MITSUBISHI ELECTRIC

SPLIT-TYPE AIR CONDITIONERS

**Revision L:**
- MXZ-2F33/42/53VF4-[E1], [ET1], MXZ-2F53VFH4-[E1], MXZ-3F54/68VF4-[E1], [ET1], MXZ-4F72/80VF4-[E1], [ET1], MXZ-4F83VF2-[E1], [ET1], MXZ-5F102VF2-[E1], [ET1], MXZ-6F120VF2-[E1], [ET1], MXZ-2F53VFHZ2-[E1] and MXZ-4F83VFHZ2-[E1] have been added.

OBH790 REVISED EDITION-K is void.

# OUTDOOR UNIT

HFC utilized R32

**No. OBH790**
**REVISED EDITION-L**

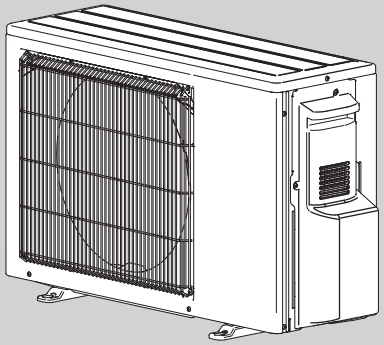
# SERVICE MANUAL

## Models

**MXZ-2F33VF** - [E1], [ET1]
**MXZ-2F33VF2** - [E1], [ET1]
**MXZ-2F33VF3** - [E1], [ET1], [ER1], [E2]
**MXZ-2F33VF4** - [E1], [ET1]
**MXZ-2F42VF** - [E1], [ET1]
**MXZ-2F42VF2** - [E1], [ET1]
**MXZ-2F42VF3** - [E1], [ET1], [ER1], [E2]
**MXZ-2F42VF4** - [E1], [ET1]
**MXZ-2F53VF** - [E1], [ET1]
**MXZ-2F53VF2** - [E1], [ET1]
**MXZ-2F53VF3** - [E1], [ET1], [ER1], [E2]
**MXZ-2F53VF4** - [E1], [ET1]
**MXZ-2F53VFH** - [E1]
**MXZ-2F53VFH2** - [E1]
**MXZ-2F53VFH3** - [E1], [E2]
**MXZ-2F53VFH4** - [E1]
**MXZ-3F54VF** - [E1], [ET1], [E2], [ET2]
**MXZ-3F54VF2** - [E1], [ET1]
**MXZ-3F54VF3** - [E1], [ET1], [ER1], [E2], [ET2], [ER2]
**MXZ-3F54VF4** - [E1], [ET1]
**MXZ-3F68VF** - [E1], [ET1], [E2], [ET2]
**MXZ-3F68VF2** - [E1], [ET1]
**MXZ-3F68VF3** - [E1], [ET1], [ER1]
**MXZ-3F68VF4** - [E1], [ET1]
**MXZ-4F72VF** - [E1], [ET1], [E2], [ET2]
**MXZ-4F72VF2** - [E1], [ET1]
**MXZ-4F72VF3** - [E1], [ET1], [ER1]
**MXZ-4F72VF4** - [E1], [ET1]
**MXZ-4F80VF2** - [E1], [ET1]
**MXZ-4F80VF3** - [E1], [ET1]
**MXZ-4F80VF4** - [E1], [ET1]
**MXZ-4F83VF** - [E1], [ET1], [ER1]
**MXZ-4F83VF2** - [E1], [ET1]
**MXZ-5F102VF** - [E1], [ET1], [ER1]
**MXZ-5F102VF2** - [E1], [ET1]
**MXZ-6F120VF2** - [E1], [ET1]
**MXZ-6F122VF** - [E1], [ET1], [ER1]
**MXZ-2F53VFHZ** - [E1], [ER1]
**MXZ-2F53VFHZ2** - [E1]
**MXZ-4F83VFHZ** - [E1], [ER1]
**MXZ-4F83VFHZ2** - [E1]

**Indoor unit service manual**

**MSZ-LN•VG Series (OBH766)**
**MSZ-LN•VG2 Series (OBH766)**
**MSZ-EF•VG Series (OBH589)**
**MSZ-AP•VF Series (OBH799)**
**MSZ-AP•VG Series (OBH788)**
**MSZ-BT•VG Series (OBH849)**
**MSZ-AY•VG Series (OBH930, 932)**
**MLZ-KP•VF Series (OBH801)**
**MFZ-KT•VG Series (OBH843)**
**MLZ-KY•VG Series (OBH921)**
**SLZ-M•FA Series (OCH522)**
**SEZ-M•DA Series (HWE17040)**
**SFZ-M•VA Series (HWE19090)**
**PCA-M•KA Series (OCH659)**
**PEAD-M•JA(L) Series (HWE16130)**
**PEAD-M•JA(L)2 Series (HWE21070)**



MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4
MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4
MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4
MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4

## CONTENTS



**PARTS CATALOG (OBB790)**

# Use the specified refrigerant only

## Never use any refrigerant other than that specified.

Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of.
Correct refrigerant is specified in the manuals and on the spec labels provided with our products.
We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.

**<Preparation before the repair service>**

- Prepare the proper tools.
- Prepare the proper protectors.
- Provide adequate ventilation.
- After stopping the operation of the air conditioner, turn off the power-supply breaker and pull the power plug.
- Discharge the capacitor before the work involving the electric parts.

**<Precautions during the repair service>**

- Do not perform the work involving the electric parts with wet hands.
- Do not pour water into the electric parts.
- Do not touch the refrigerant.
- Do not touch the hot or cold areas in the refrigeration cycle.
- When the repair or the inspection of the circuit needs to be done without turning off the power, exercise great caution not to touch the live parts.

**⚠ WARNING**

- **When the refrigeration circuit has a leak, do not execute pump down with the compressor.**
- **When pumping down the refrigerant, stop the compressor before disconnecting the refrigerant pipes. The compressor may burst if air etc. get into it.**
- **When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the gap between the valve stem and the valve body, resulting in injuries.**

**Revision A:**
• MXZ-3F54VF - [E2], [ET2], MXZ-3F68VF - [E2], [ET2] and MXZ-4F72VF - [E2], [ET2] have been added.

**Revision B:**
• MXZ-3F54VF2 - [E1], [ET1], MXZ-3F68VF2- [E1], [ET1], MXZ-4F72VF2 - [E1], [ET1] and MXZ-4F80VF2 - [E1], [ET1] have been added.

**Revision C:**
• MXZ-2F33VF2 - [E1], [ET1], MXZ-2F42VF2 - [E1], [ET1], MXZ-2F53VF2 - [E1], [ET1] and MXZ-2F53VFH2 - [E1] have been added.

**Revision D:**
• MXZ-2F33VF3 - [E1], [ET1], MXZ-2F42VF3 - [E1], [ET1], MXZ-2F53VF3 - [E1], [ET1], MXZ-2F53VFH3- [E1], MXZ-3F54VF3 - [E1], [ET1], MXZ-3F68VF3 - [E1], [ET1], MXZ-4F72VF3 - [E1], [ET1] and MXZ-4F80VF3- [E1], [ET1] have been added.

**Revision E:**
• MXZ-4F83VF - [E1], [ET1], MXZ-5F102VF - [E1], [ET1], MXZ-6F122VF - [E1], [ET1], MXZ-2F53VFHZ - [E1] and MXZ-4F83VFHZ - [E1] have been added.

**Revision F:**
• Chart of heating capacity and total input for MXZ-4F83VFHZ - [E1] have been added.
• Outdoor unit power supply for MXZ-4F83VF - [ET1] and MXZ-5F102VF - [ET1] have been added.

**Revision G:**
• MXZ-2F33/42/53VF3 - [E2] and MXZ-2F53VFH3 - [E2] have been added.

**Revision H:**
• MXZ-2F33/42/53VF3 - [ER1], MXZ-3F54/68VF3 - [ER1], MXZ-4F72VF3 - [ER1], MXZ-4F83VF - [ER1], MXZ-5F102VF - [ER1], MXZ-6F122VF - [ER1], MXZ-2F53VFHZ - [ER1] and MXZ-4F83VFHZ - [ER1] have been added.

**Revision J:**
• MXZ-3F54VF3 - [E2], [ET2], [ER2] have been added.

**Revision K:**
• INDOOR / OUTDOOR UNIT COMPATIBILITY TABLE has been modified.

**Revision L:**
• MXZ-2F33/42/53VF4 - [E1], [ET1], MXZ-2F53VFH4 - [E1], MXZ-3F54/68VF4 - [E1], [ET1], MXZ-4F72/80VF4 - [E1], [ET1], MXZ-4F83VF2 - [E1], [ET1], MXZ-5F102VF2 - [E1], [ET1], MXZ-6F120VF2 - [E1], [ET1], MXZ-2F53VFHZ2 - [E1] and MXZ-4F83VFHZ2 - [E1] have been added.

# INDOOR / OUTDOOR UNIT COMPATIBILITY TABLE

**<MXZ-2F33VF>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | | | | | | |
| | MSZ-AP**VG | | | | | ● | | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F33VF2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F33VF3>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | | | | | | |
| | MSZ-RW**VG | | | | | ● | | | | | | |
| | MSZ-BT**VG | | | ● | | ● | | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F33VF4>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | | | | | | |
| | MSZ-RW**VG | | | | | ● | | | | | | |
| | MSZ-BT**VG | | | ● | | ● | | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | | | | | | |
| | MLZ-KY**VG | | | | ● | | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | | | | | | |
| | SFZ-M**VA | | | | | ● | | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F42VF>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | | | | | |
| | MSZ-AP**VG | | | | | ● | ● | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F42VF2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F42VF3>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F42VF4>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | | | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| | MLZ-KY**VG | | | | ● | | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| | SFZ-M**VA | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F53VF / MXZ-2F53VFH>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | | | | | |
| | MSZ-AP**VG | | | | | ● | ● | | | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F53VF2 / MXZ-2F53VFH2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F53VF3 / MXZ-2F53VFH3>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-2F53VF4 / MXZ-2F53VFH4>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 | |
| Wall mounted | MSZ-LN**VG | | | | | | | | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | | |
| | MLZ-KY**VG | | | ● | | | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | | |
| | SFZ-M**VA | | | | | ● | ● | | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | | | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | | | | |

**<MXZ-3F54VF>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | | | | | | | *1 | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | | |

*1: Models with service sub number -E2/ET2 are connectable.

**<MXZ-3F54VF2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | | | | | | | ● | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor tanding | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | | |

**<MXZ-3F54VF3>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | | |

**<MXZ-3F54VF4>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| | MLZ-KY**VG | | | | ● | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | | |

**<MXZ-3F68VF / MXZ-4F72VF>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | | | | | | | *1 | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | ● | |

*1: Models with service sub number -E2/ET2 are connectable.

**<MXZ-3F68VF2 / MXZ-4F72VF2 / MXZ-4F80VF2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | | | | | | | ● | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | ● | |

**<MXZ-3F68VF3 / MXZ-4F72VF3 / MXZ-4F80VF3>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | ● | |

**<MXZ-3F68VF4 / MXZ-4F72VF4 / MXZ-4F80VF4>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG | | ● | | | ● | ● | | | | |
| | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VE3 | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | |
| | MSZ-AP**VF | ● | | ● | | | | | | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| | MLZ-KY**VG | | | | ● | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | ● | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | PEAD-M**JA(L) | | | | | | | | ● | | |
| | PEAD-M**JA(L)2 | | | | | | ● | | ● | | |
| | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | |
| Ceiling suspended | PCA-M**KA | | | | | | | | ● | ● | |

**<MXZ-4F83VF / MXZ-5F102VF / MXZ-6F122VF>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | ● |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | ● | ● |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | ● |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | ● |

**<MXZ-4F83VF2 / MXZ-5F102VF2 / MXZ-6F120VF2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | ● |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| | MLZ-KY**VG | | | | ● | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | ● | ● |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | ● |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | ● |
| | PEAD-M**JA(L)2 | | | | | | ● | | ● | ● | ● |

**<MXZ-2F53VFHZ>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-FT**VG | | | | | ● | ● | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | |
| | SFZ-M**VA | | | | | ● | ● | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | |

**<MXZ-2F53VFHZ2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | | | |
| | MSZ-RW**VG | | | | | ● | ● | | | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | | |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-FT**VG | | | | | ● | ● | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | | | |
| | MLZ-KY**VG | | ● | | | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | | | |
| | SFZ-M**VA | | | | | ● | ● | | | | |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | | | |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | | | |

**<MXZ-4F83VFHZ>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | ● |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-FT**VG | | | | | ● | ● | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | ● | ● |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | ● |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | ● |

**<MXZ-4F83VFHZ2>**

| Connectable indoor unit lineups (Heat pump inverter type) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model type | Model name | Capacity class [kW/h] | | | | | | | | | |
| | | 15 | 18 | 20 | 22 | 25 | 35 | 42 | 50 | 60 | 71 |
| Wall mounted | MSZ-LN**VG2 | | ● | | | ● | ● | | ● | | |
| | MSZ-RW**VG | | | | | ● | ● | | ● | | |
| | MSZ-BT**VG | | | ● | | ● | ● | | | | |
| | MSZ-EF**VG | | ● | | ● | ● | ● | ● | ● | | |
| | MSZ-AP**VG | ● | | ● | | ● | ● | ● | ● | ● | ● |
| | MSZ-AY**VG | | | | | ● | ● | ● | ● | | |
| | MSZ-FT**VG | | | | | ● | ● | | | | |
| 1way cassette | MLZ-KP**VF | | | | | ● | ● | | ● | | |
| | MLZ-KY**VG | | | ● | | | | | | | |
| Floor standing | MFZ-KT**VG | | | | | ● | ● | | ● | | |
| | SFZ-M**VA | | | | | ● | ● | | ● | ● | ● |
| 4way cassette | SLZ-M**FA | ● | | | | ● | ● | | ● | | |
| | SLZ-M**FA2 | ● | | | | ● | ● | | ● | | |
| Ceiling concealed | SEZ-M**DA(L) | | | | | ● | ● | | ● | ● | ● |
| | SEZ-M**DA(L)2 | | | | | ● | ● | | ● | ● | ● |
| | PEAD-M**JA(L)2 | | | | | | ● | | ● | ● | ● |

# 1 TECHNICAL CHANGES

**MXZ-2F33VF-** E1, ET1
**MXZ-2F42VF-** E1, ET1
**MXZ-2F53VF-** E1, ET1
**MXZ-2F53VFH-** E1
**MXZ-3F54VF-** E1, ET1
**MXZ-3F68VF-** E1, ET1
**MXZ-4F72VF-** E1, ET1
**MXZ-4F83VF-** E1, ET1, ER1
**MXZ-5F102VF-** E1, ET1, ER1
**MXZ-6F122VF-** E1, ET1, ER1
**MXZ-2F53VFHZ-** E1, ER1
**MXZ-4F83VFHZ-** E1, ER1
1. New model

**MXZ-3F54VF-** E1, ET1 → **MXZ-3F54VF-** E2, ET2
**MXZ-3F68VF-** E1, ET1 → **MXZ-3F68VF-** E2, ET2
**MXZ-4F72VF-** E1, ET1 → **MXZ-4F72VF-** E2, ET2
1. LEV-R has been changed.
2. Outdoor control P. C. board has been changed.

**MXZ-3F54VF-** E2, ET2 → **MXZ-3F54VF2-** E1, ET1
**MXZ-3F68VF-** E2, ET2 → **MXZ-3F68VF2-** E1, ET1
**MXZ-4F72VF-** E2, ET2 → **MXZ-4F72VF2-** E1, ET1
1. Pre charged refrigerant amount and additional refrigerant amount have been changed.
2. Outdoor control P.C. board has been changed.
3. Power board has been changed.
4. LEV R has been changed.

**MXZ-4F80VF2-** E1, ET1
1. New model

**MXZ-2F33VF-** E1, ET1 → **MXZ-2F33VF2-** E1, ET1
**MXZ-2F42VF-** E1, ET1 → **MXZ-2F42VF2-** E1, ET1
**MXZ-2F53VF-** E1, ET1 → **MXZ-2F53VF2-** E1, ET1
**MXZ-2F53VFH-** E1 → **MXZ-2F53VFH2-** E1, ET1
1. Outdoor control P.C. board has been changed.
2. Outdoor fan motor has been changed.

**MXZ-2F33VF2-** E1, ET1 → **MXZ-2F33VF3-** E1, ET1
**MXZ-2F42VF2-** E1, ET1 → **MXZ-2F42VF3-** E1, ET1
**MXZ-2F53VF2-** E1, ET1 → **MXZ-2F53VF3-** E1, ET1
**MXZ-2F53VFH2-** E1 → **MXZ-2F53VFH3-** E1
**MXZ-3F54VF2-** E1, ET1 → **MXZ-3F54VF3-** E1, ET1
**MXZ-3F68VF2-** E1, ET1 → **MXZ-3F68VF3-** E1, ET1
**MXZ-4F72VF2-** E1, ET1 → **MXZ-4F72VF3-** E1, ET1
**MXZ-4F80VF2-** E1, ET1 → **MXZ-4F80VF3-** E1, ET1

**MXZ-2F33VF3-** E1 → **MXZ-2F33VF3-** E2
**MXZ-2F42VF3-** E1 → **MXZ-2F42VF3-** E2
**MXZ-2F53VF3-** E1 → **MXZ-2F53VF3-** E2
**MXZ-2F53VFH3-** E1 → **MXZ-2F53VFH3-** E2
1. Model name has been changed.

**MXZ-2F33VF3-** ER1
**MXZ-2F42VF3-** ER1
**MXZ-2F53VF3-** ER1
**MXZ-3F54VF3-** ER1
**MXZ-3F68VF3-** ER1
**MXZ-4F72VF3-** ER1
1. New model

**MXZ-3F54VF3-** E1, ET1, ER1 → **MXZ-3F54VF3-** E2, ET2, ER2
1. Outdoor control P.C. board has been changed.
2. Outdoor fan motor has been changed.

**MXZ-2F33VF3-** E1, ET1 → **MXZ-2F33VF4-** E1, ET1
**MXZ-2F42VF3-** E1, ET1 → **MXZ-2F42VF4-** E1, ET1
**MXZ-2F53VF3-** E1, ET1 → **MXZ-2F53VF4-** E1, ET1
**MXZ-2F53VFH3-** E1 → **MXZ-2F53VFH4-** E1
**MXZ-3F54VF3-** E1, ET1 → **MXZ-3F54VF4-** E1, ET1
**MXZ-3F68VF3-** E1, ET1 → **MXZ-3F68VF4-** E1, ET1
**MXZ-4F72VF3-** E1, ET1 → **MXZ-4F72VF4-** E1, ET1
**MXZ-4F80VF3-** E1, ET1 → **MXZ-4F80VF4-** E1, ET1
**MXZ-4F83VF-** E1, ET1 → **MXZ-4F83VF2-** E1, ET1
**MXZ-5F102VF-** E1, ET1 → **MXZ-5F102VF2-** E1, ET1
**MXZ-6F122VF-** E1, ET1 → **MXZ-6F120VF2-** E1, ET1
**MXZ-2F53VFHZ-** E1 → **MXZ-2F53VFHZ2-** E1
**MXZ-4F83VFHZ-** E1 → **MXZ-4F83VFHZ2-** E1
1. New model

# 2 SAFETY PRECAUTION

**MEANINGS OF SYMBOLS DISPLAYED ON THE UNIT**

| | | |
|---|---|---|
|  | **WARNING** (Risk of fire) | This mark is for R32 refrigerant only. Refrigerant type is written on nameplate of outdoor unit.<br>In case that refrigerant type is R32, this unit uses a flammable refrigerant.<br>If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire. |
|  | Read the OPERATION MANUAL carefully before operation. | |
|  | Service personnel are required to carefully read the OPERATION MANUAL and INSTALLATION MANUAL before operation. | |
|  | Further information is available in the OPERATION MANUAL, INSTALLATION MANUAL, and the like. | |

## 2-1. ALWAYS OBSERVE FOR SAFETY

**Before obtaining access to terminal, all supply circuits must be disconnected.**

## 2-2. CAUTIONS RELATED TO NEW REFRIGERANT

**Cautions for units utilizing refrigerant R32**

**Preparation before the repair service.**

- Prepare the proper tools.
- Prepare the proper protectors.
- Provide adequate ventilation.
- After stopping the operation of the air conditioner, turn off the power-supply breaker.
- Discharge the condenser before the work involving the electric parts.

**Use new refrigerant pipes.**

In case of using the existing pipes for R22, be careful with the following.

· Be sure to clean the pipes and make sure that the insides of the pipes are clean.
· Change flare nut to the one provided with this product. Use a newly flared pipe.
· Avoid using thin pipes.

**Make sure that the inside and outside of refrigerant piping is clean and it has no contaminants such as sulfur, oxides, dirt, shaving particles, etc, which are hazard to refrigerant cycle.**
**In addition, use pipes with specified thickness.**

Contamination inside refrigerant piping can cause deterioration of refrigerant oil, etc.

**Store the piping indoors, and both ends of the piping sealed until just before brazing.**
**(Leave elbow joints, etc. in their packaging.)**

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

**Precautions during the repair service.**

- Do not perform the work involving the electric parts with wet hands.
- Do not pour water into the electric parts.
- Do not touch the refrigerant.
- Do not touch the hot or cold areas in the refrigerating cycle.
- When the repair or the inspection of the circuit needs to be done without turning off the power, exercise great caution not to touch the live parts.
- When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the valve gap, resulting in injuries.

**Use a vacuum pump with a reverse flow check valve.**

Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil, etc.

**Use the following tools specifically designed for use with R32 refrigerant.**

The following tools are necessary to use R32 refrigerant.

| Tools for R32 | |
|---|---|
| Gauge manifold | Flare tool |
| Charge hose | Size adjustment gauge |
| Gas leak detector | Vacuum pump adaptor |
| Torque wrench | Electronic refrigerant charging scale |

**Handle tools with care.**

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

**The refrigerant oil applied to flare and flange connections must be ester oil, ether oil or alkylbenzene oil in a small amount.**

If large amount of mineral oil enters, that can cause deterioration of refrigerant oil, etc.

**Do not use refrigerant other than R32.**

If other refrigerant (R22, etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil, etc.

**Use the specified refrigerant only.**

**Never use any refrigerant other than that specified.**
Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of.
Correct refrigerant is specified in the manuals and on the spec labels provided with our products.
We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.

**Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.**

## [1] Warning for service

(1) Do not alter the unit.
(2) For installation and relocation work, follow the instructions in the Installation Manual and use tools and pipe components specifically made for use with refrigerant specified in the outdoor unit installation manual.
(3) Ask a dealer or an authorized technician to install, relocate and repair the unit.
For appliances not accessible to the general public.
(4) Refrigerant pipes connection shall be accessible for maintenance purposes.
(5) If the air conditioner is installed in a small room or closed room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of refrigerant leakage. Should the refrigerant leak and cause the concentration limit to be exceeded, hazards due to lack of oxygen in the room may result.
(6) Keep gas-burning appliances, electric heaters, and other fire sources (ignition sources) away from the location where installation, repair, and other air conditioner work will be performed.
If refrigerant comes into contact with a flame, poisonous gases will be released.
(7) When installing or relocating, or servicing the air conditioner, use only the specified refrigerant (R32) to charge the refrigerant lines.
Do not mix it with any other refrigerant and do not allow air to remain in the lines.
If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards.
(8) After installation has been completed, check for refrigerant leaks. If refrigerant leaks into the room and comes into contact with the flame of a heater or portable cooking range, poisonous gases will be released.
(9) Do not use low temperature solder alloy in case of brazing the refrigerant pipes.
(10) When performing brazing work, be sure to ventilate the room sufficiently. Make sure that there are no hazardous or flammable materials nearby.
When performing the work in a closed room, small room, or similar location, make sure that there are no refrigerant leaks before performing the work.
If refrigerant leaks and accumulates, it may ignite or poisonous gases may be released.
(11) Do not install the unit in places where refrigerant may build-up or places with poor ventilation such as a semi-basement or a sunken place in outdoor: Refrigerant is heavier than air, and inclined to fall away from the leak source.
(12) Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
(13) The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
(14) Do not pierce or burn.
(15) Be aware that refrigerants may not contain an odour.
(16) Pipe-work shall be protected from physical damage.
(17) The installation of pipe-work shall be kept to a minimum.
(18) Compliance with national gas regulations shall be observed.
(19) Keep any required ventilation openings clear of obstruction.
(20) Servicing shall be performed only as recommended by the manufacturer.
(21) The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
(22) Maintenance, service and repair operations shall be performed by authorized technician with required qualification.
(23) Be sure to have appropriate ventilation in order to prevent ignition. Furthermore, be sure to carry out fire prevention measures that there are no dangerous or flammable objects in the surrounding area.

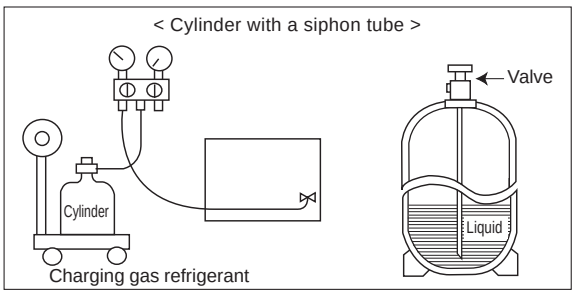
## [2] Cautions for service

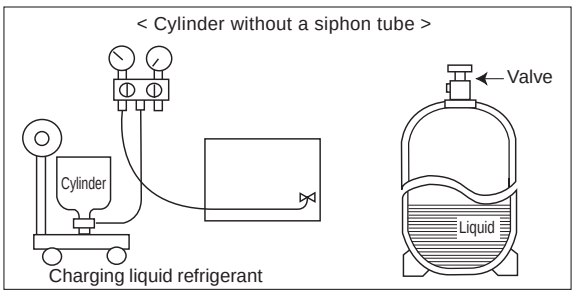
(1) Perform service after recovering the refrigerant left in unit completely.
(2) Do not release refrigerant in the air.
(3) After completing service, charge the cycle with specified amount of refrigerant.
(4) When performing service, install a filter drier simultaneously.
Be sure to use a filter drier for new refrigerant.

## [3] Additional refrigerant charge

**When charging directly from cylinder**

R32 is a single refrigerant and its composition does not change. Therefore, both liquid charging and gas charging are possible. Liquid charging of refrigerant all at once from the low-pressure side may cause the compressor malfunction. Accordingly, make sure that charging is gradual.



## [4] Cautions for unit using R32 refrigerant

**Basic work procedures are the same as those for conventional units using refrigerant R410A. However, pay careful attention to the following points.**

(1) Information on servicing

(1-1) Checks on the Area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized.

For repair to the refrigerating systems, (1-3) to (1-7) shall be completed prior to conducting work on the systems.

(1-2) Work Procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.

(1-3) General Work Area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

(1-4) Checking for Presence of Refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

(1-5) Presence of Fire Extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand.

Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

(1-6) No Ignition Sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.

(1-7) Ventilated Area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

(1-8) Checks on the Refrigeration Equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer’s maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer’s technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

- The charge size is in accordance with the room size within which the refrigerant containing parts are installed.
- The ventilation machinery and outlets are operating adequately and are not obstructed.
- Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
- Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being corroded.

(1-9) Checks on Electrical Devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include that:

- capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- no live electrical components and wiring are exposed while charging, recovering or purging the system;
- there is continuity of earth bonding

(2) Repairs to Sealed Components

(2-1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

(2-2) Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.

Ensure that the apparatus is mounted securely.

Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres.

Replacement parts shall be in accordance with the manufacturer’s specifications.

(3) Repair to intrinsically Safe Components
Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating.
Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

(4) Cabling
Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

(5) Detection of Flammable Refrigerants
Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.
A halide torch (or any other detector using a naked flame) shall not be used.

(6) Leak Detection Methods
Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.
Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.
If a leak is suspected, all naked flames shall be removed/extinguished.
If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. For appliances containing flammable refrigerants, oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

(7) Removal and Evacuation
When breaking into the refrigerant circuit to make repairs – or for any other purpose conventional procedures shall be used. However, for flammable refrigerants it is important that best practice is followed since flammability is a consideration.
The following procedure shall be adhered to:
- remove refrigerant
- purge the circuit with inert gas
- evacuate
- purge again with inert gas
- open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. For appliances containing flammable refrigerants, the system shall be “flushed” with OFN to render the unit safe. This process may need to be repeated several times.
Compressed air or oxygen shall not be used for purging refrigerant systems.
For appliances containing flammable refrigerants, flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.
Ensure that the outlet for the vacuum pump is not close to any ignition sources and that ventilation is available.

(8) Charging Procedures
In addition to conventional charging procedures, the following requirements shall be followed:
- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigeration system.

Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

(9) Decommissioning
Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.
(9-1) Become familiar with the equipment and its operation.

(9-2) Isolate system electrically.
(9-3) Before attempting the procedure, ensure that:
- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protective equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

(9-4) Pump down refrigerant system, if possible.
(9-5) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
(9-6) Make sure that cylinder is situated on the scales before recovery takes place.
(9-7) Start the recovery machine and operate in accordance with manufacturer's instructions.
(9-8) Do not overfill cylinders. (No more than 80 % volume liquid charge).
(9-9) Do not exceed the maximum working pressure of the cylinder, even temporarily.
(9-10) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
(9-11) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

(10) Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing flammable refrigerants, ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

(11) Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

## [5] Service tools

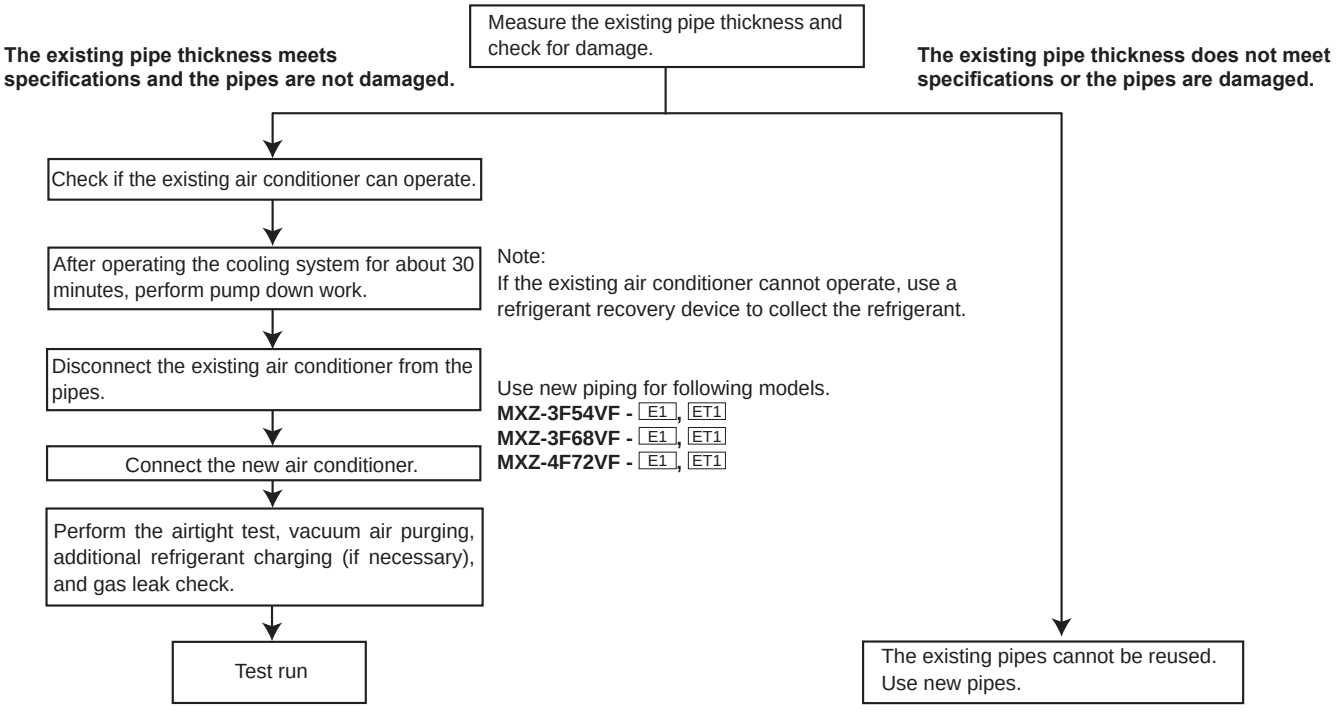
**Use the below service tools as exclusive tools for R32 refrigerant.**

| No. | Tool name | Specifications |
|---|---|---|
| ① | Gauge manifold | · Only for R32 |
| | | · Use the existing fitting specifications. (UNF1/2) |
| | | · Use high-tension side pressure of 5.3MPa·G or over. |
| ② | Charge hose | · Only for R32 |
| | | · Use pressure performance of 5.09MPa·G or over. |
| ③ | Electronic scale | — |
| ④ | Gas leak detector | · Use the detector for R134a, R407C, R410a or R32. |
| ⑤ | Adaptor for reverse flow check | · Attach on vacuum pump. |
| ⑥ | Refrigerant charge base | — |
| ⑦ | Refrigerant cylinder | · Only for R32<br>· Cylinder with syphon |
| ⑧ | Refrigerant recovery equipment | — |

## 2-3. PRECAUTIONS WHEN REUSING EXISTING R22/R410a REFRIGERANT PIPES

**(1) Flowchart**

- Refer to the flowchart below to determine if the existing pipes can be used and if it is necessary to use a filter dryer.
- If the diameter of the existing pipes is different from the specified diameter, refer to technological data materials to confirm if the pipes can be used.



**(2) Cautions for refrigerant piping work**

New refrigerant R32 is adopted for replacement inverter series. Although the refrigerant piping work for R32 is same as for R22, exclusive tools are necessary so as not to mix with different kind of refrigerant. Furthermore as the working pressure of R32 is 1.6 times higher than that of R22, their sizes of flared sections and flare nuts are different.

① Thickness of pipes

Because the working pressure of R32 is higher compared to R22, be sure to use refrigerant piping with thickness shown below. (Never use pipes of 0.7 mm or below.)

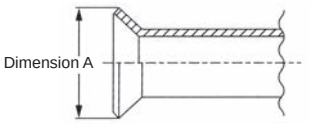
Diagram below: Piping diameter and thickness

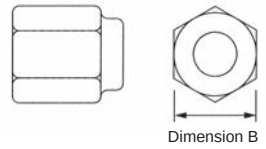
| Nominal dimensions(inch) | Outside diameter (mm) | Thickness (mm) | |
|---|---|---|---|
| | | R32/R410a | R22 |
| 1/4 | 6.35 | 0.8 | 0.8 |
| 3/8 | 9.52 | 0.8 | 0.8 |
| 1/2 | 12.70 | 0.8 | 0.8 |
| 5/8 | 15.88 | 1.0 | 1.0 |
| 3/4 | 19.05 | — | 1.0 |

② Dimensions of flare cutting and flare nut

The component molecules in HFC refrigerant are smaller compared to conventional refrigerants. In addition to that, R32 is a refrigerant, which has higher risk of leakage because its working pressure is higher than that of other refrigerants. Therefore, to enhance airtightness and strength, flare cutting dimension of copper pipe for R32 has been specified separately from the dimensions for other refrigerants as shown below. The dimension B of flare nut for R32 also has partly been changed to increase strength as shown below. Set copper pipe correctly referring to copper pipe flaring dimensions for R32 below. For 1/2 and 5/8 inch pipes, the dimension B changes.

Use torque wrench corresponding to each dimension.




Flare cutting dimensions

| Nominal dimensions(inch) | Outside diameter(mm) | Dimension A ($^{+0}_{-0.4}$) (mm) | |
|---|---|---|---|
| | | R32/R410a | R22 |
| 1/4 | 6.35 | 9.1 | 9.0 |
| 3/8 | 9.52 | 13.2 | 13.0 |
| 1/2 | 12.70 | 16.6 | 16.2 |
| 5/8 | 15.88 | 19.7 | 19.4 |
| 3/4 | 19.05 | — | 23.3 |

Flare nut dimensions

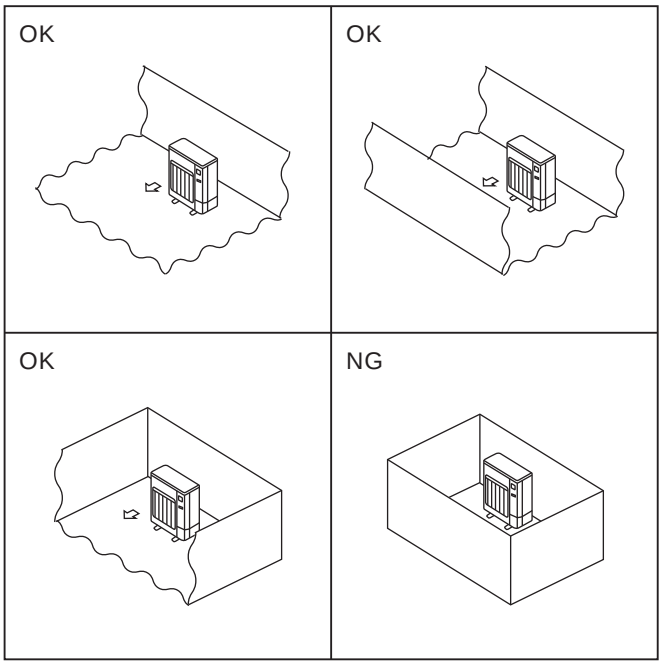
| Nominal dimensions(inch) | Outside diameter(mm) | Dimension B (mm) | |
|---|---|---|---|
| | | R32/R410a | R22 |
| 1/4 | 6.35 | 17.0 | 17.0 |
| 3/8 | 9.52 | 22.0 | 22.0 |
| 1/2 | 12.70 | 26.0 | 24.0 |
| 5/8 | 15.88 | 29.0 * | 27.0 |
| 3/4 | 19.05 | — | 36.0 |

③ Tools for R32 (The following table shows whether conventional tools can be used or not.)

| Tools and materials | Use | R32 tools | Can R22 tools be used? | Can R407C tools be used? | Can R410a tools be used? |
|---|---|---|---|---|---|
| Gauge manifold | Air purge, refrigerant charge and operation check | Tool exclusive for R32 | × | × | ○ |
| Charge hose | | Tool exclusive for R32 | × | × | ○ |
| Gas leak detector | Gas leak check | Tool for HFC refrigerant | × | ○ | ○ |
| Refrigerant recovery equipment | Refrigerant recovery | Tool exclusive for R32 | × | × | ○ |
| Refrigerant cylinder | Refrigerant charge | Tool exclusive for R32 | × | × | × |
| Safety charger | Prevent compressor malfunction when charging refrigerant by spraying liquid refrigerant | Tool exclusive for R32 | × | × | ○ |
| Charge valve | Prevent gas from blowing out when detaching charge hose | Tool exclusive for R32 | × | × | ○ |
| Vacuum pump | Vacuum drying and air purge | Tools for other refrigerants can be used if equipped with adapter for reverse flow check | △(Usable if equipped with adapter for reverse flow) | △(Usable if equipped with adapter for reverse flow) | △(Usable if equipped with adapter for reverse flow) |
| Flare tool | Flaring work of piping | Tools for other refrigerants can be used by adjusting flaring dimension | △(Usable by adjusting flaring dimension) | △(Usable by adjusting flaring dimension) | △(Usable by adjusting flaring dimension) |
| Bender | Bend the pipes | Tools for other refrigerants can be used | ○ | ○ | ○ |
| Pipe cutter | Cut the pipes | Tools for other refrigerants can be used | ○ | ○ | ○ |
| Welder and nitrogen gas cylinder | Weld the pipes | Tools for other refrigerants can be used | ○ | ○ | ○ |
| Refrigerant charging scale | Refrigerant charge | Tools for other refrigerants can be used | ○ | ○ | ○ |
| Vacuum gauge or thermistor vacuum gauge and vacuum valve | Check the degree of vacuum. (Vacuum valve prevents back flow of oil and refrigerant to thermistor vacuum gauge) | Tools for other refrigerants can be used | ○ | ○ | ○ |
| Charging cylinder | Refrigerant charge | Tool exclusive for R32 | × | – | × |

× : Prepare a new tool. (Use the new tool as the tool exclusive for R32.)
△ : Tools for other refrigerants can be used under certain conditions.
○ : Tools for other refrigerants can be used.

## 2-4. CHOOSING THE OUTDOOR UNIT INSTALLATION LOCATION




R32 is heavier than air—as well as other refrigerants—so tends to accumulate at the base (in the vicinity of the floor). If R32 accumulates around base, it may reach a flammable concentration in case room is small. To avoid ignition, maintaining a safe work environment is required by ensuring appropriate ventilation. If a refrigerant leak is confirmed in a room or an area where there is insufficient ventilation, refrain from using of flames until the work environment can be improved by ensuring appropriate ventilation.
Install outdoor unit in a place where at least one of the four sides is open, and in a sufficiently large space without depressions.

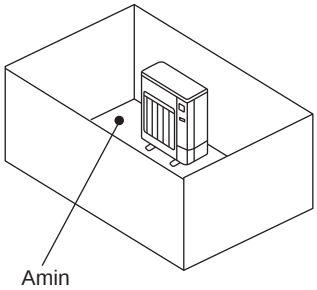
## 2-5. MINIMUM INSTALLATION AREA

If you unavoidably install a unit in a space where all four sides are blocked or there are depressions, confirm that one of these situations (A, B or C) is satisfied.

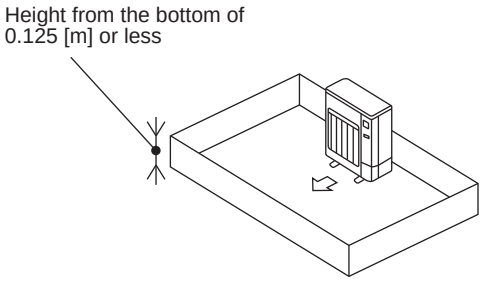
Note: These countermeasures are for keeping safety not for specification guarantee.

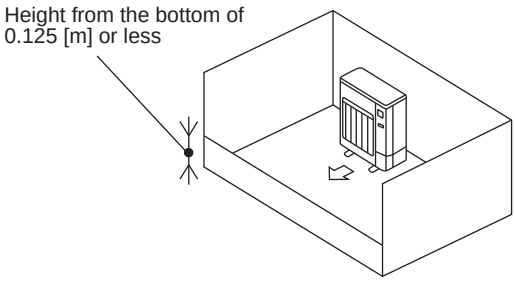
A) Secure sufficient installation space (minimum installation area Amin).
Install in a space with an installation area of Amin or more, corresponding to refrigerant quantity M (factory-charged refrigerant + locally added refrigerant).

| M [kg] | Amin [m²] |
|---|---|
| 1.0 | 12 |
| 1.5 | 17 |
| 2.0 | 23 |
| 2.5 | 28 |
| 3.0 | 34 |
| 3.5 | 39 |
| 4.0 | 45 |
| 4.5 | 50 |
| 5.0 | 56 |
| 5.5 | 62 |
| 6.0 | 67 |
| 6.5 | 73 |
| 7.0 | 78 |
| 7.5 | 84 |

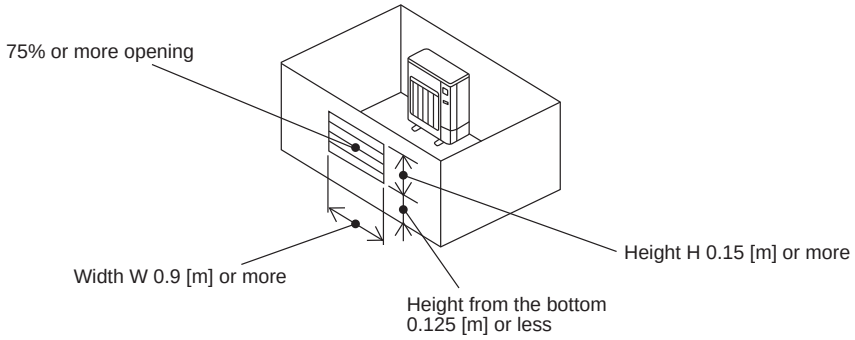



B) Install in a space with a depression height of 0.125 [m] or less.



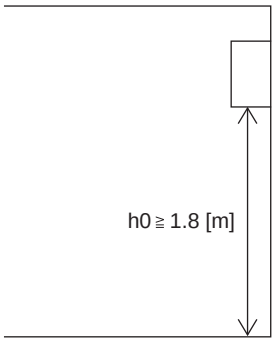
C) Create an appropriate ventilation open area.
Make sure that the width of the open area is 0.9 [m] or more and the height of the open area is 0.15 [m] or more.
However, the height from the bottom of the installation space to the bottom edge of the open area should be 0.125 [m] or less.
Open area should be 75% or more opening.



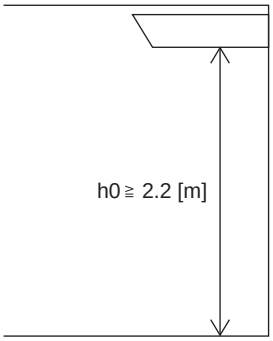

■ Indoor units
Install in a room with a floor area of A min or more, corresponding to refrigerant quantity M (factory-charged refrigerant + locally added refrigerant).
* For the factory-charged refrigerant amount, refer to the spec nameplate or installation manual.
For the amount to be added locally, refer to the installation manual.
Install the indoor unit so that the height from the floor to the bottom of the indoor unit is h0;
for wall mounted: 1.8 m or more;
for ceiling suspended, cassette and ceiling concealed: 2.2 m or more.
When installing floor standing, refer to indoor unit Installation manual.
There are restrictions in installation height for each model, so read the installation manual for the particular unit.

Case 1: for wall mounted, ceiling suspended, cassette and concealed

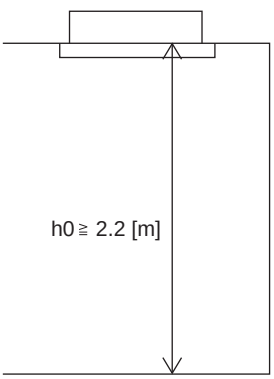
| M [kg] | Amin [m²] |
|---|---|
| 1.0 | 3 |
| 1.5 | 4.5 |
| 2.0 | 6 |
| 2.5 | 7.5 |
| 3.0 | 9 |
| 3.5 | 12 |
| 4.0 | 15.5 |
| 4.5 | 20 |
| 5.0 | 24 |
| 5.5 | 29 |
| 6.0 | 35 |
| 6.5 | 41 |
| 7.0 | 47 |
| 7.5 | 54 |



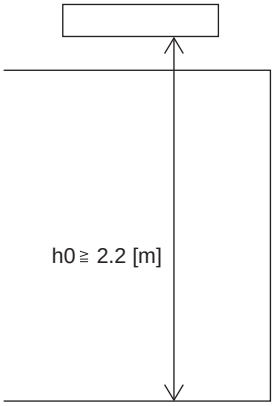
Wall mounted



Ceiling suspended



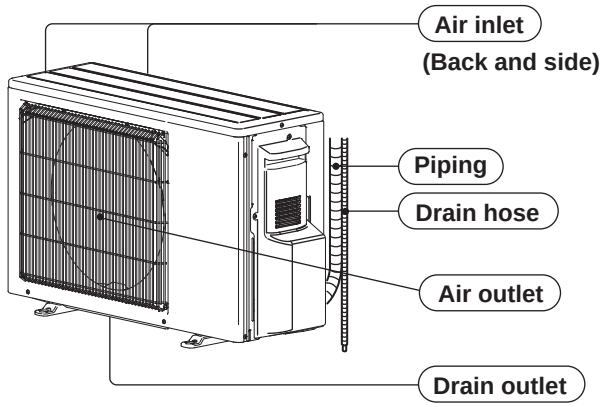
Cassette



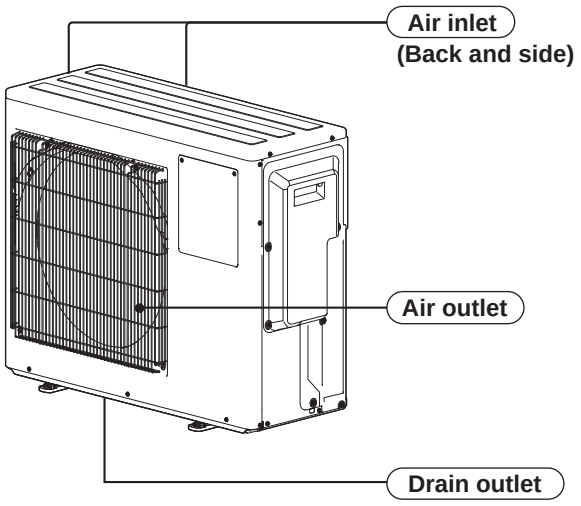
Ceiling concealed

# 3 PART NAMES AND FUNCTIONS

**MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4**
**MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4**
**MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4**
**MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4**



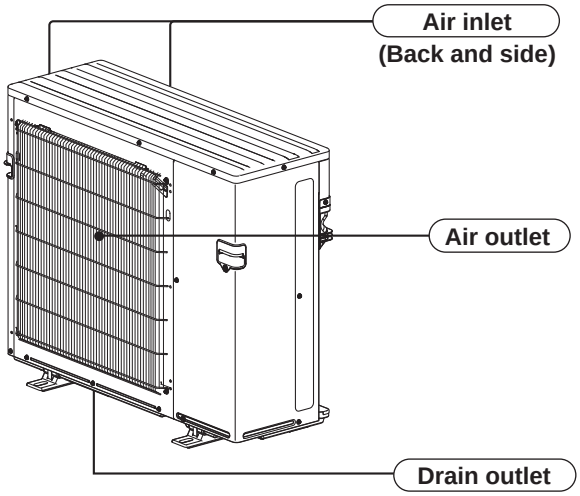

**MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4**
**MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4**
**MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4**
**MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4**

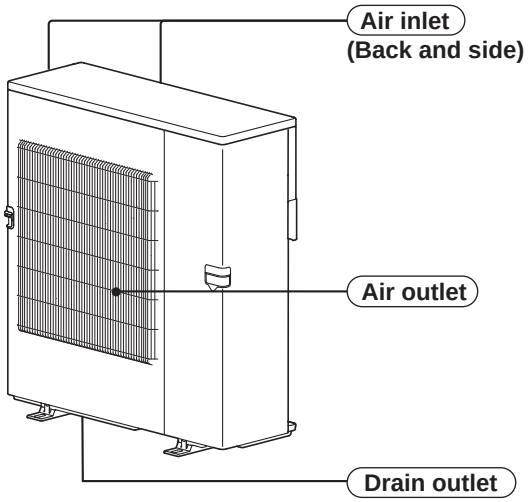



## ACCESSORIES

| Model | | MXZ-2F33VF MXZ-2F33VF3<br>MXZ-2F42VF MXZ-2F42VF3<br>MXZ-2F53VF MXZ-2F53VF3<br>MXZ-2F33VF2 MXZ-2F33VF4<br>MXZ-2F42VF2 MXZ-2F42VF4<br>MXZ-2F53VF2 MXZ-2F53VF4 | MXZ-3F54VF MXZ-3F54VF2<br>MXZ-3F68VF MXZ-3F68VF2<br>MXZ-4F72VF MXZ-4F72VF2<br>MXZ-4F80VF2<br>MXZ-3F54VF3 MXZ-4F54VF4<br>MXZ-3F54VF3 MXZ-4F68VF4<br>MXZ-3F54VF3 MXZ-4F72VF4<br>MXZ-3F54VF3 MXZ-4F80VF4 |
|---|---|---|---|
| ① | Drain socket | 1 | 1 |
| ② | Drain cap | - | 2 |

**MXZ-4F83VF** **MXZ-4F83VF2** **MXZ-4F83VFHZ** **MXZ-4F83VFHZ2**
**MXZ-5F102VF** **MXZ-5F102VF2** **MXZ-6F120VF2** **MXZ-6F122VF**
**MXZ-2F53VFHZ** **MXZ-2F53VFHZ2**




## ACCESSORIES

| Model | | MXZ-4F83VF MXZ-5F102VF MXZ-6F120VF2<br>MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F122VF |
|---|---|---|
| ① | Drain socket | 1 |
| ② | Drain cap | 5 |

# 4 SPECIFICATION

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F33VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 20 | |
| | Connecting pipe length | m | Max. 15 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 3.3 (1.1 - 3.8) | 4.0 (1.0 - 4.1) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 850 | 910 |
| | Running current (Total) *1, *2 | A | 4.3 - 4.1 - 3.9 | 4.6 - 4.4 - 4.2 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 4.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.88 | 4.40 |
| Compressor | Model | | KVB073FYXMC | |
| | Output | W | 470 | |
| | Current *1, *2 | A | 3.8 | |
| | Refrigeration oil (Model) | L | 0.27 (FW68S) | |
| Fan motor | Model | | RC0J50-FA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 33 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,890 | 1,938 |
| | Sound level (Rated) | dB(A) | 49 | 50 |
| | Fan speed (Rated) | rpm | 860 | 880 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-AP15VF + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F33VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 20 | |
| | Connecting pipe length | m | Max. 15 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 3.3 (1.1 - 3.8) | 4.0 (1.0 - 4.1) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 850 | 910 |
| | Running current (Total) *1, *2 | A | 4.3 - 4.1 - 3.9 | 4.6 - 4.4 - 4.2 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 4.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.88 | 4.40 |
| Compressor | Model | | KVB073FYXMC | |
| | Output | W | 470 | |
| | Current *1, *2 | A | 3.8 | |
| | Refrigeration oil (Model) | L | 0.27 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 33 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,890 | 1,938 |
| | Sound level (Rated) | dB(A) | 49 | 50 |
| | Fan speed (Rated) | rpm | 860 | 880 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-AP15VG + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F33VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 20 | |
| | Connecting pipe length | m | Max. 15 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 3.3 (1.1 - 3.8) | 4.0 (1.0 - 4.1) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 850 | 910 |
| | Running current (Total) *1, *2 | A | 4.3 - 4.1 - 3.9 | 4.6 - 4.4 - 4.2 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 4.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.88 | 4.40 |
| Compressor | Model | | KVB073FYXMC | |
| | Output | W | 470 | |
| | Current *1, *2 | A | 3.8 | |
| | Refrigeration oil (Model) | L | 0.27 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 33 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,890 | 1,938 |
| | Sound level (Rated) | dB(A) | 49 | 50 |
| | Fan speed (Rated) | rpm | 860 | 880 |
| | Pre-charged refrigerant quantity (R32) | kg | 0.8 | |
| | Max refrigerant quantity (R32) | kg | 0.8 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-AP15VG + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F33VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 20 | |
| | Connecting pipe length | m | Max. 15 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 3.3 (1.1 - 3.8) | 4.0 (1.0 - 4.1) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 850 | 910 |
| | Running current (Total) *1, *2 | A | 4.5 - 4.3 - 4.1 | 4.6 - 4.4 - 4.2 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 4.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.88 | 4.40 |
| Compressor | Model | | KVB073FYXMC | |
| | Output | W | 470 | |
| | Current *1, *2 | A | 3.8 | |
| | Refrigeration oil (Model) | L | 0.27 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 33 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,848 | 1,938 |
| | Sound level (Rated) | dB(A) | 49 | 50 |
| | Fan speed (Rated) | rpm | 840 | 880 |
| | Pre-charged refrigerant quantity (R32) | kg | 0.8 | |
| | Max refrigerant quantity (R32) | kg | 0.8 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-AP15VG + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F42VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 4.2 (1.1 - 4.4) | 4.5 (1.0 - 4.8) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 980 | 880 |
| | Running current (Total) *1, *2 | A | 4.9 - 4.7 - 4.5 | 4.4 - 4.3 - 4.1 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.29 | 5.11 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,100 | |
| | Current *1, *2 | A | 3.99 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-FA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 37 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,704 | 2,010 |
| | Sound level (Rated) | dB(A) | 44 | 50 |
| | Fan speed (Rated) | rpm | 780 | 910 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.2 | |
| | Max refrigerant quantity (R32) | kg | 1.2 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN25VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F42VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 4.2 (1.1 - 4.4) | 4.5 (1.0 - 4.8) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 980 | 880 |
| | Running current (Total) *1, *2 | A | 4.9 - 4.7 - 4.5 | 4.4 - 4.3 - 4.1 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.29 | 5.11 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,100 | |
| | Current *1, *2 | A | 3.99 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 37 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,704 | 2,010 |
| | Sound level (Rated) | dB(A) | 44 | 50 |
| | Fan speed (Rated) | rpm | 780 | 910 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.2 | |
| | Max refrigerant quantity (R32) | kg | 1.2 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN25VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F42VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 4.2 (1.1 - 4.4) | 4.5 (1.0 - 4.8) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 980 | 880 |
| | Running current (Total) *1, *2 | A | 4.9 - 4.7 - 4.5 | 4.4 - 4.3 - 4.1 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.29 | 5.11 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,100 | |
| | Current *1, *2 | A | 3.99 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 37 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,704 | 2,010 |
| | Sound level (Rated) | dB(A) | 44 | 50 |
| | Fan speed (Rated) | rpm | 780 | 910 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F42VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 4.2 (1.1 - 4.4) | 4.5 (1.0 - 4.8) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 980 | 880 |
| | Running current (Total) *1, *2 | A | 4.9 - 4.7 - 4.5 | 4.4 - 4.3 - 4.1 |
| | Power factor (Total) *1, *2 | % | 90 | |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.29 | 5.11 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,100 | |
| | Current *1, *2 | A | 3.99 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | 37 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,704 | 2,010 |
| | Sound level (Rated) | dB(A) | 44 | 50 |
| | Fan speed (Rated) | rpm | 780 | 910 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VF** | **MXZ-2F53VFH** |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 5.6) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,400 | 1,560 |
| | Running current (Total) *1, *2 | A | 6.5 - 6.2 - 6.0 | 7.5 - 7.1 - 6.8 |
| | Power factor (Total) *1, *2 | % | 97.5 | 95 |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.79 | 4.10 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 6.59 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-FA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | **MXZ-2F53VF:** 37 | **MXZ-2F53VFH:** 38 |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,962 | 2,082 |
| | Sound level (Rated) | dB(A) | 46 | 51 |
| | Fan speed (Rated) | rpm | 890 | 940 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.2 | |
| | Max refrigerant quantity (R32) | kg | 1.2 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN35VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VF2 MXZ-2F53VFH2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 5.6) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,400 | 1,560 |
| | Running current (Total) *1, *2 | A | 6.5 - 6.2 - 6.0 | 7.5 - 7.1 - 6.8 |
| | Power factor (Total) *1, *2 | % | 97.5 | 95 |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.79 | 4.10 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 6.59 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | **MXZ-2F53VF2:** 37 **MXZ-2F53VFH2:** 38 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,962 | 2,082 |
| | Sound level (Rated) | dB(A) | 46 | 51 |
| | Fan speed (Rated) | rpm | 890 | 940 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.2 | |
| | Max refrigerant quantity (R32) | kg | 1.2 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN35VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VF3 MXZ-2F53VFH3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 5.6) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,400 | 1,560 |
| | Running current (Total) *1, *2 | A | 6.5 - 6.2 - 6.0 | 7.5 - 7.1 - 6.8 |
| | Power factor (Total) *1, *2 | % | 97.5 | 95 |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.79 | 4.10 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 6.59 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | **MXZ-2F53VF3:** 37 **MXZ-2F53VFH3:** 38 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,962 | 2,082 |
| | Sound level (Rated) | dB(A) | 46 | 51 |
| | Fan speed (Rated) | rpm | 890 | 940 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN35VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VF4 MXZ-2F53VFH4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 5.6) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 15 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,400 | 1,560 |
| | Running current (Total) *1, *2 | A | 6.5 - 6.2 - 6.0 | 7.5 - 7.1 - 6.8 |
| | Power factor (Total) *1, *2 | % | 97.5 | 95 |
| | Starting current (Total) *1, *2 | A | 7.6 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.79 | 4.10 |
| Compressor | Model | | SVB130FBBMT | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 6.59 | |
| | Refrigeration oil (Model) | L | 0.35 (FW68S) | |
| Fan motor | Model | | RC0J50-NA | |
| | Current *1, *2 | A | 0.35 | |
| | Dimensions W x H x D | mm | 800 x 550 x 285 | |
| | Weight | kg | **MXZ-2F53VF4:** 37 **MXZ-2F53VFH4:** 38 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,962 | 2,082 |
| | Sound level (Rated) | dB(A) | 46 | 51 |
| | Fan speed (Rated) | rpm | 890 | 940 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.0 | |
| | Max refrigerant quantity (R32) | kg | 1.0 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN35VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F54VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 50 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.4 (2.9 - 6.8) | 7.0 (2.6 - 9.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,320 | 1,400 |
| | Running current (Total) *1, *2 | A | 6.0 - 5.7 - 5.5 | 6.4 - 6.1 - 5.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.7 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.09 | 5.00 |
| Compressor | Model | | SVB130FBBM1T | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 5.06 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 57 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,860 | 1,632 |
| | Sound level (Rated) | dB(A) | 46 | 50 |
| | Fan speed (Rated) | rpm | 600 | 560 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F54VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 50 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.4 (2.9 - 6.8) | 7.0 (2.6 - 9.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,320 | 1,400 |
| | Running current (Total) *1, *2 | A | 6.0 - 5.7 - 5.5 | 6.4 - 6.1 - 5.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.7 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.09 | 5.00 |
| Compressor | Model | | SVB130FBBM1T | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 5.06 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,860 | 1,860 |
| | Sound level (Rated) | dB(A) | 46 | 50 |
| | Fan speed (Rated) | rpm | 600 | 600 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F54VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 50 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.4 (2.9 - 6.8) | 7.0 (2.6 - 9.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,320 | 1,400 |
| | Running current (Total) *1, *2 | A | 6.0 - 5.7 - 5.5 | 6.4 - 6.1 - 5.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.7 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.09 | 5.00 |
| Compressor | Model | | SVB130FBBM1T | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 5.06 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,860 | 1,860 |
| | Sound level (Rated) | dB(A) | 46 | 50 |
| | Fan speed (Rated) | rpm | 600 | 600 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F54VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 50 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.4 (2.9 - 6.8) | 7.0 (2.6 - 9.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,320 | 1,400 |
| | Running current (Total) *1, *2 | A | 6.0 - 5.7 - 5.5 | 6.4 - 6.1 - 5.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.7 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.09 | 5.00 |
| Compressor | Model | | SVB130FBBM1T | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 5.06 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 1,860 | 1,860 |
| | Sound level (Rated) | dB(A) | 46 | 50 |
| | Fan speed (Rated) | rpm | 600 | 600 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F68VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 6.8 (2.9 - 8.4) | 8.6 (2.6 - 10.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,840 | 1,910 |
| | Running current (Total) *1, *2 | A | 8.4 - 8.0 - 7.7 | 8.8 - 8.4 - 8.0 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.70 | 4.50 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 1,800 | |
| | Current *1, *2 | A | 8.58 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 57 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,376 |
| | Sound level (Rated) | dB(A) | 48 | 53 |
| | Fan speed (Rated) | rpm | 650 | 700 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN25VG + MSZ-LN25VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F68VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 6.8 (2.9 - 8.4) | 8.6 (2.6 - 10.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,840 | 1,910 |
| | Running current (Total) *1, *2 | A | 8.4 - 8.0 - 7.7 | 8.8 - 8.4 - 8.0 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.70 | 4.50 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 1,800 | |
| | Current *1, *2 | A | 8.58 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,376 |
| | Sound level (Rated) | dB(A) | 48 | 53 |
| | Fan speed (Rated) | rpm | 650 | 700 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN25VG + MSZ-LN25VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F68VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 6.8 (2.9 - 8.4) | 8.6 (2.6 - 10.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,840 | 1,910 |
| | Running current (Total) *1, *2 | A | 8.4 - 8.0 - 7.7 | 8.8 - 8.4 - 8.0 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.70 | 4.50 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 1,800 | |
| | Current *1, *2 | A | 8.58 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,376 |
| | Sound level (Rated) | dB(A) | 48 | 53 |
| | Fan speed (Rated) | rpm | 650 | 700 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-3F68VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 3 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 6.8 (2.9 - 8.4) | 8.6 (2.6 - 10.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,840 | 1,910 |
| | Running current (Total) *1, *2 | A | 8.4 - 8.0 - 7.7 | 8.8 - 8.4 - 8.0 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.70 | 4.50 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 1,800 | |
| | Current *1, *2 | A | 8.58 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,376 |
| | Sound level (Rated) | dB(A) | 48 | 53 |
| | Fan speed (Rated) | rpm | 650 | 700 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F72VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 7.2 (3.7 - 8.8) | 8.6 (3.4 - 10.7) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,850 | 1,870 |
| | Running current (Total) *1, *2 | A | 8.5 - 8.1 - 7.8 | 8.6 - 8.2 - 7.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.89 | 4.60 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 58 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,562 |
| | Sound level (Rated) | dB(A) | 48 | 54 |
| | Fan speed (Rated) | rpm | 650 | 740 |
| | Pre-charged refrigerant quantity (R32) | kg | 1.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F72VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 7.2 (3.7 - 8.8) | 8.6 (3.4 - 10.7) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,850 | 1,870 |
| | Running current (Total) *1, *2 | A | 8.5 - 8.1 - 7.8 | 8.6 - 8.2 - 7.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.89 | 4.60 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,562 |
| | Sound level (Rated) | dB(A) | 48 | 54 |
| | Fan speed (Rated) | rpm | 650 | 740 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F72VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 7.2 (3.7 - 8.8) | 8.6 (3.4 - 10.7) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,850 | 1,870 |
| | Running current (Total) *1, *2 | A | 8.5 - 8.1 - 7.8 | 8.6 - 8.2 - 7.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.89 | 4.60 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,562 |
| | Sound level (Rated) | dB(A) | 48 | 54 |
| | Fan speed (Rated) | rpm | 650 | 740 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F72VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 7.2 (3.7 - 8.8) | 8.6 (3.4 - 10.7) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,850 | 1,870 |
| | Running current (Total) *1, *2 | A | 8.5 - 8.1 - 7.8 | 8.6 - 8.2 - 7.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.89 | 4.60 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,124 | 2,562 |
| | Sound level (Rated) | dB(A) | 48 | 54 |
| | Fan speed (Rated) | rpm | 650 | 740 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F80VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.0 (3.7 - 9.0) | 8.8 (3.4 - 11.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 2,250 | 2,000 |
| | Running current (Total) *1, *2 | A | 10.3 - 9.9 - 9.5 | 9.2 - 8.8 - 8.4 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.56 | 4.40 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,418 | 2,646 |
| | Sound level (Rated) | dB(A) | 50 | 55 |
| | Fan speed (Rated) | rpm | 710 | 760 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG + MSZ-LN18VG + MSZ-LN18VG + MSZ-LN25VG**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F80VF3** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.0 (3.7 - 9.0) | 8.8 (3.4 - 11.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 2,250 | 2,000 |
| | Running current (Total) *1, *2 | A | 10.3 - 9.9 - 9.5 | 9.2 - 8.8 - 8.4 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.56 | 4.40 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,418 | 2,646 |
| | Sound level (Rated) | dB(A) | 50 | 55 |
| | Fan speed (Rated) | rpm | 710 | 760 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F80VF4** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240 V, 50 Hz | |
| System | Indoor units number | | 2 to 4 | |
| | Piping total length | m | Max. 60 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.0 (3.7 - 9.0) | 8.8 (3.4 - 11.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 2,250 | 2,000 |
| | Running current (Total) *1, *2 | A | 10.3 - 9.9 - 9.5 | 9.2 - 8.8 - 8.4 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 10.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.56 | 4.40 |
| Compressor | Model | | SVB172FCKM1T | |
| | Output | W | 2,000 | |
| | Current *1, *2 | A | 6.98 | |
| | Refrigeration oil (Model) | L | 0.6 (FW68S) | |
| Fan motor | Model | | SIC-82FX-F764-1 | |
| | Current *1, *2 | A | 0.5 | |
| | Dimensions W x H x D | mm | 840 x 710 x 330 | |
| | Weight | kg | 59 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,418 | 2,646 |
| | Sound level (Rated) | dB(A) | 50 | 55 |
| | Fan speed (Rated) | rpm | 710 | 760 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2**
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)
COOLING INDOOR Dry-bulb temperature 27.0 °C Wet-bulb temperature 19.0 °C
OUTDOOR Dry-bulb temperature 35.0 °C Wet-bulb temperature 24.0 °C
HEATING INDOOR Dry-bulb temperature 20.0 °C
OUTDOOR Dry-bulb temperature 7.0 °C Wet-bulb temperature 6.0 °C

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F83VF** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 4 *4 | |
| | Piping total length | m | Max. 70 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.3 (3.7 - 9.2) | 9.3 (3.4 - 11.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,970 | 2,000 |
| | Running current (Total) *1, *2 | A | 9.1 - 8.7 - 8.3 | 9.2 - 8.8 - 8.4 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 8.8 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.21 | 4.65 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 2,200 | |
| | Current *1, *2 | A | 7.4 | 7.5 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 62 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,420 | 3,720 |
| | Sound level (Rated) | dB(A) | 49 | 51 |
| | Fan speed (Rated) | rpm | 600 | 640 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F83VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 4 *4 | |
| | Piping total length | m | Max. 70 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.3 (3.7 - 9.2) | 9.3 (3.4 - 11.6) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,970 | 2,000 |
| | Running current (Total) *1, *2 | A | 9.1 - 8.7 - 8.3 | 9.2 - 8.8 - 8.4 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 8.8 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.21 | 4.65 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 2,200 | |
| | Current *1, *2 | A | 7.4 | 7.5 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | ZWB2710D10A | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 62 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,420 | 3,720 |
| | Sound level (Rated) | dB(A) | 49 | 51 |
| | Fan speed (Rated) | rpm | 600 | 640 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-5F102VF** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 5 *4 | |
| | Piping total length | m | Max. 80 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 10.2 (3.9 - 11.0) | 10.5 (4.1 - 14.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 2,800 | 2,280 |
| | Running current (Total) *1, *2 | A | 12.9 - 12.3 - 11.8 | 10.5 - 10.0 - 9.6 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 12.3 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.64 | 4.60 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 2,800 | |
| | Current *1, *2 | A | 10.7 | 8.4 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 62 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,500 |
| | Sound level (Rated) | dB(A) | 52 | 56 |
| | Fan speed (Rated) | rpm | 650 | 750 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-5F102VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 5 *4 | |
| | Piping total length | m | Max. 80 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 10.2 (3.9 - 11.0) | 10.5 (4.1 - 14.0) |
| | Breaker capacity | A | 25 | |
| Electrical data | Power input (Total) *1, *2 | W | 2,800 | 2,280 |
| | Running current (Total) *1, *2 | A | 12.9 - 12.3 - 11.8 | 10.5 - 10.0 - 9.6 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 12.3 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.64 | 4.60 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 2,800 | |
| | Current *1, *2 | A | 10.7 | 8.4 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | ZWB2710D10A | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 62 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,500 |
| | Sound level (Rated) | dB(A) | 52 | 56 |
| | Fan speed (Rated) | rpm | 650 | 750 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-6F120VF2** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 6 *4 | |
| | Piping total length | m | Max. 80 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 12.0 ( 3.5 - 14.0 ) | 14.0 ( 3.5 - 16.5 ) |
| | Breaker capacity | A | 32 | |
| Electrical data | Power input (Total) *1, *2 | W | 3,600 | 3,310 |
| | Running current (Total) *1, *2 | A | 15.2 - 14.5 - 13.9 | 15.2 - 14.5 - 13.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 14.5 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.33 | 4.23 |
| Compressor | Model | | MVB33FBFMC | |
| | Output | W | 3,300 | |
| | Current *1, *2 | A | 14.2 | 12.6 |
| | Refrigeration oil (Model) | L | 1.10 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 1,048 x 330 | |
| | Weight | kg | 87 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,620 |
| | Sound level (Rated) | dB(A) | 55 | 57 |
| | Fan speed (Rated) | rpm | 650 | 770 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Refrigerant filling capacity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-6F122VF** | |
| | Outdoor unit power supply | | Single phase<br>220 - 230 - 240V, 50 Hz *3 | |
| System | Indoor units number | | 1 to 6 *4 | |
| | Piping total length | m | Max. 80 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 12.2 ( 3.5 - 14.0 ) | 14.0 ( 3.5 - 16.5 ) |
| | Breaker capacity | A | 32 | |
| Electrical data | Power input (Total) *1, *2 | W | 3,660 | 3,310 |
| | Running current (Total) *1, *2 | A | 16.8 - 16.1 - 15.4 | 15.2 - 14.5 - 13.9 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 16.1 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 3.33 | 4.23 |
| Compressor | Model | | MVB33FBFMC | |
| | Output | W | 3,300 | |
| | Current *1, *2 | A | 14.2 | 12.6 |
| | Refrigeration oil (Model) | L | 1.10 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 1,048 x 330 | |
| | Weight | kg | 87 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,620 |
| | Sound level (Rated) | dB(A) | 55 | 57 |
| | Fan speed (Rated) | rpm | 650 | 770 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Refrigerant filling capacity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 220 and 240 V are only - E1.
*4 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0 °C | Wet-bulb temperature | 19.0 °C |
| | OUTDOOR | Dry-bulb temperature | 35.0 °C | Wet-bulb temperature | 24.0 °C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0 °C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0 °C | Wet-bulb temperature | 6.0 °C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VFHZ** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz | |
| System | Indoor units number | | 1 to 2 *3 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 6.0) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 16 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,290 | 1,360 |
| | Running current (Total) *1, *2 | A | 5.9 - 5.7 - 5.4 | 6.2 - 6.0 - 5.7 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.0 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.11 | 4.71 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 4.9 | 5.2 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 61 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,580 | 2,430 |
| | Sound level (Rated) | dB(A) | 45 | 47 |
| | Fan speed (Rated) | rpm | 480 | 460 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN35VG2**
*3 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-2F53VFHZ2** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz | |
| System | Indoor units number | | 1 to 2 *3 | |
| | Piping total length | m | Max. 30 | |
| | Connecting pipe length | m | Max. 20 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 5.3 (1.1 - 6.0) | 6.4 (1.0 - 7.0) |
| | Breaker capacity | A | 16 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,290 | 1,360 |
| | Running current (Total) *1, *2 | A | 5.9 - 5.7 - 5.4 | 6.2 - 6.0 - 5.7 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 6.0 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.11 | 4.71 |
| Compressor | Model | | SVB220FUGMC-L1 | |
| | Output | W | 1,400 | |
| | Current *1, *2 | A | 4.9 | 5.2 |
| | Refrigeration oil (Model) | L | 0.6 (FW68CA) | |
| Fan motor | Model | | ZWB2710D10A | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 796 x 330 | |
| | Weight | kg | 61 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 2,580 | 2,430 |
| | Sound level (Rated) | dB(A) | 45 | 47 |
| | Fan speed (Rated) | rpm | 480 | 460 |
| | Pre-charged refrigerant quantity (R32) | kg | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN35VG2**
*3 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F83VFHZ** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz | |
| System | Indoor units number | | 1 to 4 *3 | |
| | Piping total length | m | Max. 70 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.3 ( 3.5 - 9.2 ) | 9.0 ( 3.5 - 11.6 ) |
| | Breaker capacity | A | 30 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,900 | 1,700 |
| | Running current (Total) *1, *2 | A | 8.7 - 8.3 - 8.0 | 7.8 -7.5 -7.2 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 8.3 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.37 | 5.29 |
| Compressor | Model | | MVB33FBFMC | |
| | Output | W | 2,200 | |
| | Current *1, *2 | A | 7.0 | 6.2 |
| | Refrigeration oil (Model) | L | 1.10 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 1,048 x 330 | |
| | Weight | kg | 86 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,620 |
| | Sound level (Rated) | dB(A) | 55 | 57 |
| | Fan speed (Rated) | rpm | 650 | 770 |
| | Pre-charged refrigerant quantity (R32) | | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

| | | | | |
|---|---|---|---|---|
| | Outdoor model | | **MXZ-4F83VFHZ2** | |
| | Outdoor unit power supply | | Single phase<br>220 -230 - 240 V, 50 Hz | |
| System | Indoor units number | | 1 to 4 *3 | |
| | Piping total length | m | Max. 70 | |
| | Connecting pipe length | m | Max. 25 | |
| | Height difference (Indoor ~ Outdoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Height difference (Indoor ~ Indoor) | m | Refer to 8 REFRIGERANT SYSTEM DIAGRAM. | |
| | Function | | Cooling | Heating |
| | Capacity<br>Rated (Min.-Max.) *2 | kW | 8.3 ( 3.5 - 9.2 ) | 9.0 ( 3.5 - 11.6 ) |
| | Breaker capacity | A | 30 | |
| Electrical data | Power input (Total) *1, *2 | W | 1,900 | 1,700 |
| | Running current (Total) *1, *2 | A | 8.7 - 8.3 - 8.0 | 7.8 -7.5 -7.2 |
| | Power factor (Total) *1, *2 | % | 99 | |
| | Starting current (Total) *1, *2 | A | 8.3 | |
| Coefficient of performance (C.O.P) (Total) *1, *2 | | | 4.37 | 5.29 |
| Compressor | Model | | MVB33FBFMC | |
| | Output | W | 2,200 | |
| | Current *1, *2 | A | 7.0 | 6.2 |
| | Refrigeration oil (Model) | L | 1.10 (FW68CA) | |
| Fan motor | Model | | SIC-88FWJ-D888-4 | |
| | Current *1, *2 | A | 0.3 | |
| | Dimensions W x H x D | mm | 950 x 1,048 x 330 | |
| | Weight | kg | 86 | |
| Special remarks | Air flow (Rated) | $m^3/h$ | 3,780 | 4,620 |
| | Sound level (Rated) | dB(A) | 55 | 57 |
| | Fan speed (Rated) | rpm | 650 | 770 |
| | Pre-charged refrigerant quantity (R32) | | 2.4 | |
| | Max refrigerant quantity (R32) | kg | 2.4 | |

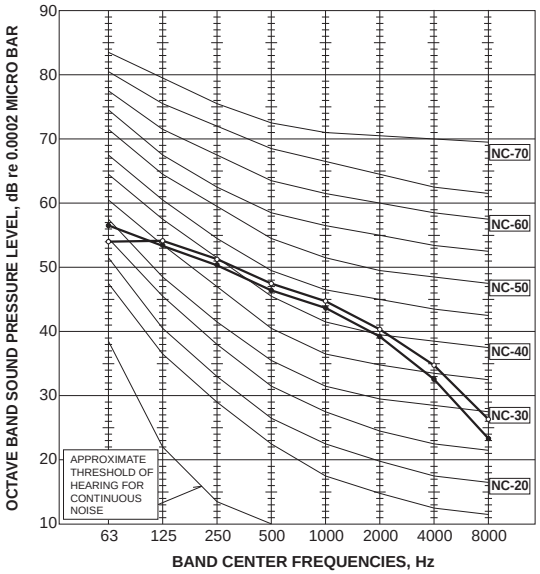
*1 Measured under rated operating frequency.
*2 When connected with below indoor units below.
**MSZ-LN18VG2 + MSZ-LN18VG2 + MSZ-LN25VG2 + MSZ-LN25VG2**
*3 At least 2 indoor units must be connected when using indoor unit with capacity lower than 25 class.
**NOTE:** Test conditions are based on ISO 5151. (Refrigerant piping length (one way): 5 m)

| | | | | | |
|---|---|---|---|---|---|
| COOLING | INDOOR | Dry-bulb temperature | 27.0°C | Wet-bulb temperature | 19.0°C |
| | OUTDOOR | Dry-bulb temperature | 35.0°C | Wet-bulb temperature | 24.0°C |
| HEATING | INDOOR | Dry-bulb temperature | 20.0°C | | |
| | OUTDOOR | Dry-bulb temperature | 7.0°C | Wet-bulb temperature | 6.0°C |

# 5 NOISE CRITERIA CURVES

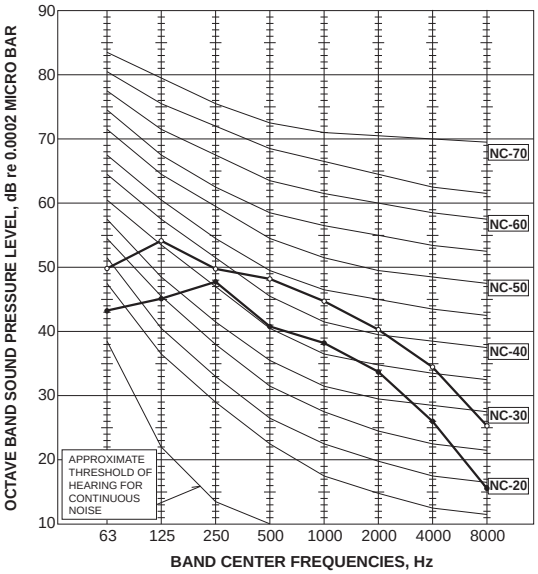
## MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 49 | ●—● |
| High | Heating | 50 | ○—○ |



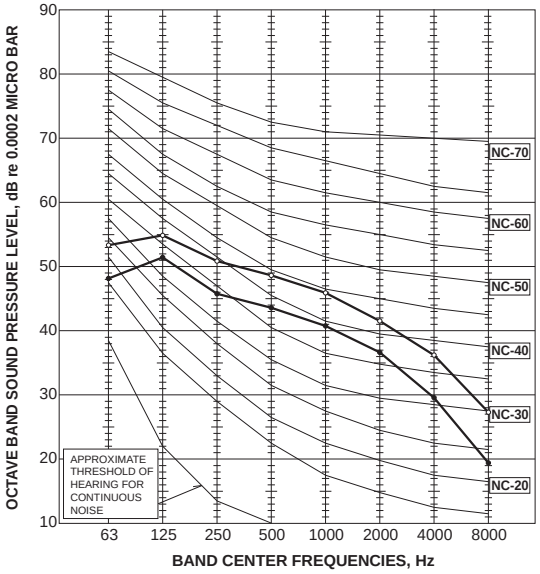

## MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 44 | ●—● |
| High | Heating | 50 | ○—○ |



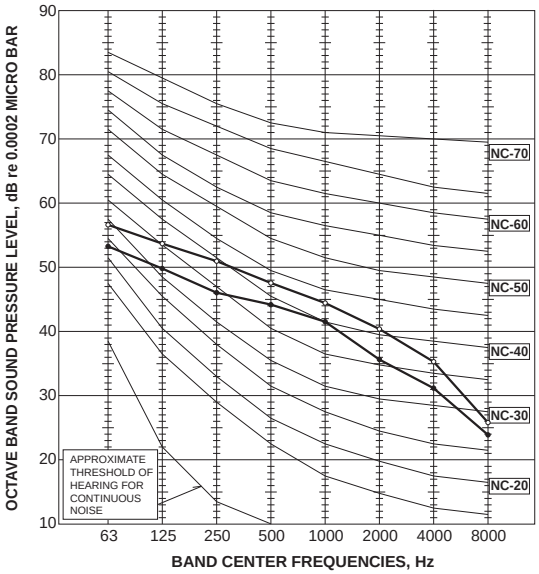

## MXZ-2F53VF MXZ-2F53VFH MXZ-2F53VF2 MXZ-2F53VFH2 MXZ-2F53VF3 MXZ-2F53VFH3 MXZ-2F53VF4 MXZ-2F53VFH4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 46 | ●—● |
| High | Heating | 51 | ○—○ |



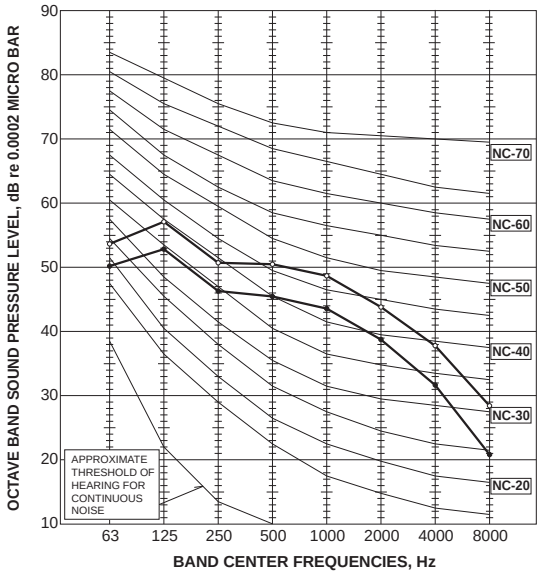
## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 46 | ●—● |
| High | Heating | 50 | ○—○ |



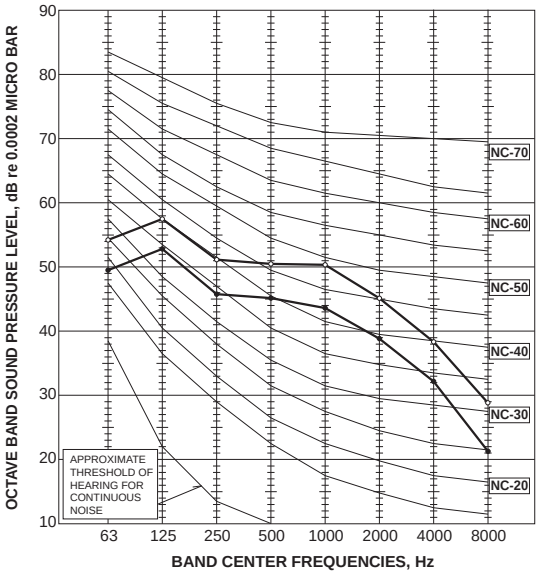

## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 48 | ●—● |
| High | Heating | 53 | ○—○ |



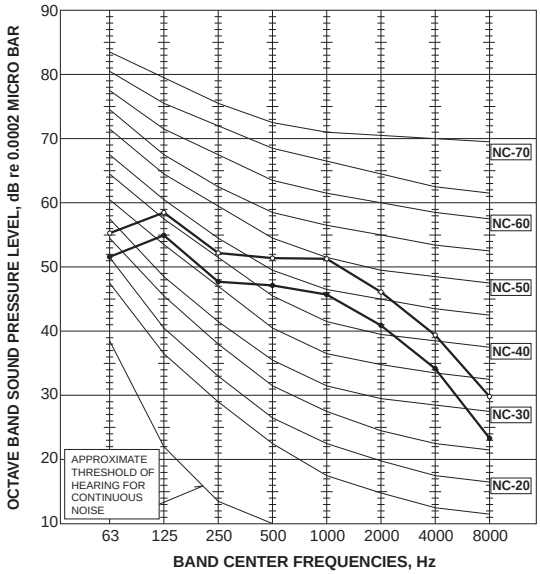

## MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 48 | ●—● |
| High | Heating | 54 | ○—○ |



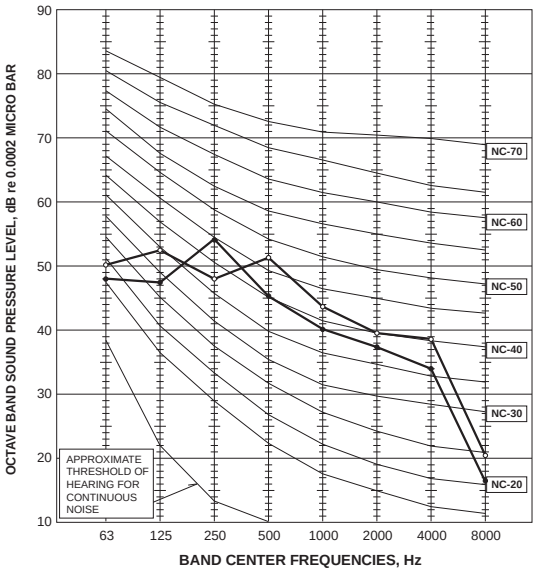

## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 50 | ●—● |
| High | Heating | 55 | ○—○ |



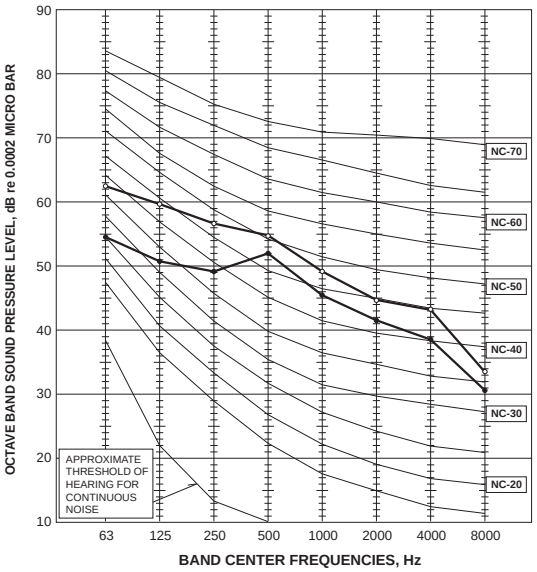
## MXZ-4F83VF MXZ-4F83VF2

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 49 | ●—● |
| High | Heating | 51 | ○—○ |



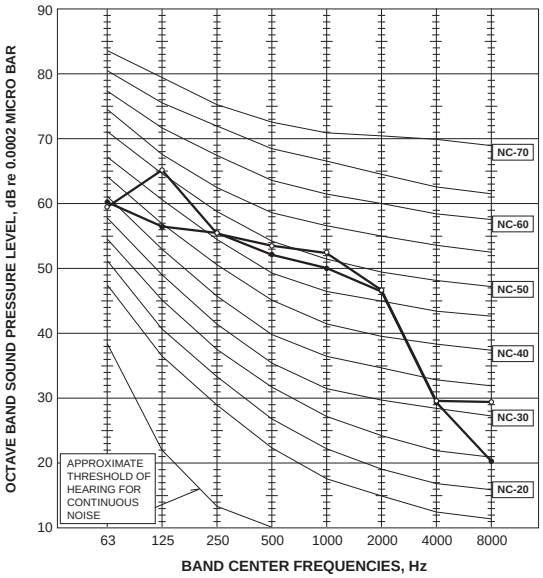

## MXZ-5F102VF MXZ-5F102VF2

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 52 | ●—● |
| High | Heating | 56 | ○—○ |



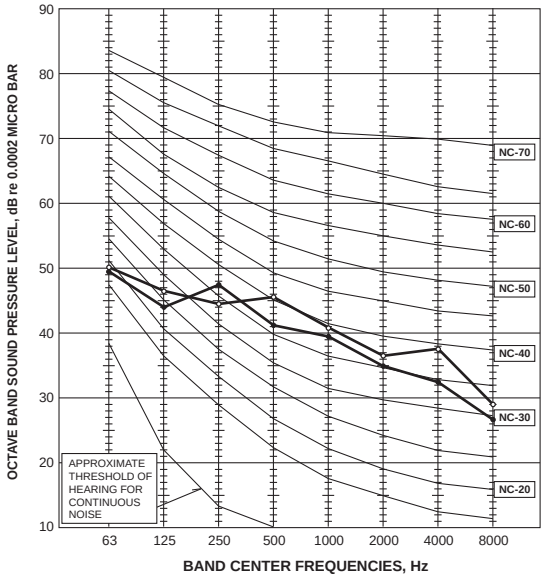

## MXZ-6F120VF2 MXZ-6F122VF

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 55 | ●—● |
| High | Heating | 57 | ○—○ |



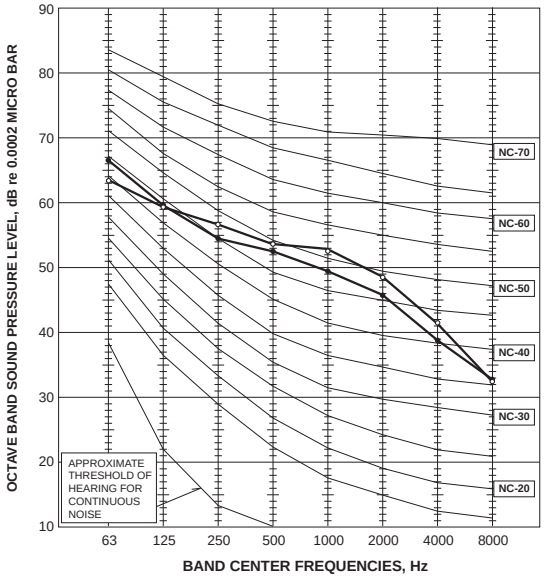
## MXZ-2F53VFHZ MXZ-2F53VFHZ2

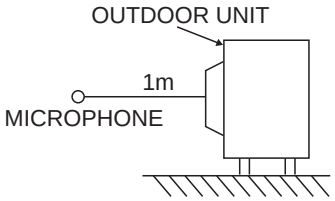
| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 45 | ●—● |
| High | Heating | 47 | ○—○ |




## MXZ-4F83VFHZ MXZ-4F83VFHZ2

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|---|---|---|---|
| High | Cooling | 55 | ●—● |
| High | Heating | 57 | ○—○ |




Test conditions

Cooling :Dry-bulb temperature 35.0°C Wet-bulb temperature 24.0°C

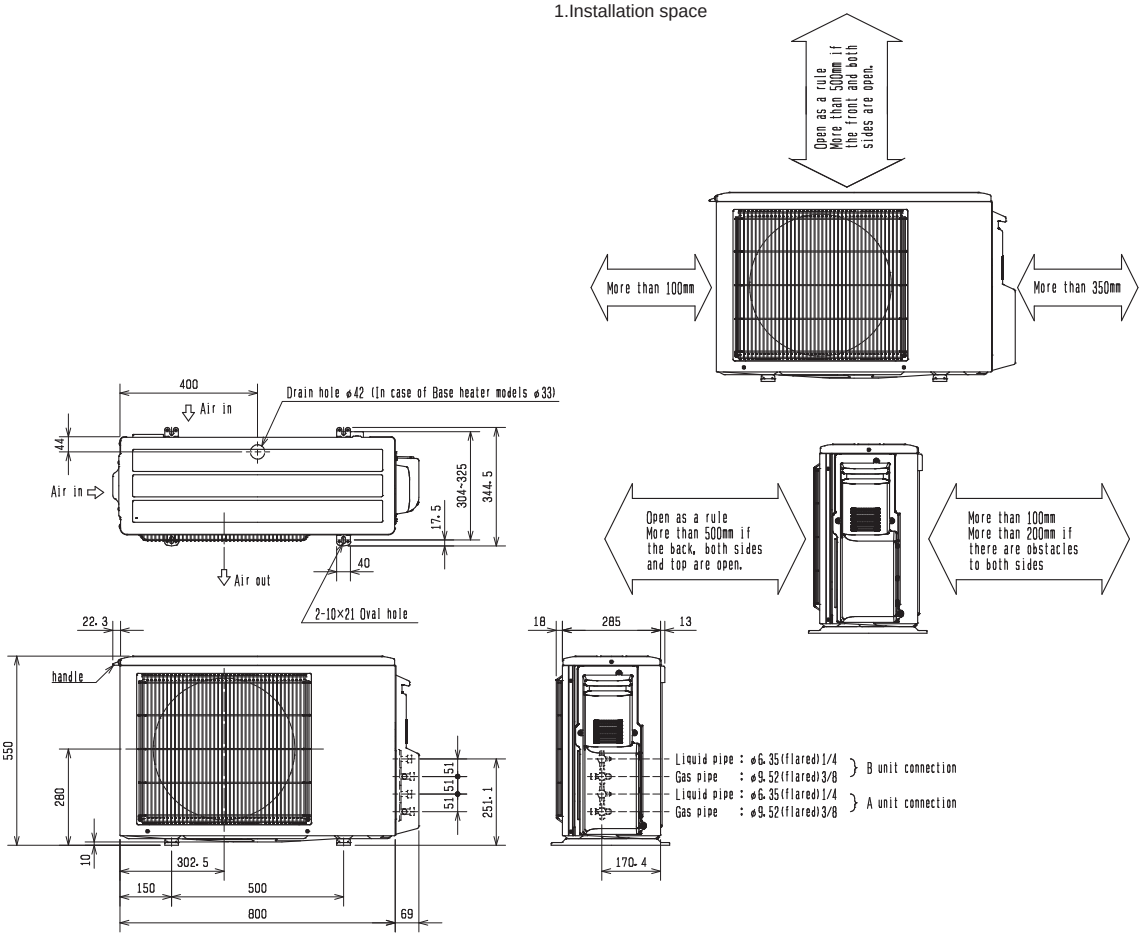
Heating :Dry-bulb temperature 7.0°C Wet-bulb temperature 6.0°C

# 6 OUTLINES AND DIMENSIONS

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**

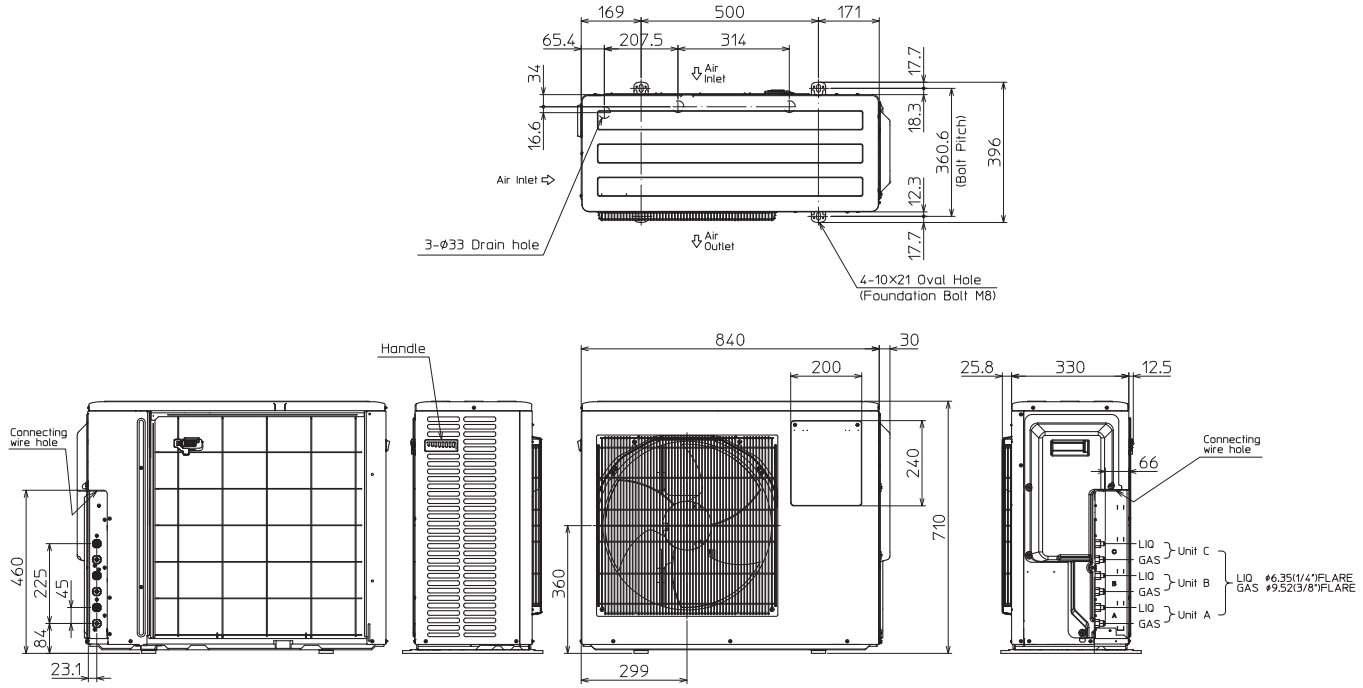
Unit: mm

1.Installation space



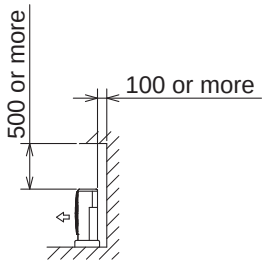
**MXZ-3F54VF MXZ-3F68VF**
**MXZ-3F54VF2 MXZ-3F68VF2**
**MXZ-3F54VF3 MXZ-3F68VF3**
**MXZ-3F54VF4 MXZ-3F68VF4**

Unit: mm

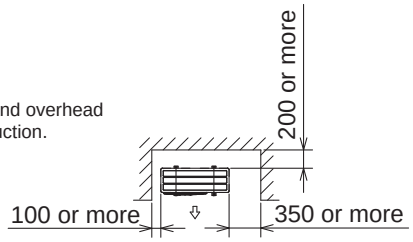



**1.Installation space**

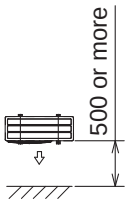
Note : Leave front and both sides free of obstruction.



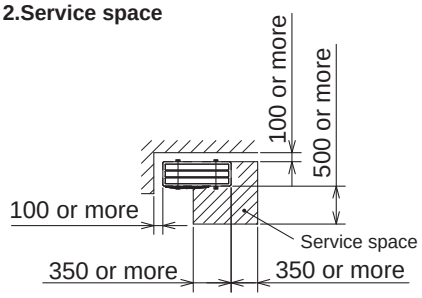

Note : Leave front and overhead free of obstruction.




Note : Leave rear, overhead and both sides free of obstruction.

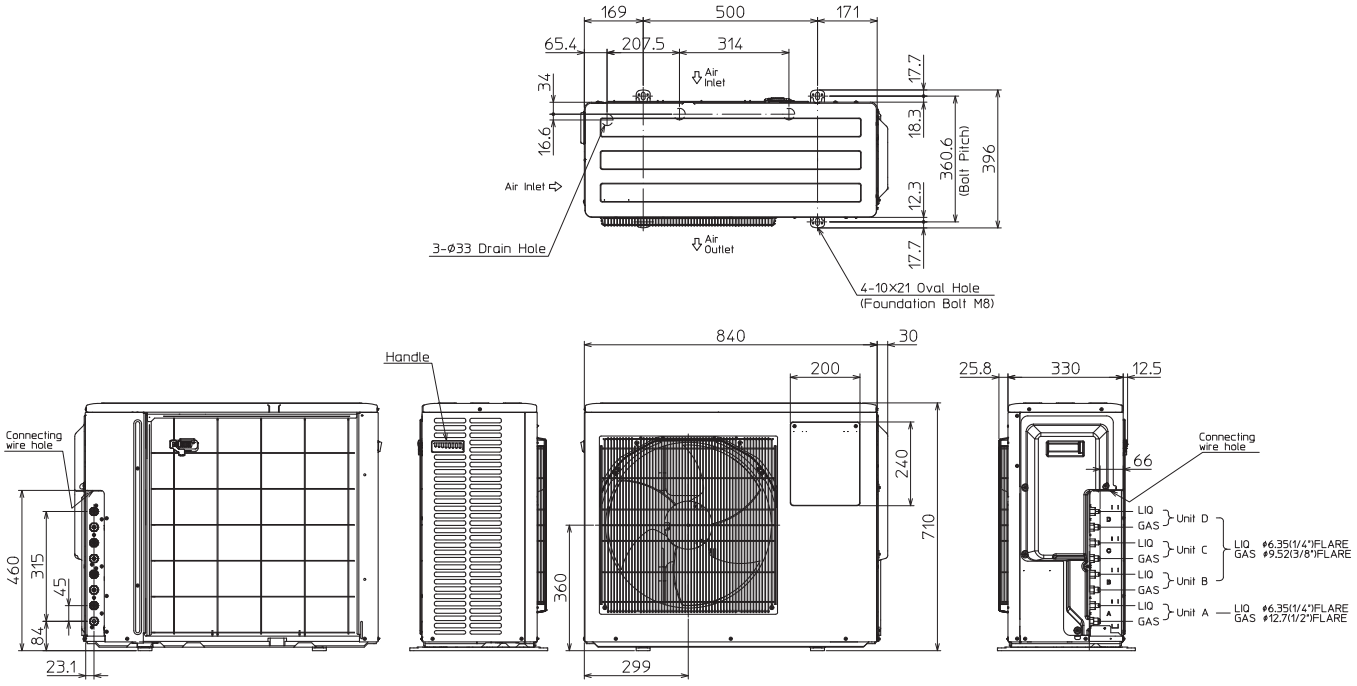



**2.Service space**



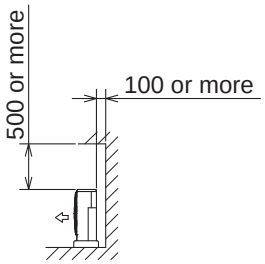
**MXZ-4F72VF**
**MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-4F72VF4 MXZ-4F80VF4**

Unit: mm

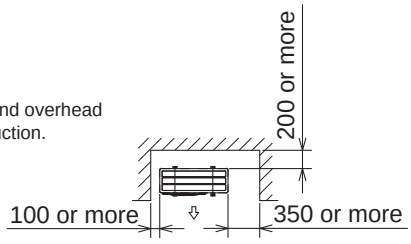



**1.Installation space**

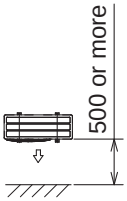
Note : Leave front and both sides free of obstruction.



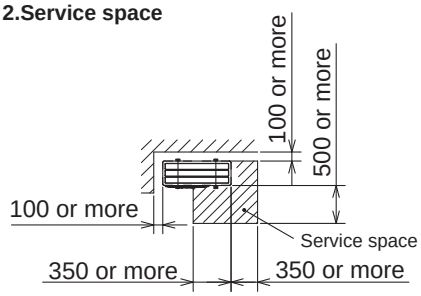

Note : Leave front and overhead free of obstruction.




Note : Leave rear, overhead and both sides free of obstruction.

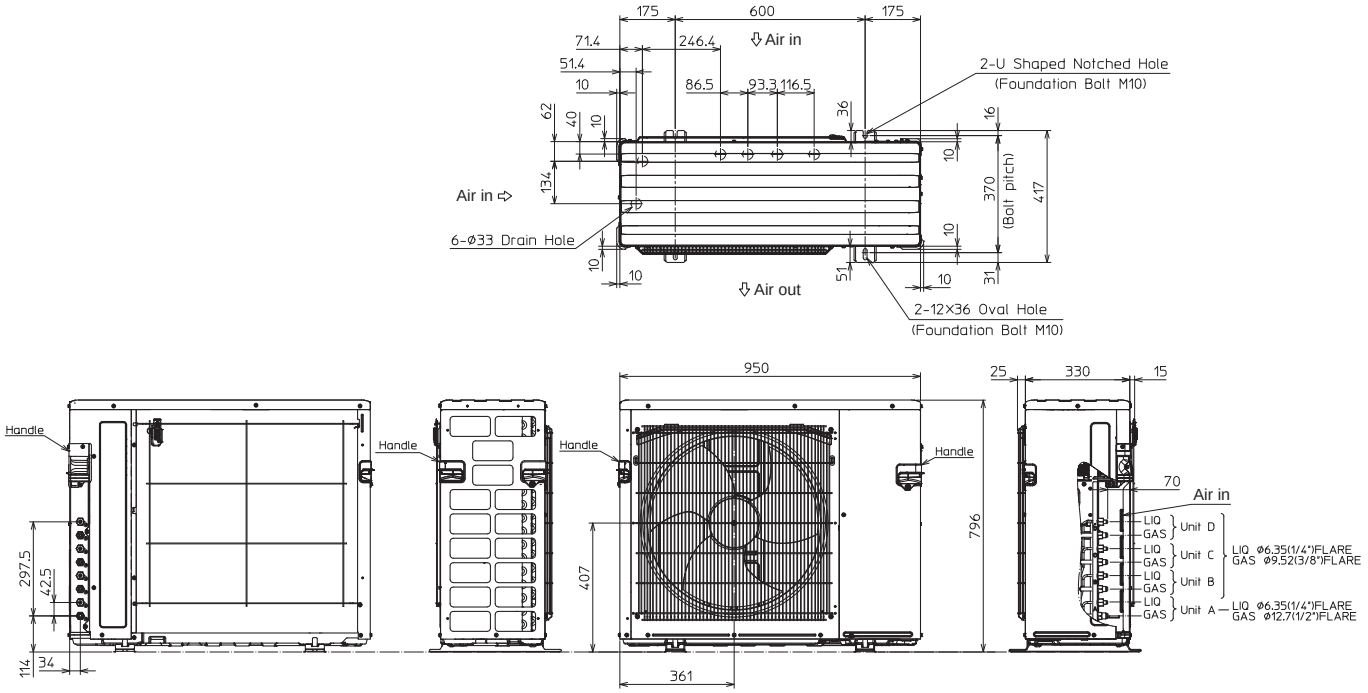



**2.Service space**

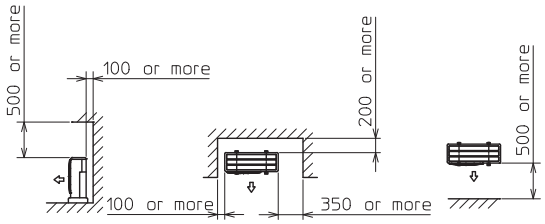


## MXZ-4F83VF MXZ-4F83VF2

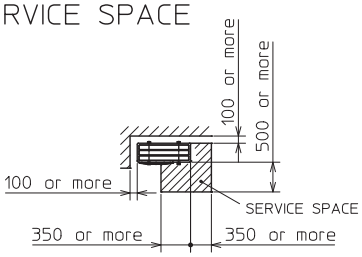
Unit: mm




1.FREE SPACE

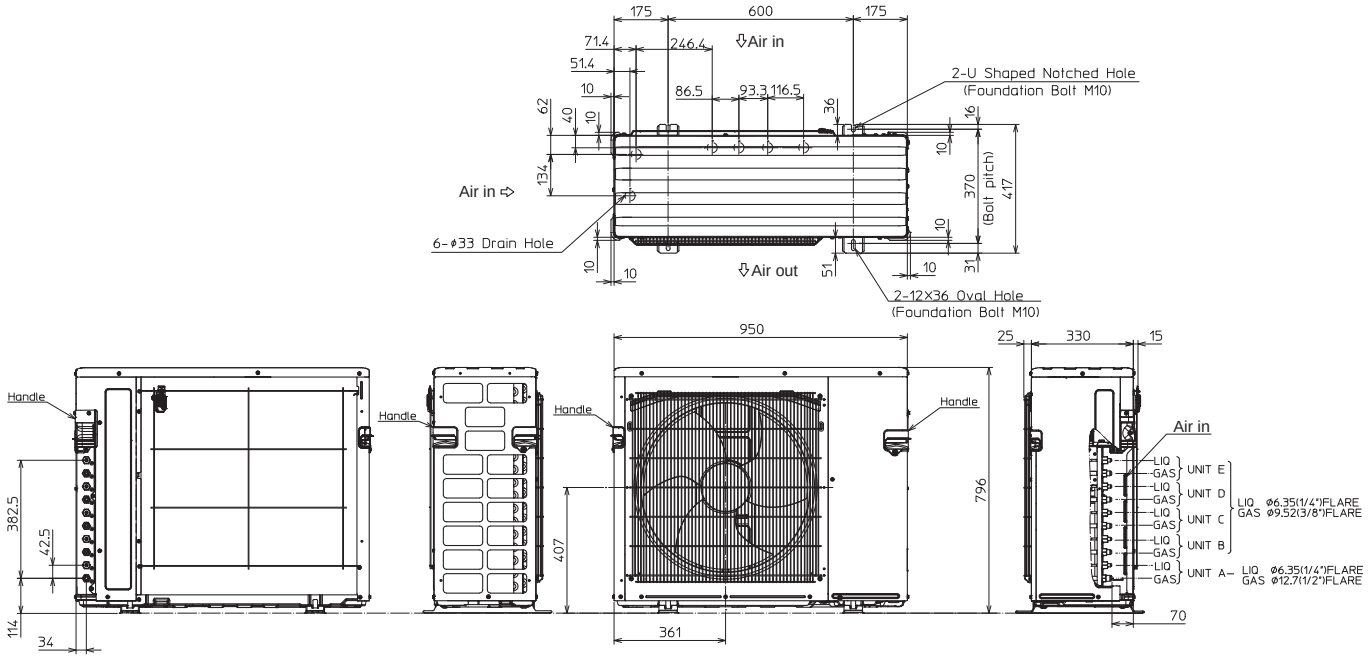



2.SERVICE SPACE

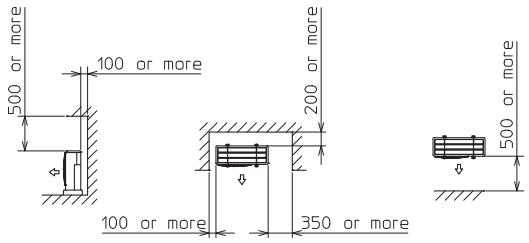


## MXZ-5F102VF MXZ-5F102VF2

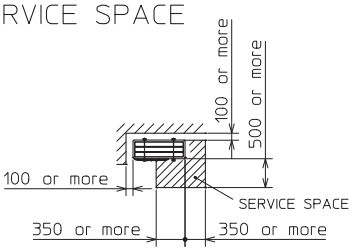
Unit: mm




1.FREE SPACE

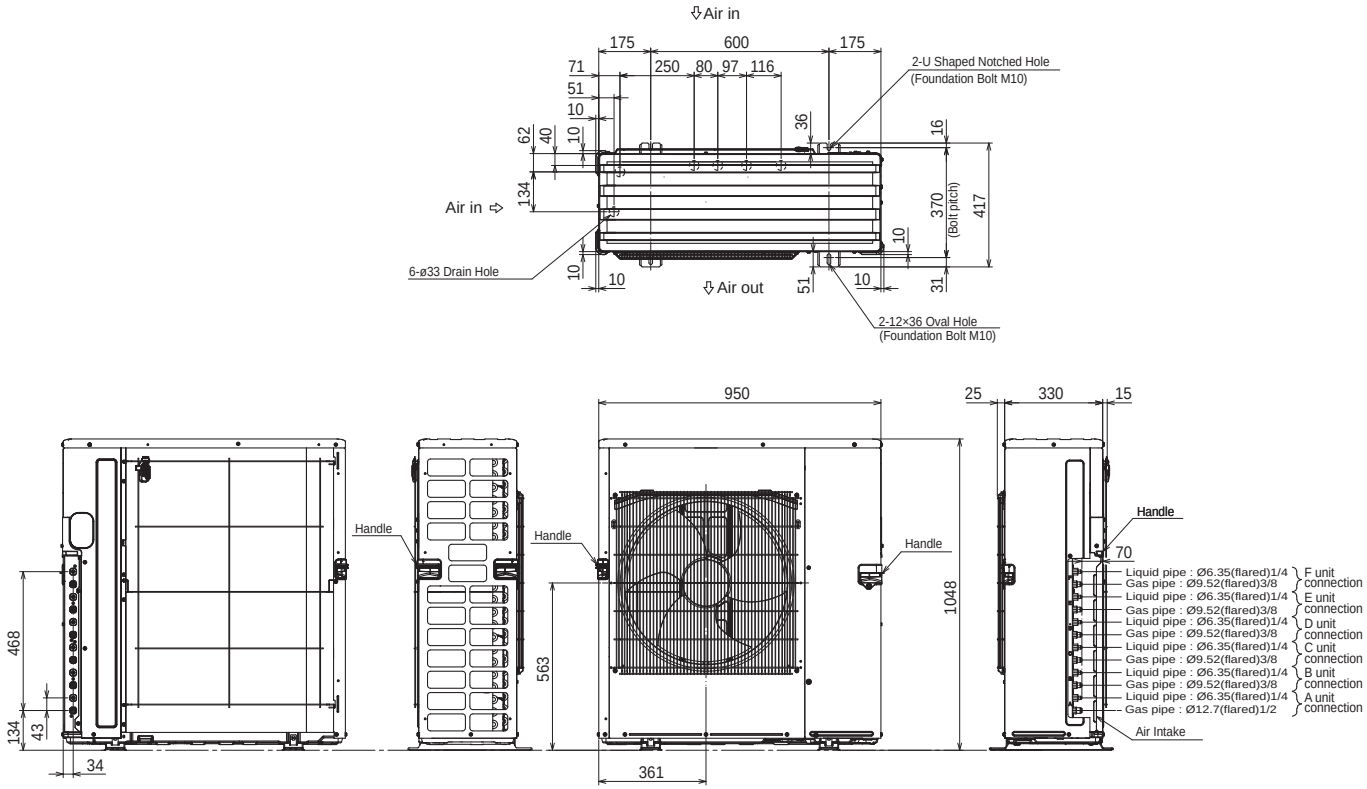



2.SERVICE SPACE

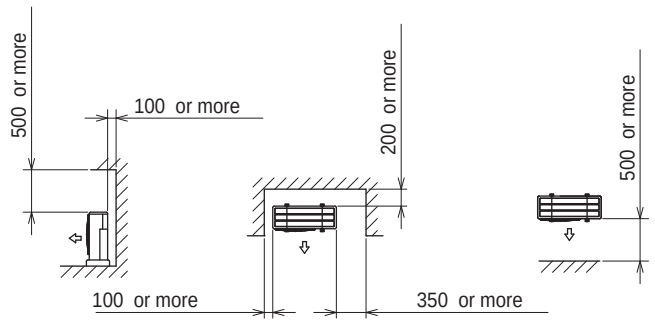


## MXZ-6F120VF2 MXZ-6F122VF

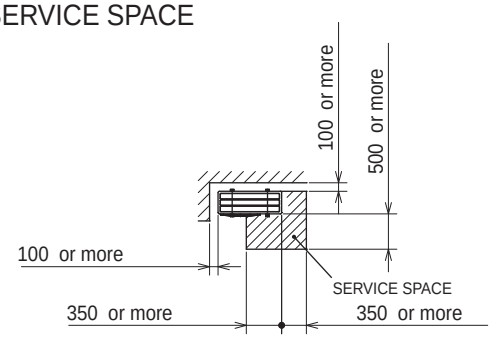
Unit: mm




1.FREE SPACE

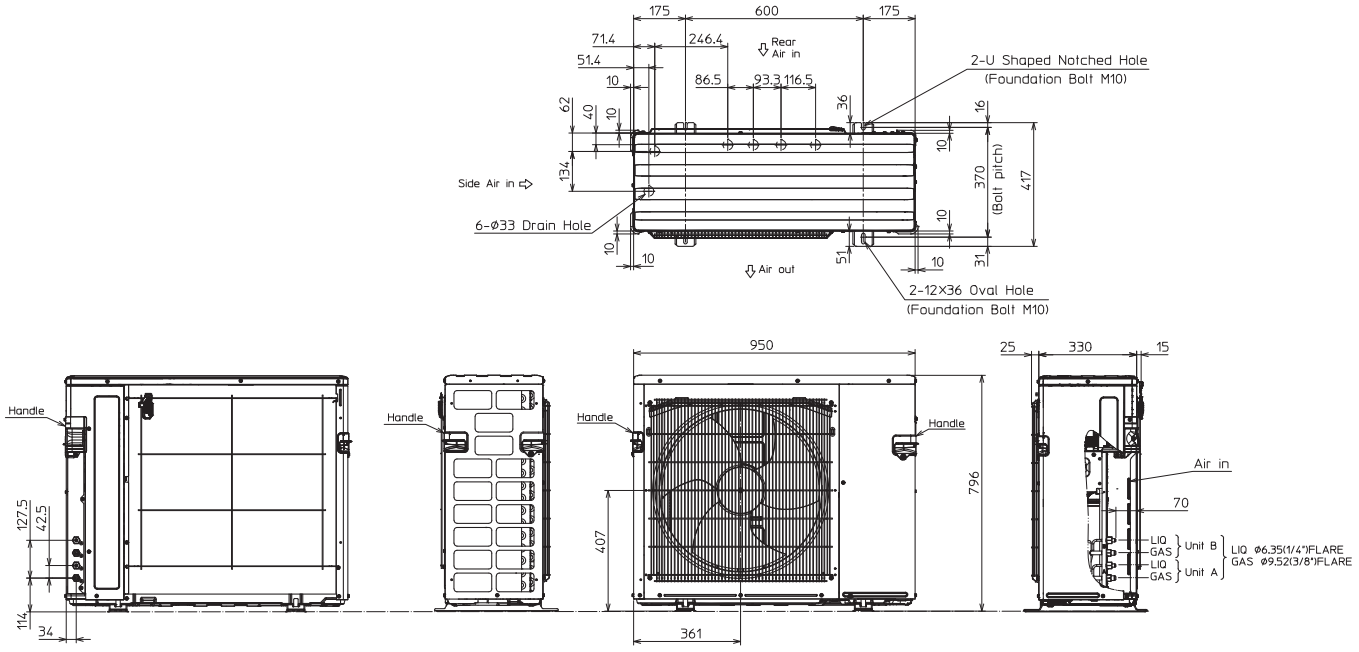



2.SERVICE SPACE

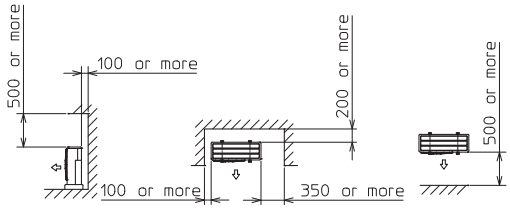


## MXZ-2F53VFHZ MXZ-2F53VFHZ2

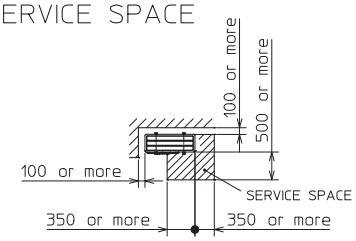
Unit: mm




1.FREE SPACE

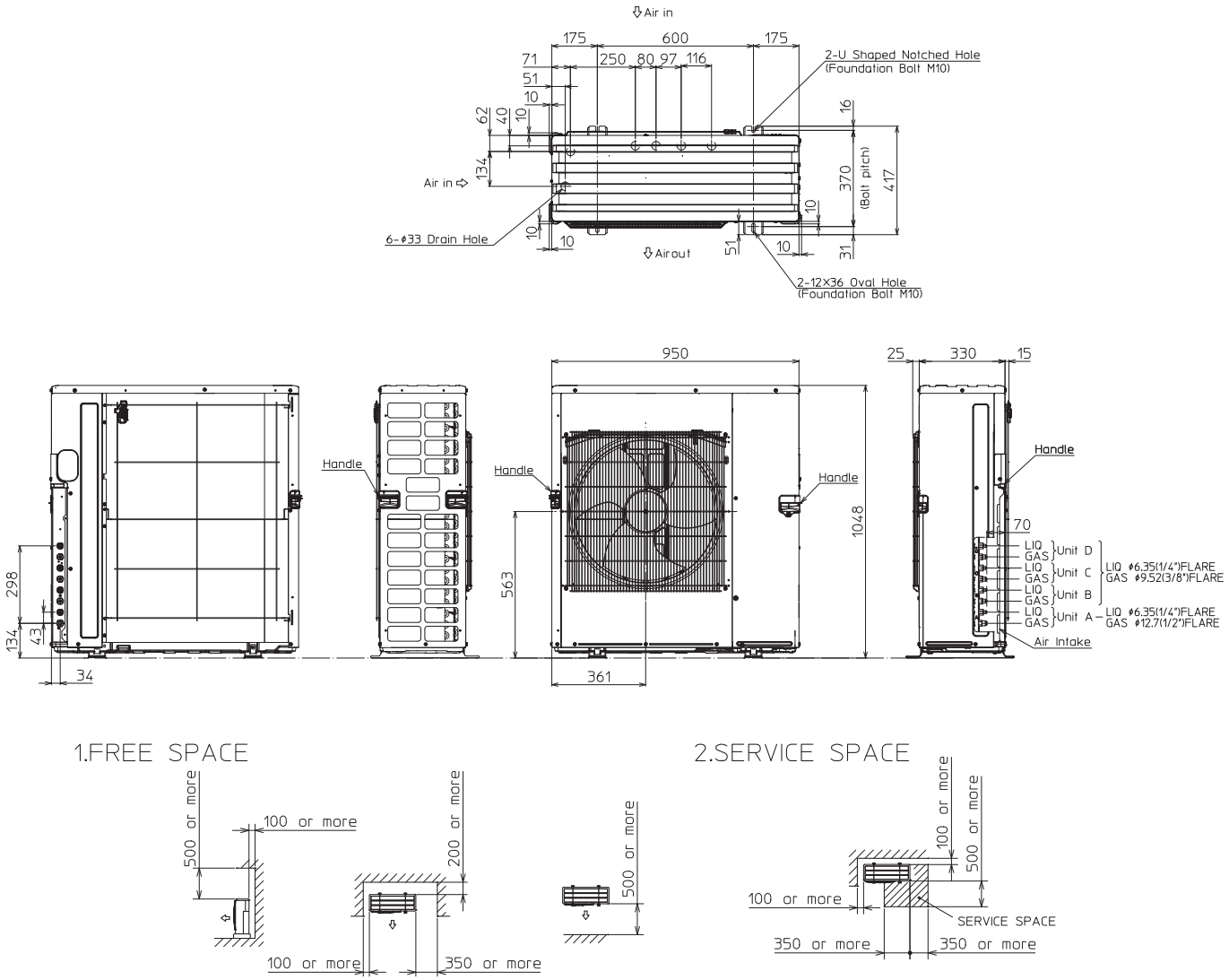



2.SERVICE SPACE



## MXZ-4F83VFHZ MXZ-4F83VFHZ2

Unit: mm



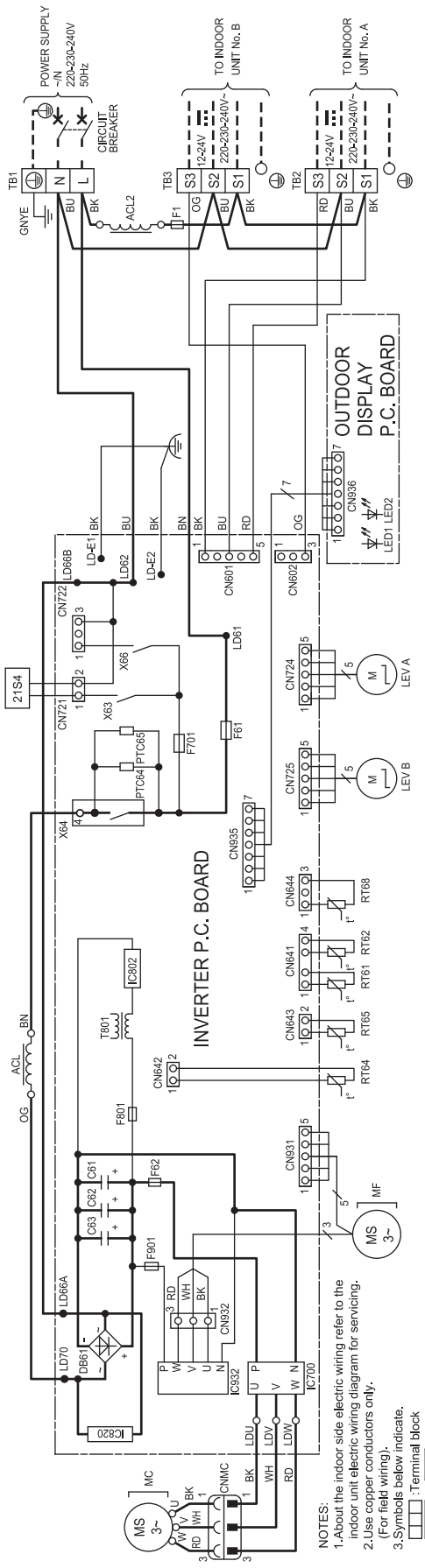

1.FREE SPACE




2.SERVICE SPACE

# 7 WIRING DIAGRAM

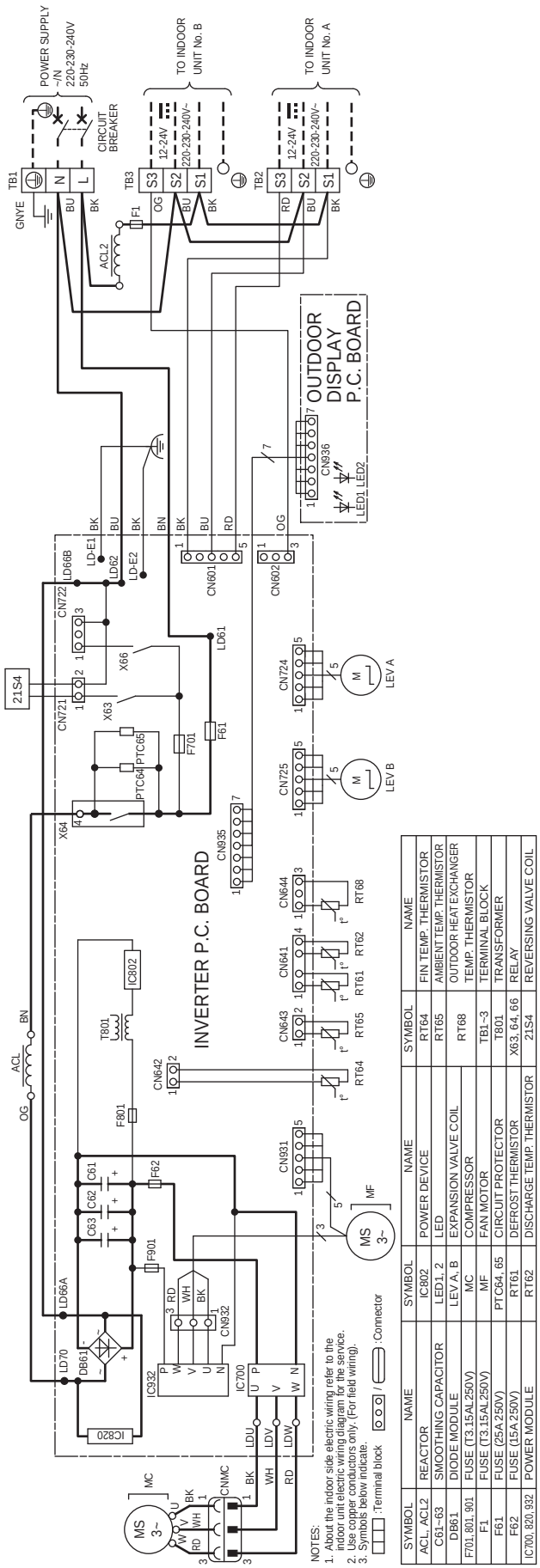
**MXZ-2F33VF - E1, ET1 MXZ-2F42VF - E1, ET1 MXZ-2F53VF - E1, ET1**




NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for servicing.
2. Use copper conductors only. (For field wiring).
3. Symbols below indicate.
   : Terminal block
   : Connector

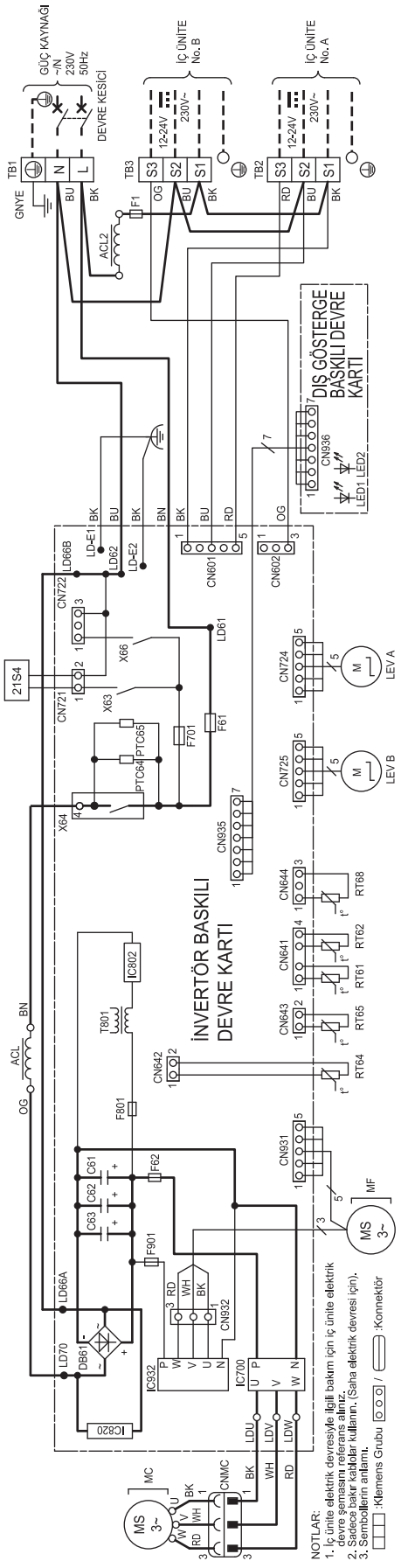
| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| ACL, ACL2 | REACTOR | IC802 | POWER DEVICE | RT64 | FIN TEMP. THERMISTOR |
| C61~63 | SMOOTHING CAPACITOR | LED1, 2 | LED | RT65 | AMBIENT TEMP. THERMISTOR |
| DB61 | DIODE MODULE | LEV A, B | EXPANSION VALVE COIL | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| F701, 801, 901 | FUSE (T3.15AL250V) | MC | COMPRESSOR | | |
| F1 | FUSE (T3.15AL250V) | MF | FAN MOTOR | TB1~3 | TERMINAL BLOCK |
| F61 | FUSE (25A 250V) | PTC64, 65 | CIRCUIT PROTECTOR | T801 | SWITCHING TRANS |
| F62 | FUSE (15A 250V) | RT61 | DEFROST THERMISTOR | X63, 64, 66 | RELAY |
| IC700, 820, 932 | POWER MODULE | RT62 | DISCHARGE TEMP. THERMISTOR | 21S4 | REVERSING VALVE COIL |

## MXZ-2F33VF2 - E1 MXZ-2F42VF2 - E1 MXZ-2F53VF2 - E1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| ACL, ACL2 | REACTOR | IC802 | POWER DEVICE | RT64 | FIN TEMP. THERMISTOR |
| C61~63 | SMOOTHING CAPACITOR | LED1, 2 | LED | RT65 | AMBIENT TEMP. THERMISTOR |
| DB61 | DIODE MODULE | LEV A, B | EXPANSION VALVE COIL | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| F701, 801, 901 | FUSE (T3.15AL 250V) | MC | COMPRESSOR | TB1~3 | TERMINAL BLOCK |
| F1 | FUSE (T3.15AL 250V) | MF | FAN MOTOR | T801 | TRANSFORMER |
| F61 | FUSE (25A 250V) | PTC64, 65 | CIRCUIT PROTECTOR | X63, 64, 66 | RELAY |
| F62 | FUSE (15A 250V) | RT61 | DEFROST THERMISTOR | 21S4 | REVERSING VALVE COIL |
| IC700, 820, 932 | POWER MODULE | RT62 | DISCHARGE TEMP. THERMISTOR | | |

## MXZ-2F33VF2 - ET1 MXZ-2F42VF2 - ET1 MXZ-2F53VF2 - ET1

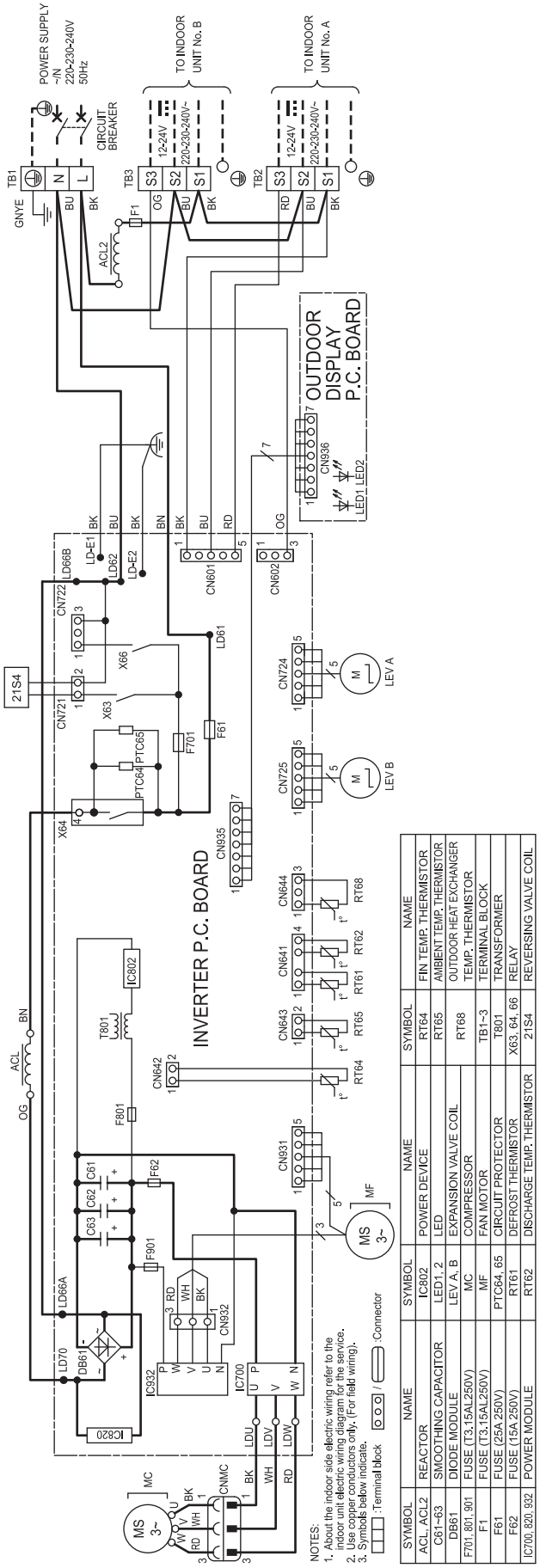



| SEMBOL | PARÇA ADI |
|---|---|
| ACL, ACL2 | REAKTÖR |
| C61~63 | KAPASİTÖR |
| DB61 | DİYOT MODÜLÜ |
| F701, 801, 901 | SİGORTA (T3.15AL250V) |
| F1 | SİGORTA (T3.15AL250V) |
| F61 | SİGORTA (25A 250V) |
| F62 | SİGORTA (15A 250V) |
| IC700, 820, 932 | GÜÇ MODÜLÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| IC802 | GÜÇ CİHAZI |
| LED1, 2 | LED |
| LEV A, B | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC64, 65 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

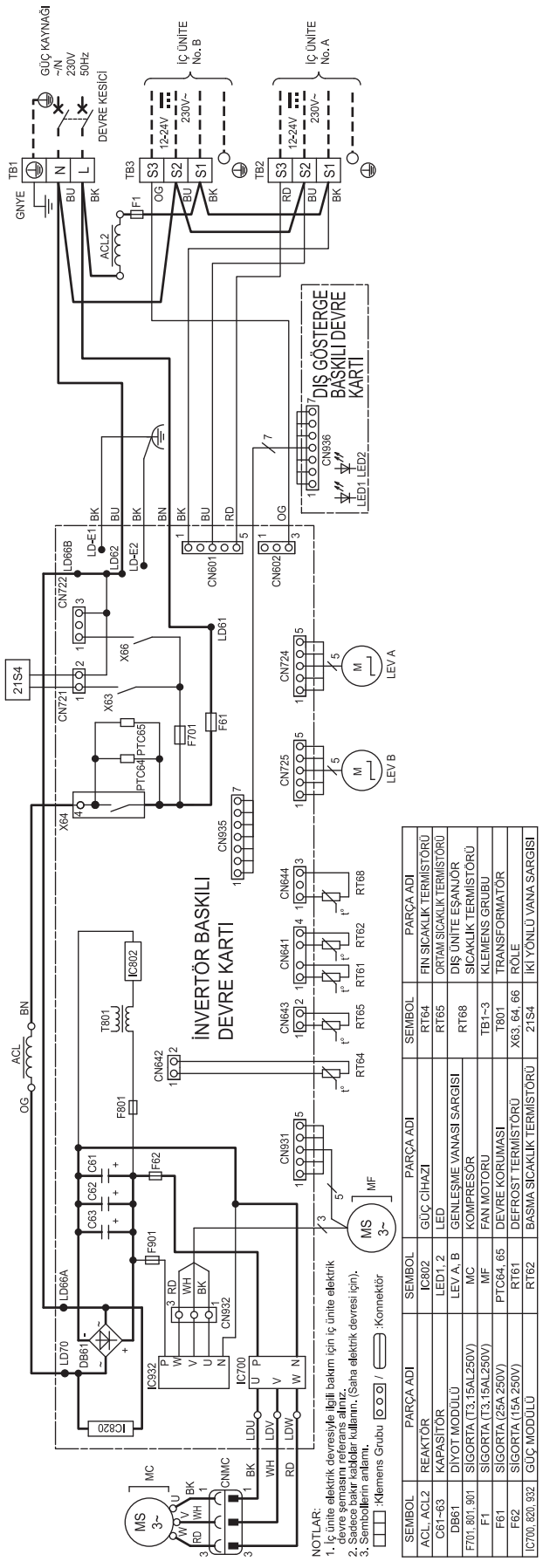
| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| TB1~3 | KLEMENS GRUBU |
| T801 | TRANSFORMATÖR |
| X63, 64, 66 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SARGISI |

**MXZ-2F33VF3 -** E1, ER1, E2 **MXZ-2F42VF3 -** E1, ER1, E2 **MXZ-2F53VF3 -** E1, ER1, E2




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|
| ACL, ACL2 | REACTOR | IC802 | POWER DEVICE | RT64 | FIN TEMP. THERMISTOR |
| C61~63 | SMOOTHING CAPACITOR | LED1, 2 | LED | RT65 | AMBIENT TEMP. THERMISTOR |
| DB61 | DIODE MODULE | LEV A, B | EXPANSION VALVE COIL | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| F701, 801, 901 | FUSE (T3.15AL250V) | MC | COMPRESSOR | TB1~3 | TERMINAL BLOCK |
| F1 | FUSE (T3.15AL250V) | MF | FAN MOTOR | T801 | TRANSFORMER |
| F61 | FUSE (25A 250V) | PTC64, 65 | CIRCUIT PROTECTOR | X63, 64, 66 | RELAY |
| F62 | FUSE (15A 250V) | RT61 | DEFROST THERMISTOR | 21S4 | REVERSING VALVE COIL |
| IC700, 820, 932 | POWER MODULE | RT62 | DISCHARGE TEMP. THERMISTOR | | |

**MXZ-2F33VF3 -** ET1 **MXZ-2F42VF3 -** ET1 **MXZ-2F53VF3 -** ET1

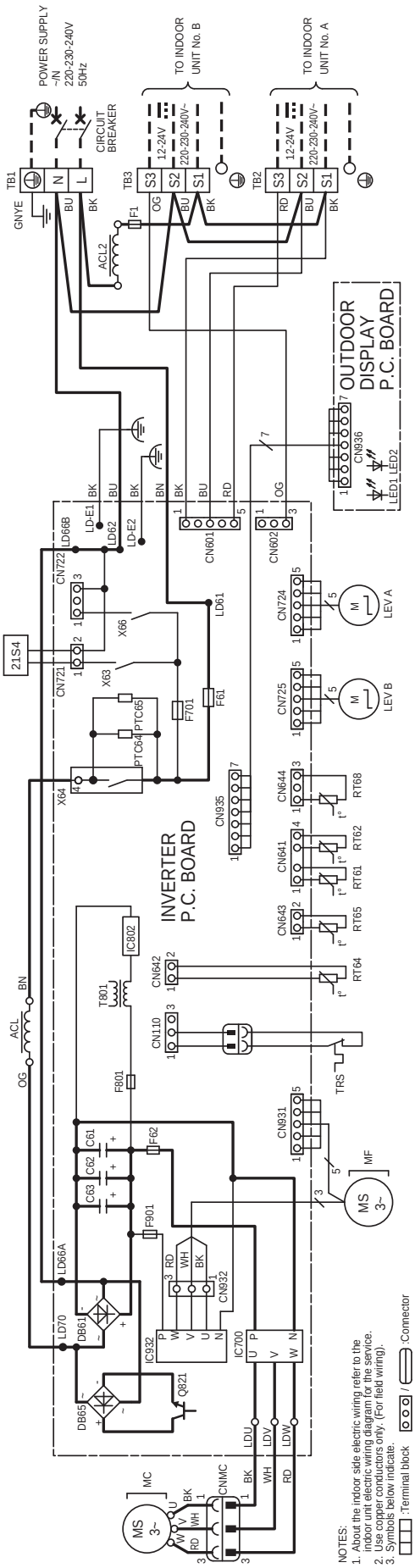



| SEMBOL | PARÇA ADI |
|---|---|
| ACL, ACL2 | REAKTÖR |
| C61~63 | KAPASİTÖR |
| DB61 | DİYOT MODÜLÜ |
| F701, 801, 901 | SİGORTA (T3,15AL250V) |
| F1 | SİGORTA (T3,15AL250V) |
| F61 | SİGORTA (25A 250V) |
| F62 | SİGORTA (15A 250V) |
| IC700, 820, 932 | GÜÇ MODÜLÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| IC802 | GÜÇ CİHAZI |
| LED1, 2 | LED |
| LEV A, B | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC64, 65 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| TB1~3 | KLEMENS GRUBU |
| T801 | TRANSFORMATÖR |
| X63, 64, 66 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SARGISI |

## MXZ-2F33VF4 - E1 MXZ-2F42VF4 - E1 MXZ-2F53VF4 - E1



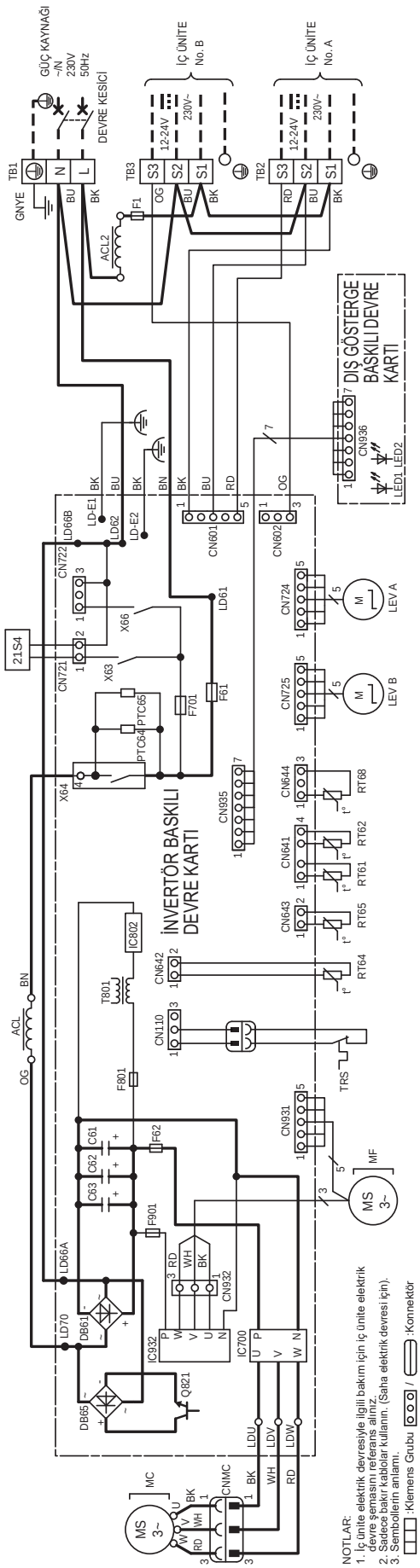

NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only. (For field wiring).
3. Symbols below indicate. : Terminal block / : Connector

| SYMBOL | NAME |
|---|---|
| ACL, ACL2 | REACTOR |
| C61~63 | SMOOTHING CAPACITOR |
| DB61,DB65 | DIODE MODULE |
| F701, 801, 901 | FUSE (T3.15AL250V) |
| F1 | FUSE (T3.15AL250V) |
| F61 | FUSE (25A 250V) |
| F62 | FUSE (15A 250V) |
| IC700, 932 | POWER MODULE |

| SYMBOL | NAME |
|---|---|
| IC802 | POWER DEVICE |
| LED1, 2 | LED |
| LEV A, B | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC64, 65 | CIRCUIT PROTECTOR |
| Q821 | SWITCHING POWER TRANSISTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| TB1~3 | TERMINAL BLOCK |
| TRS | THERMAL PROTECTOR |
| T801 | TRANSFORMER |
| X63, 64, 66 | RELAY |
| 21S4 | 4-WAY VALVE SOLENOID COIL |

**MXZ-2F33VF4 -** ET1 **MXZ-2F42VF4 -** ET1 **MXZ-2F53VF4 -** ET1



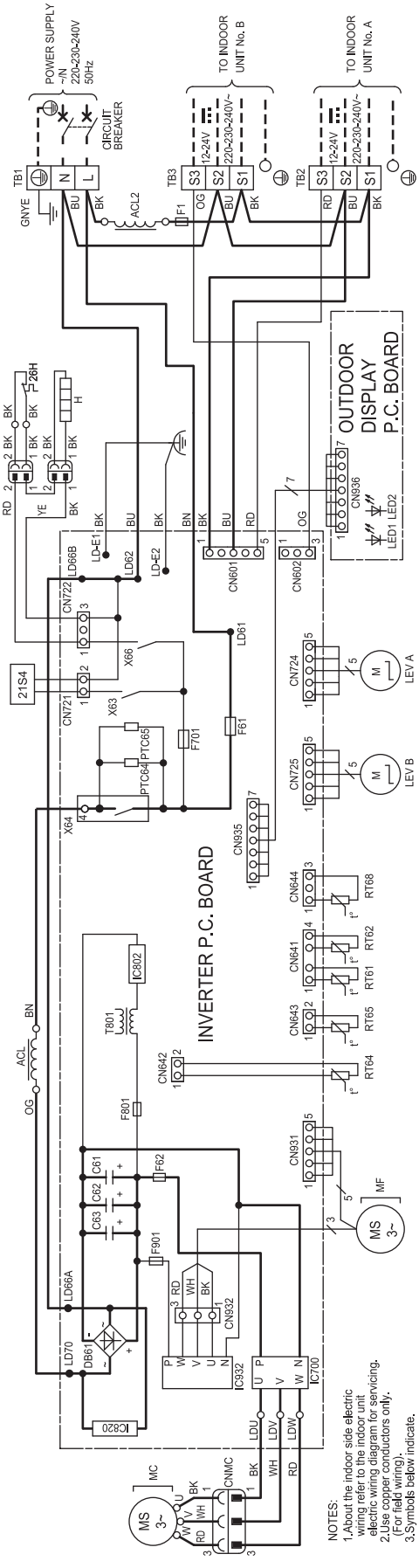

NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın. (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□ :Klemens Grubu ▭▭ / ⊂▭⊃ :Konnektör

| SEMBOL | PARÇA ADI |
|---|---|
| ACL, ACL2 | REAKTÖR |
| C61~63 | KAPASİTÖR |
| DB61 | DİYOT MODÜLÜ |
| F701, 801, 901 | SİGORTA (T3.15AL250V) |
| F1 | SİGORTA (T3.15AL250V) |
| F61 | SİGORTA (25A 250V) |
| F62 | SİGORTA (15A 250V) |
| IC700, 820, 932 | GÜÇ MODÜLÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| IC802 | GÜÇ CİHAZI |
| LED1, 2 | LED |
| LEV A, B | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC64, 65 | DEVRE KORUMASI |
| Q821 | ANAHTARLAMALI GÜÇ TRANSİSTÖRÜ |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| TB1~3 | KLEMENS GRUBU |
| TRS | ISIL KORUYUCU |
| T801 | TRANSFORMATÖR |
| X63, 64, 66 | RÖLE |
| 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

## MXZ-2F53VFH - E1

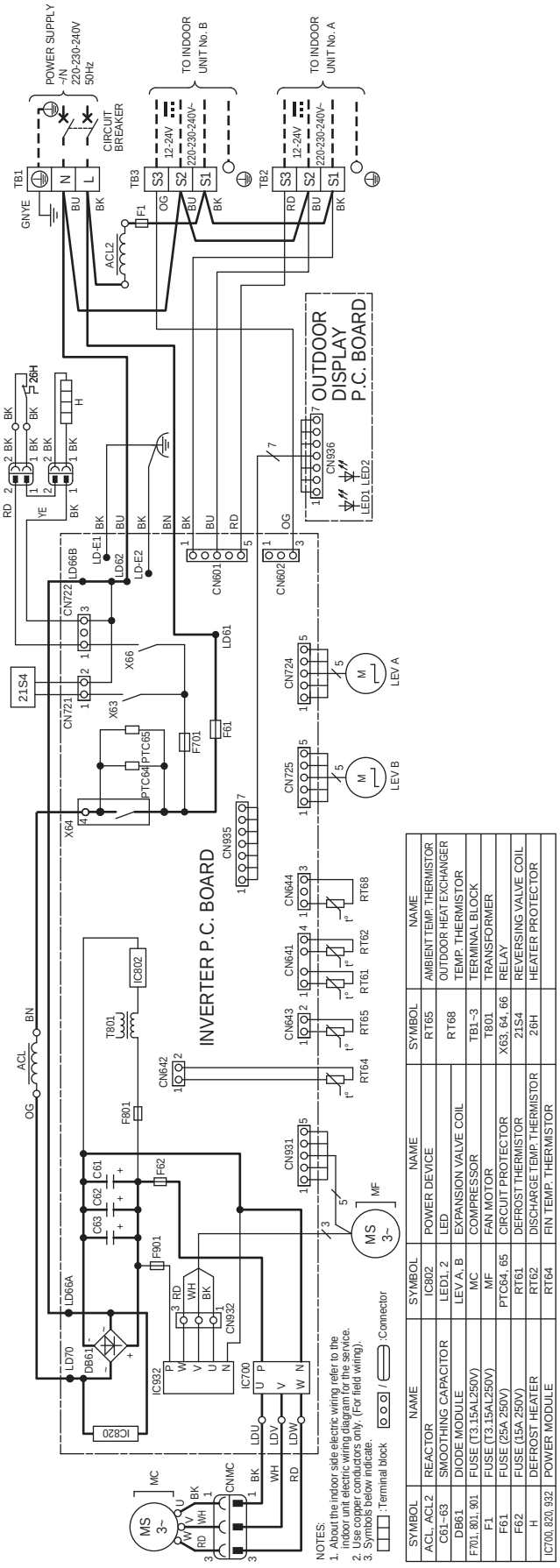



| SYMBOL | NAME |
|---|---|
| ACL, ACL2 | REACTOR |
| C61~63 | SMOOTHING CAPACITOR |
| DB61 | DIODE MODULE |
| F701, 801, 901 | FUSE (T3.15AL250V) |
| F1 | FUSE (T3.15AL250V) |
| F61 | FUSE (25A 250V) |
| F62 | FUSE (15A 250V) |
| H | DEFROST HEATER |
| IC700, 820, 932 | POWER MODULE |

| SYMBOL | NAME |
|---|---|
| IC802 | POWER DEVICE |
| LED1, 2 | LED |
| LEV A, B | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC64, 65 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |
| RT64 | FIN TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| TB1~3 | TERMINAL BLOCK |
| T801 | SWITCHING TRANS |
| X63, 64, 66 | RELAY |
| 21S4 | REVERSING VALVE COIL |
| 26H | HEATER PROTECTOR |

## MXZ-2F53VFH2 - E1



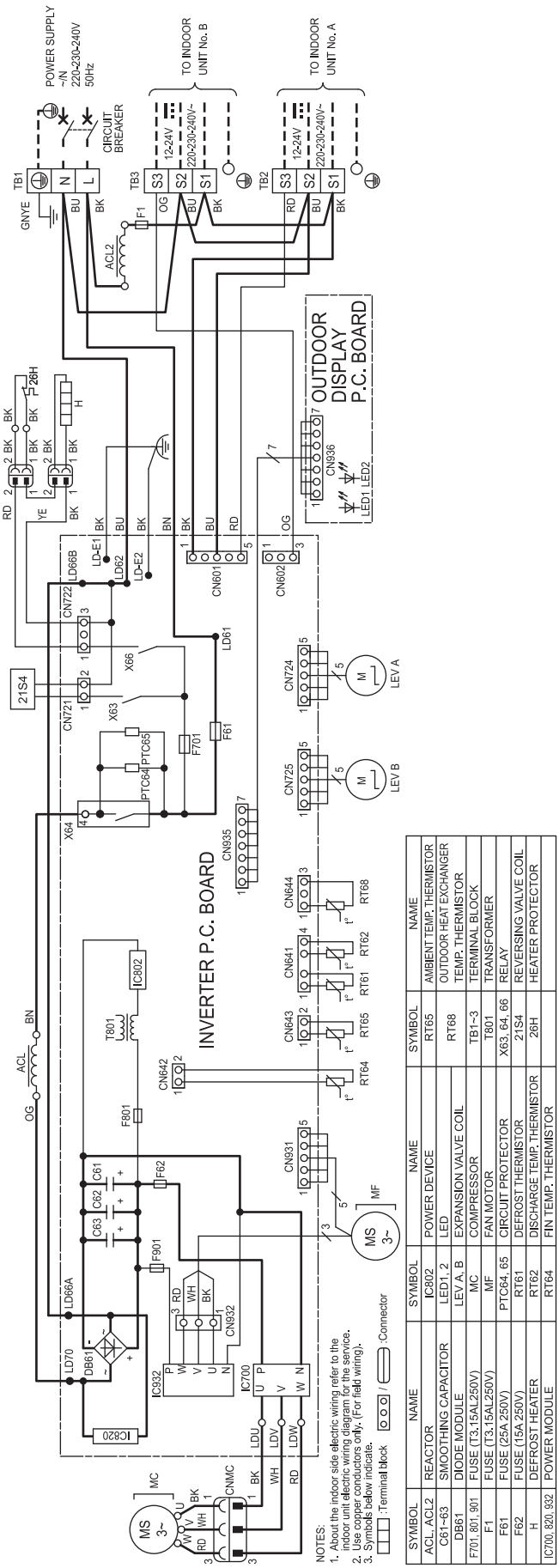

NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only. (For field wiring).
3. Symbols below indicate.
□□□ : Terminal block ○○○ / ⊂⊃ : Connector

| SYMBOL | NAME |
|---|---|
| ACL, ACL2 | REACTOR |
| C61~63 | SMOOTHING CAPACITOR |
| DB61 | DIODE MODULE |
| F701, 801, 901 | FUSE (T3.15AL250V) |
| F1 | FUSE (T3.15AL250V) |
| F61 | FUSE (25A 250V) |
| F62 | FUSE (15A 250V) |
| H | DEFROST HEATER |
| IC700, 820, 932 | POWER MODULE |

| SYMBOL | NAME |
|---|---|
| IC802 | POWER DEVICE |
| LED1, 2 | LED |
| LEV A, B | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC64, 65 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |
| RT64 | FIN TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| TB1~3 | TERMINAL BLOCK |
| T801 | TRANSFORMER |
| X63, 64, 66 | RELAY |
| 21S4 | REVERSING VALVE COIL |
| 26H | HEATER PROTECTOR |

## MXZ-2F53VFH3 - E1, E2

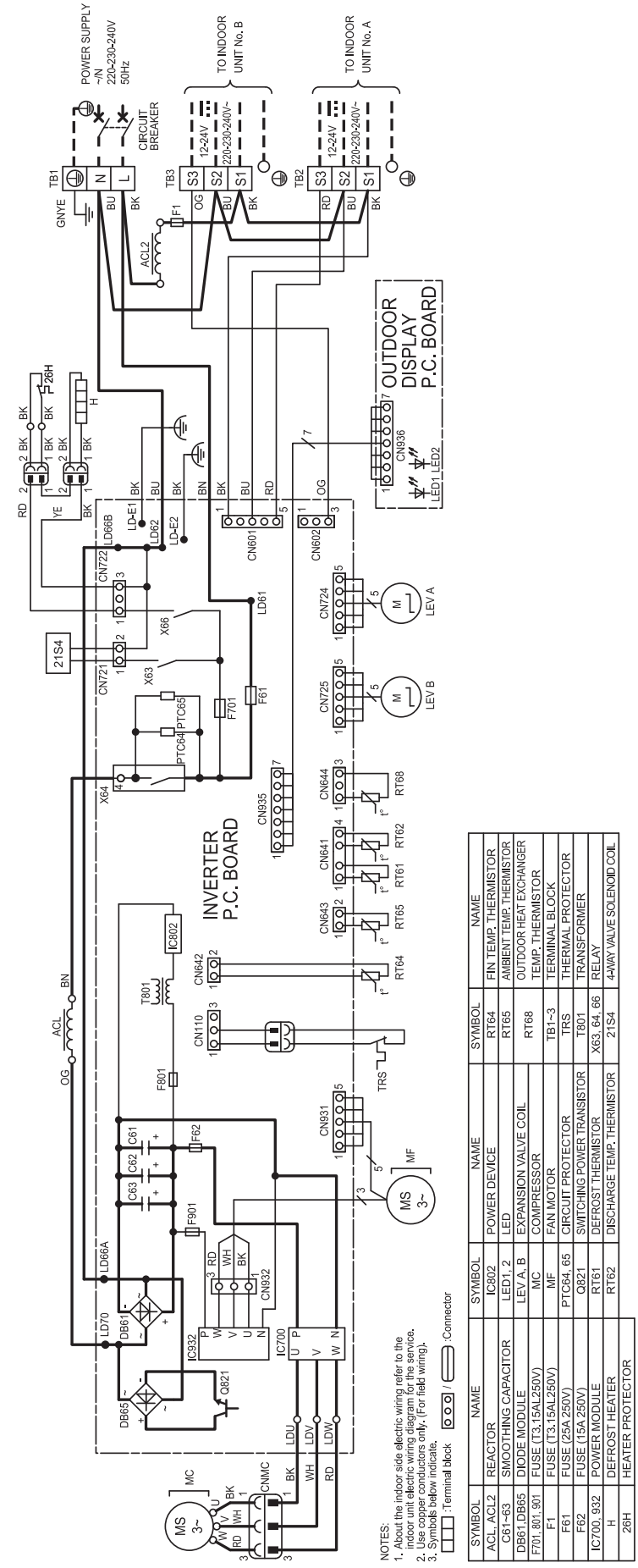



| SYMBOL | NAME |
|---|---|
| ACL, ACL2 | REACTOR |
| C61~63 | SMOOTHING CAPACITOR |
| DB61 | DIODE MODULE |
| F701, 801, 901 | FUSE (T3.15AL250V) |
| F1 | FUSE (T3.15AL250V) |
| F61 | FUSE (25A 250V) |
| F62 | FUSE (15A 250V) |
| H | DEFROST HEATER |
| IC700, 820, 932 | POWER MODULE |

| SYMBOL | NAME |
|---|---|
| IC802 | POWER DEVICE |
| LED1, 2 | LED |
| LEV A, B | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC64, 65 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |
| RT64 | FIN TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| TB1~3 | TERMINAL BLOCK |
| T801 | TRANSFORMER |
| X63, 64, 66 | RELAY |
| 21S4 | REVERSING VALVE COIL |
| 26H | HEATER PROTECTOR |

## MXZ-2F53VFH4 - E1



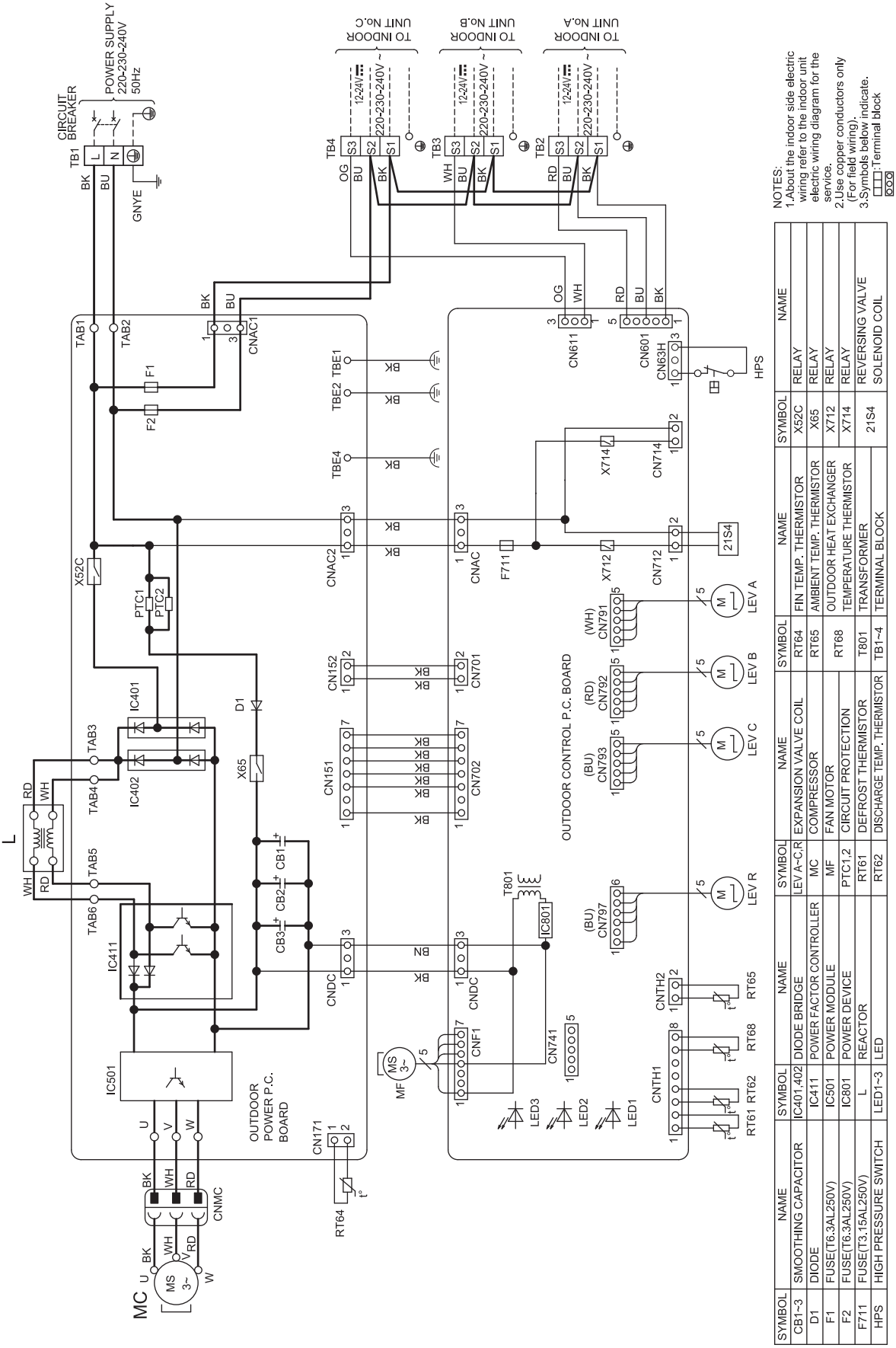

NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only. (For field wiring).
3. Symbols below indicate. : Terminal block / : Connector

| SYMBOL | NAME |
|---|---|
| ACL, ACL2 | REACTOR |
| C61~63 | SMOOTHING CAPACITOR |
| DB61,DB65 | DIODE MODULE |
| F701, 801, 901 | FUSE (T3.15AL250V) |
| F1 | FUSE (T3.15AL250V) |
| F61 | FUSE (25A 250V) |
| F62 | FUSE (15A 250V) |
| IC700, 932 | POWER MODULE |
| H | DEFROST HEATER |
| 26H | HEATER PROTECTOR |

| SYMBOL | NAME |
|---|---|
| IC802 | POWER DEVICE |
| LED1, 2 | LED |
| LEV A, B | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC64, 65 | CIRCUIT PROTECTOR |
| Q821 | SWITCHING POWER TRANSISTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| TB1~3 | TERMINAL BLOCK |
| TRS | THERMAL PROTECTOR |
| T801 | TRANSFORMER |
| X63, 64, 66 | RELAY |
| 21S4 | 4-WAY VALVE SOLENOID COIL |

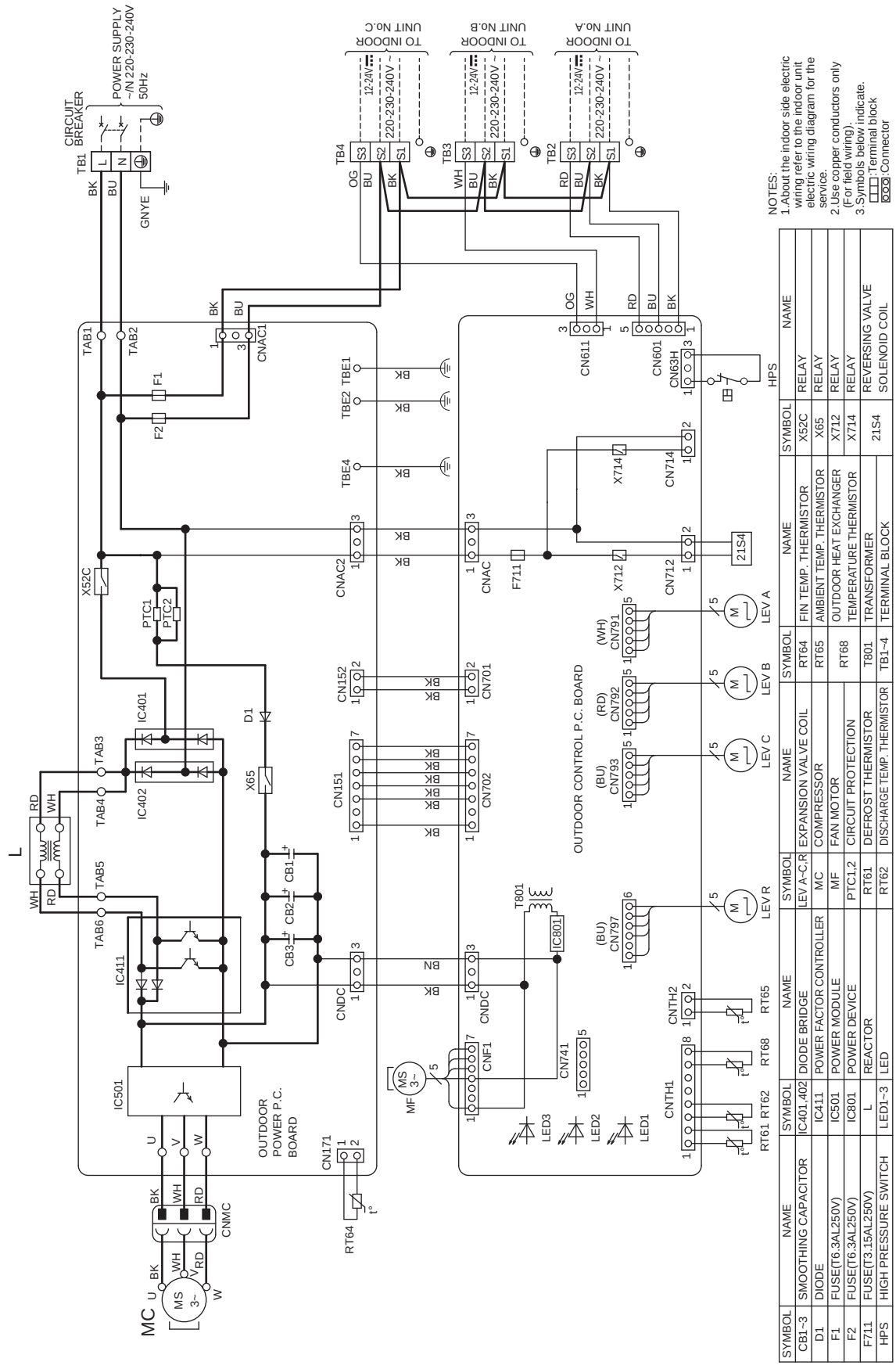
**MXZ-3F54VF -** E1, ET1, E2, ET2
**MXZ-3F68VF -** E1, ET1, E2, ET2




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | IC401,402 | DIODE BRIDGE | LEV A~C,R | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR |
| D1 | DIODE | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR |
| F1 | FUSE(T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR |
| F2 | FUSE(T6.3AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTION | T801 | TRANSFORMER |
| F711 | FUSE(T3.15AL250V) | L | REACTOR | RT61 | DEFROST THERMISTOR | TB1~4 | TERMINAL BLOCK |
| HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | | |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-3F54VF2 -** E1
**MXZ-3F68VF2 -** E1




| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

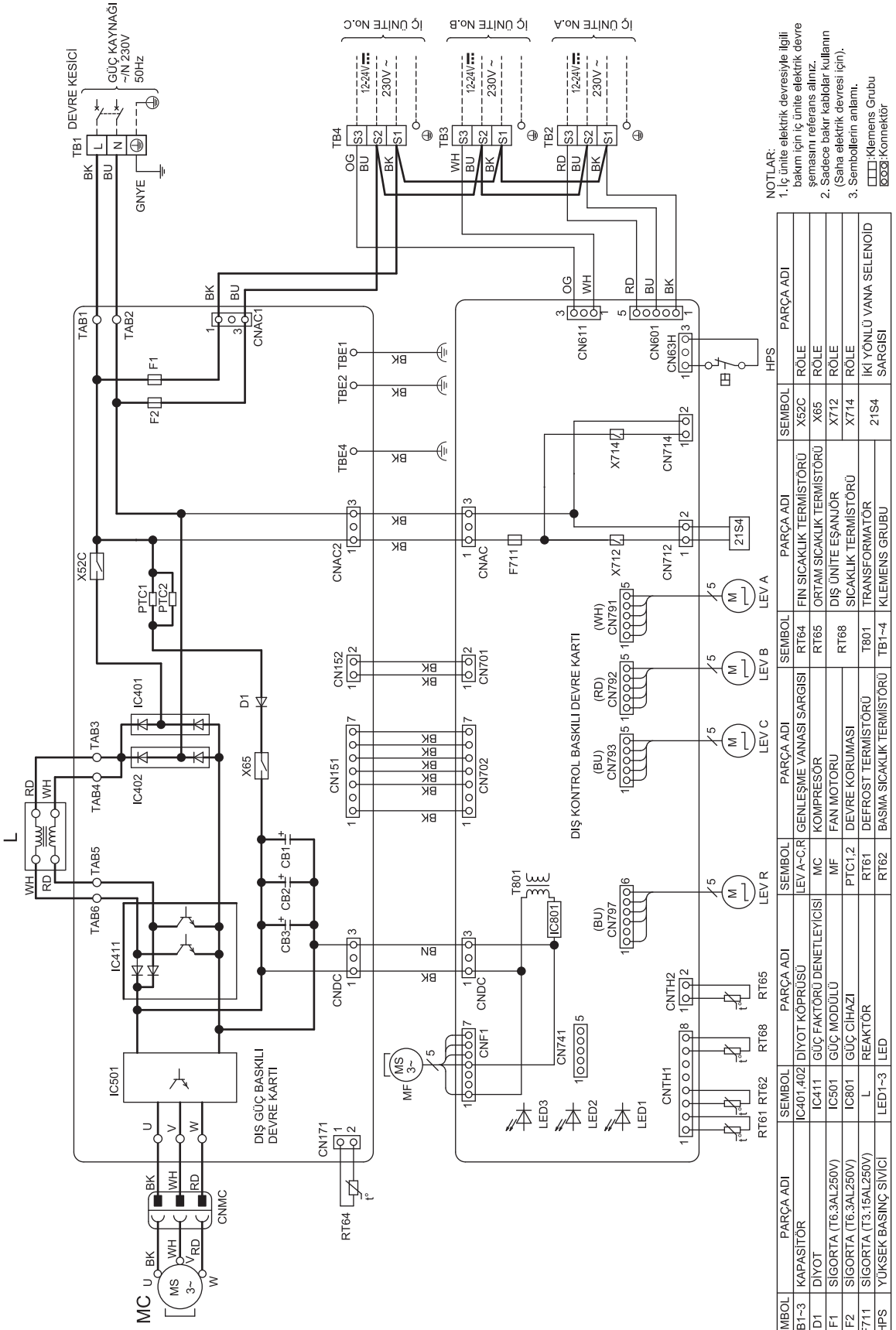
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~C,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTION |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR |
| T801 | TRANSFORMER |
| TB1~4 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-3F54VF2 -** ET1
**MXZ-3F68VF2 -** ET1




NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□:Klemens Grubu
⊡⊡⊡:Konnektör

| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

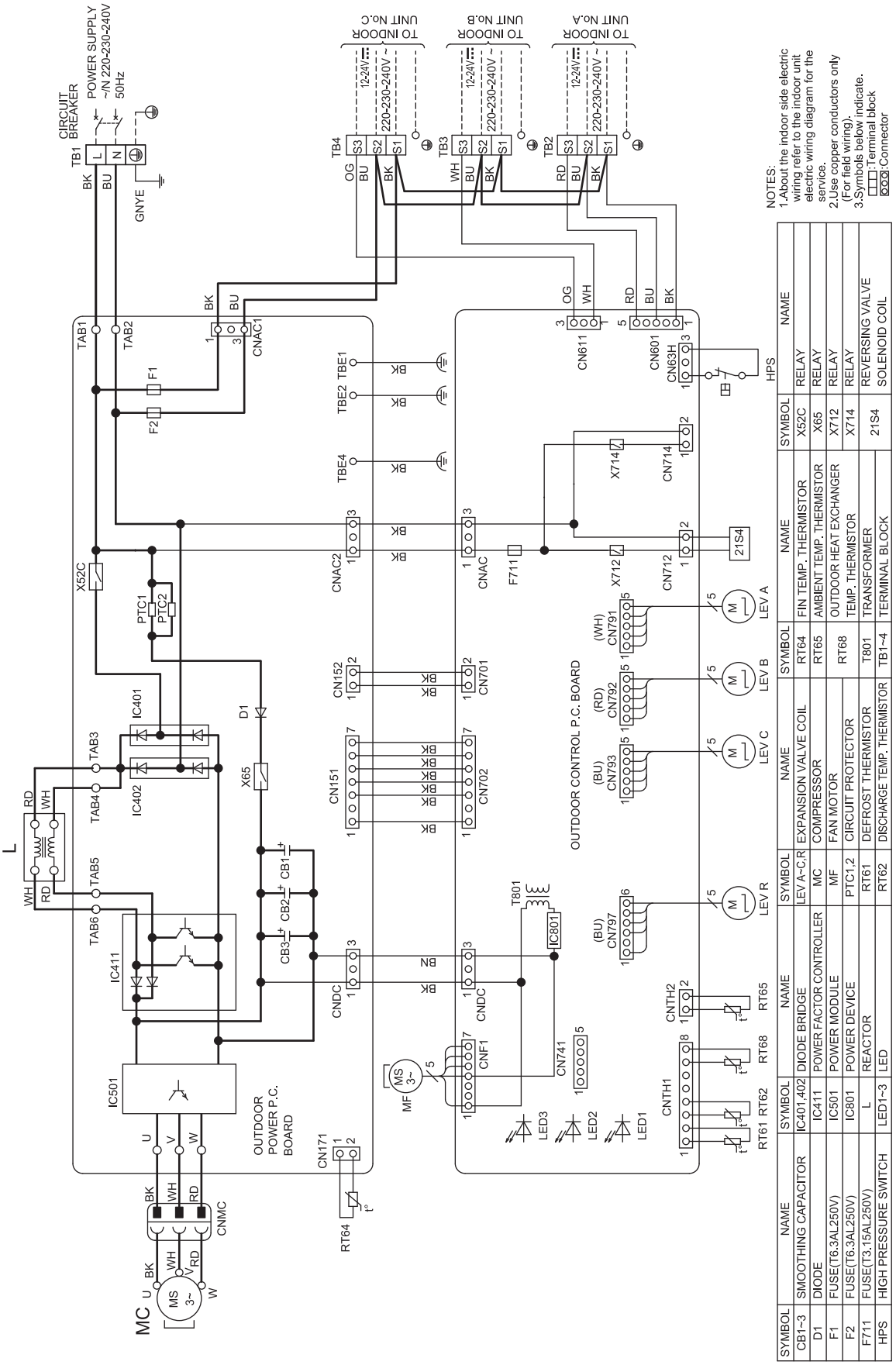
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~C,R | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~4 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

**MXZ-3F54VF3 -** E1, ER1, E2, ER2
**MXZ-3F68VF3 -** E1, ER1




| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

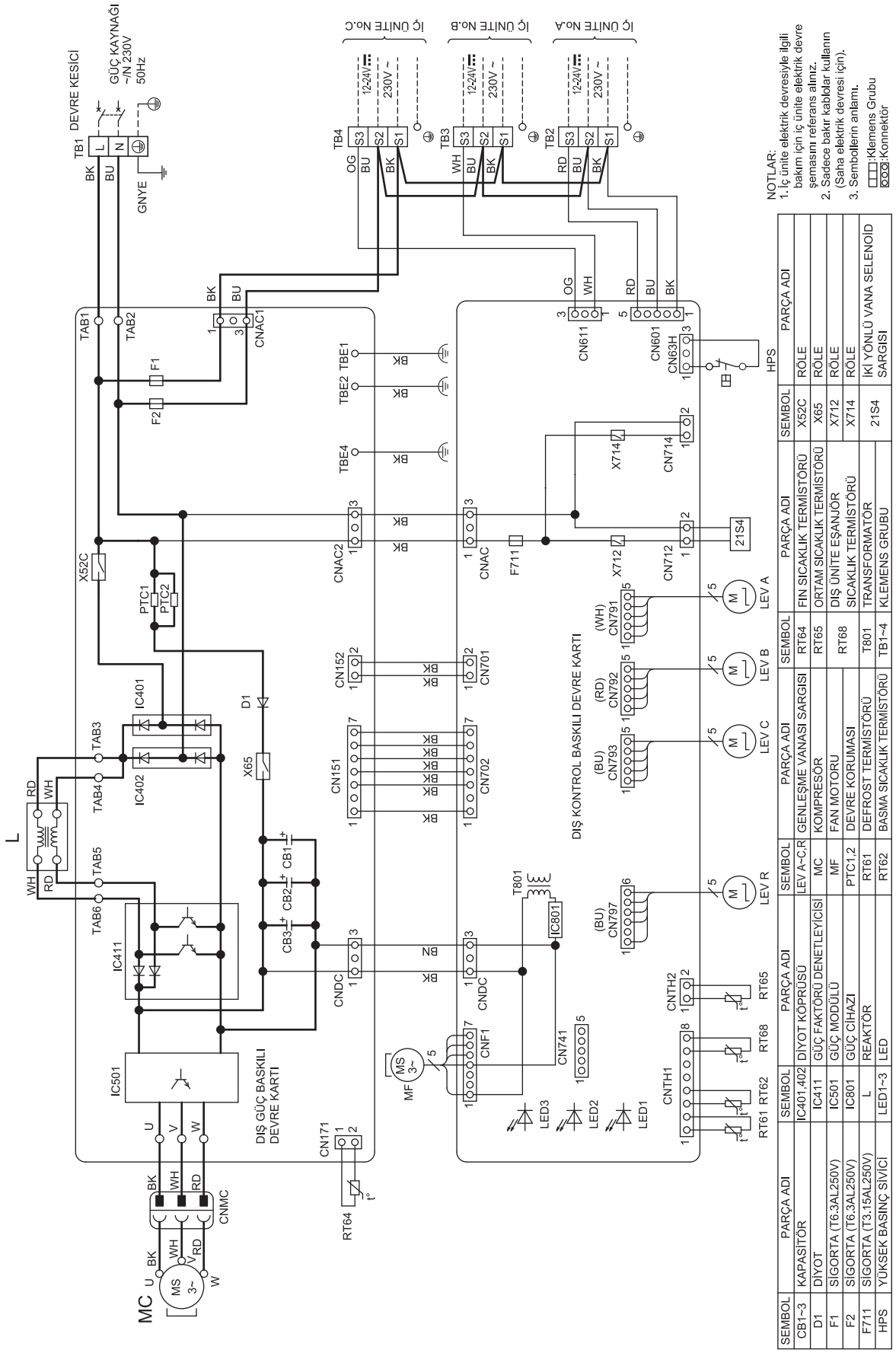
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~C,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| T801 | TRANSFORMER |
| TB1~4 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-3F54VF3 -** ET1, ET2
**MXZ-3F68VF3 -** ET1

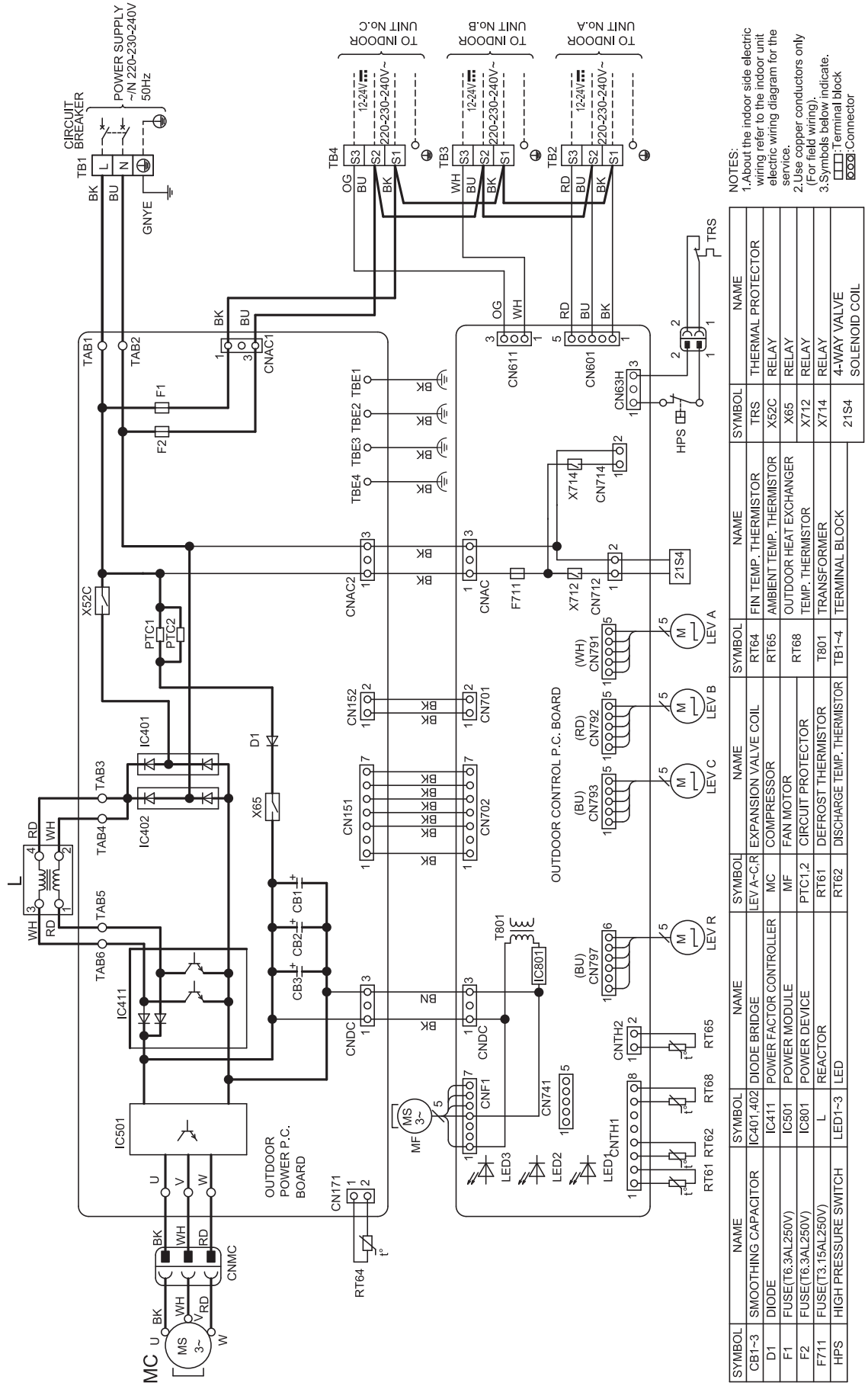



NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□:Klemens Grubu
▯▯▯:Konnektör

| SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI |
|---|---|---|---|---|---|---|---|
| CB1~3 | KAPASİTÖR | IC401,402 | DİYOT KÖPRÜSÜ | LEV A~C,R | GENLEŞME VANASI SARGISI | RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| D1 | DİYOT | IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ | MC | KOMPRESÖR | RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| F1 | SİGORTA (T6.3AL250V) | IC501 | GÜÇ MODÜLÜ | MF | FAN MOTORU | RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| F2 | SİGORTA (T6.3AL250V) | IC801 | GÜÇ CİHAZI | PTC1,2 | DEVRE KORUMASI | T801 | TRANSFORMATÖR |
| F711 | SİGORTA (T3.15AL250V) | L | REAKTÖR | RT61 | DEFROST TERMİSTÖRÜ | TB1~4 | KLEMENS GRUBU |
| HPS | YÜKSEK BASINÇ SİVİCİ | LED1~3 | LED | RT62 | BASMA SICAKLIK TERMİSTÖRÜ | X52C | RÖLE |
| | | | | | | X65 | RÖLE |
| | | | | | | X712 | RÖLE |
| | | | | | | X714 | RÖLE |
| | | | | | | 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

**MXZ-3F54VF4 -** E1

**MXZ-3F68VF4 -** E1




| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

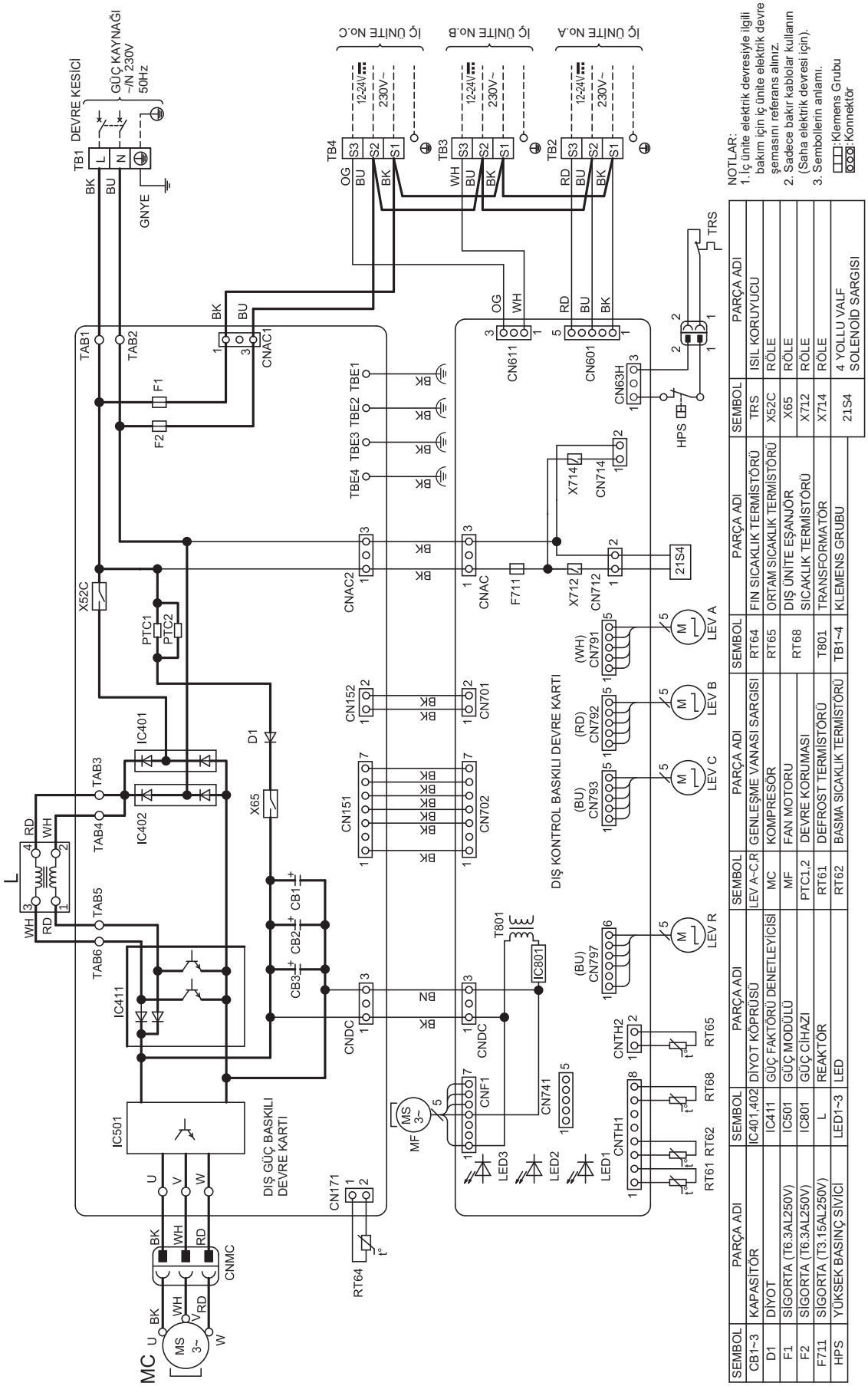
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~C,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| T801 | TRANSFORMER |
| TB1~4 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| TRS | THERMAL PROTECTOR |
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | 4-WAY VALVE SOLENOID COIL |

**MXZ-3F54VF4 -** ET1
**MXZ-3F68VF4 -** ET1




NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□:Klemens Grubu
□□□:Konnektör

| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

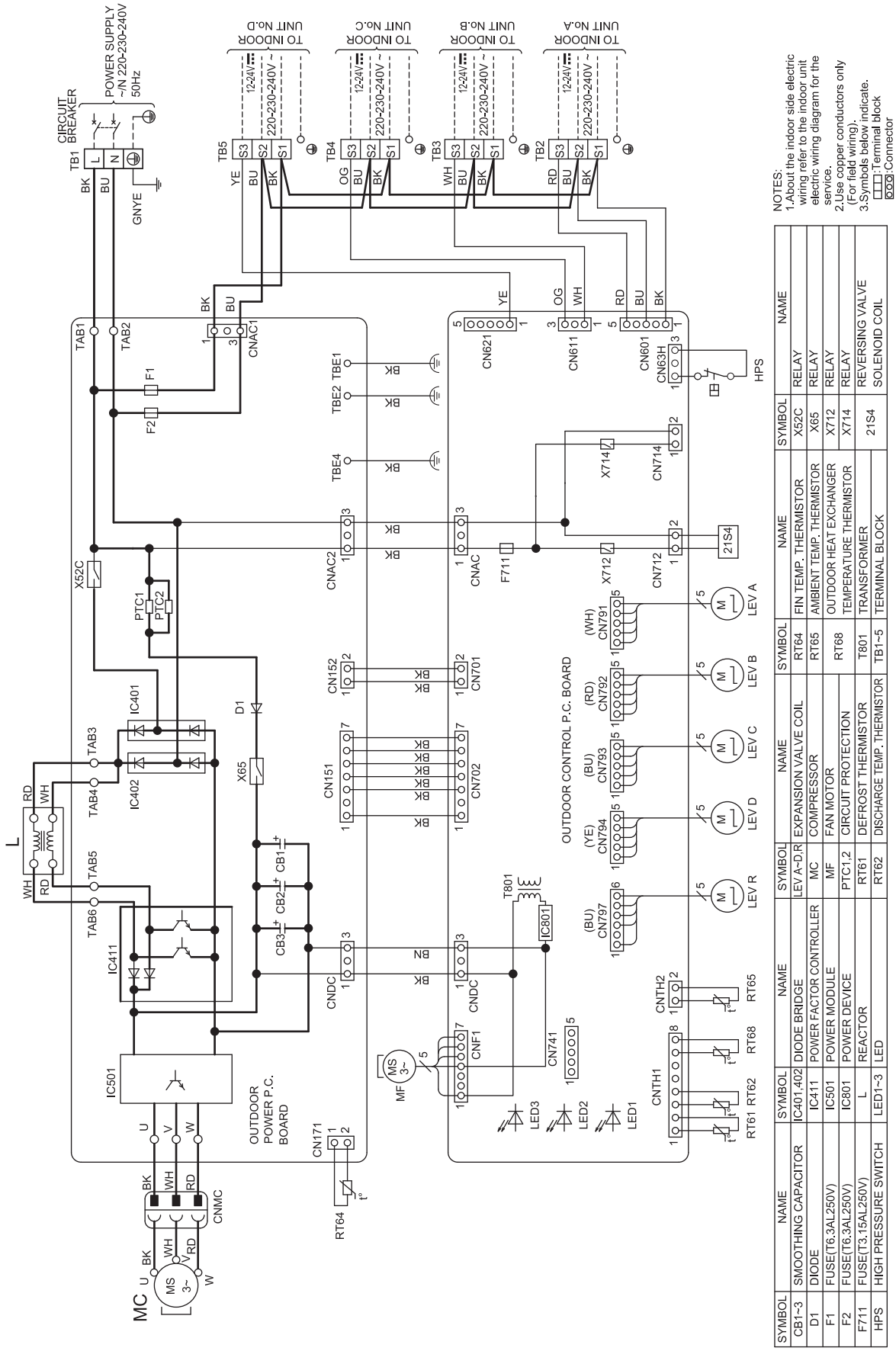
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~C,R | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~4 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| TRS | ISIL KORUYUCU |
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

## MXZ-4F72VF - E1, ET1, E2, ET2




NOTES:
1.About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2.Use copper conductors only (For field wiring).
3.Symbols below indicate.
□□□:Terminal block
⊂⊃⊂⊃:Connector

| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

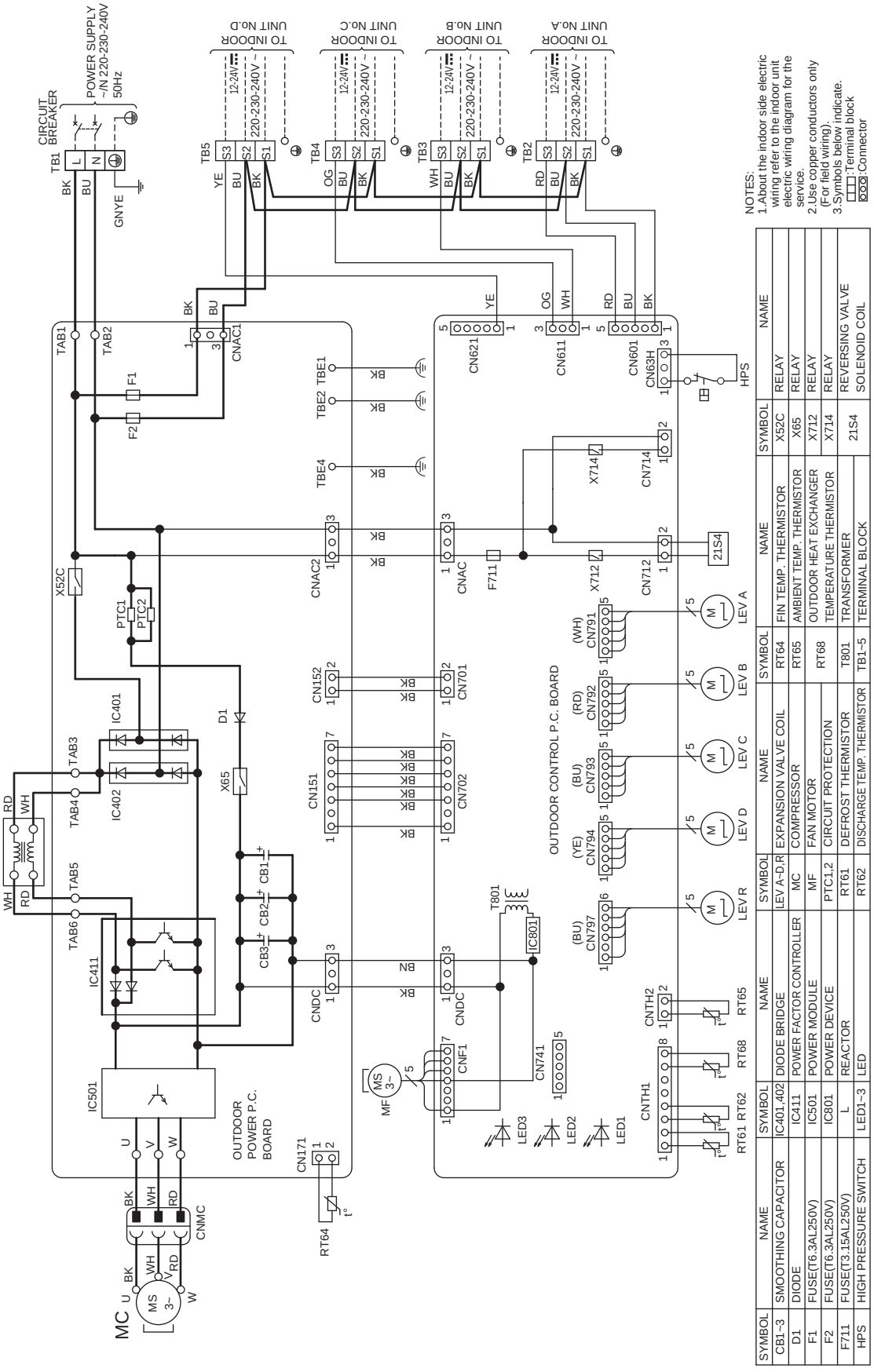
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~D,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTION |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR |
| T801 | TRANSFORMER |
| TB1~5 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-4F72VF2 -** E1
**MXZ-4F80VF2 -** E1




NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only (For field wiring).
3. Symbols below indicate.
□□□ : Terminal block
⊂○○⊃ : Connector

| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

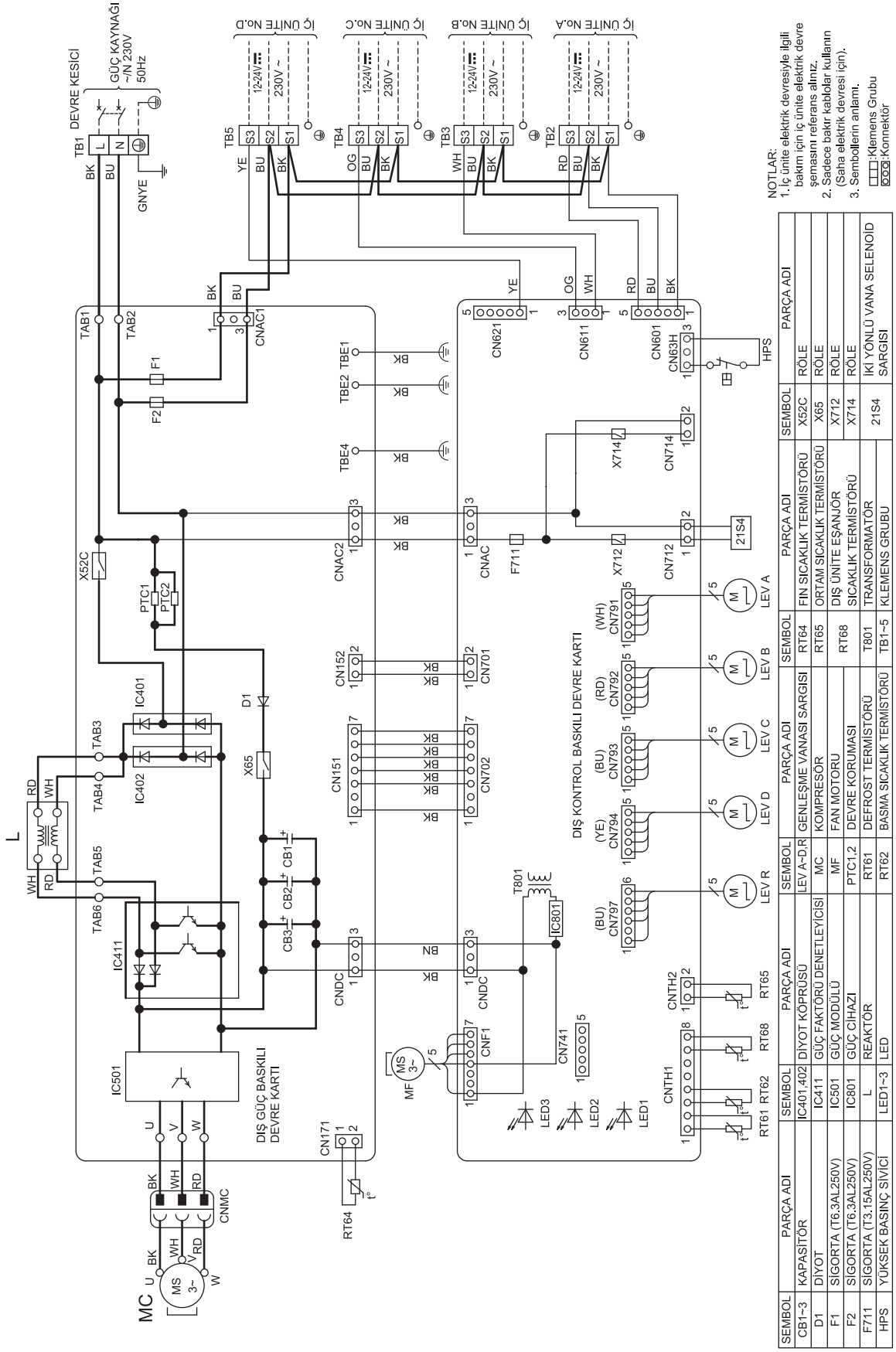
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~D,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTION |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR |
| T801 | TRANSFORMER |
| TB1~5 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-4F72VF2 -** ET1
**MXZ-4F80VF2 -** ET1




| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

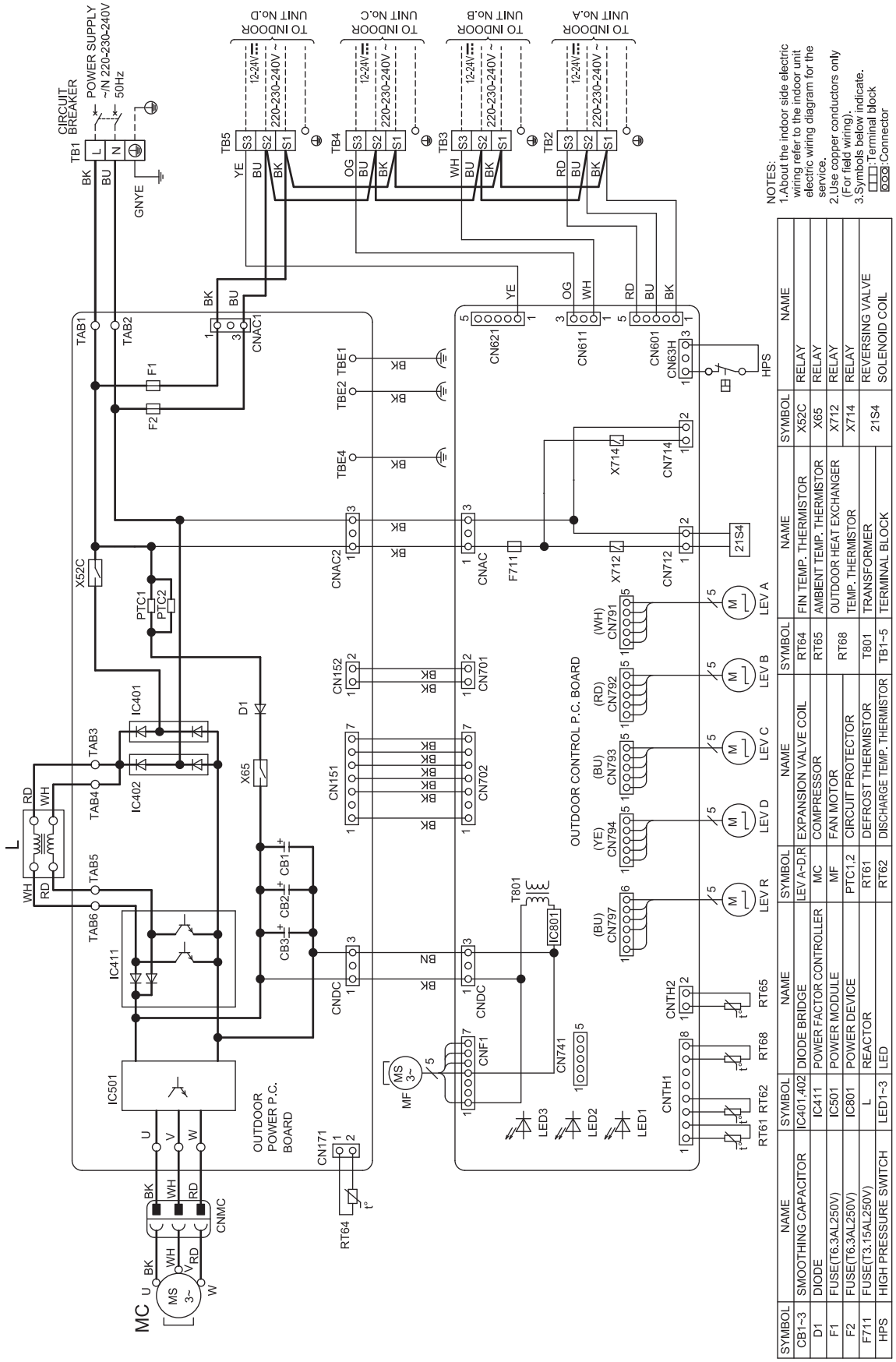
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~D,R | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~5 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

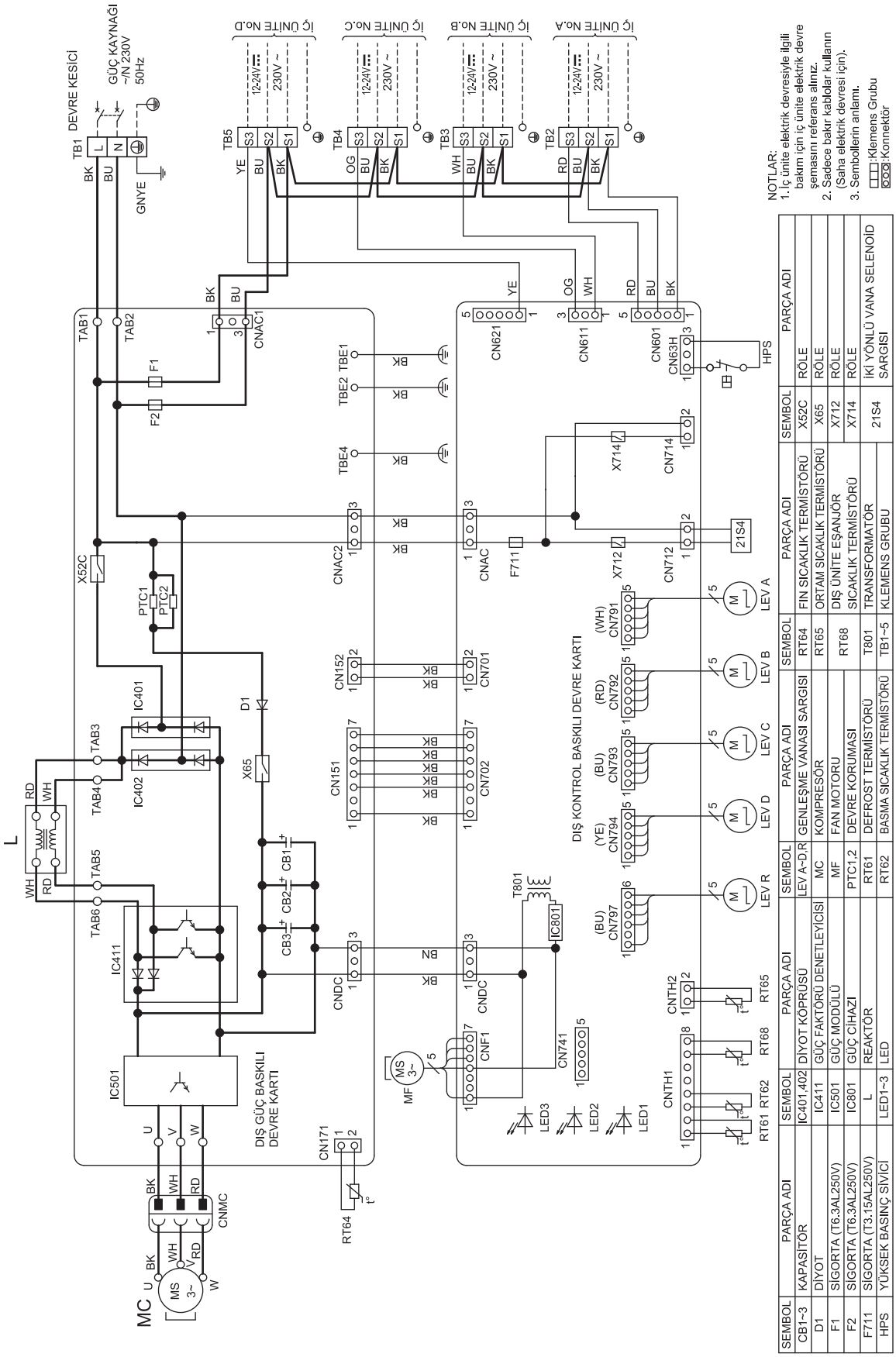
**MXZ-4F72VF3 -** E1, ER1
**MXZ-4F80VF3 -** E1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | IC401,402 | DIODE BRIDGE | LEV A~D,R | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR |
| D1 | DIODE | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR |
| F1 | FUSE(T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| F2 | FUSE(T6.3AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | T801 | TRANSFORMER |
| F711 | FUSE(T3.15AL250V) | L | REACTOR | RT61 | DEFROST THERMISTOR | TB1~5 | TERMINAL BLOCK |
| HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | | |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

**MXZ-4F72VF3 -** ET1
**MXZ-4F80VF3 -** ET1



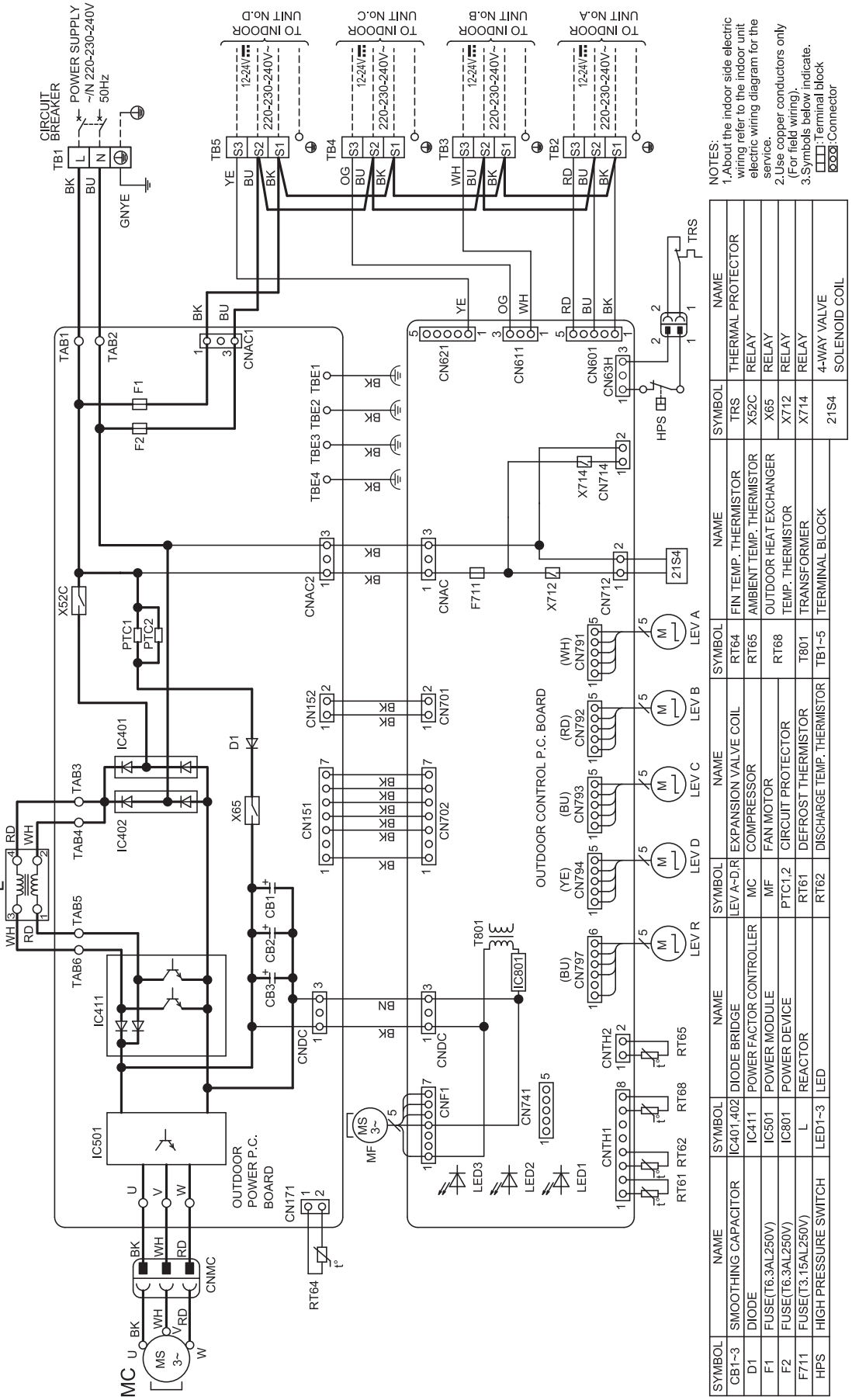

NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□:Klemens Grubu
⊠⊠⊠:Konnektör

| SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI |
|---|---|---|---|---|---|---|---|
| CB1~3 | KAPASİTÖR | IC401,402 | DİYOT KÖPRÜSÜ | LEV A~D,R | GENLEŞME VANASI SARGISI | RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| D1 | DİYOT | IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ | MC | KOMPRESÖR | RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| F1 | SİGORTA (T6.3AL250V) | IC501 | GÜÇ MODÜLÜ | MF | FAN MOTORU | RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| F2 | SİGORTA (T6.3AL250V) | IC801 | GÜÇ CİHAZI | PTC1,2 | DEVRE KORUMASI | T801 | TRANSFORMATÖR |
| F711 | SİGORTA (T3.15AL250V) | L | REAKTÖR | RT61 | DEFROST TERMİSTÖRÜ | TB1~5 | KLEMENS GRUBU |
| HPS | YÜKSEK BASINÇ SİVİCİ | LED1~3 | LED | RT62 | BASMA SICAKLIK TERMİSTÖRÜ | | |

| SEMBOL | PARÇA ADI |
|---|---|
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

**MXZ-4F72VF4 -** E1

**MXZ-4F80VF4 -** E1




NOTES:
1.About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2.Use copper conductors only (For field wiring).
3.Symbols below indicate.
□□□:Terminal block
⊡⊡⊡:Connector

| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

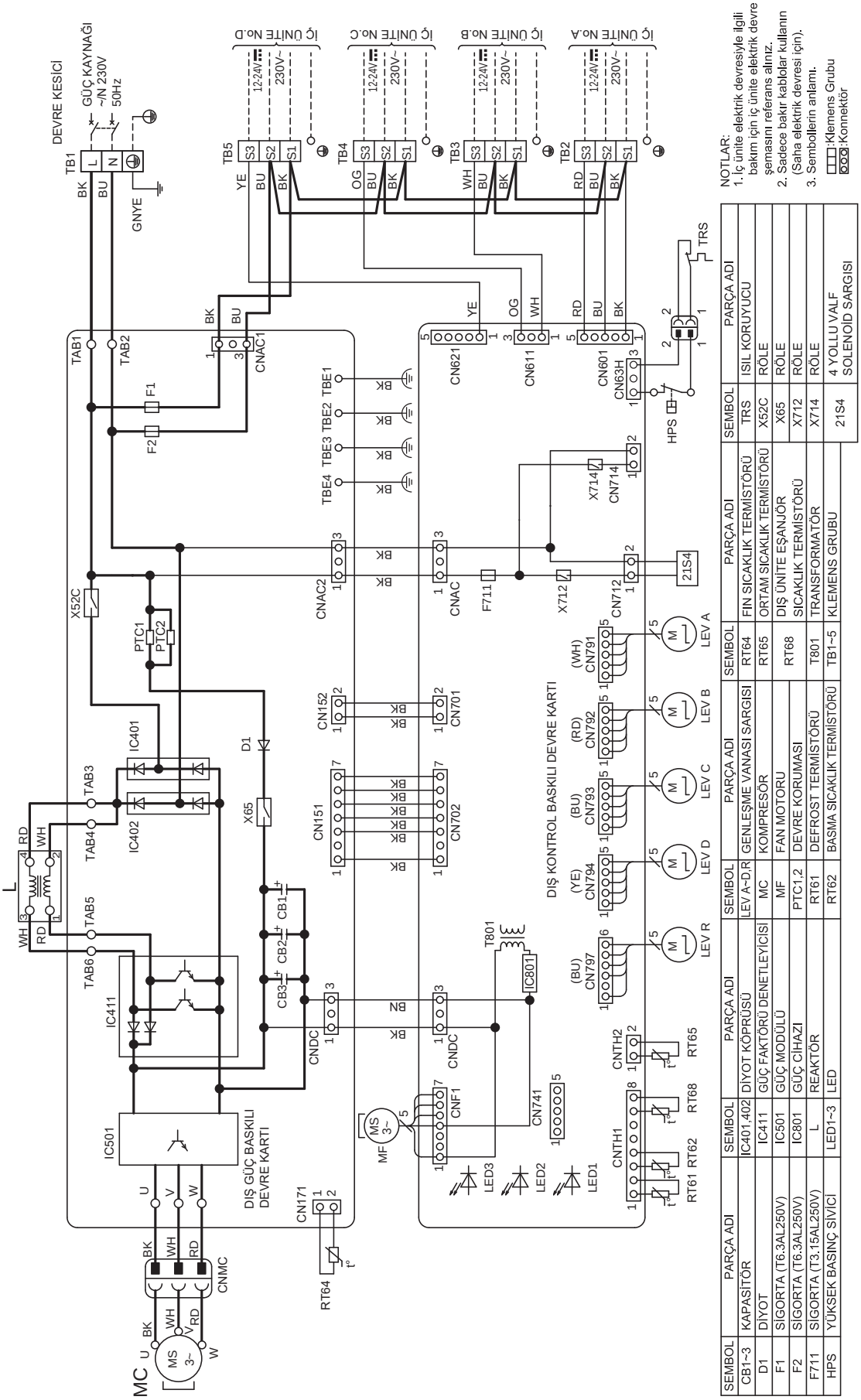
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~D,R | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| T801 | TRANSFORMER |
| TB1~5 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| TRS | THERMAL PROTECTOR |
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | 4-WAY VALVE SOLENOID COIL |

**MXZ-4F72VF4 -** ET1
**MXZ-4F80VF4 -** ET1




NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.

□□□:Klemens Grubu
○○○:Konnektör

| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

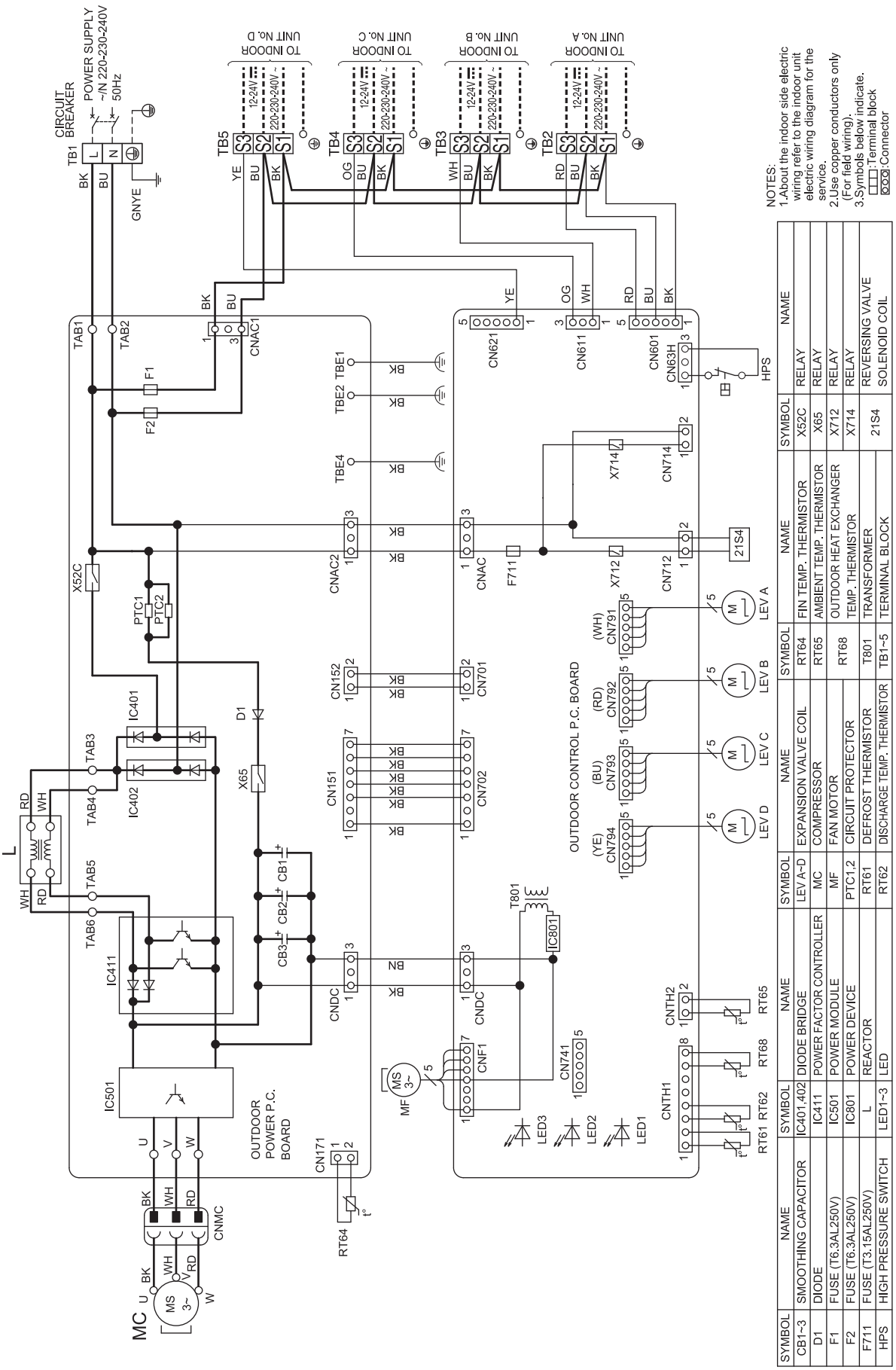
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~D,R | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~5 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| TRS | ISIL KORUYUCU |
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

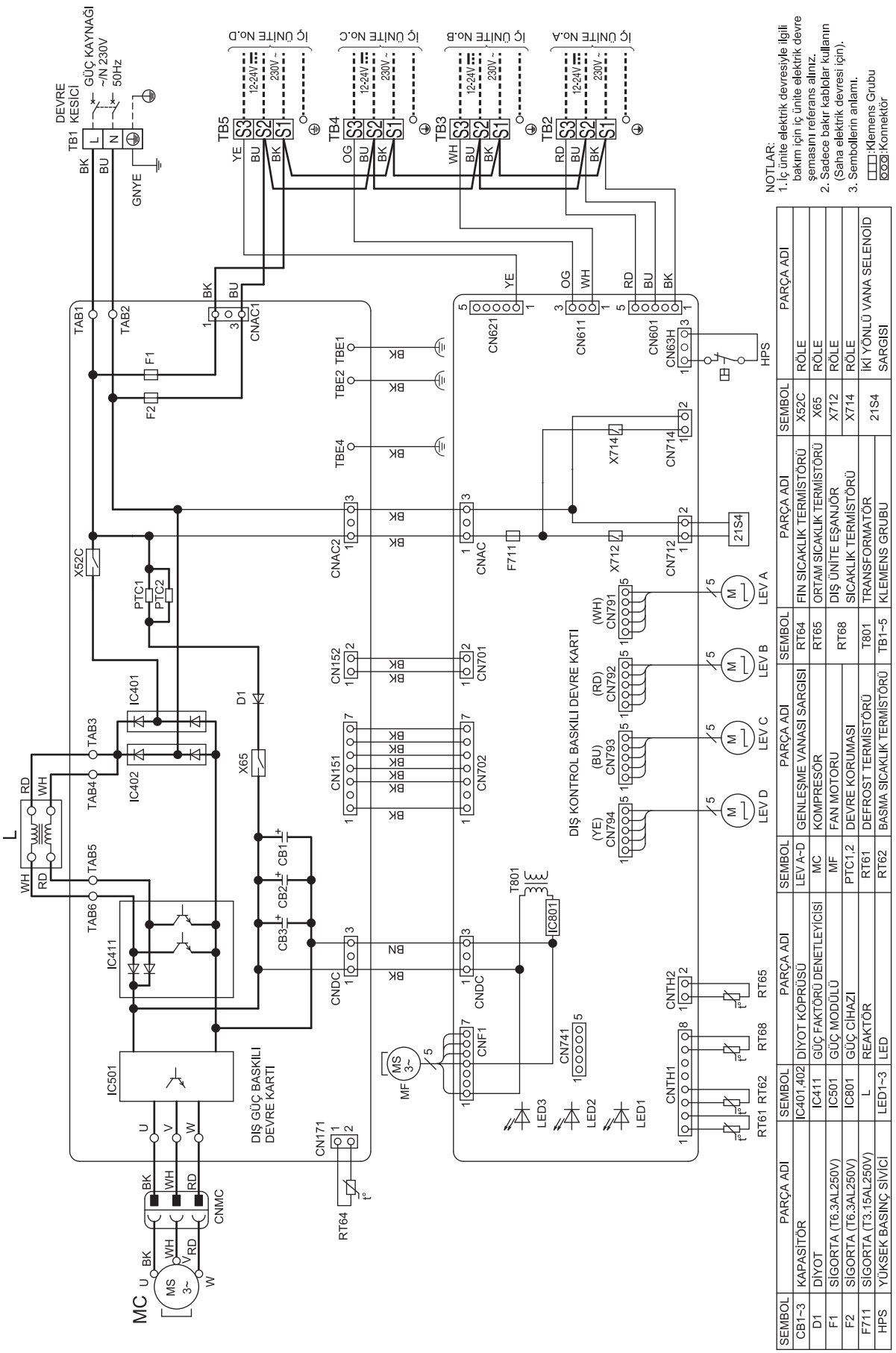
## MXZ-4F83VF - E1, ER1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | IC401,402 | DIODE BRIDGE | LEV A~D | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR |
| D1 | DIODE | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR |
| F1 | FUSE (T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| F2 | FUSE (T6.3AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | T801 | TRANSFORMER |
| F711 | FUSE (T3.15AL250V) | L | REACTOR | RT61 | DEFROST THERMISTOR | TB1~5 | TERMINAL BLOCK |
| HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | | |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

## MXZ-4F83VF - ET1




| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

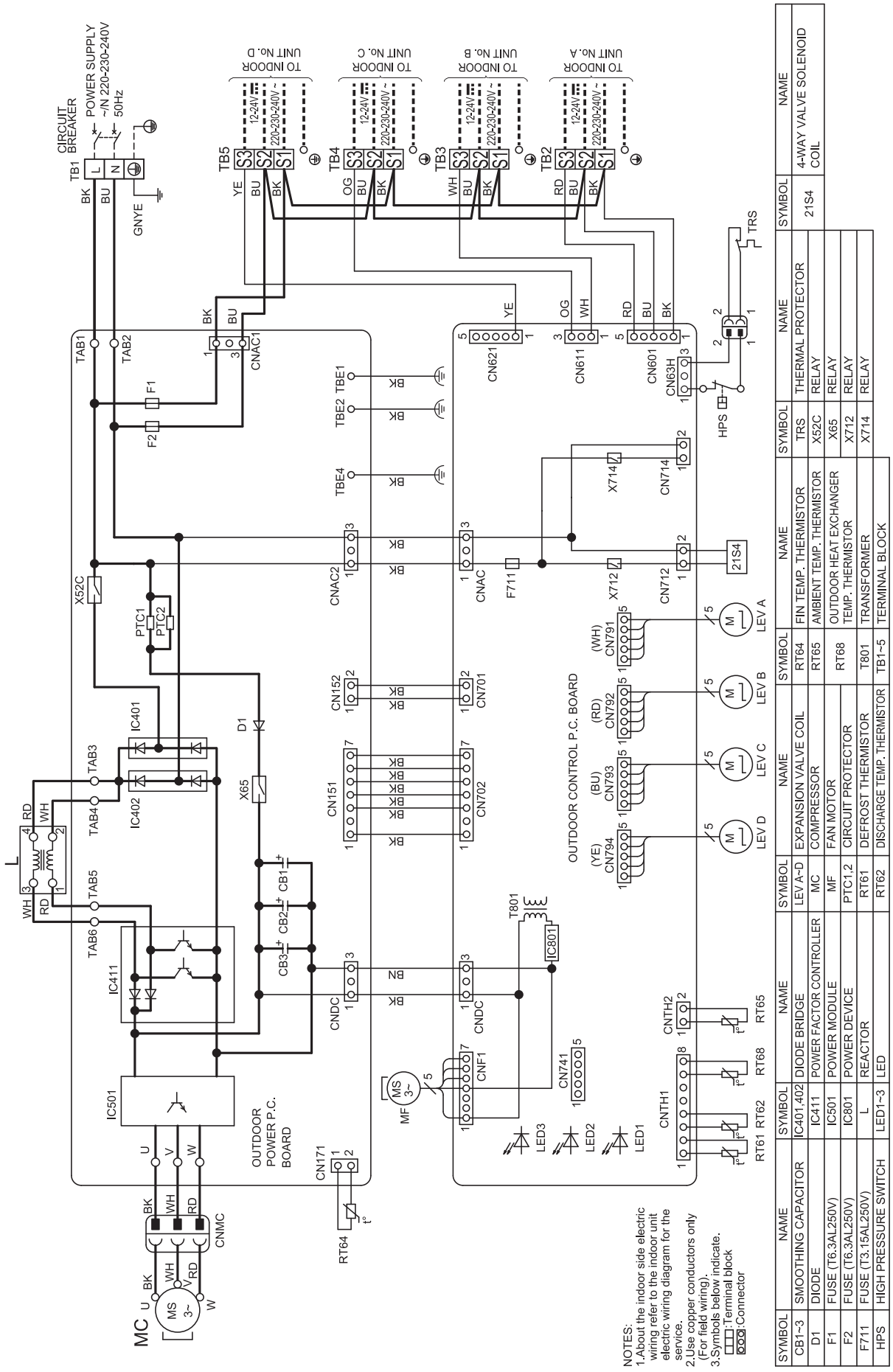
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~D | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~5 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

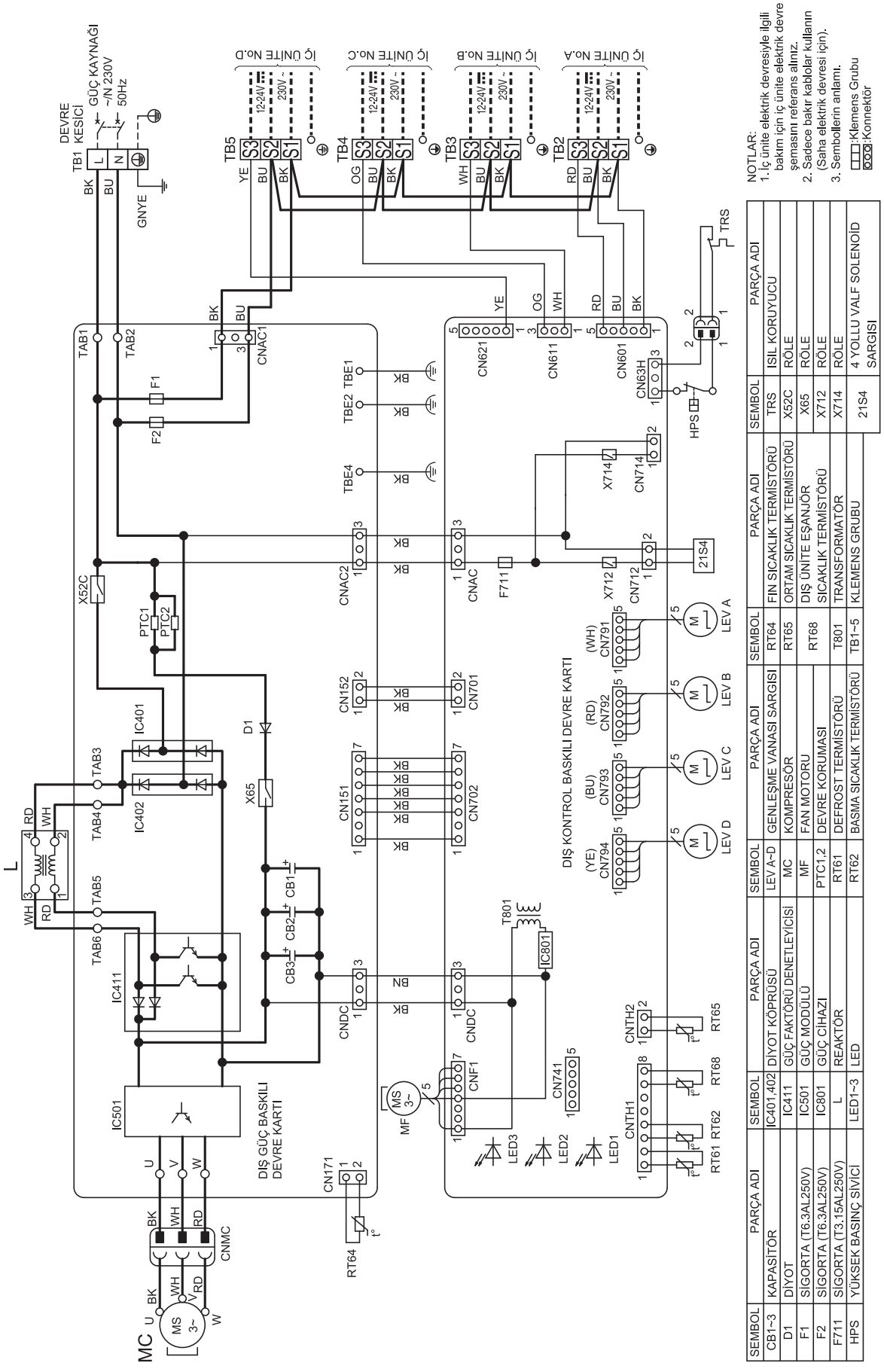
## MXZ-4F83VF2 - E1




NOTES:
1.About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2.Use copper conductors only (For field wiring).
3.Symbols below indicate.
□□:Terminal block
○○○:Connector

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | IC401,402 | DIODE BRIDGE | LEV A~D | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR | TRS | THERMAL PROTECTOR | 21S4 | 4-WAY VALVE SOLENOID COIL |
| D1 | DIODE | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR | X52C | RELAY | | |
| F1 | FUSE (T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR | X65 | RELAY | | |
| F2 | FUSE (T6.3AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | | | X712 | RELAY | | |
| F711 | FUSE (T3.15AL250V) | L | REACTOR | RT61 | DEFROST THERMISTOR | T801 | TRANSFORMER | X714 | RELAY | | |
| HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | TB1~5 | TERMINAL BLOCK | | | | |

## MXZ-4F83VF2 - ET1




| SEMBOL | PARÇA ADI |
|---|---|
| CB1~3 | KAPASİTÖR |
| D1 | DİYOT |
| F1 | SİGORTA (T6.3AL250V) |
| F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |

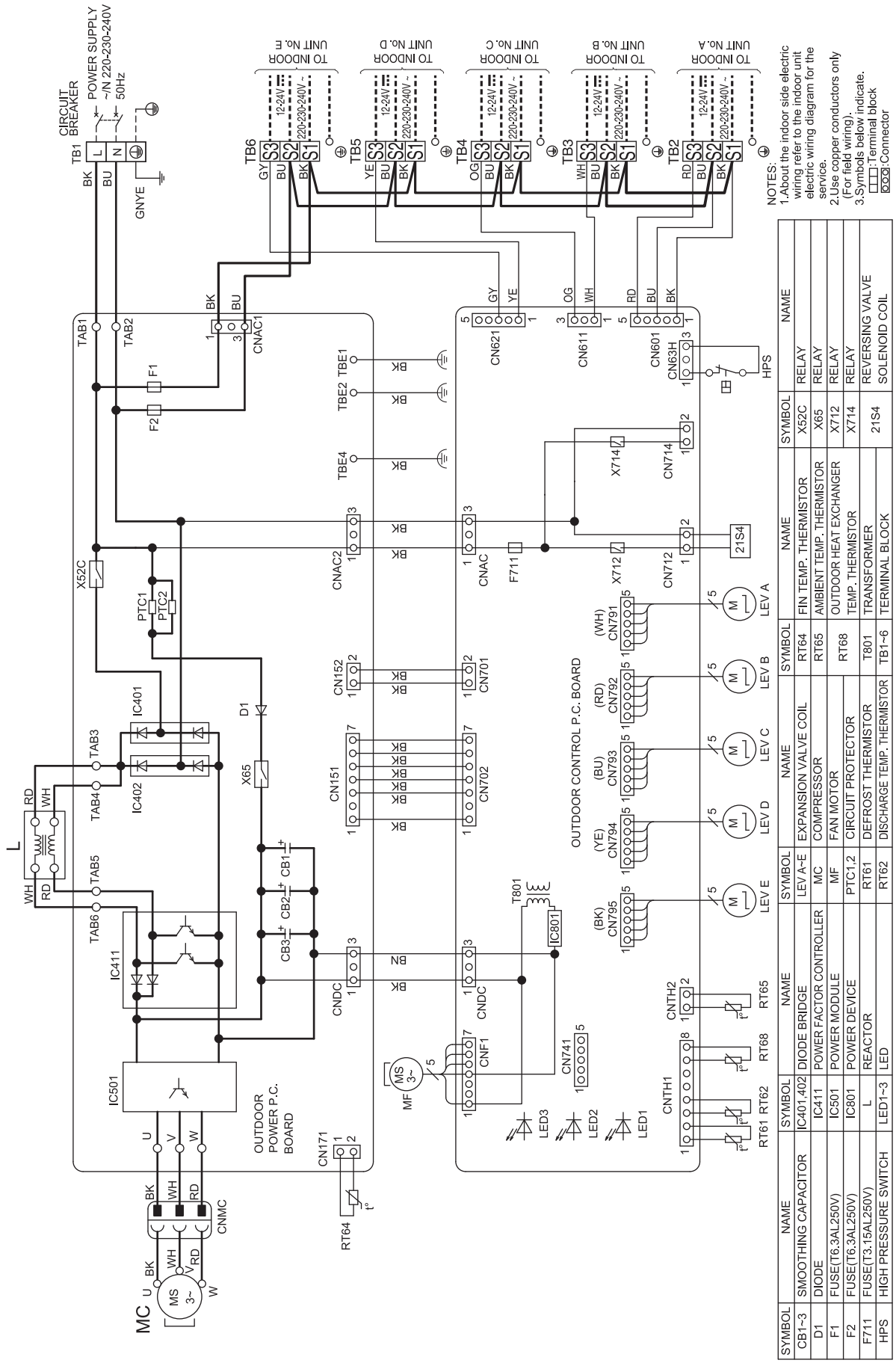
| SEMBOL | PARÇA ADI |
|---|---|
| IC401,402 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L | REAKTÖR |
| LED1~3 | LED |

| SEMBOL | PARÇA ADI |
|---|---|
| LEV A~D | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1,2 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~5 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| TRS | ISIL KORUYUCU |
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

## MXZ-5F102VF - E1, ER1




| SYMBOL | NAME |
|---|---|
| CB1~3 | SMOOTHING CAPACITOR |
| D1 | DIODE |
| F1 | FUSE(T6.3AL250V) |
| F2 | FUSE(T6.3AL250V) |
| F711 | FUSE(T3.15AL250V) |
| HPS | HIGH PRESSURE SWITCH |

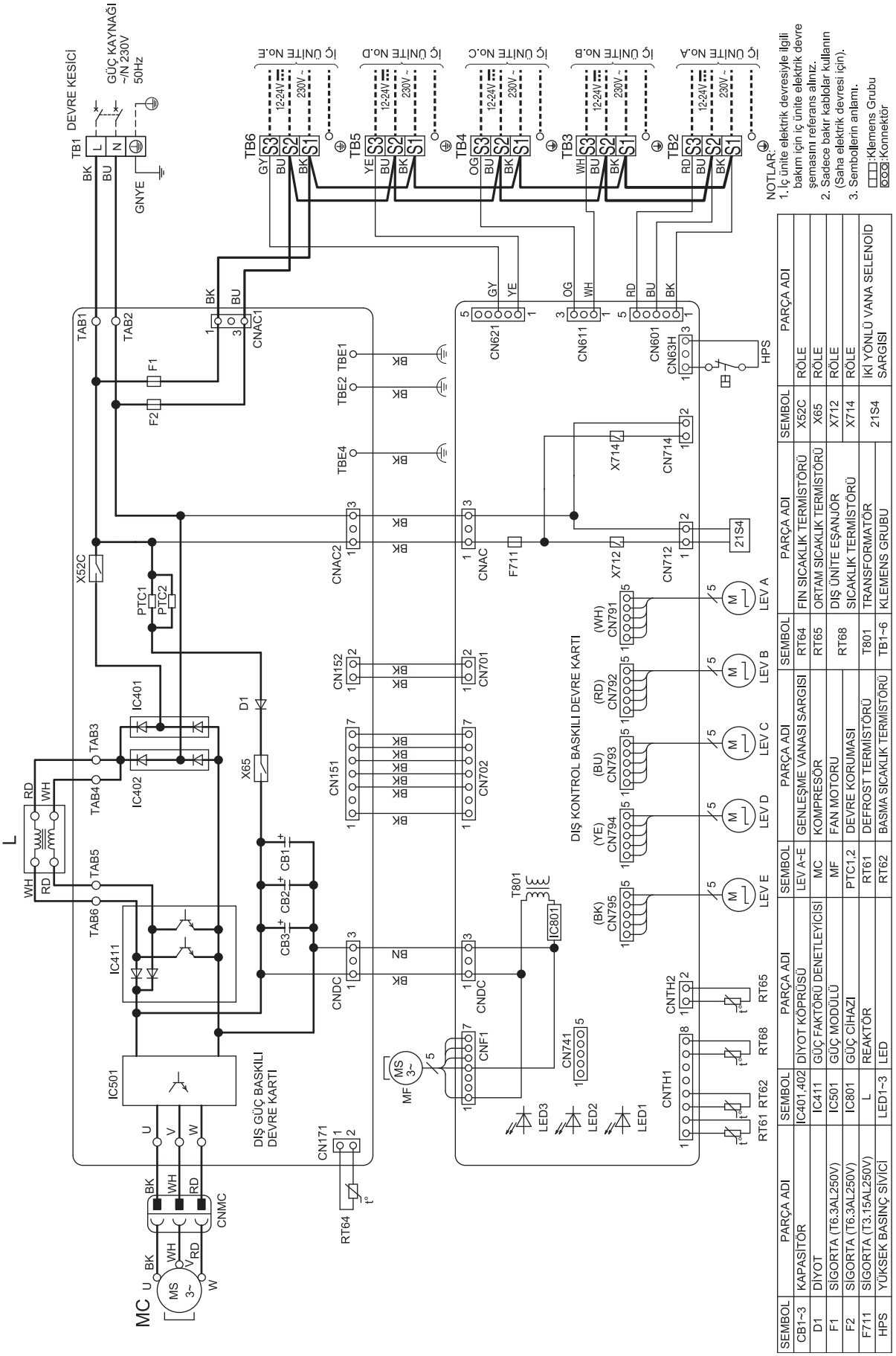
| SYMBOL | NAME |
|---|---|
| IC401,402 | DIODE BRIDGE |
| IC411 | POWER FACTOR CONTROLLER |
| IC501 | POWER MODULE |
| IC801 | POWER DEVICE |
| L | REACTOR |
| LED1~3 | LED |

| SYMBOL | NAME |
|---|---|
| LEV A~E | EXPANSION VALVE COIL |
| MC | COMPRESSOR |
| MF | FAN MOTOR |
| PTC1,2 | CIRCUIT PROTECTOR |
| RT61 | DEFROST THERMISTOR |
| RT62 | DISCHARGE TEMP. THERMISTOR |

| SYMBOL | NAME |
|---|---|
| RT64 | FIN TEMP. THERMISTOR |
| RT65 | AMBIENT TEMP. THERMISTOR |
| RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| T801 | TRANSFORMER |
| TB1~6 | TERMINAL BLOCK |

| SYMBOL | NAME |
|---|---|
| X52C | RELAY |
| X65 | RELAY |
| X712 | RELAY |
| X714 | RELAY |
| 21S4 | REVERSING VALVE SOLENOID COIL |

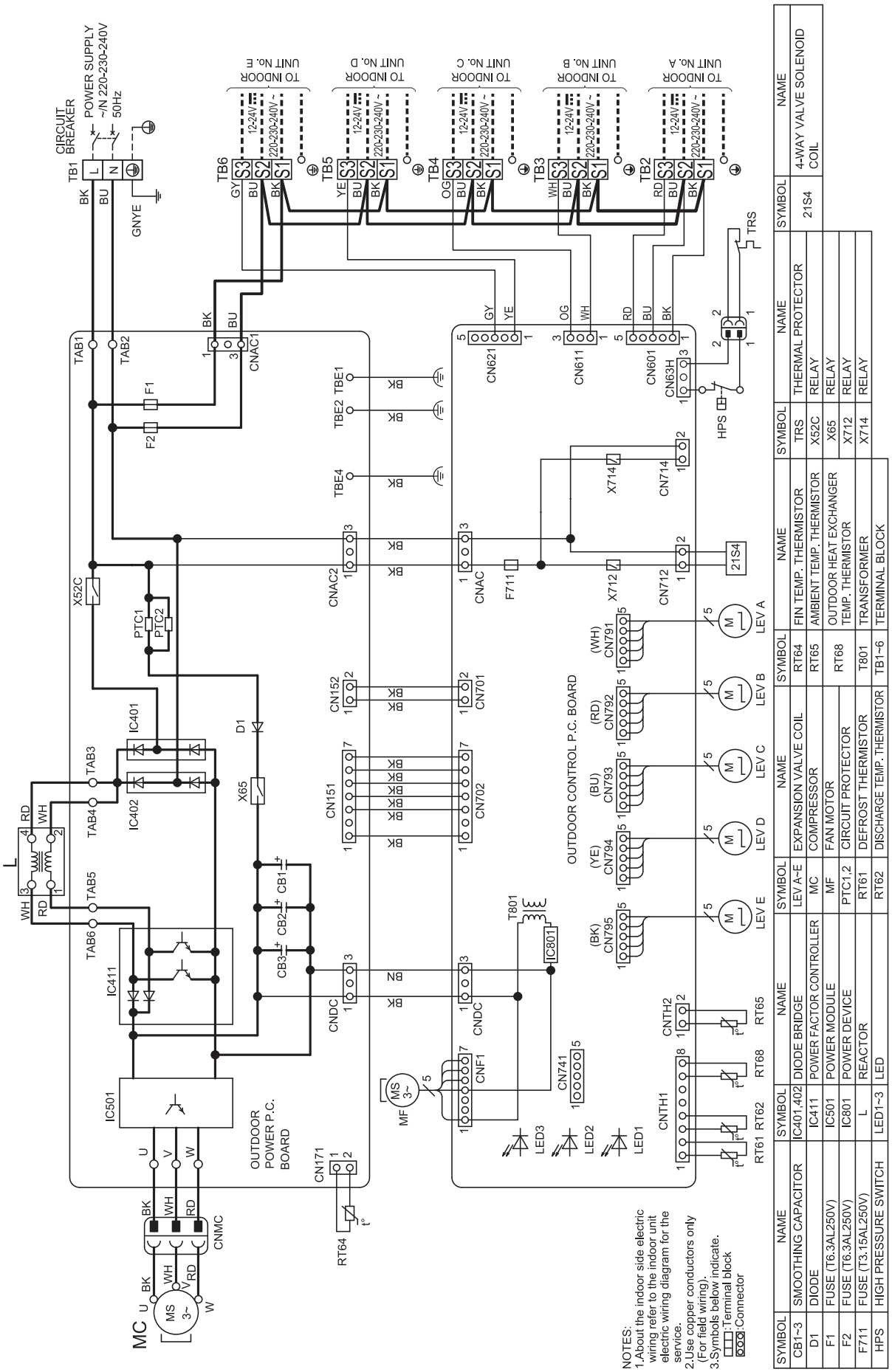
## MXZ-5F102VF - ET1




| SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI |
|---|---|---|---|---|---|---|---|
| CB1~3 | KAPASİTÖR | IC401,402 | DİYOT KÖPRÜSÜ | LEV A~E | GENLEŞME VANASI SARGISI | RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| D1 | DİYOT | IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ | MC | KOMPRESÖR | RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| F1 | SİGORTA (T6.3AL250V) | IC501 | GÜÇ MODÜLÜ | MF | FAN MOTORU | RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| F2 | SİGORTA (T6.3AL250V) | IC801 | GÜÇ CİHAZI | PTC1,2 | DEVRE KORUMASI | | |
| F711 | SİGORTA (T3.15AL250V) | L | REAKTÖR | RT61 | DEFROST TERMİSTÖRÜ | T801 | TRANSFORMATÖR |
| HPS | YÜKSEK BASINÇ SİVİCİ | LED1~3 | LED | RT62 | BASMA SICAKLIK TERMİSTÖRÜ | TB1~6 | KLEMENS GRUBU |

| SEMBOL | PARÇA ADI |
|---|---|
| X52C | RÖLE |
| X65 | RÖLE |
| X712 | RÖLE |
| X714 | RÖLE |
| 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |

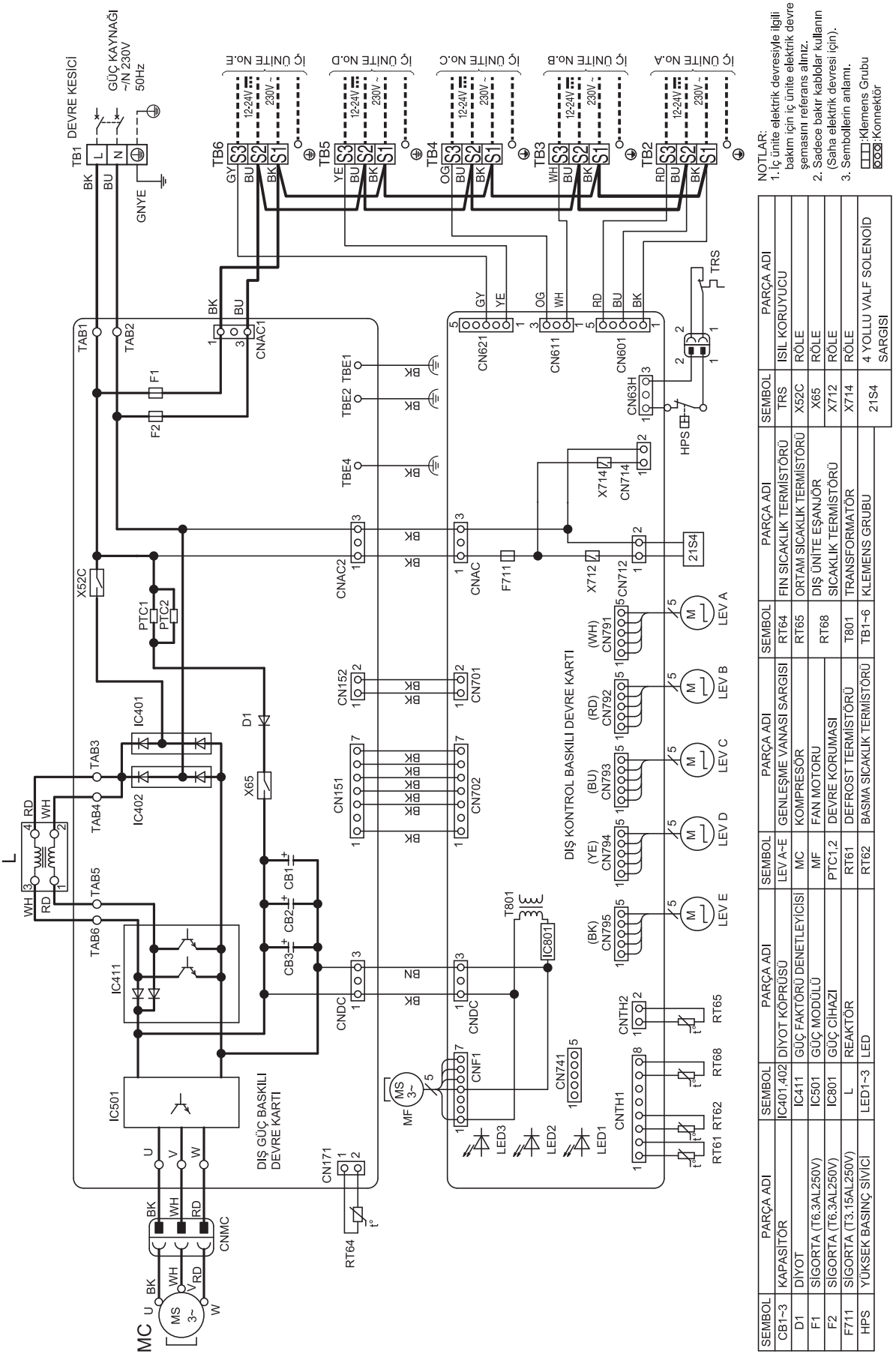
## MXZ-5F102VF2 - E1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | IC401,402 | DIODE BRIDGE | LEV A~E | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR | TRS | THERMAL PROTECTOR | 21S4 | 4-WAY VALVE SOLENOID COIL |
| D1 | DIODE | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR | X52C | RELAY | | |
| F1 | FUSE (T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR | X65 | RELAY | | |
| F2 | FUSE (T6.3AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | | | X712 | RELAY | | |
| F711 | FUSE (T3.15AL250V) | L | REACTOR | RT61 | DEFROST THERMISTOR | T801 | TRANSFORMER | X714 | RELAY | | |
| HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | TB1~6 | TERMINAL BLOCK | | | | |

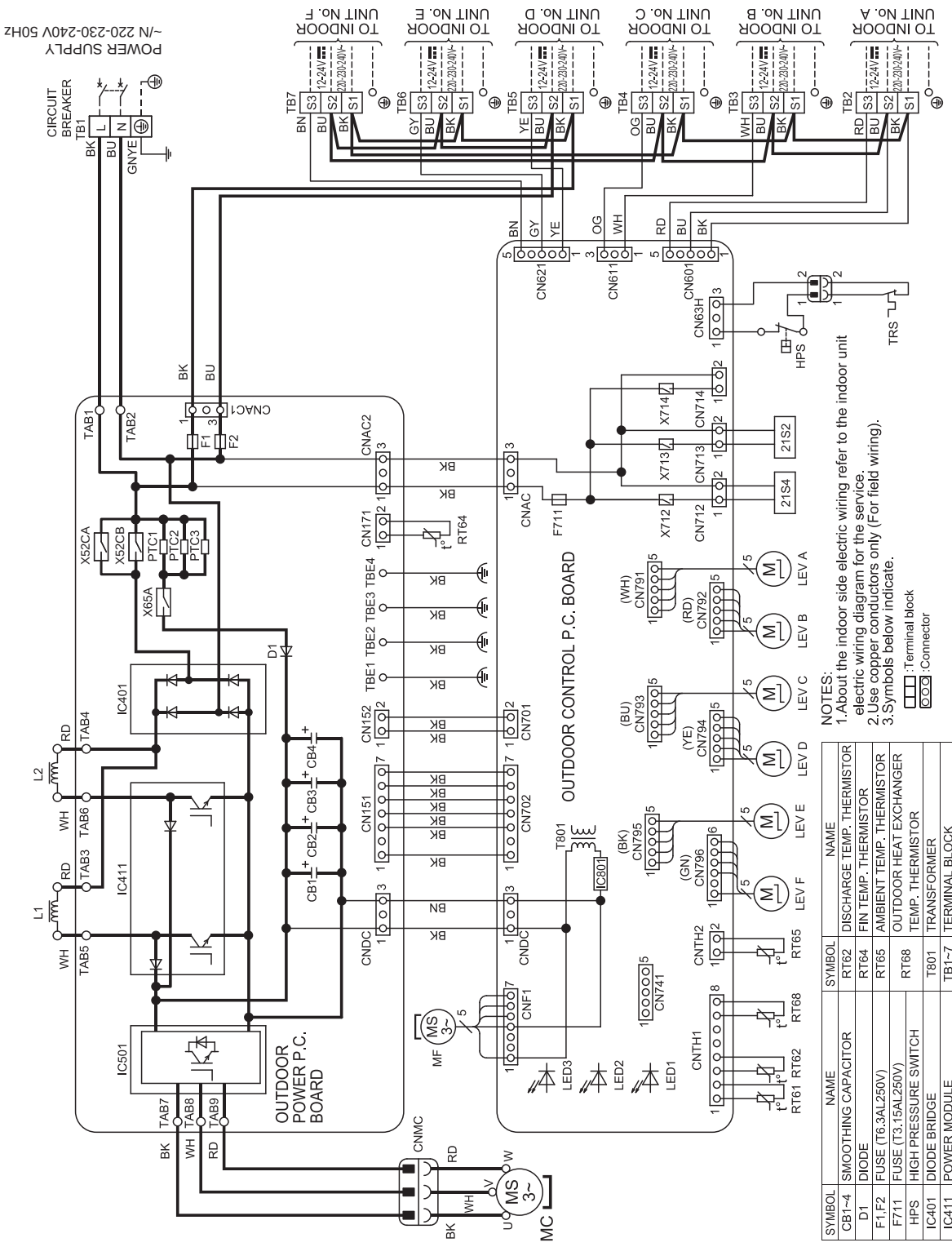
NOTES:
1.About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2.Use copper conductors only (For field wiring).
3.Symbols below indicate.
□□□:Terminal block
○○○:Connector

## MXZ-5F102VF2 - ET1



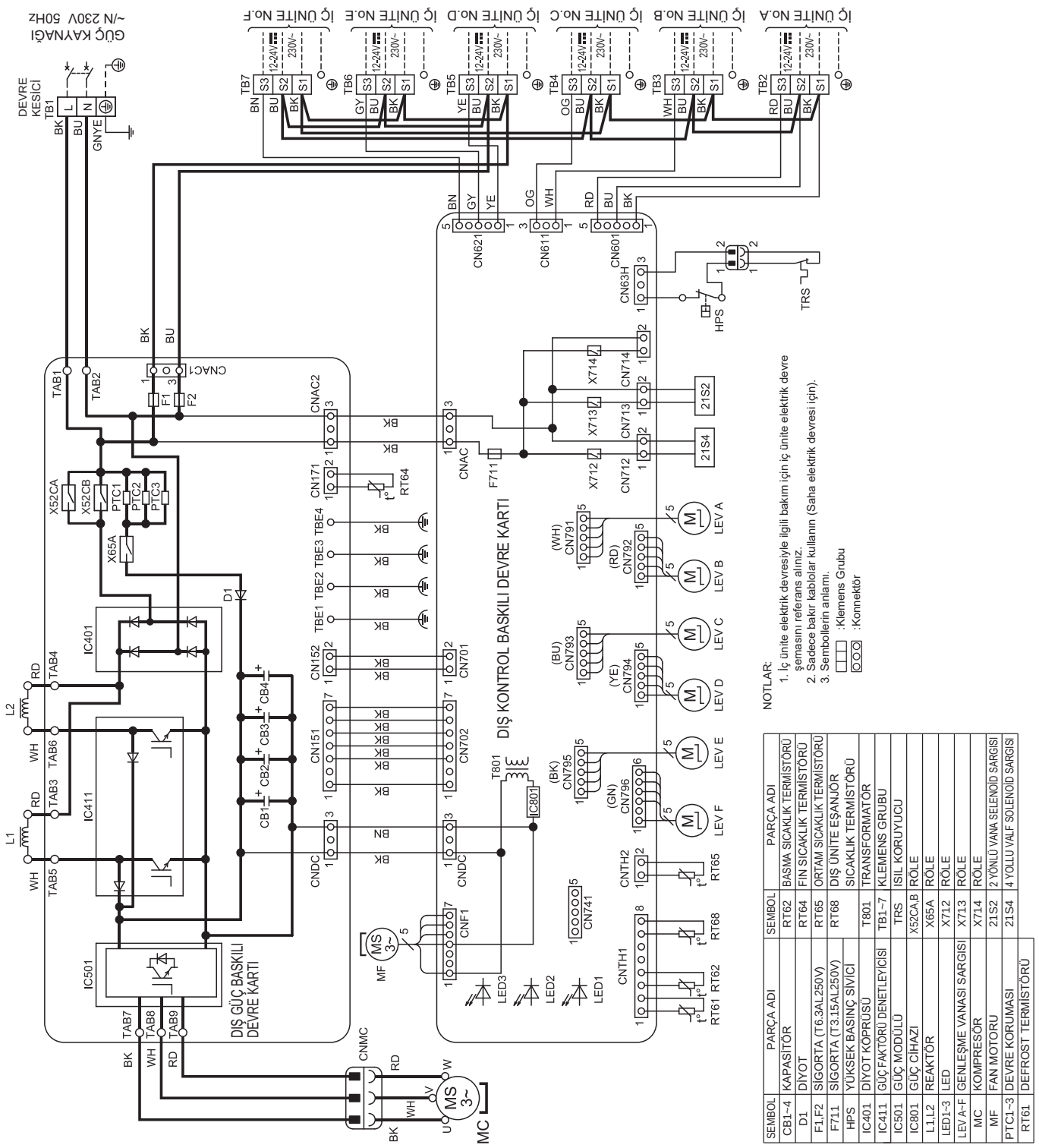

| SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI |
|---|---|---|---|---|---|---|---|
| CB1~3 | KAPASİTÖR | IC401,402 | DİYOT KÖPRÜSÜ | LEV A~E | GENLEŞME VANASI SARGISI | RT64 | FIN SICAKLIK TERMİSTÖRÜ |
| D1 | DİYOT | IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ | MC | KOMPRESÖR | RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| F1 | SİGORTA (T6.3AL250V) | IC501 | GÜÇ MODÜLÜ | MF | FAN MOTORU | RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| F2 | SİGORTA (T6.3AL250V) | IC801 | GÜÇ CİHAZI | PTC1,2 | DEVRE KORUMASI | T801 | TRANSFORMATÖR |
| F711 | SİGORTA (T3.15AL250V) | L | REAKTÖR | RT61 | DEFROST TERMİSTÖRÜ | TB1~6 | KLEMENS GRUBU |
| HPS | YÜKSEK BASINÇ SİVİCİ | LED1~3 | LED | RT62 | BASMA SICAKLIK TERMİSTÖRÜ | TRS | ISIL KORUYUCU |
| | | | | | | X52C | RÖLE |
| | | | | | | X65 | RÖLE |
| | | | | | | X712 | RÖLE |
| | | | | | | X714 | RÖLE |
| | | | | | | 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

## MXZ-6F120VF2 - E1




| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| CB1~4 | SMOOTHING CAPACITOR | RT62 | DISCHARGE TEMP. THERMISTOR |
| D1 | DIODE | RT64 | FIN TEMP. THERMISTOR |
| F1,F2 | FUSE (T6.3AL250V) | RT65 | AMBIENT TEMP. THERMISTOR |
| F711 | FUSE (T3.15AL250V) | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| HPS | HIGH PRESSURE SWITCH | T801 | TRANSFORMER |
| IC401 | DIODE BRIDGE | TB1~7 | TERMINAL BLOCK |
| IC411 | POWER MODULE | TRS | THERMAL PROTECTOR |
| IC501 | POWER MODULE | X52CA,B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| L1,L2 | REACTOR | X712 | RELAY |
| LED1~3 | LED | X713 | RELAY |
| LEV A~F | EXPANSION VALVE COIL | X714 | RELAY |
| MC | COMPRESSOR | 21S2 | 2-WAY VALVE SOLENOID COIL |
| MF | FAN MOTOR | 21S4 | 4-WAY VALVE SOLENOID COIL |
| PTC1~3 | CIRCUIT PROTECTOR | | |
| RT61 | DEFROST THERMISTOR | | |

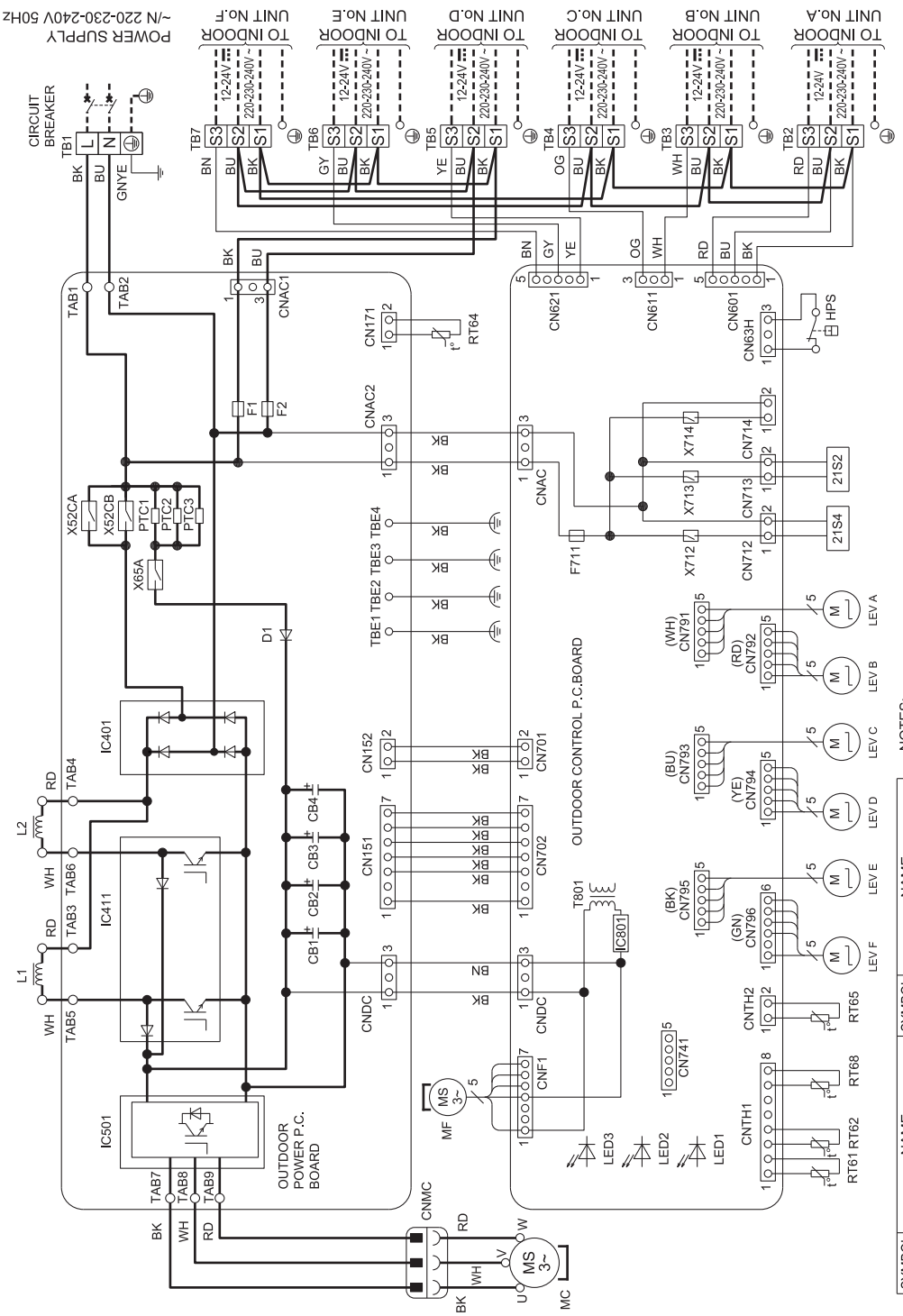
## MXZ-6F120VF2 - ET1




| SEMBOL | PARÇA ADI |
|---|---|
| CB1~4 | KAPASİTÖR |
| D1 | DİYOT |
| F1,F2 | SİGORTA (T6.3AL250V) |
| F711 | SİGORTA (T3.15AL250V) |
| HPS | YÜKSEK BASINÇ SİVİCİ |
| IC401 | DİYOT KÖPRÜSÜ |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ |
| IC501 | GÜÇ MODÜLÜ |
| IC801 | GÜÇ CİHAZI |
| L1,L2 | REAKTÖR |
| LED1~3 | LED |
| LEV A~F | GENLEŞME VANASI SARGISI |
| MC | KOMPRESÖR |
| MF | FAN MOTORU |
| PTC1~3 | DEVRE KORUMASI |
| RT61 | DEFROST TERMİSTÖRÜ |

| SEMBOL | PARÇA ADI |
|---|---|
| RT62 | BASMA SICAKLIK TERMİSTÖRÜ |
| RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| T801 | TRANSFORMATÖR |
| TB1~7 | KLEMENS GRUBU |
| TRS | ISIL KORUYUCU |
| X52CA,B | RÖLE |
| X65A | RÖLE |
| X712 | RÖLE |
| X713 | RÖLE |
| X714 | RÖLE |
| 21S2 | 2 YÖNLÜ VANA SELENOİD SARGISI |
| 21S4 | 4 YOLLU VALF SOLENOİD SARGISI |

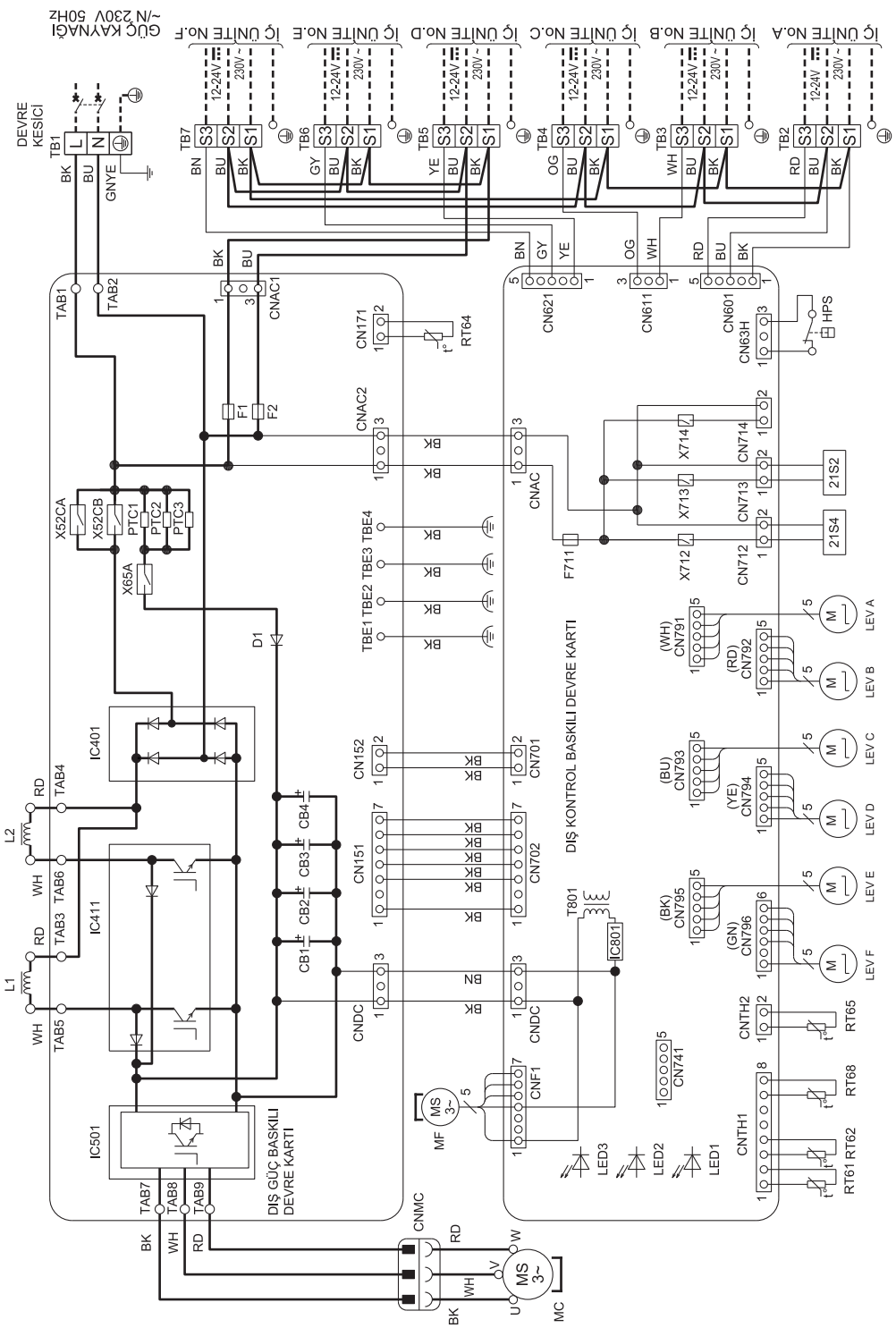
## MXZ-6F122VF - E1, ER1




NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only (For field wiring).
3. Symbols below indicate.
□□□ :Terminal block
○○○ :Connector

| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| CB1~4 | SMOOTHING CAPACITOR | RT61 | DEFROST THERMISTOR |
| D1 | DIODE | RT62 | DISCHARGE TEMP.THERMISTOR |
| F1,F2 | FUSE(T6.3AL250V) | RT64 | FIN TEMP.THERMISTOR |
| F711 | FUSE(T3.15AL250V) | RT65 | AMBIENT TEMP.THERMISTOR |
| HPS | HIGH PRESSURE SWITCH | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| IC401 | DIODE BRIDGE | T801 | TRANSFORMER |
| IC411 | POWER MODULE | TB1~7 | TERMINAL BLOCK |
| IC501 | POWER MODULE | X52CA,B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| L1,L2 | REACTOR | X712 | RELAY |
| LED1~3 | LED | X713 | RELAY |
| LEV A~F | EXPANSION VALVE COIL | X714 | RELAY |
| MC | COMPRESSOR | 21S2 | 2WAY VALVE SOLENOID COIL |
| MF | FAN MOTOR | 21S4 | REVERSING VALVE SOLENOID COIL |
| PTC1~3 | CIRCUIT PROTECTOR | | |

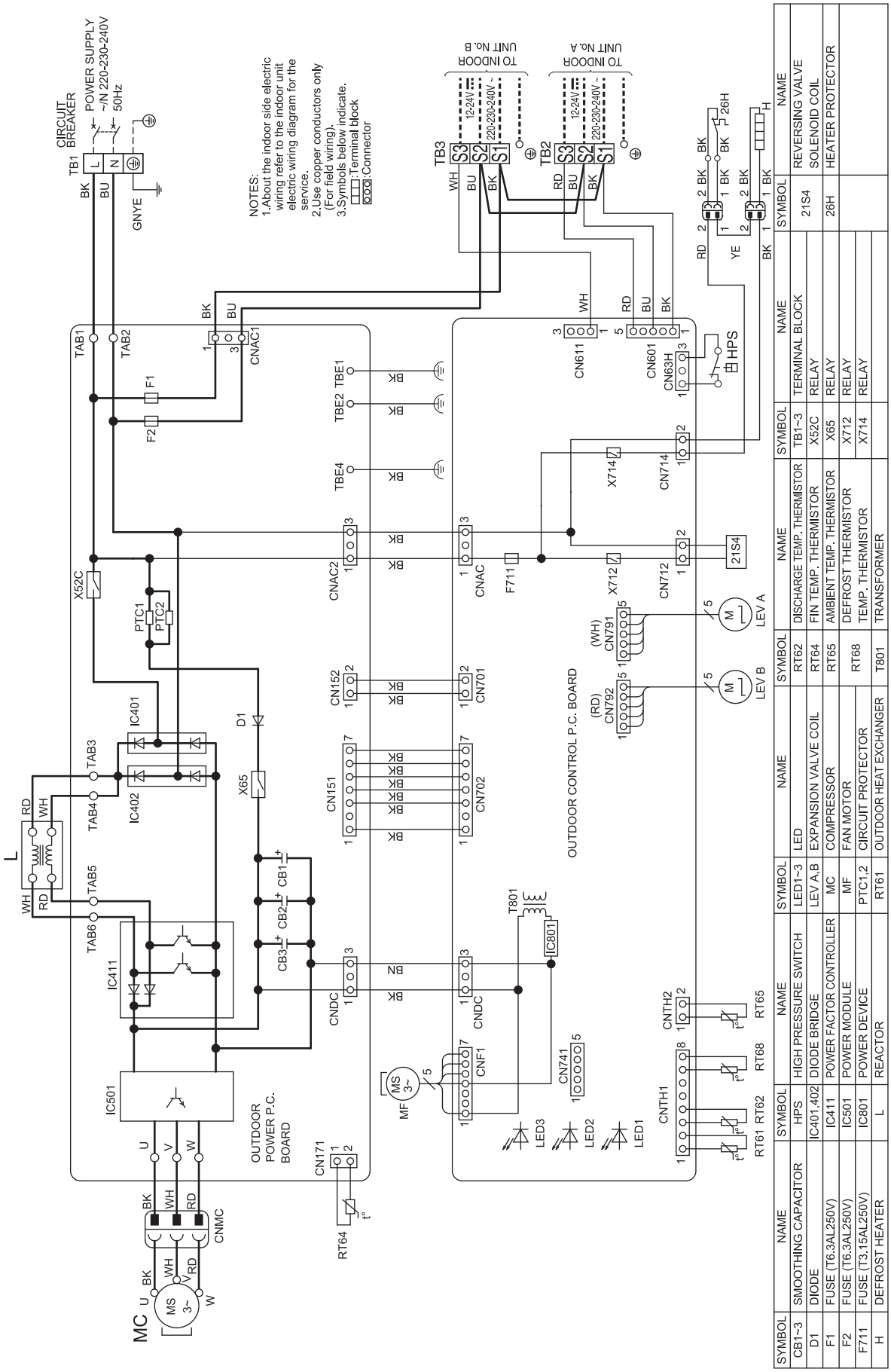
## MXZ-6F122VF - ET1




NOTLAR:
1. İç ünite elektrik devresiyle ilgili bakım için iç ünite elektrik devre şemasını referans alınız.
2. Sadece bakır kablolar kullanın (Saha elektrik devresi için).
3. Sembollerin anlamı.
□□□ :Klemens Grubu
○○○ :Konnektör

| SEMBOL | PARÇA ADI | SEMBOL | PARÇA ADI |
|---|---|---|---|
| CB1~4 | KAPASİTÖR | RT61 | DEFROST TERMİSTÖRÜ |
| D1 | DİYOT | RT62 | BASMA SICAKLIK TERMİSTÖRÜ |
| F1,F2 | SİGORTA (T6.3AL250V) | RT64 | FİN SICAKLIK TERMİSTÖRÜ |
| F711 | SİGORTA (T3.15AL250V) | RT65 | ORTAM SICAKLIK TERMİSTÖRÜ |
| HPS | YÜKSEK BASINÇ SİVİCİ | RT68 | DIŞ ÜNİTE EŞANJÖR SICAKLIK TERMİSTÖRÜ |
| IC401 | DİYOT KÖPRÜSÜ | T801 | TRANSFORMATÖR |
| IC411 | GÜÇ FAKTÖRÜ DENETLEYİCİSİ | TB1~7 | KLEMENS GRUBU |
| IC501 | GÜÇ MODÜLÜ | X52CA,B | RÖLE |
| IC801 | GÜÇ CİHAZI | X65A | RÖLE |
| L1,L2 | REAKTÖR | X712 | RÖLE |
| LED1~3 | LED | X713 | RÖLE |
| LEV A~F | GENLEŞME VANASI SARGISI | X714 | RÖLE |
| MC | KOMPRESÖR | 21S2 | 2 YÖNLÜ VANA SELENOİD SARGISI |
| MF | FAN MOTORU | 21S4 | İKİ YÖNLÜ VANA SELENOİD SARGISI |
| PTC1~3 | DEVRE KORUMASI | | |

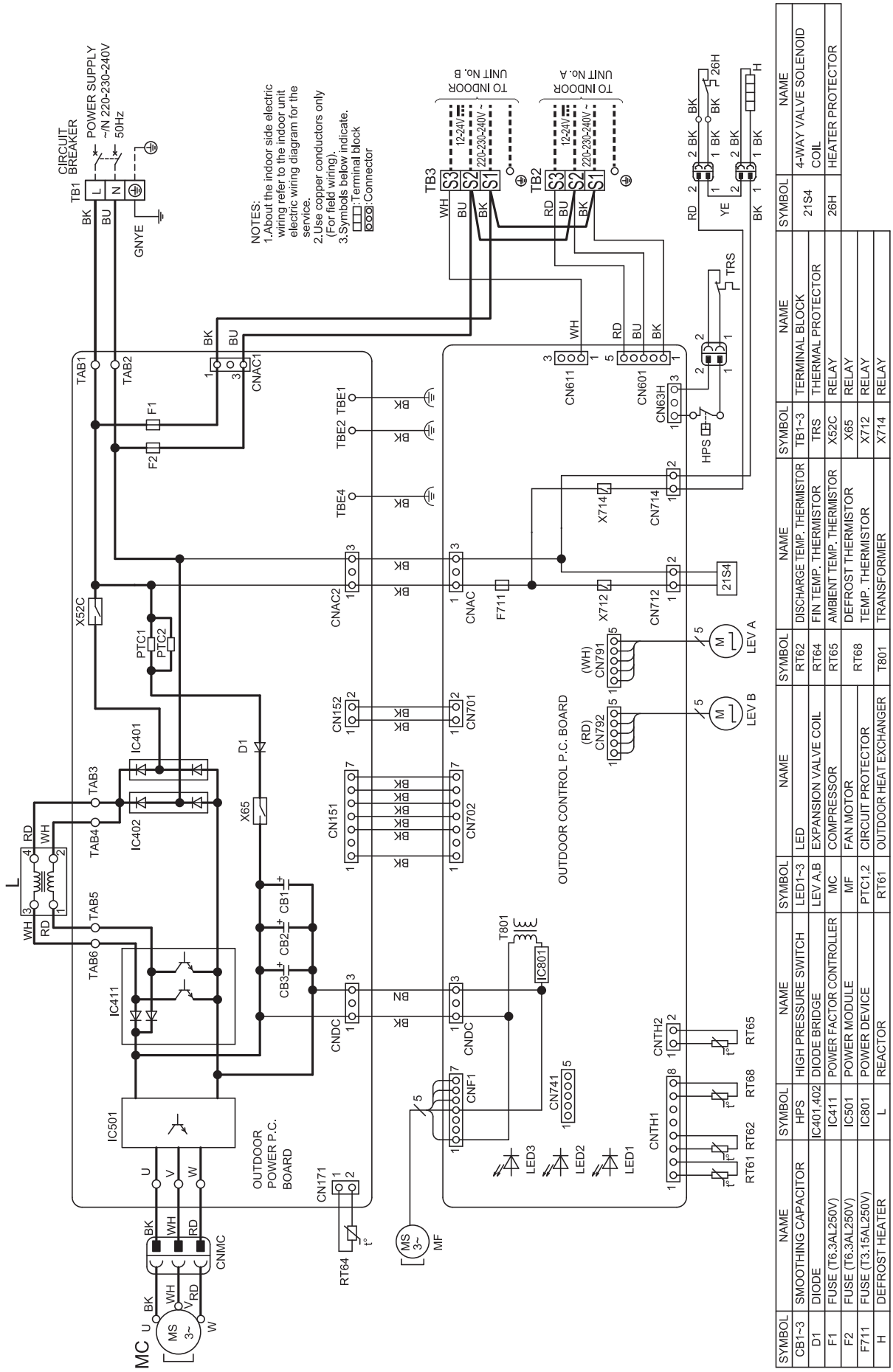
## MXZ-2F53VFHZ - E1, ER1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR |
| D1 | DIODE | IC401,402 | DIODE BRIDGE | LEV A,B | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR |
| F1 | FUSE (T6.3AL250V) | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR |
| F2 | FUSE (T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | DEFROST THERMISTOR |
| F711 | FUSE (T3.15AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | | TEMP. THERMISTOR |
| H | DEFROST HEATER | L | REACTOR | RT61 | OUTDOOR HEAT EXCHANGER | T801 | TRANSFORMER |

| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| TB1~3 | TERMINAL BLOCK | 21S4 | REVERSING VALVE SOLENOID COIL |
| X52C | RELAY | 26H | HEATER PROTECTOR |
| X65 | RELAY | | |
| X712 | RELAY | | |
| X714 | RELAY | | |

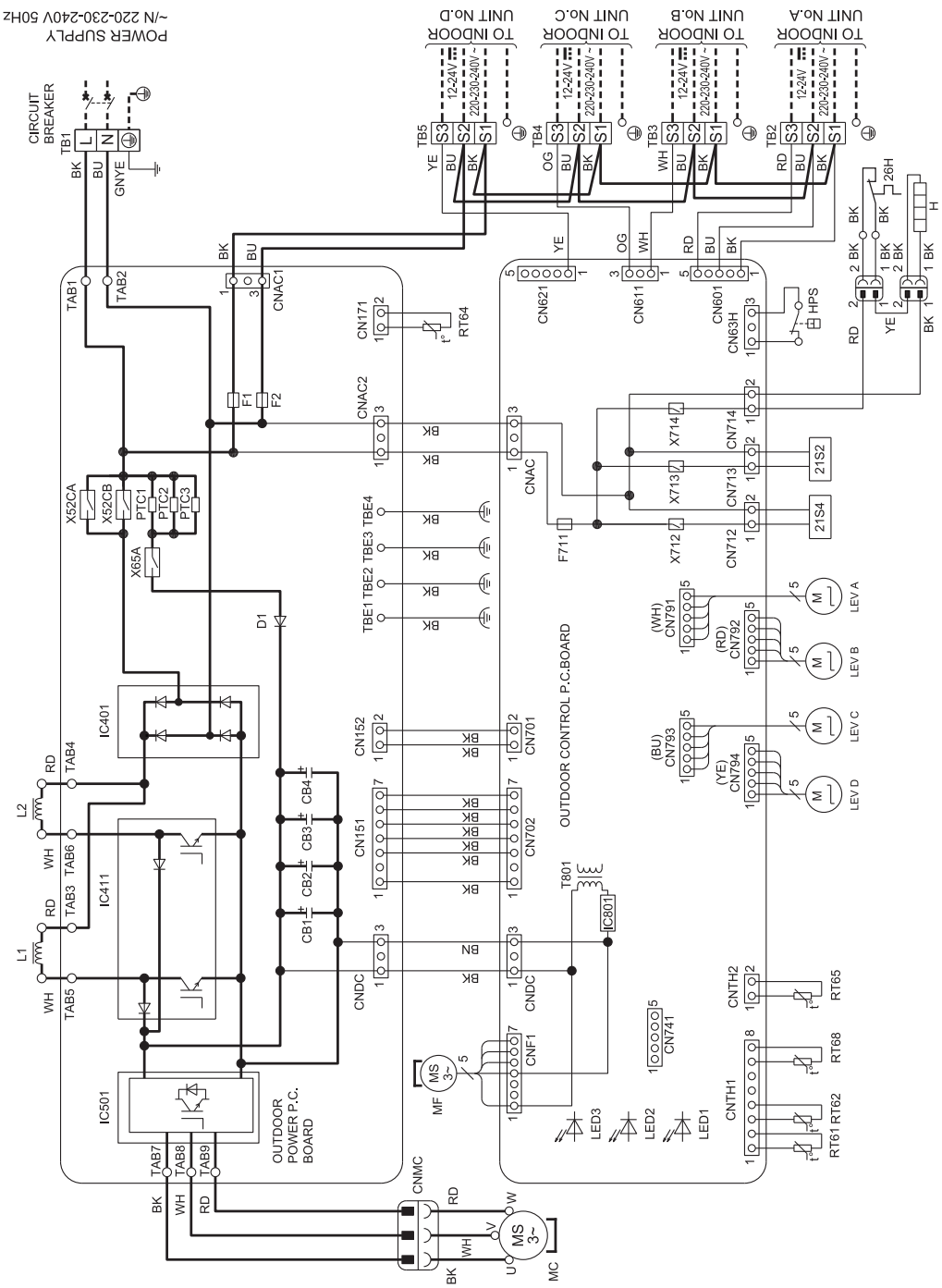
## MXZ-2F53VFHZ2 - E1




| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|---|---|---|---|---|---|
| CB1~3 | SMOOTHING CAPACITOR | HPS | HIGH PRESSURE SWITCH | LED1~3 | LED | RT62 | DISCHARGE TEMP. THERMISTOR | TB1~3 | TERMINAL BLOCK |
| D1 | DIODE | IC401,402 | DIODE BRIDGE | LEV A,B | EXPANSION VALVE COIL | RT64 | FIN TEMP. THERMISTOR | TRS | THERMAL PROTECTOR |
| F1 | FUSE (T6.3AL250V) | IC411 | POWER FACTOR CONTROLLER | MC | COMPRESSOR | RT65 | AMBIENT TEMP. THERMISTOR | X52C | RELAY |
| F2 | FUSE (T6.3AL250V) | IC501 | POWER MODULE | MF | FAN MOTOR | RT68 | DEFROST THERMISTOR | X65 | RELAY |
| F711 | FUSE (T3.15AL250V) | IC801 | POWER DEVICE | PTC1,2 | CIRCUIT PROTECTOR | | TEMP. THERMISTOR | X712 | RELAY |
| H | DEFROST HEATER | L | REACTOR | RT61 | OUTDOOR HEAT EXCHANGER | T801 | TRANSFORMER | X714 | RELAY |

| SYMBOL | NAME |
|---|---|
| 21S4 | 4-WAY VALVE SOLENOID COIL |
| 26H | HEATER PROTECTOR |

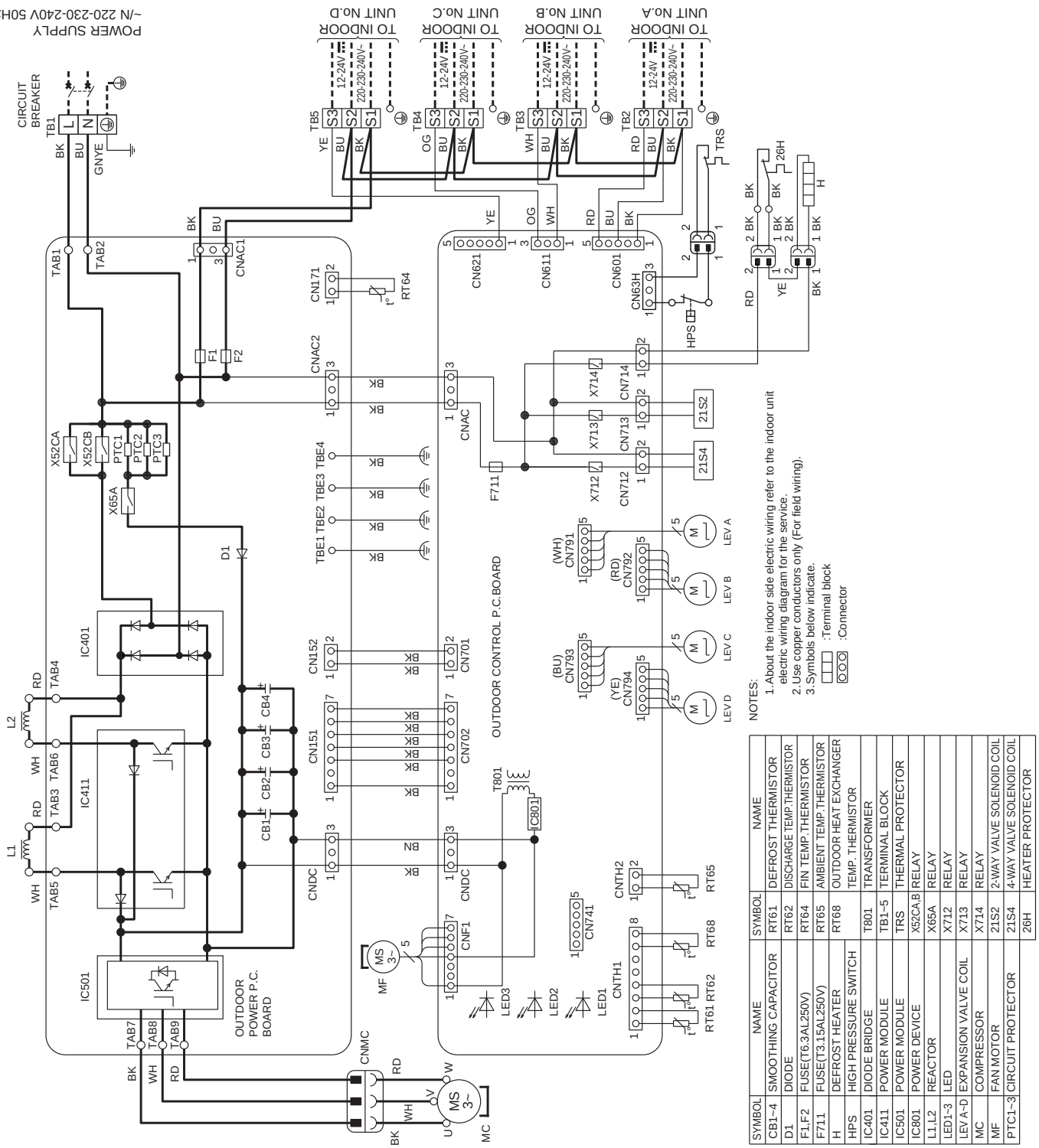
## MXZ-4F83VFHZ - E1, ER1




NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only (For field wiring).
3. Symbols below indicate.
□□ :Terminal block
○○○ :Connector

| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| CB1~4 | SMOOTHING CAPACITOR | RT61 | DEFROST THERMISTOR |
| D1 | DIODE | RT62 | DISCHARGE TEMP.THERMISTOR |
| F1,F2 | FUSE(T6.3AL250V) | RT64 | FIN TEMP.THERMISTOR |
| F711 | FUSE(T3.15AL250V) | RT65 | AMBIENT TEMP.THERMISTOR |
| H | DEFROST HEATER | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| HPS | HIGH PRESSURE SWITCH | | |
| IC401 | DIODE BRIDGE | T801 | TRANSFORMER |
| IC411 | POWER MODULE | TB1~5 | TERMINAL BLOCK |
| IC501 | POWER MODULE | X52CA,B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| L1,L2 | REACTOR | X712 | RELAY |
| LED1~3 | LED | X713 | RELAY |
| LEV A~D | EXPANSION VALVE COIL | X714 | RELAY |
| MC | COMPRESSOR | 21S2 | 2WAY VALVE SOLENOID COIL |
| MF | FAN MOTOR | 21S4 | REVERSING VALVE SOLENOID COIL |
| PTC1~3 | CIRCUIT PROTECTOR | 26H | HEATER PROTECTOR |

## MXZ-4F83VFHZ2 - E1



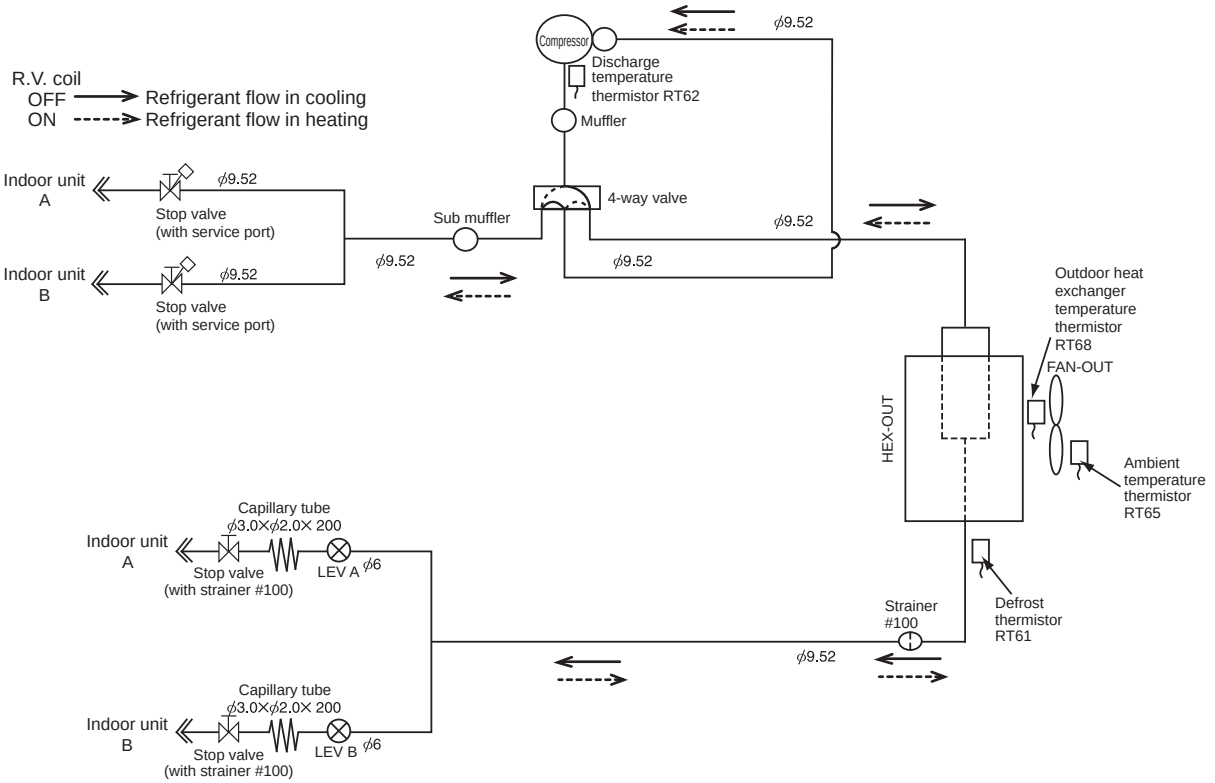

NOTES:
1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for the service.
2. Use copper conductors only (For field wiring).
3. Symbols below indicate.
□□□ :Terminal block
○○○ :Connector

| SYMBOL | NAME | SYMBOL | NAME |
|---|---|---|---|
| CB1~4 | SMOOTHING CAPACITOR | RT61 | DEFROST THERMISTOR |
| D1 | DIODE | RT62 | DISCHARGE TEMP.THERMISTOR |
| F1,F2 | FUSE(T6.3AL250V) | RT64 | FIN TEMP.THERMISTOR |
| F711 | FUSE(T3.15AL250V) | RT65 | AMBIENT TEMP.THERMISTOR |
| H | DEFROST HEATER | RT68 | OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR |
| HPS | HIGH PRESSURE SWITCH | T801 | TRANSFORMER |
| IC401 | DIODE BRIDGE | TB1~5 | TERMINAL BLOCK |
| IC411 | POWER MODULE | TRS | THERMAL PROTECTOR |
| IC501 | POWER MODULE | X52CA,B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| L1,L2 | REACTOR | X712 | RELAY |
| LED1~3 | LED | X713 | RELAY |
| LEV A~D | EXPANSION VALVE COIL | X714 | RELAY |
| MC | COMPRESSOR | 21S2 | 2-WAY VALVE SOLENOID COIL |
| MF | FAN MOTOR | 21S4 | 4-WAY VALVE SOLENOID COIL |
| PTC1~3 | CIRCUIT PROTECTOR | 26H | HEATER PROTECTOR |

# 8 REFRIGERANT SYSTEM DIAGRAM

**MXZ-2F33VF**
**MXZ-2F33VF2**
**MXZ-2F33VF3**
**MXZ-2F33VF4**

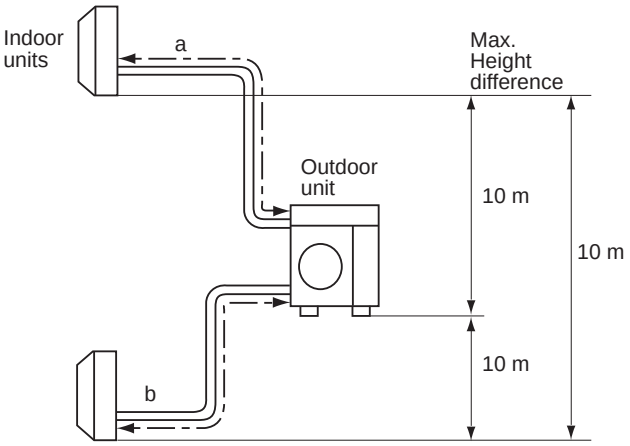
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b) | 15 m |
| Total piping length (a+b) | 20 m |
| Bending point for each unit | 15 |
| Total bending point | 20 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Model name | Outdoor unit precharged (g) | Refrigerant piping length (one way, 2 unit total) |
|---|---|---|
| | | 20 m |
| **MXZ-2F33VF MXZ-2F33VF2** | 1,000 | 0 |
| **MXZ-2F33VF3 MXZ-2F33VF4** | 800 | 0 |

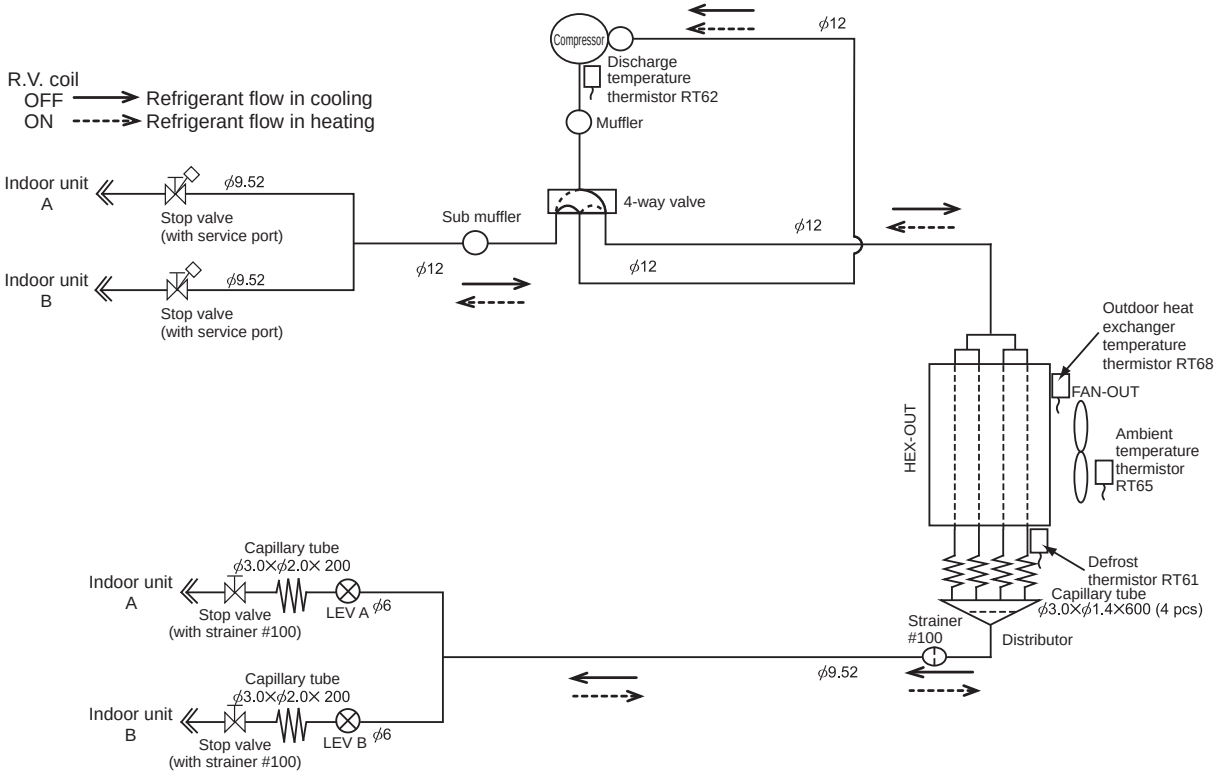
● Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the right table.

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

**MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**

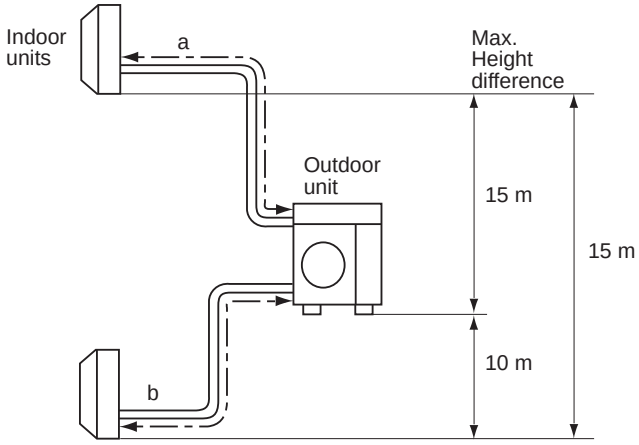
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b) | 20 m |
| Total piping length (a+b) | 30 m |
| Bending point for each unit | 30 |
| Total bending point | 20 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Model name | Outdoor unit precharged (g) | Refrigerant piping length (one way, 2 unit total) |
|---|---|---|
| | | 30 m |
| **MXZ-2F42/53VF**<br>**MXZ-2F53VFH**<br>**MXZ-2F42/53VF2**<br>**MXZ-2F53VFH2** | 1,200 | 0 |
| **MXZ-2F42/53VF3**<br>**MXZ-2F53VFH3**<br>**MXZ-2F42/53VF4**<br>**MXZ-2F53VFH4** | 1,000 | 0 |

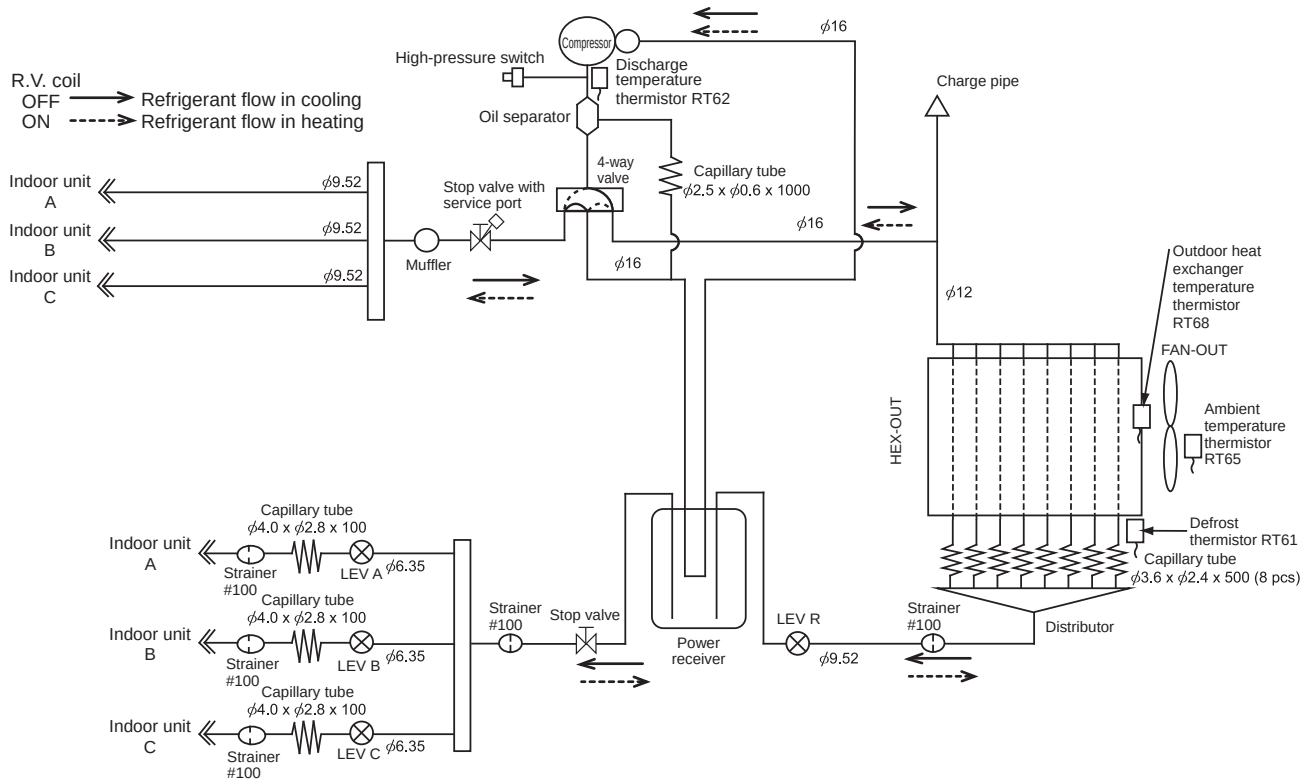
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the right table.
- For **MXZ-2F53VF**, **MXZ-2F53VF2, MXZ-2F53VF3, MXZ-2F53VF4, MXZ-2F53VFH, MXZ-2F53VFH2, MXZ-2F53VFH3** and **MXZ-2F53VFH4** when diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

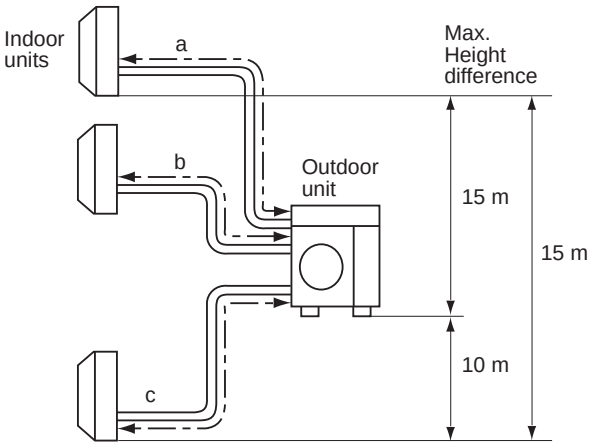
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c) | 25 m |
| Total piping length (a+b+c) | 50 m |
| Bending point for each unit | 25 |
| Total bending point | 50 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

*Refer to "Method of charging refrigerant".

| Model name | Outdoor unit precharged (g) | Refrigerant piping length (one way, 3 unit total) |
|---|---|---|
| | | 50 m |
| **MXZ-3F54VF** | 1,400 | 0 |
| **MXZ-3F54VF2**<br>**MXZ-3F54VF3**<br>**MXZ-3F54VF4** | 2,400 | 0 |

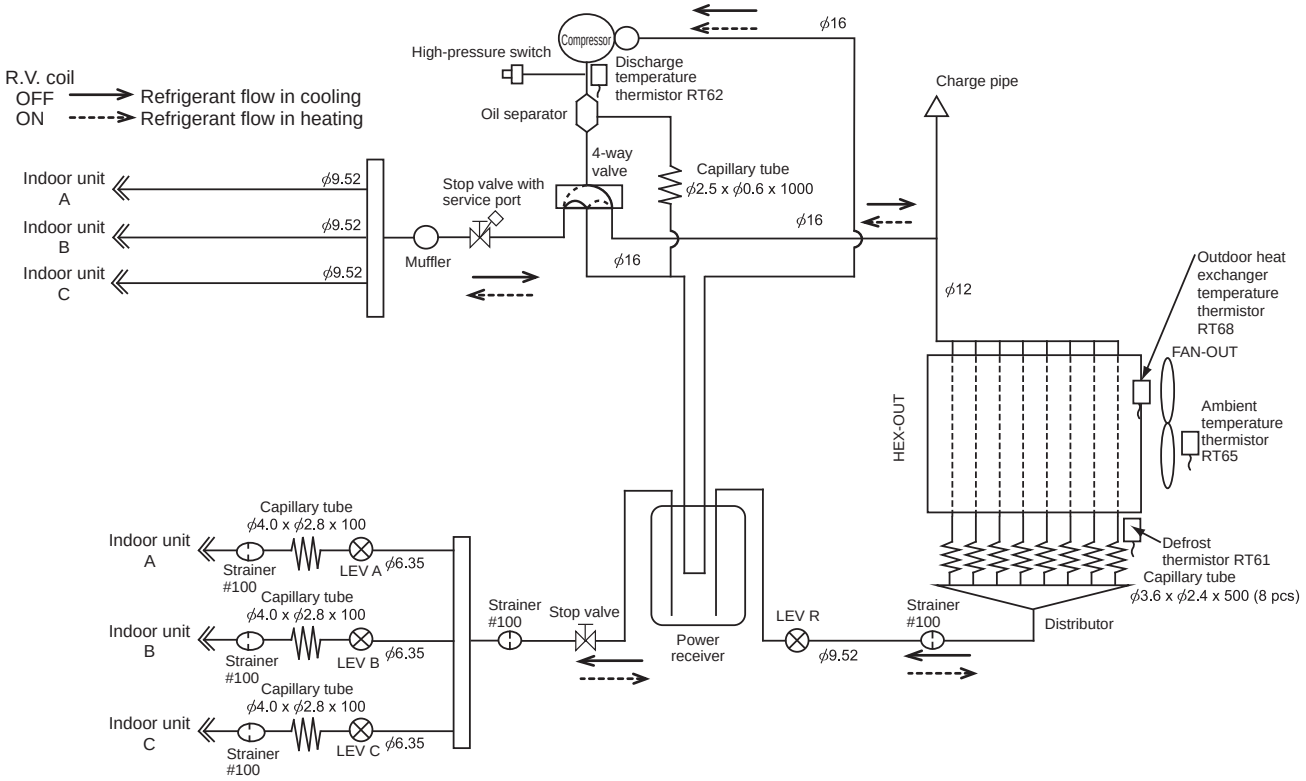
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the right table.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe.
  For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4

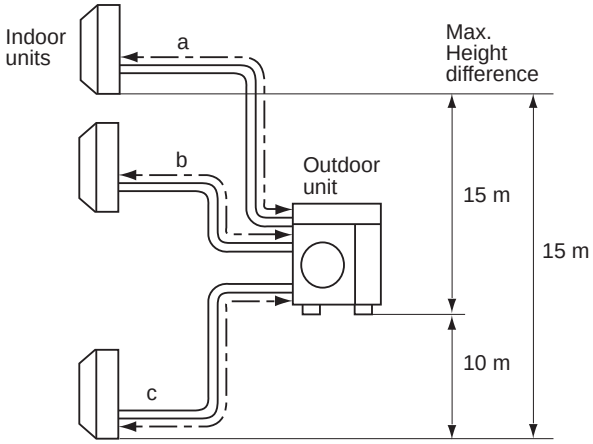
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c) | 25 m |
| Total piping length (a+b+c) | 60 m |
| Bending point for each unit | 25 |
| Total bending point | 60 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

*Refer to "Method of charging refrigerant".

| Model name | Outdoor unit precharged (g) | Refrigerant piping length (one way, 3 unit total) |
|---|---|---|
| | | 60 m |
| **MXZ-3F68VF** | 1,400 | 0 |
| **MXZ-3F68VF2**<br>**MXZ-3F68VF3**<br>**MXZ-3F68VF4** | 2,400 | 0 |

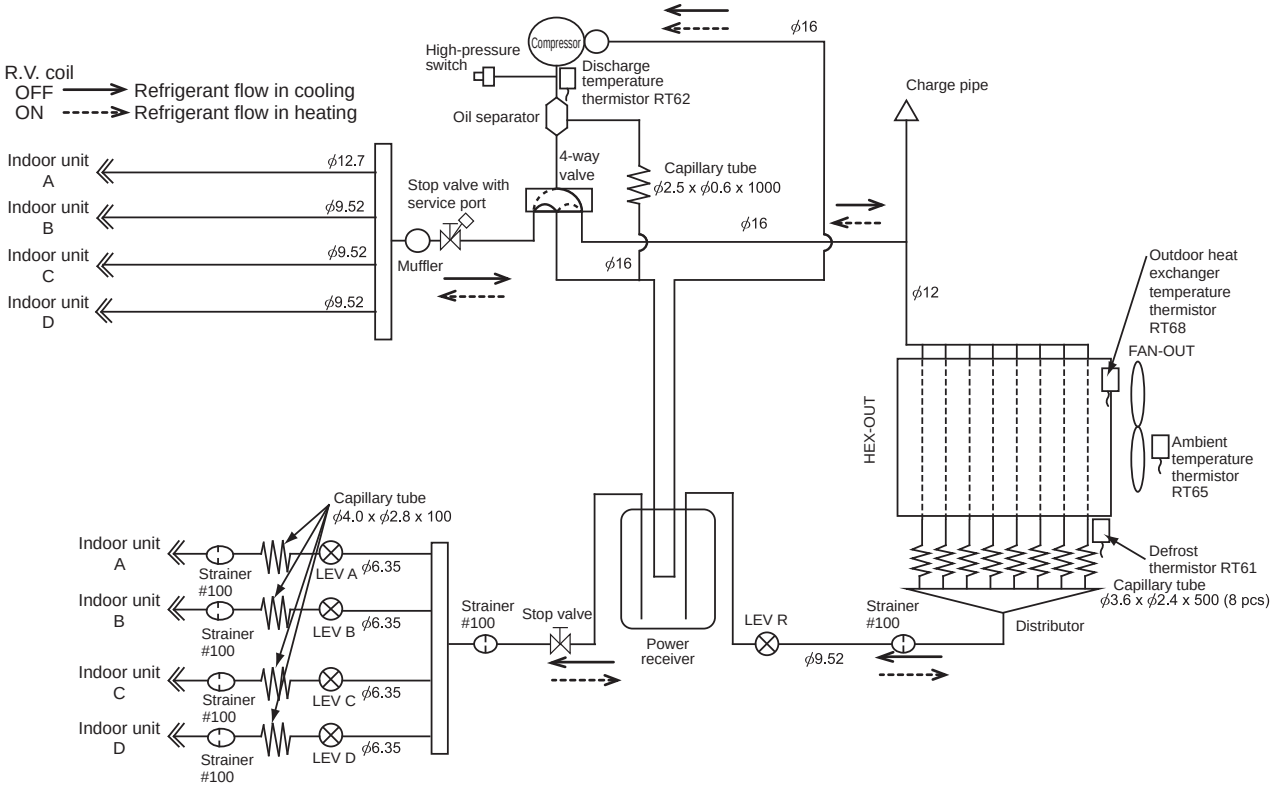
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the right table.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe.
  For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

**MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4**
**MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4**

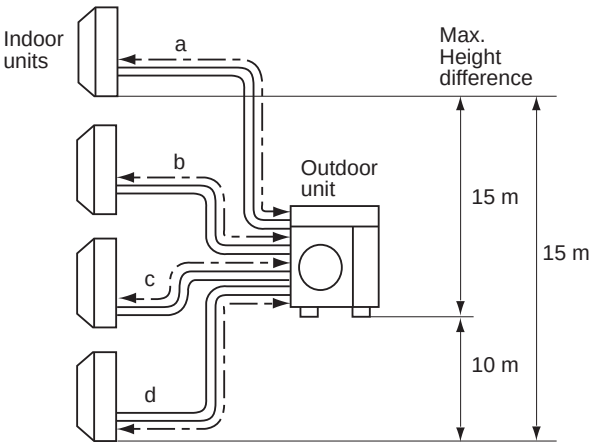
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c, d) | 25 m |
| Total piping length (a+b+c+d) | 60 m |
| Bending point for each unit | 25 |
| Total bending point | 60 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

*Refer to "Method of charging refrigerant".

| Model name | Outdoor unit precharged (g) | Refrigerant piping length (one way, 4 unit total) |
|---|---|---|
| | | 60 m |
| **MXZ-4F72VF** | 1,400 | 0 |
| **MXZ-4F72VF2**<br>**MXZ-4F72VF3**<br>**MXZ-4F72VF4**<br>**MXZ-4F80VF2**<br>**MXZ-4F80VF3**<br>**MXZ-4F80VF4** | 2,400 | 0 |

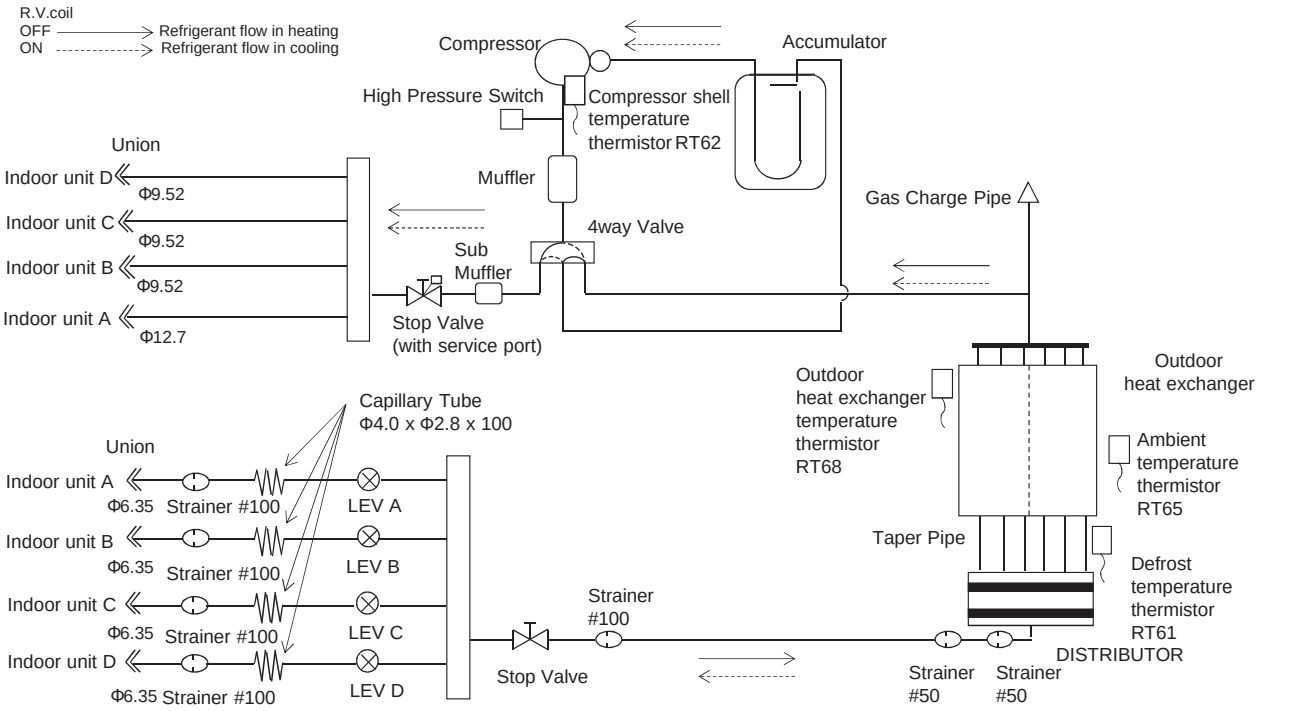
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the right table.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe.
  For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 12.7(1/2) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit D | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-4F83VF MXZ-4F83VF2

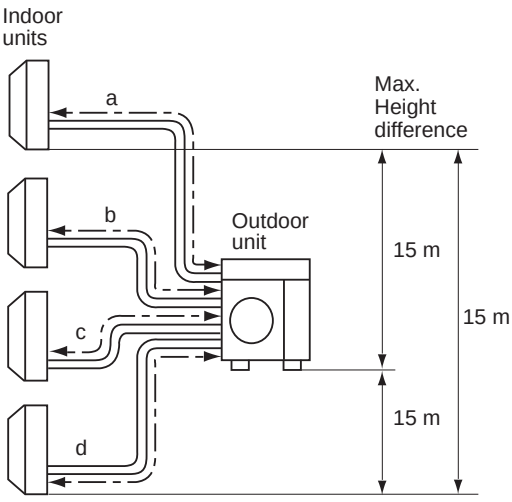
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c, d) | 25 m |
| Total piping length (a+b+c+d) | 70 m |
| Bending point for each unit | 25 |
| Total bending point | 70 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Outdoor unit precharged (g) | Refrigerant piping length (one way, 4 units total) |
|---|---|
| | 70 m |
| 2,400 | 0 |

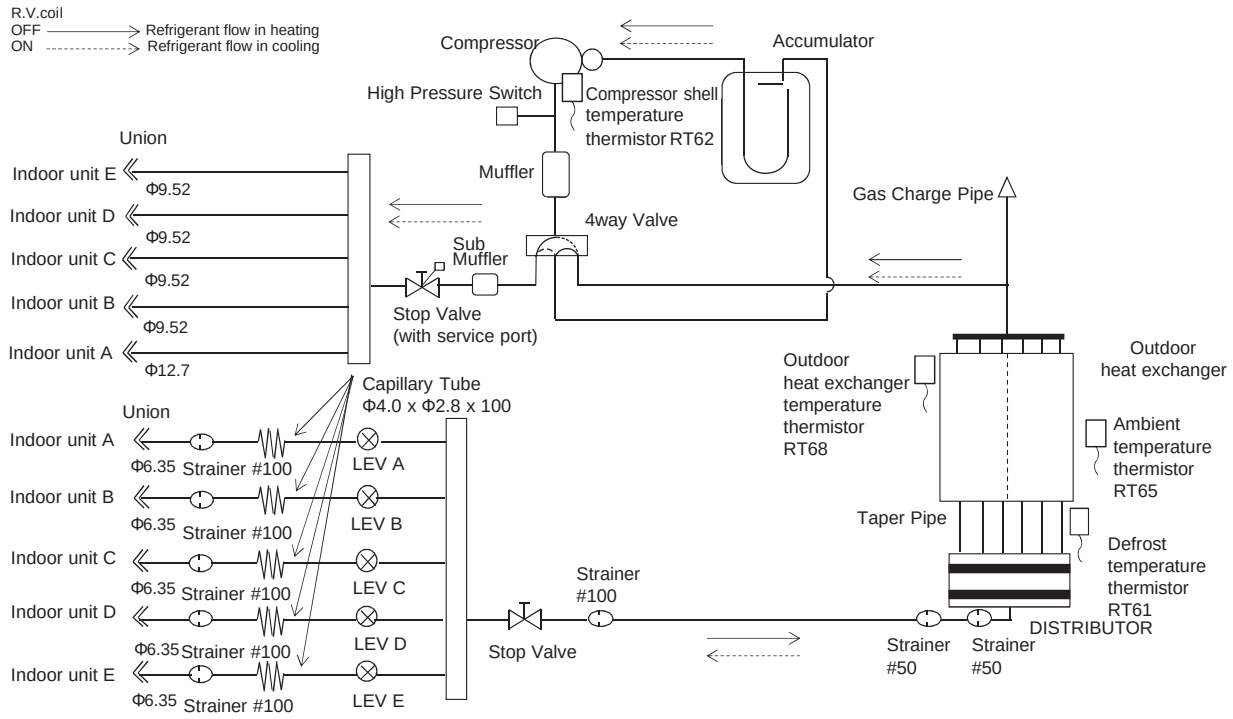
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the tables below.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 12.7(1/2) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit D | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-5F102VF MXZ-5F102VF2

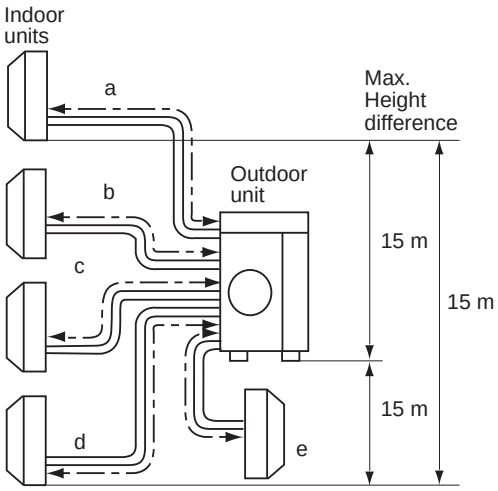
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c, d, e) | 25 m |
| Total piping length (a+b+c+d+e) | 80 m |
| Bending point for each unit | 25 |
| Total bending point | 80 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Outdoor unit precharged (g) | Refrigerant piping length (one way, 5 units total) |
|---|---|
| | 80 m |
| 2,400 | 0 |

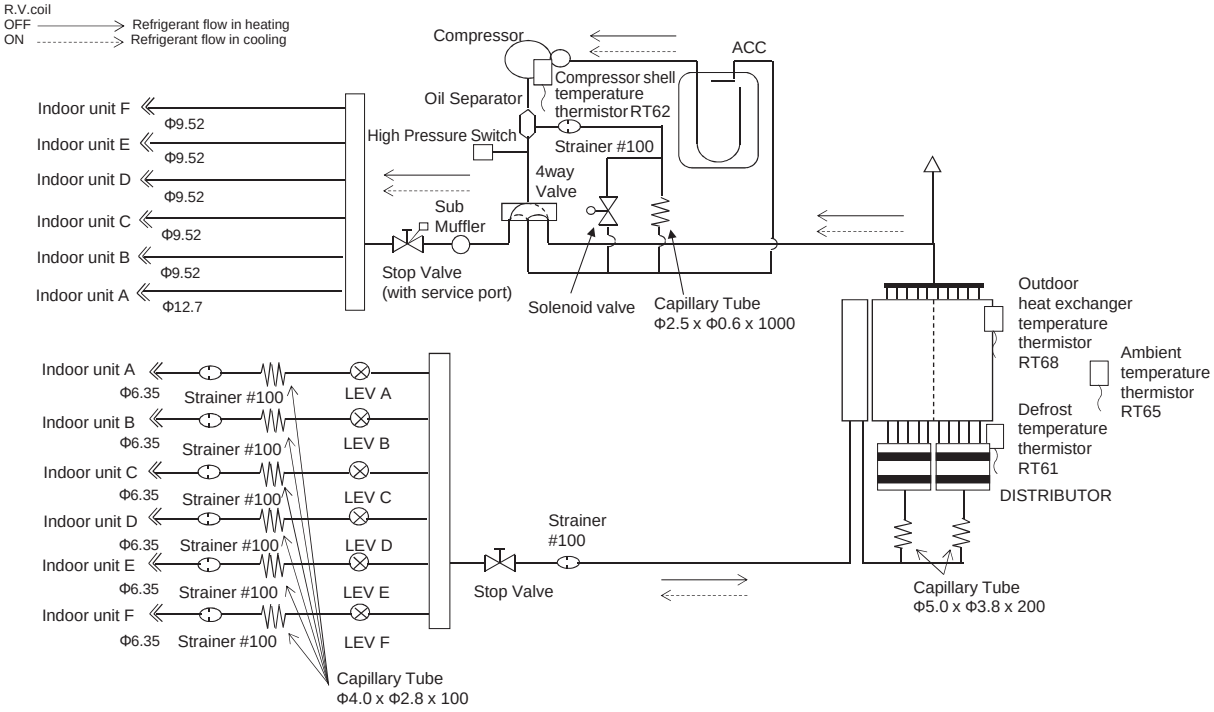
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the tables below.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 12.7(1/2) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit D | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit E | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-6F120VF2 MXZ-6F122VF

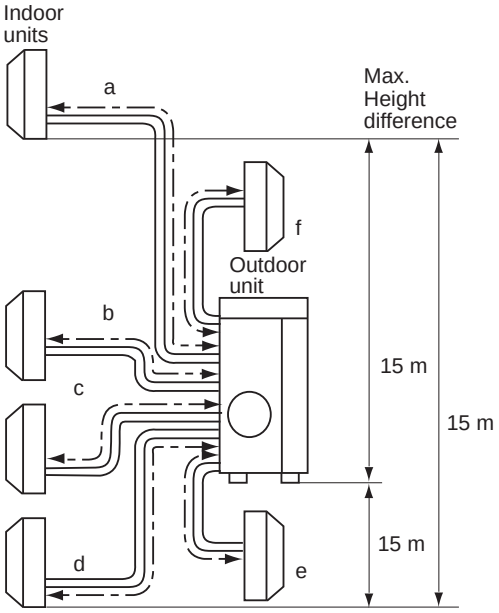
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c, d, e, f) | 25 m |
| Total piping length (a+b+c+d+e+f) | 80 m |
| Bending point for each unit | 25 |
| Total bending point | 80 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Outdoor unit precharged (g) | Refrigerant piping length (one way, 6 units total) |
|---|---|
| | 80 m |
| 2,400 | 0 |

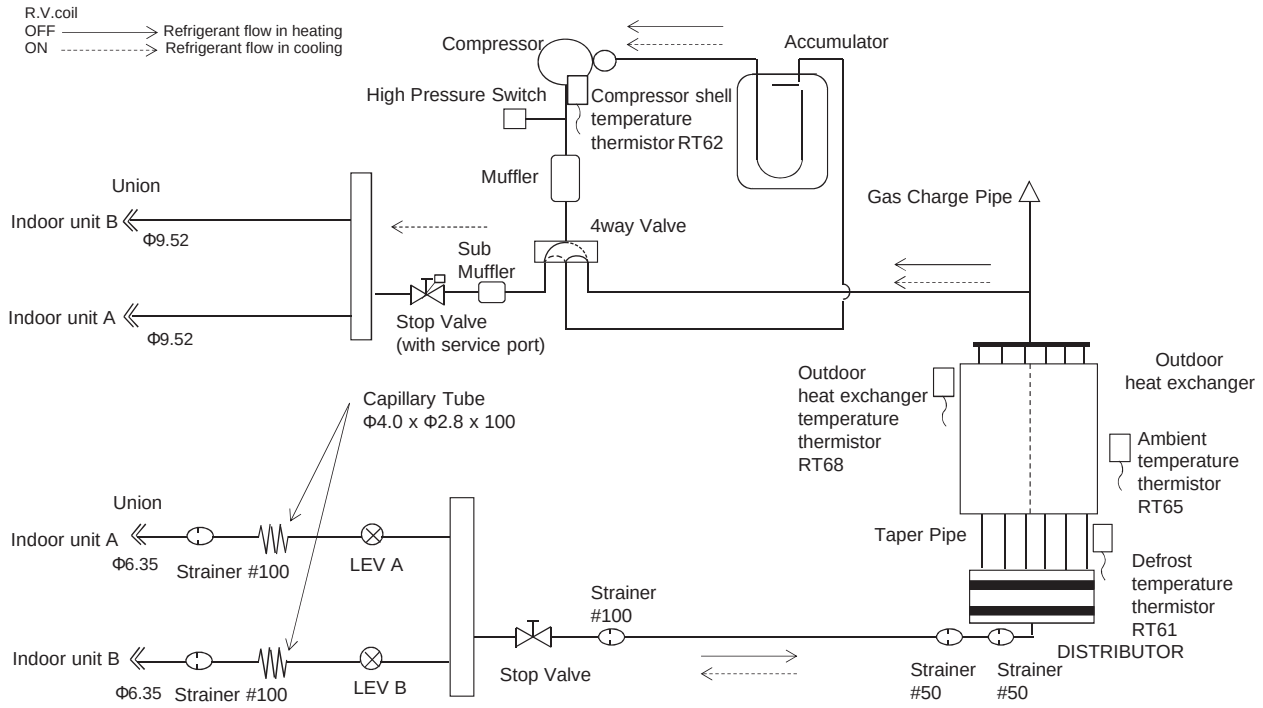
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the tables below.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | | Outdoor unit union diameter | | |
|---|---|---|---|---|---|
| For | | | For | | |
| Indoor unit A | Liquid | 6.35(1/4) | Indoor unit D | Liquid | 6.35(1/4) |
| | Gas | 12.7(1/2) | | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) | Indoor unit E | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) | | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) | Indoor unit F | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) | | Gas | 9.52(3/8) |

## MXZ-2F53VFHZ MXZ-2F53VFHZ2

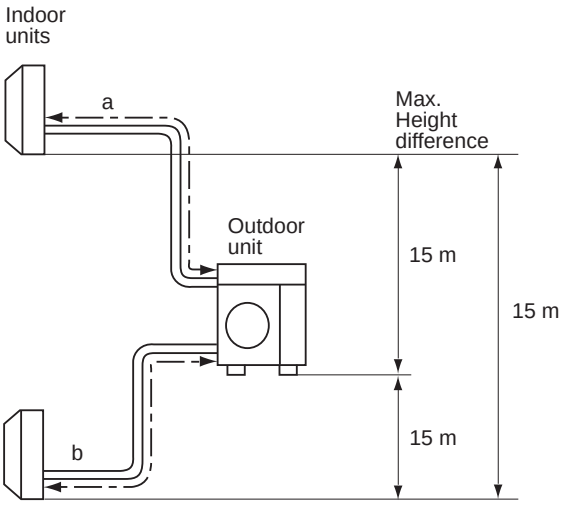
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b) | 20 m |
| Total piping length (a+b) | 30 m |
| Bending point for each unit | 20 |
| Total bending point | 30 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Outdoor unit precharged (g) | Refrigerant piping length (one way, 2 units total) |
|---|---|
| | 30 m |
| 2,400 | 0 |

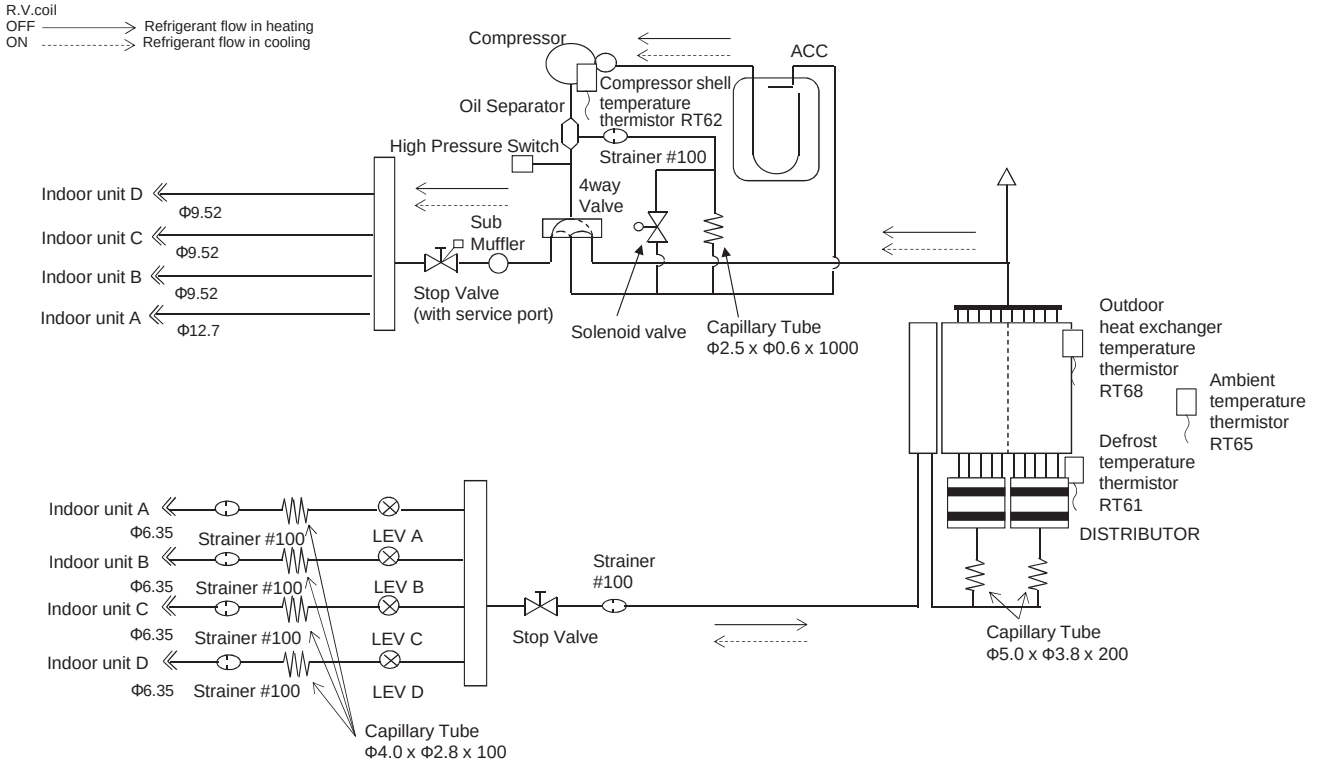
- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the tables below.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

## MXZ-4F83VFHZ MXZ-4F83VFHZ2

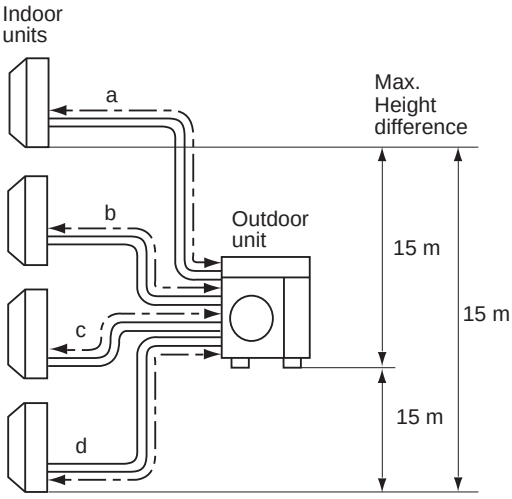
**Unit: mm**




## MAX REFRIGERANT PIPING LENGTH

| | |
|---|---|
| Piping length each indoor unit (a, b, c, d) | 25 m |
| Total piping length (a+b+c+d) | 70 m |
| Bending point for each unit | 25 |
| Total bending point | 70 |

*It is irrelevant which unit is higher.




## ADDITIONAL REFRIGERANT CHARGE

| Outdoor unit precharged (g) | Refrigerant piping length (one way, 4 units total) |
|---|---|
| | 70 m |
| 2,400 | 0 |

- Refrigerant pipe diameter is different according to indoor unit to be connected. When using extension pipes, refer to the tables below.
- When diameter of refrigerant pipe is different from that of outdoor unit union, use optional Different-diameter pipe. For further information on Different-diameter pipe, refer to "PARTS CATALOG".

**Unit: mm (inch)**

| Outdoor unit union diameter | | |
|---|---|---|
| For | | |
| Indoor unit A | Liquid | 6.35(1/4) |
| | Gas | 12.7(1/2) |
| Indoor unit B | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit C | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |
| Indoor unit D | Liquid | 6.35(1/4) |
| | Gas | 9.52(3/8) |

**Method of Charging refrigerant**

**■MXZ-3F54VF/3F68VF/4F72VF**

| Total refrigerant *3 | = | Pre charge | + | Indoor unit number *1 | + | Connection of specific I/U *2 | + | Piping length |
|---|---|---|---|---|---|---|---|---|
| _____ kg | | 1.4 kg | | _____ kg | | _____ kg | | 0.0 kg |

**■MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**■MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**■MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**

| Total refrigerant | = | Pre charge | + | Piping length |
|---|---|---|---|---|
| 2.4 kg | | 2.4 kg | | 0.0 kg |

**■MXZ-2F42VF/2F53VF/2F53VFH**
**■MXZ-2F42VF2/2F53VF2/2F53VFH2**

| Total refrigerant | = | Pre charge | + | Piping length |
|---|---|---|---|---|
| 1.2 kg | | 1.2 kg | | 0.0 kg |

**■MXZ-2F42VF3/2F53VF3/2F53VFH3**
**■MXZ-2F42VF4/2F53VF4/2F53VFH4**

| Total refrigerant | = | Pre charge | + | Piping length |
|---|---|---|---|---|
| 1.0 kg | | 1.0 kg | | 0.0 kg |

**■MXZ-2F33VF**
**■MXZ-2F33VF2**

| Total refrigerant | = | Pre charge | + | Piping length |
|---|---|---|---|---|
| 1.0 kg | | 1.0 kg | | 0.0 kg |

**■MXZ-2F33VF3**
**■MXZ-2F33VF4**

| Total refrigerant | = | Pre charge | + | Piping length |
|---|---|---|---|---|
| 0.8 kg | | 0.8 kg | | 0.0 kg |

*1 If you connect indoor unit number 3 or 4 units, please add to charge refrigetrant amount **0.5kg**

*2 If you connect specific indoor unit(s), please add to charge refrigetrant amount **0.17kg per 1unit**

Specific indoor unit is following: MSZ-LN18/25/35VG MLZ-KP25/35/50VF
SEZ-M50DA(L) PCA-M50/60KA
PEAD-M50JA(L)

*3 In case total refrigerant amount exceed **2.4kg** depending on combination, please charge only **1.0kg** for maximum.

## PUMPING DOWN

When relocating or disposing of the air conditioner, pump down the system following the procedure below so that no refrigerant is released into the atmosphere.

1) Turn off the breaker.
2) Connect the gauge manifold valve to the service port of the stop valve on the gas pipe side of the outdoor unit.
3) Fully close the stop valve on the liquid pipe side of the outdoor unit.
4) Turn on the breaker.
5) Start the emergency COOL operation on all the indoor units.
6) When the pressure gauge shows 0.05 to 0 MPa [Gauge] (approximately 0.5 to 0 kgf/cm²), fully close the stop valve on the gas pipe side of the outdoor unit and stop the operation. (Refer to the indoor unit installation manual about the method for stopping the operation.)
   * If too much refrigerant has been added to the air conditioner system, the pressure may not drop to 0.05 to 0 MPa [Gauge] (approximately 0.5 to 0 kgf/cm²), or the protection function may operate due to the pressure increase in the high pressure refrigerant circuit. If this occurs, use a refrigerant collecting device to collect all of the refrigerant in the system, and then recharge the system with the correct amount of refrigerant after the indoor and outdoor units have been relocated.
7) Turn off the breaker. Remove the pressure gauge and the refrigerant piping.

**WARNING**

When pumping down the refrigerant, stop the compressor before disconnecting the refrigerant pipes.
The compressor may burst and cause injury if any foreign substance, such as air, enters the pipes.

# 9 PERFORMANCE CURVES

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**
**MXZ-4F83VF MXZ-5F102VF MXZ-6F120VF2**
**MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F122VF**
**MXZ-2F53VFHZ MXZ-4F83VFHZ**
**MXZ-2F53VFHZ2 MXZ-4F83VFHZ2**

The standard specifications apply only to the operation of the air conditioner under normal conditions.
Since operating conditions vary according to the areas where these units are installed, the following information has been provided to clarify the operating characteristics of the air conditioner under the conditions indicated by the performance curve.

**(1) GUARANTEED VOLTAGE**

198 - 264 V 50 Hz

**(2) AIR FLOW**

Air flow should be set at MAX.

**(3) MAIN READINGS**

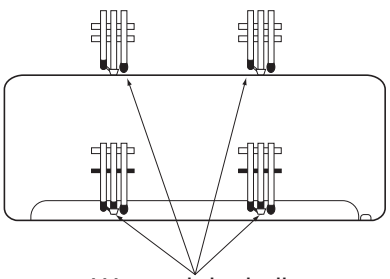
| | | |
|---|---|---|
| (1) Indoor intake air wet-bulb temperature: | °CWB | Cooling |
| (2) Indoor outlet air wet-bulb temperature: | °CWB | |
| (3) Outdoor intake air dry-bulb temperature: | °CDB | |
| (4) Total input: | W | |
| (5) Indoor intake air dry-bulb temperature: | °CDB | Heating |
| (6) Outdoor intake air wet-bulb temperature: | °CWB | |
| (7) Total input: | W | |

Indoor air wet and dry bulb temperature difference on the left side of the following chart shows the difference between the indoor intake air wet and dry bulb temperature and the indoor outlet air wet and dry bulb temperature for your reference at service.

**How to measure the indoor air wet and dry bulb temperature difference**

1. Attach at least 2 sets of wet and dry bulb thermometers to the indoor air intake as shown in the figure, and at least 2 sets of wet and dry bulb thermometers to the indoor air outlet. The thermometers must be attached to the position where air speed is high.
2. Attach at least 2 sets of wet and dry bulb thermometers to the outdoor air intake.
   Cover the thermometers to prevent direct rays of the sun.
3. Check that the air filter is cleaned.
4. Open windows and doors of room.
5. Press the emergency operation switch once (twice) to start the EMERGENCY COOL (HEAT) MODE.
6. When system stabilizes after more than 15 minutes, measure temperature and take an average temperature.
7. 10 minutes later, measure temperature again and check that the temperature does not change.

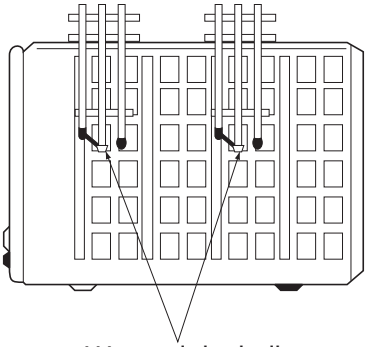
**INDOOR UNIT**



Wet and dry bulb thermometers

**FRONT VIEW**

**OUTDOOR UNIT**

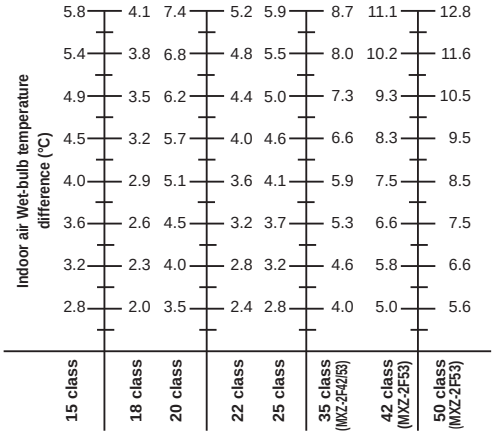


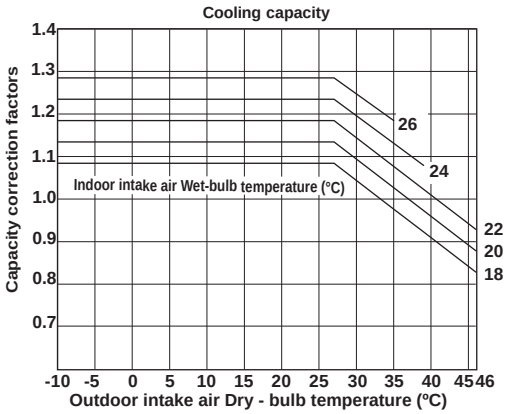
Wet and dry bulb thermometers

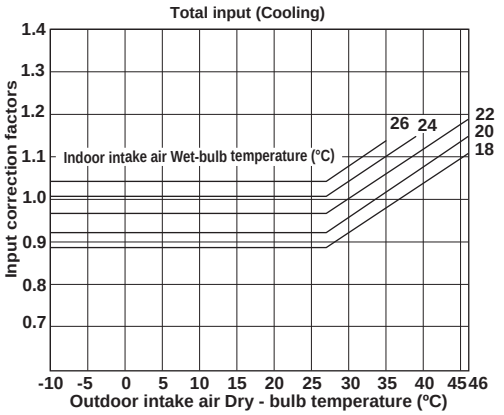
**BACK VIEW**

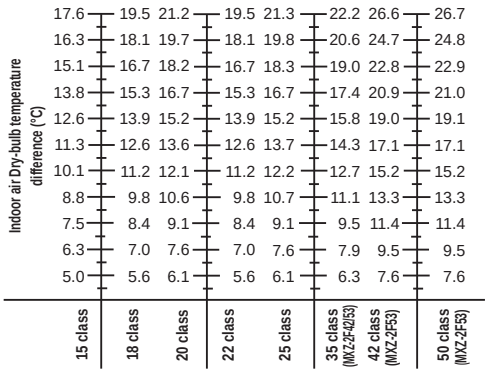
## 9-1. CAPACITY AND THE INPUT CURVES

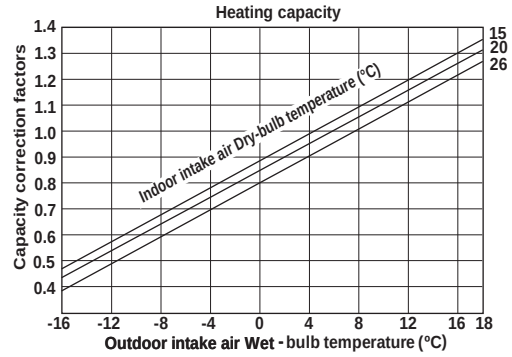
**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**

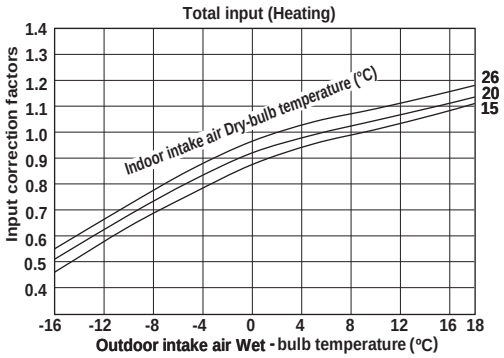


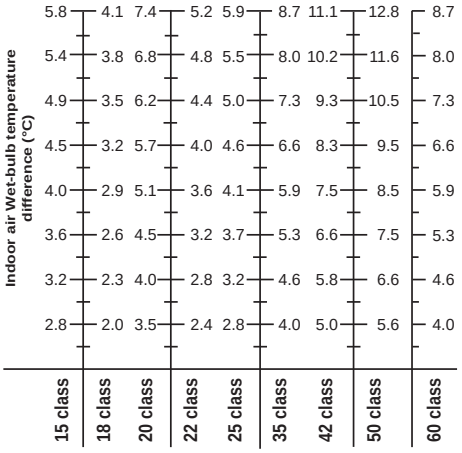



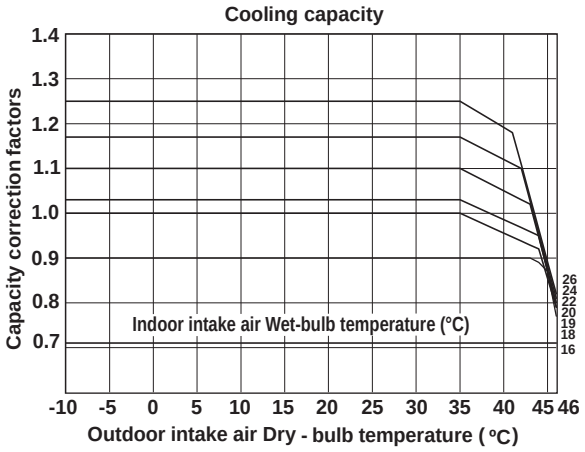



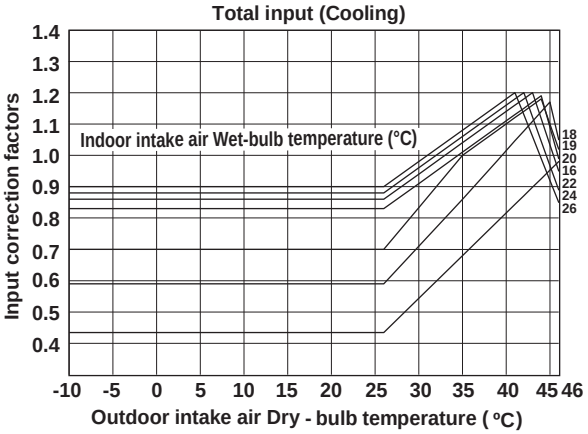



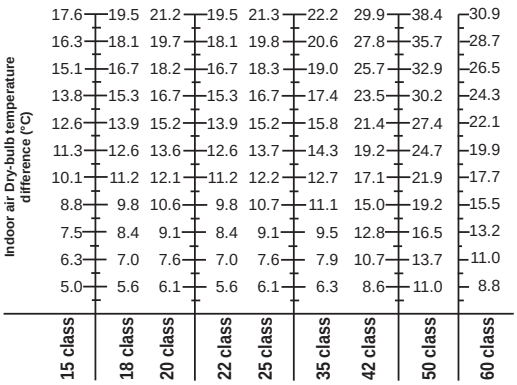



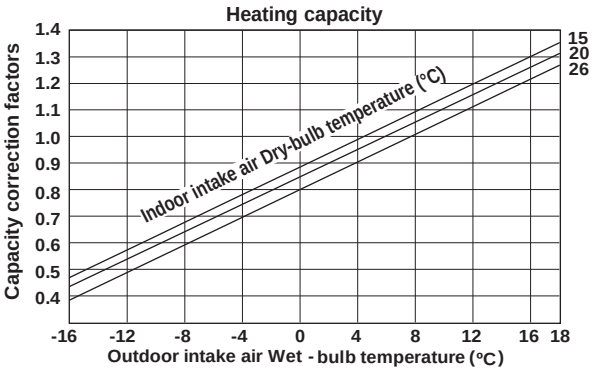
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**

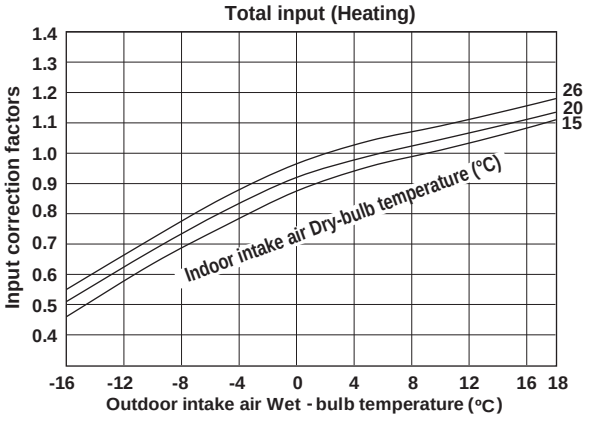


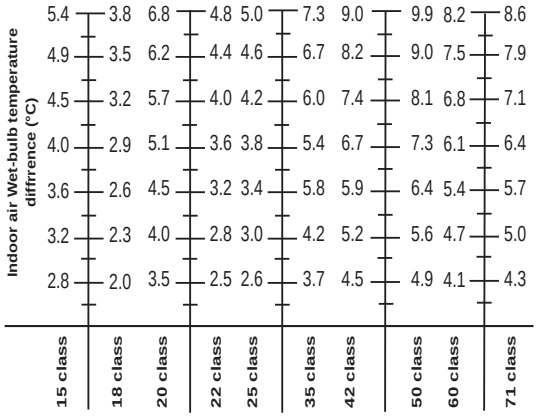



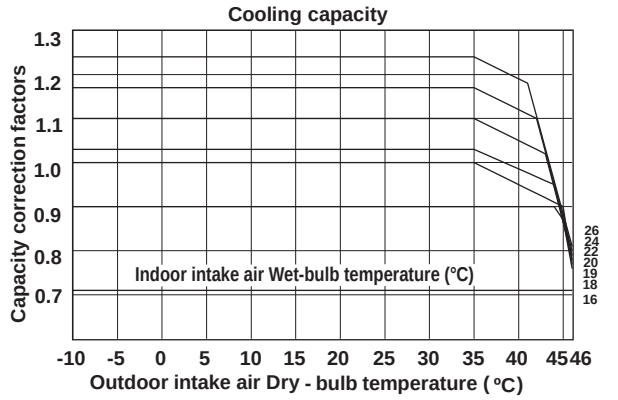



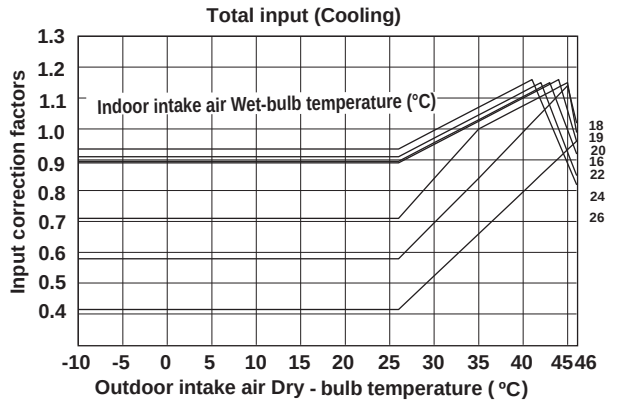



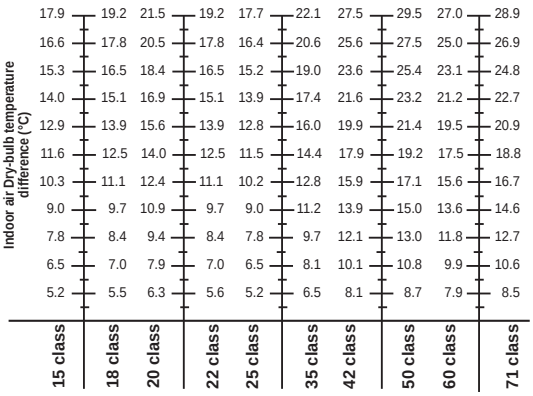



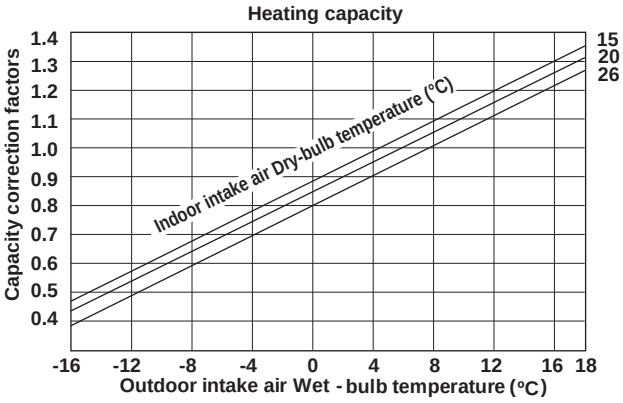
## MXZ-4F83VF MXZ-4F83VF2 MXZ-5F102VF MXZ-5F102VF2

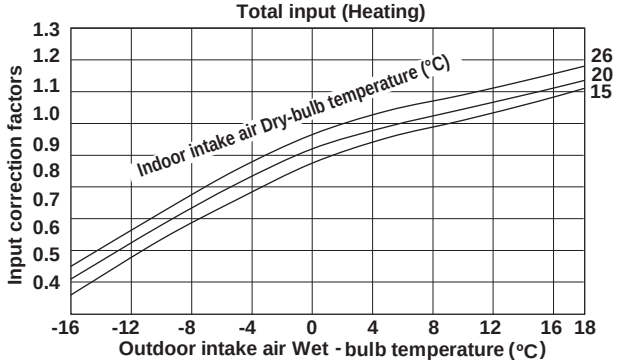


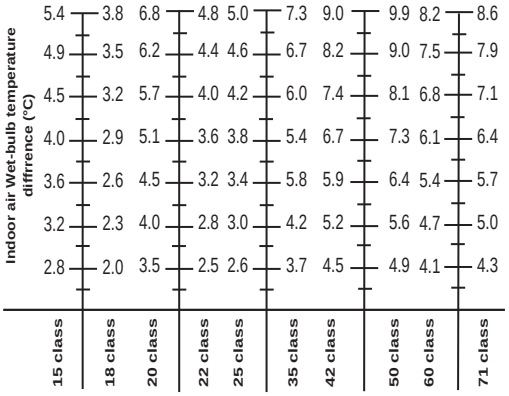



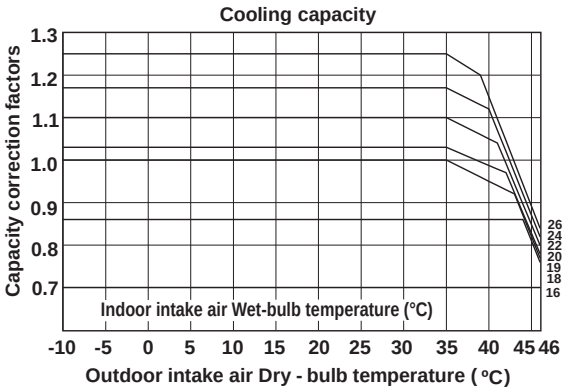



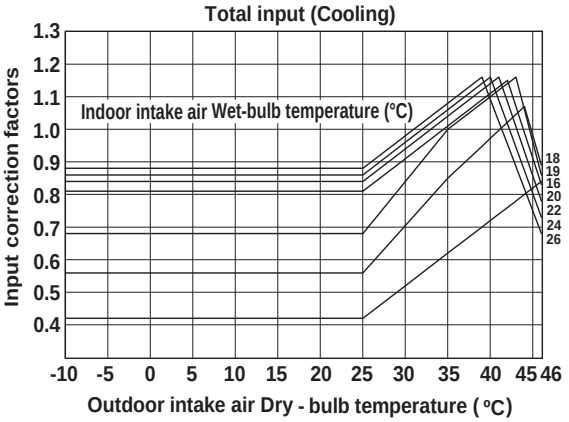



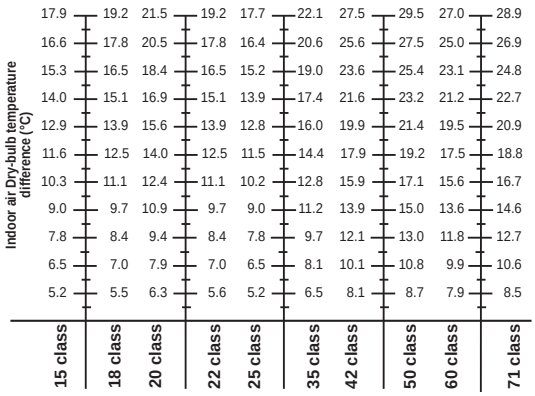



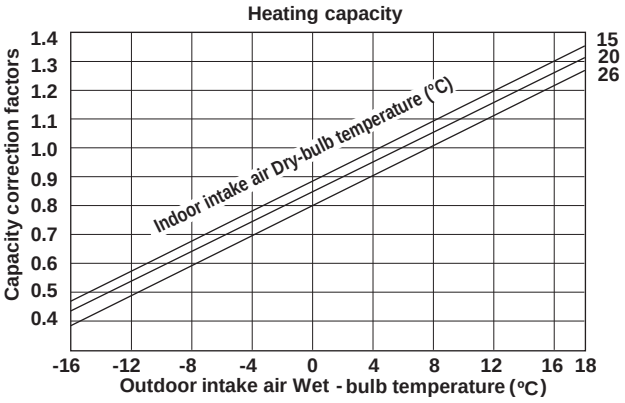
## MXZ-6F120VF2 MXZ-6F122VF

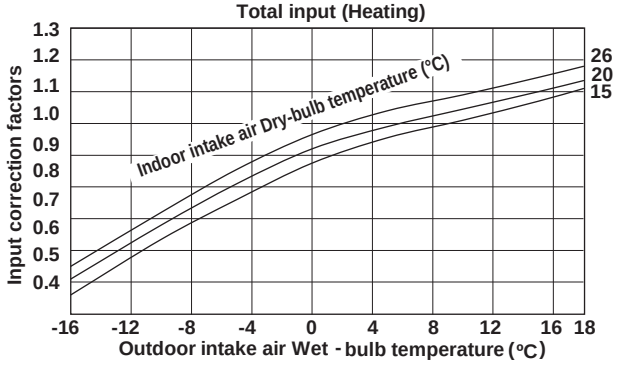


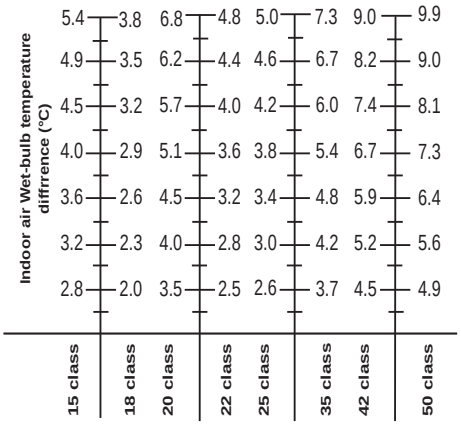



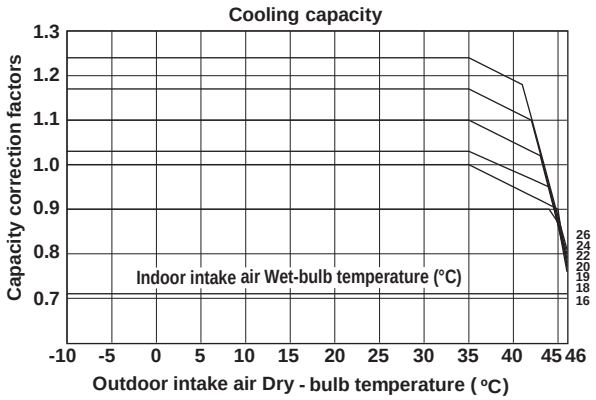



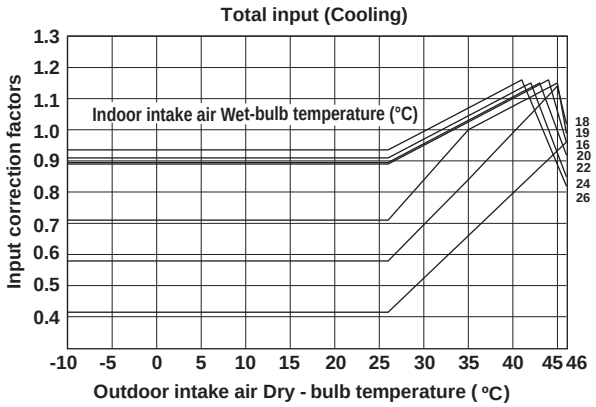



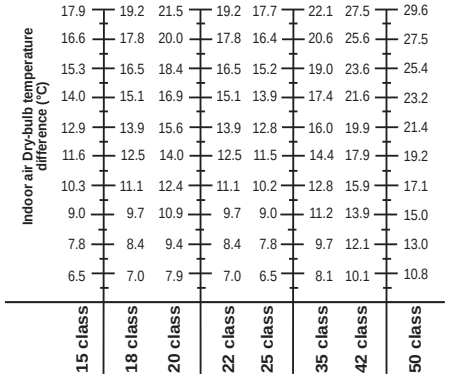



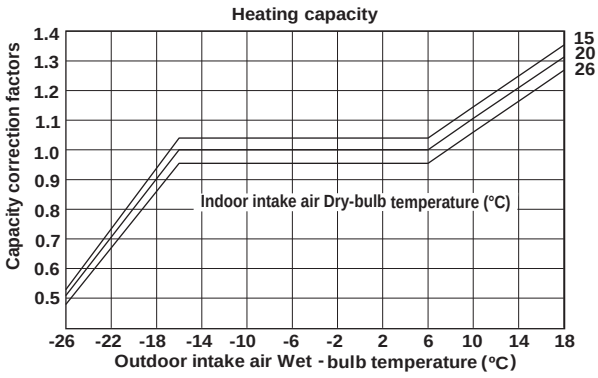
## MXZ-2F53VFHZ MXZ-2F53VFHZ2

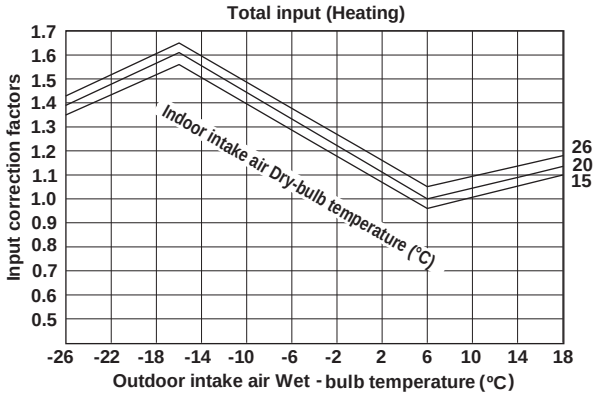


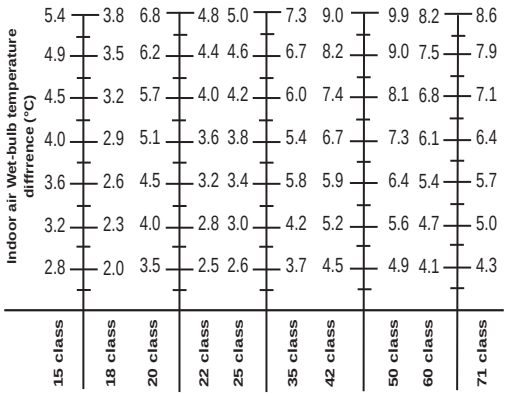



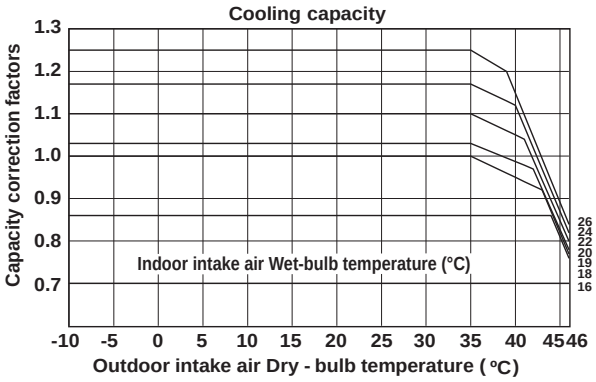



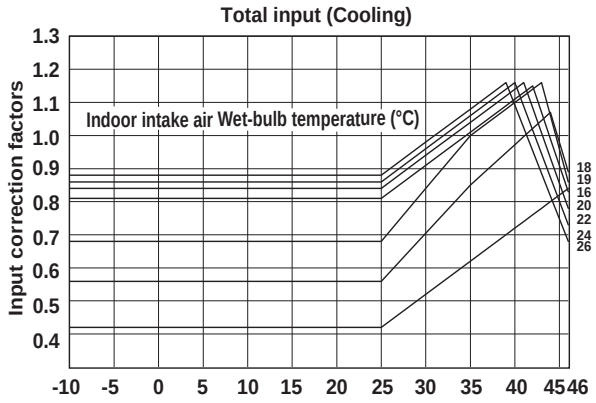



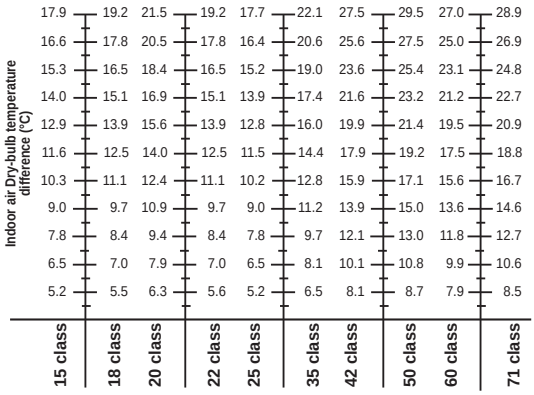



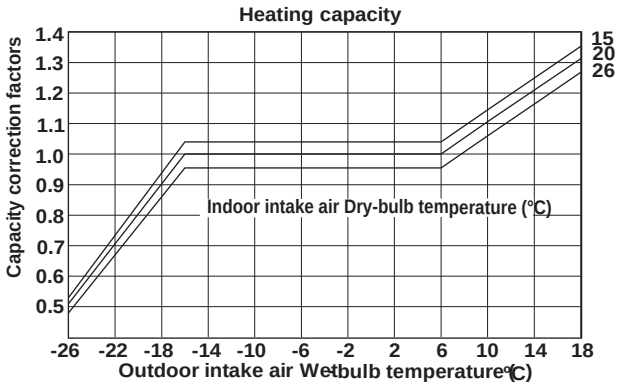
## MXZ-4F83VFHZ MXZ-4F83VFHZ2

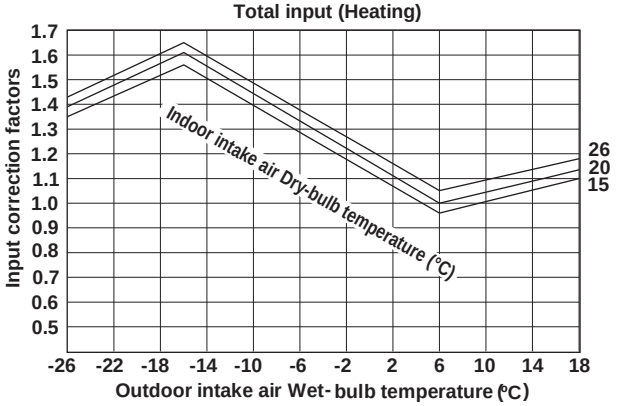


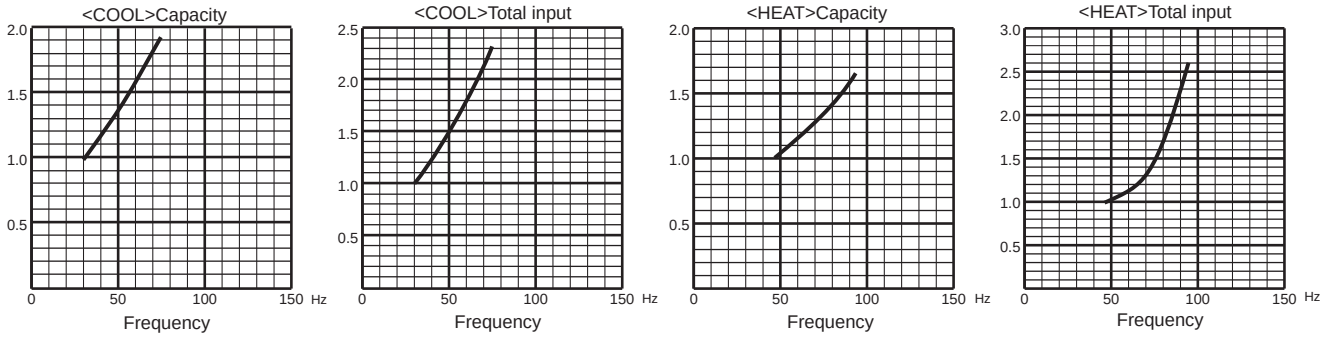



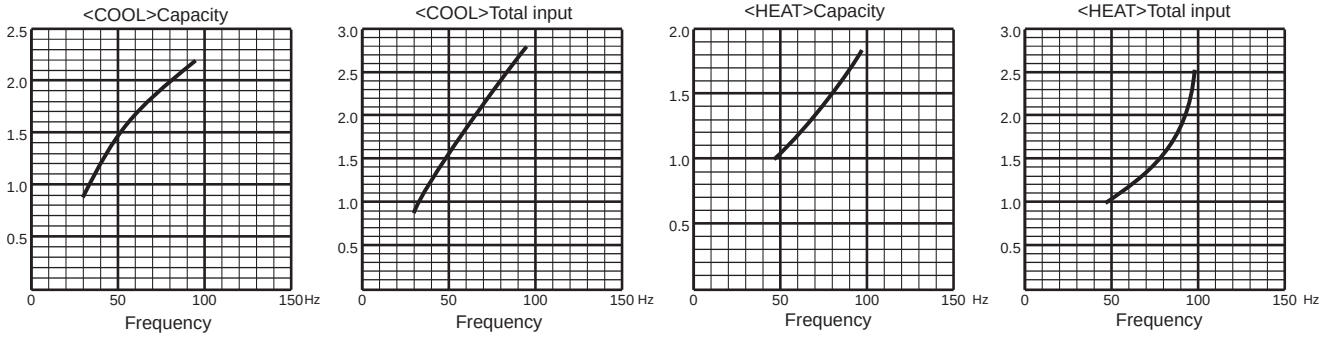



## 9-2. CAPACITY AND INPUT CORRECTION BY INVERTER OUTPUT FREQUENCY (single operation)
## MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4

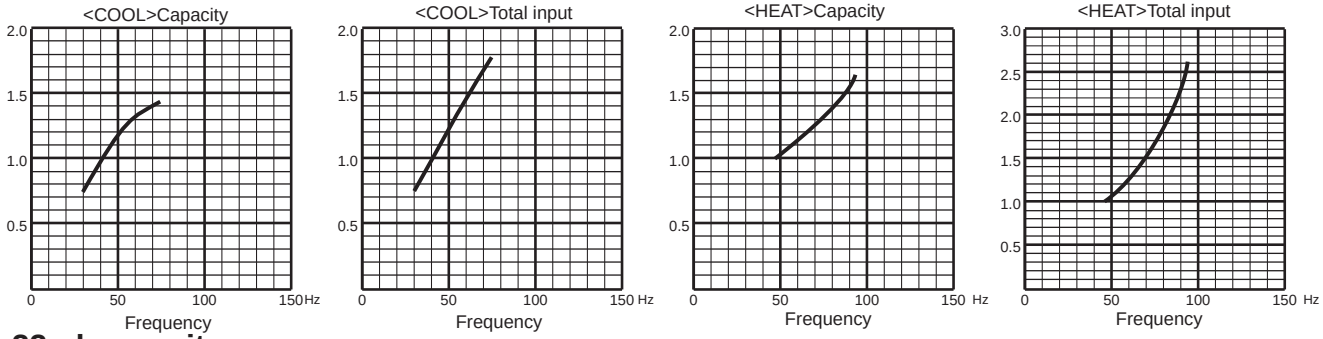
### 15-class unit



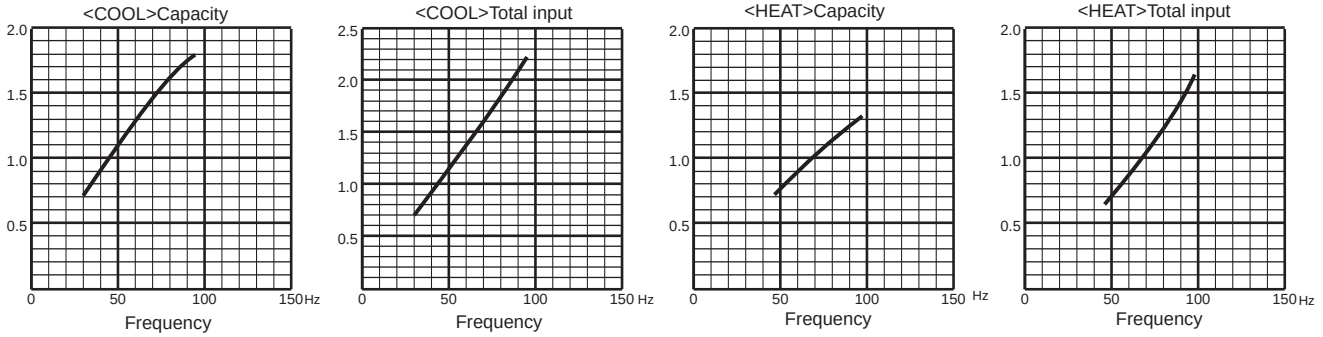

### 18-class unit



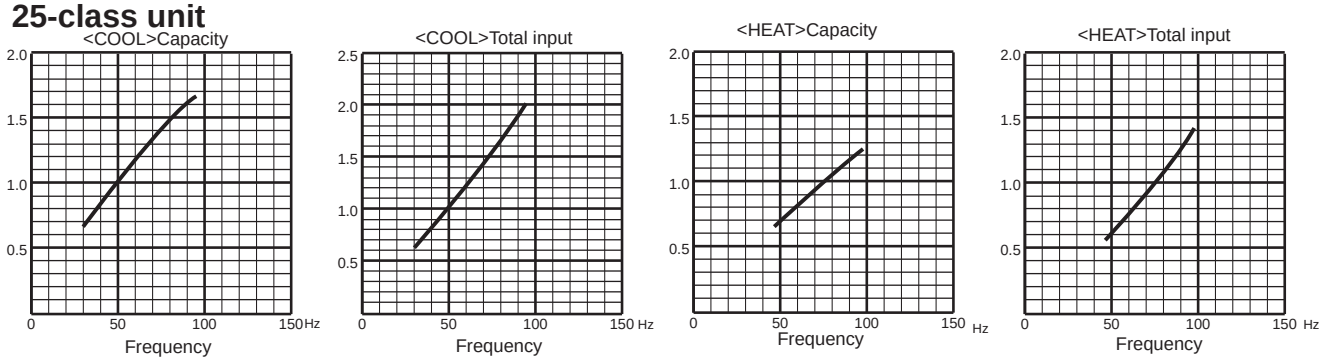

### 20-class unit




### 22-class unit

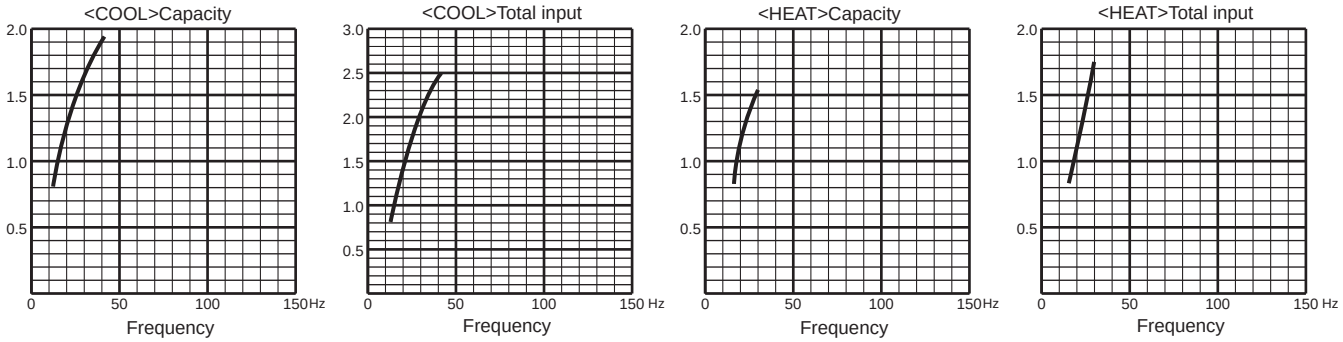



### 25-class unit

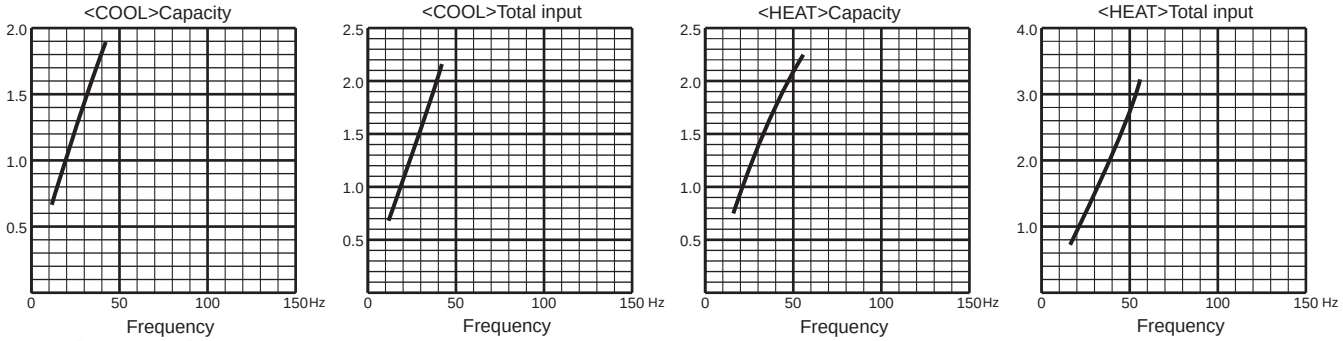


## MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4

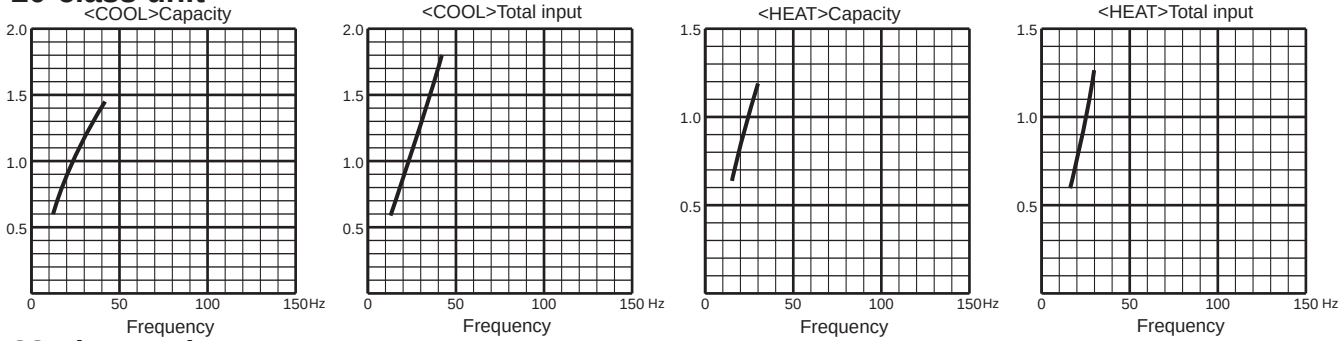
### 15-class unit



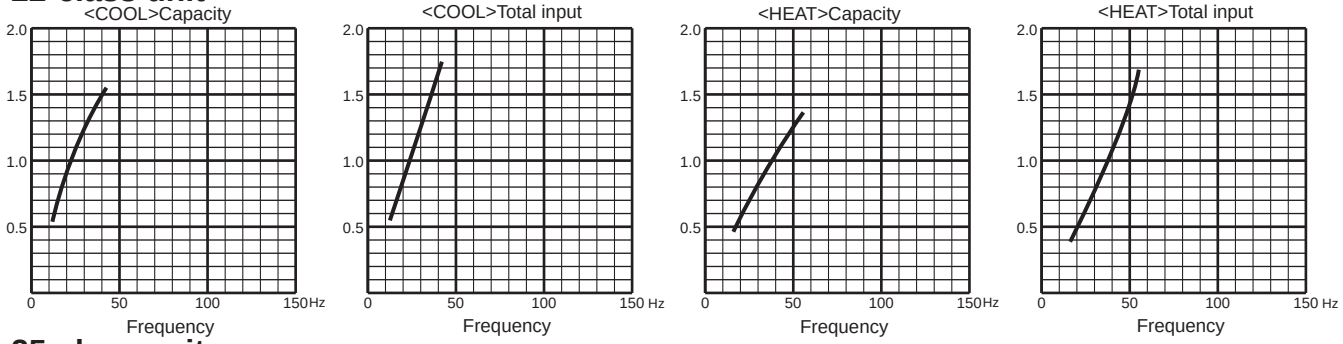

### 18-class unit



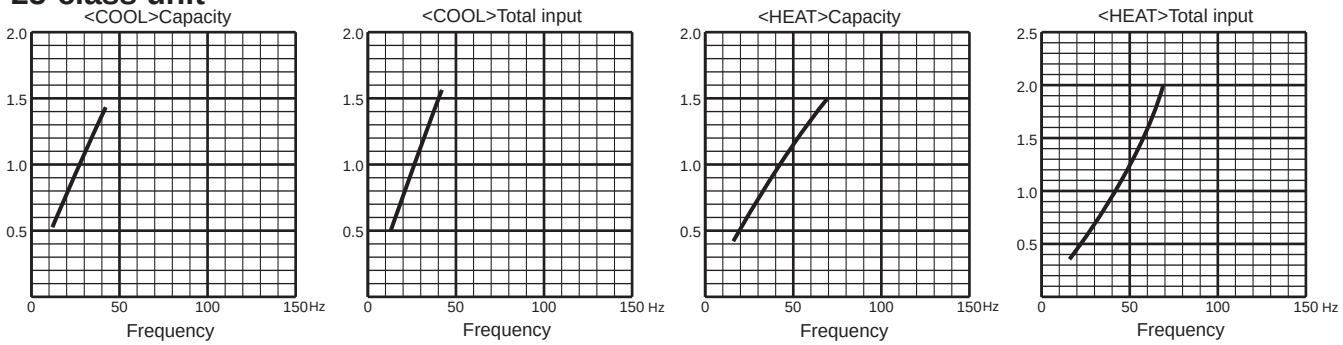

### 20-class unit




### 22-class unit

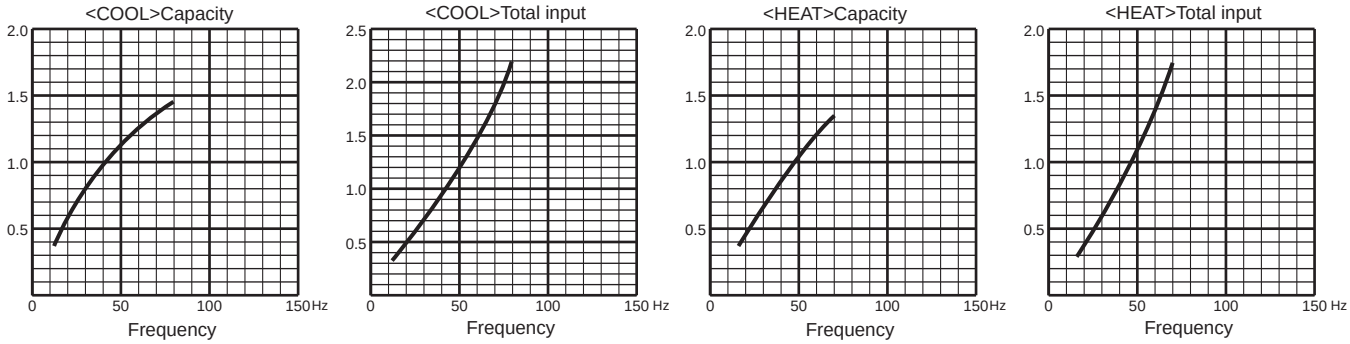



### 25-class unit



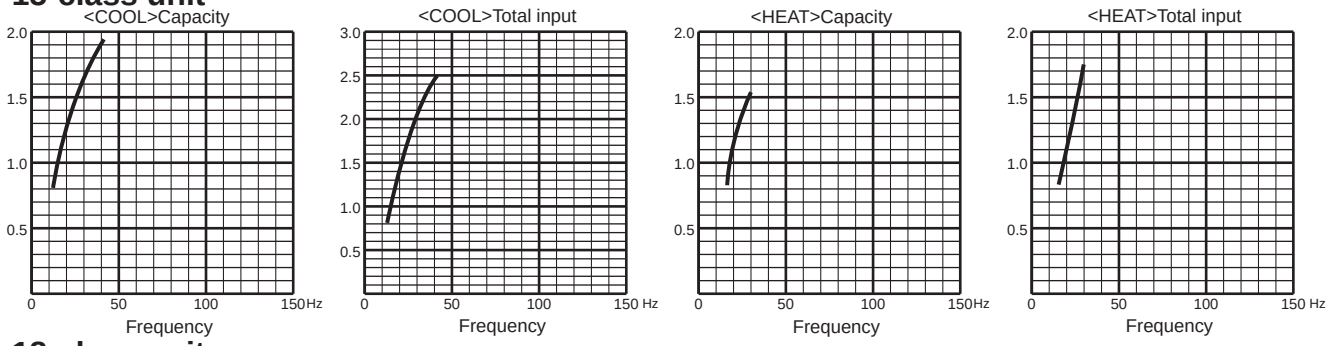
## MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4

### 35-class unit

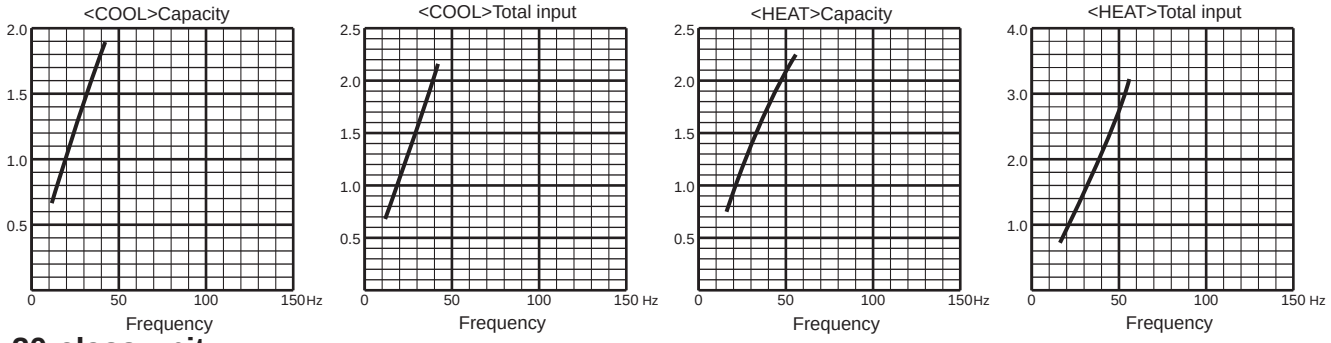



## MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4 MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4

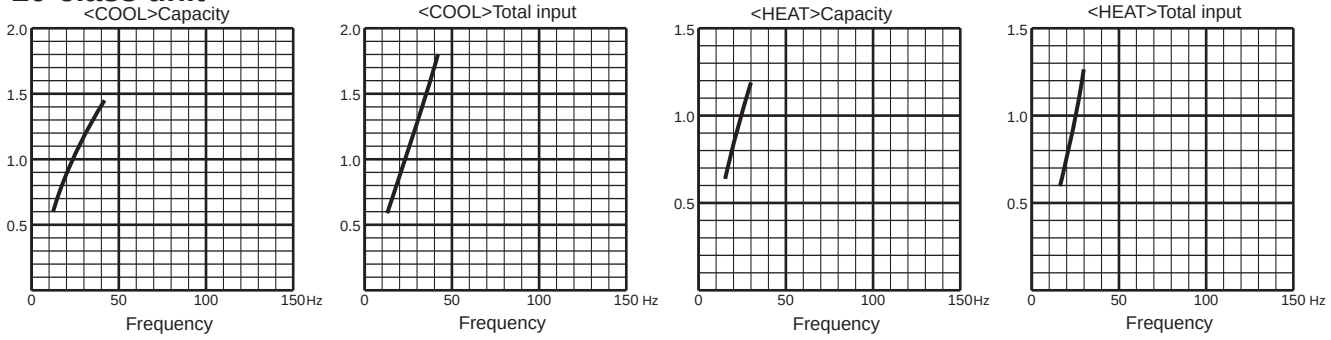
### 15-class unit




### 18-class unit

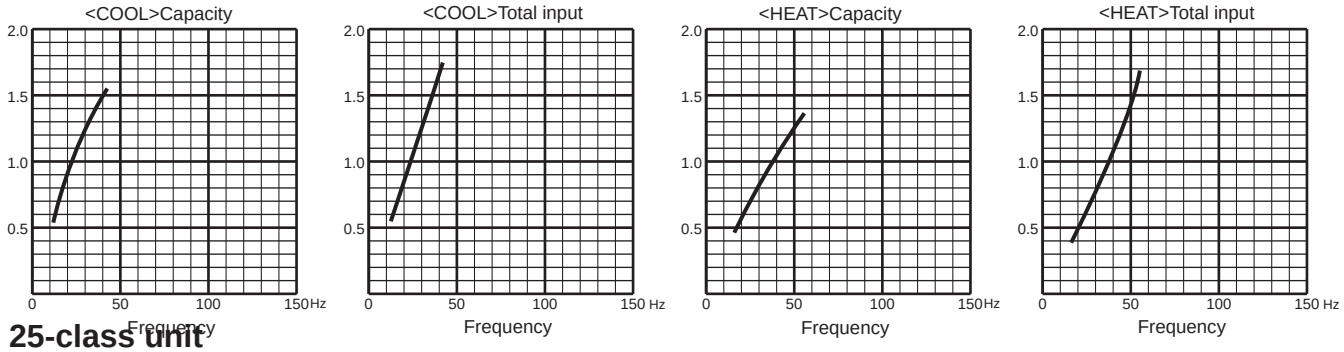



### 20-class unit

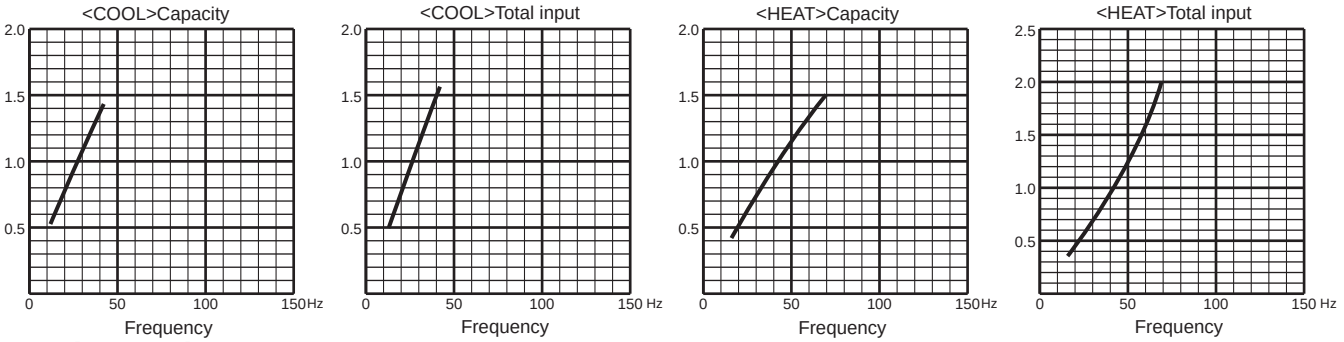


## MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4 MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4

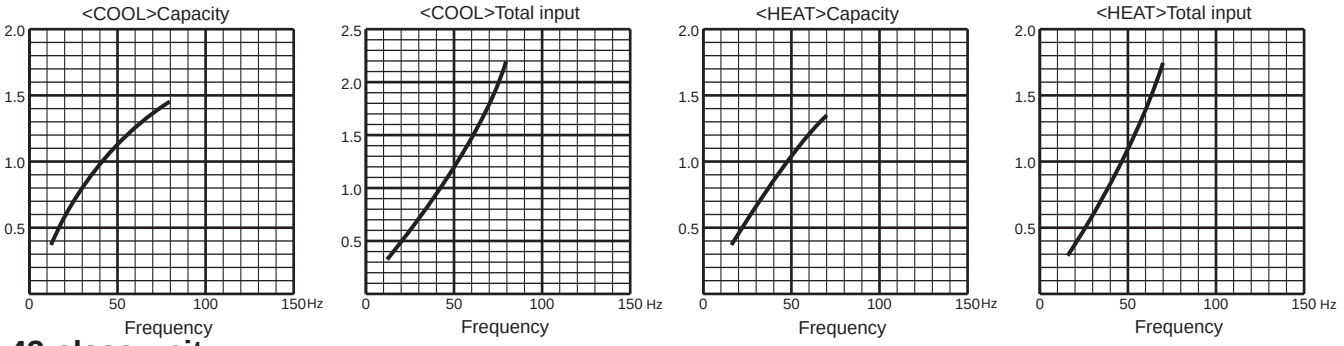
### 22-class unit



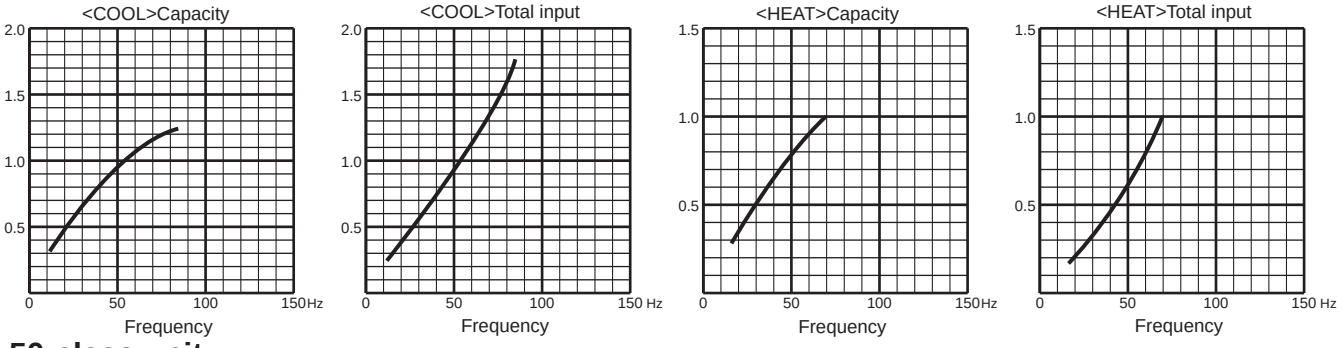

### 25-class unit



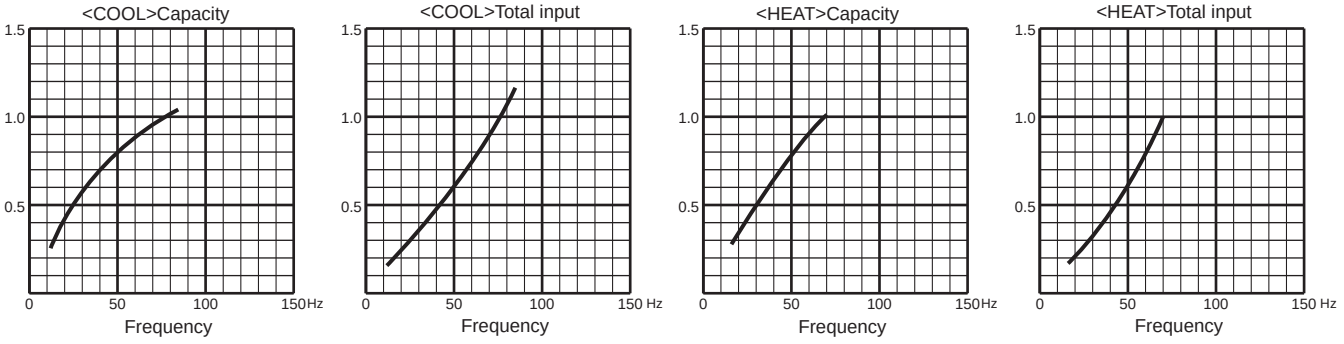

### 35-class unit




### 42-class unit

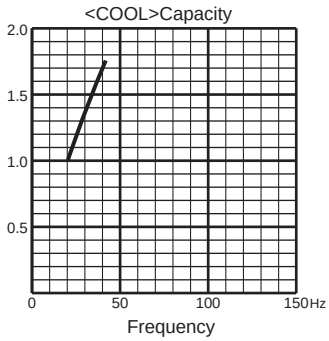


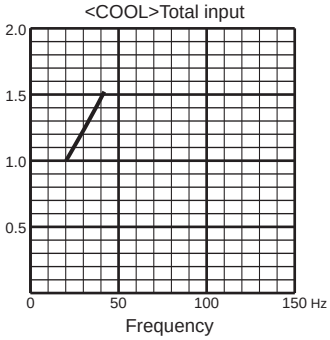

### 50-class unit

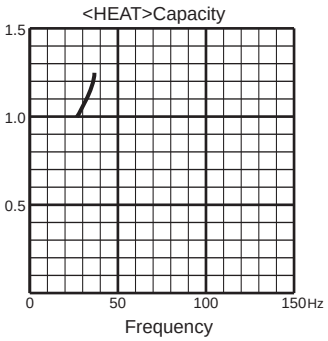


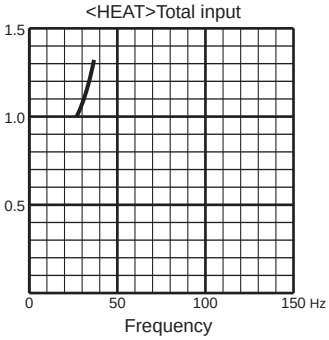
## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

### 15-class unit

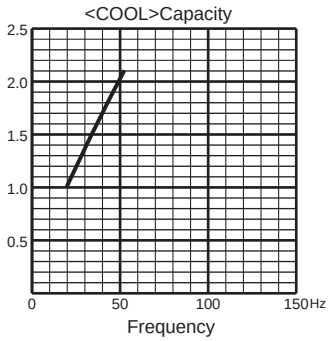


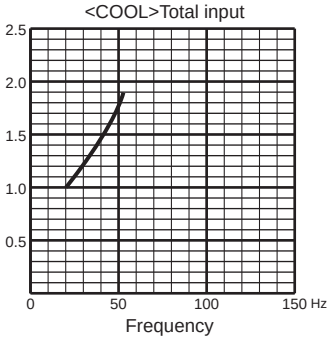



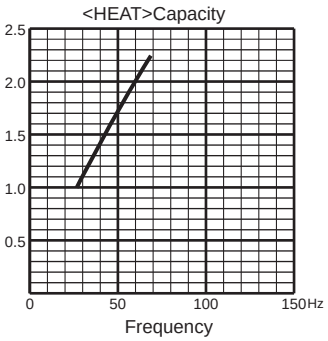



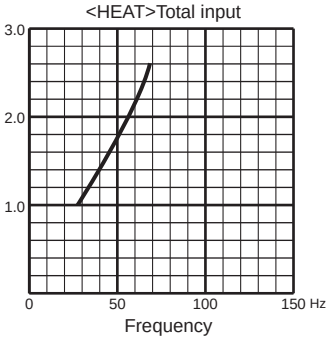




### 18-class unit

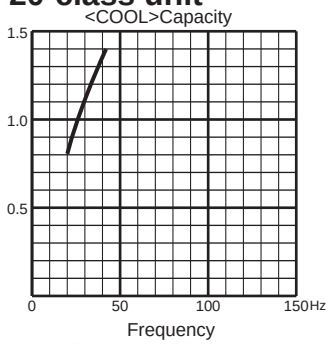


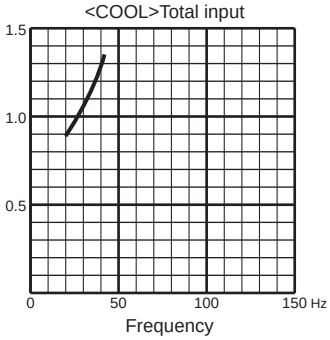



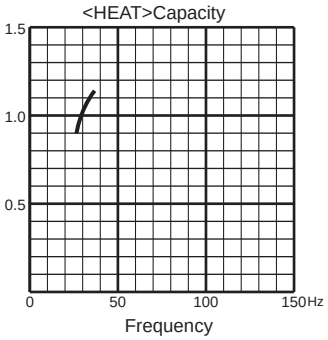



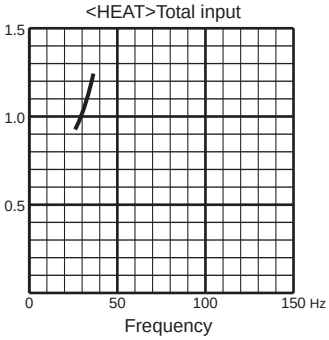




### 20-class unit

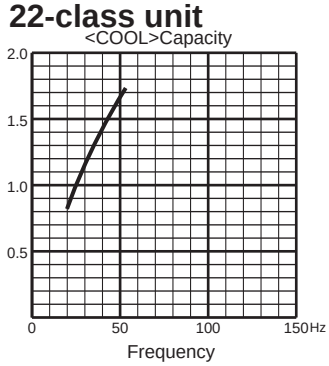


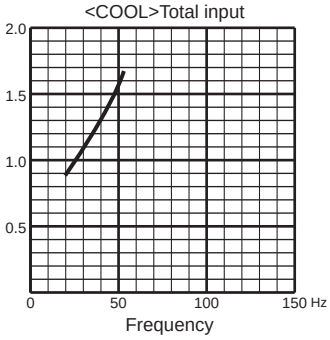



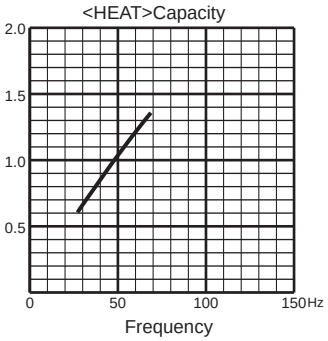



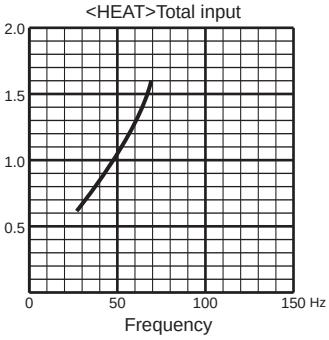




### 22-class unit



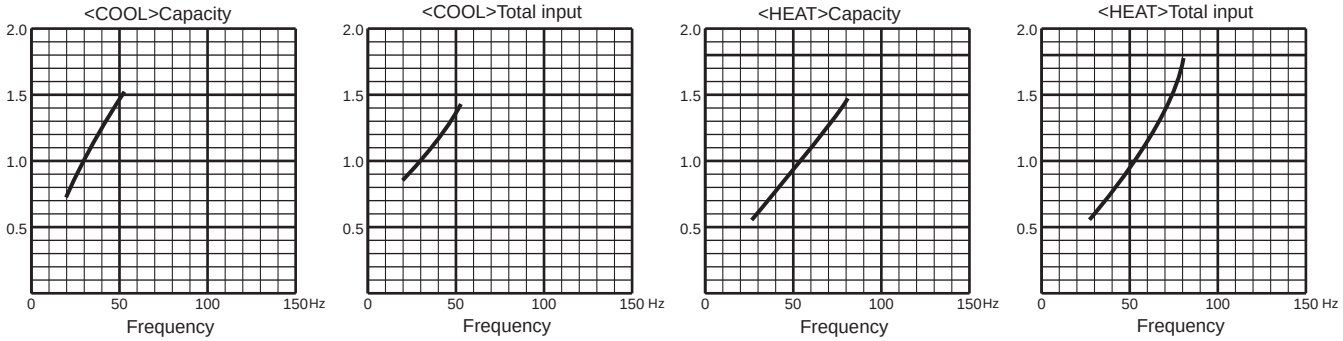



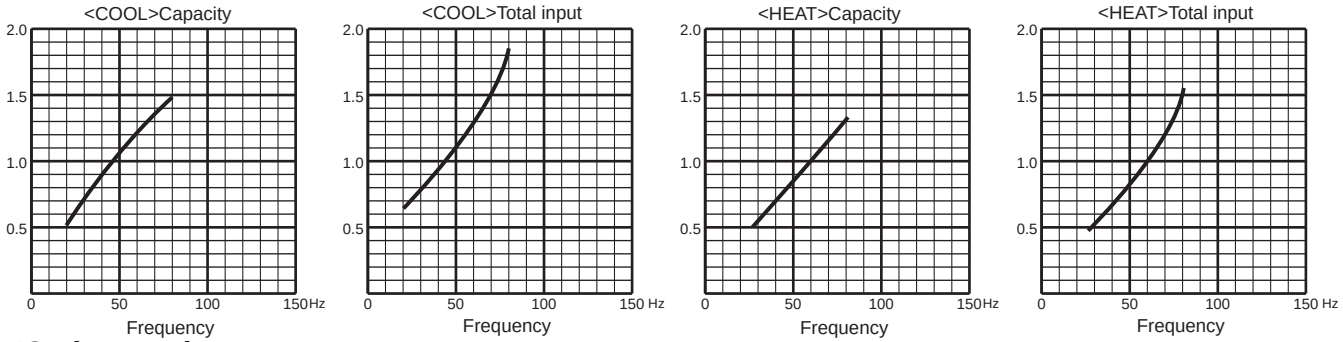



## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

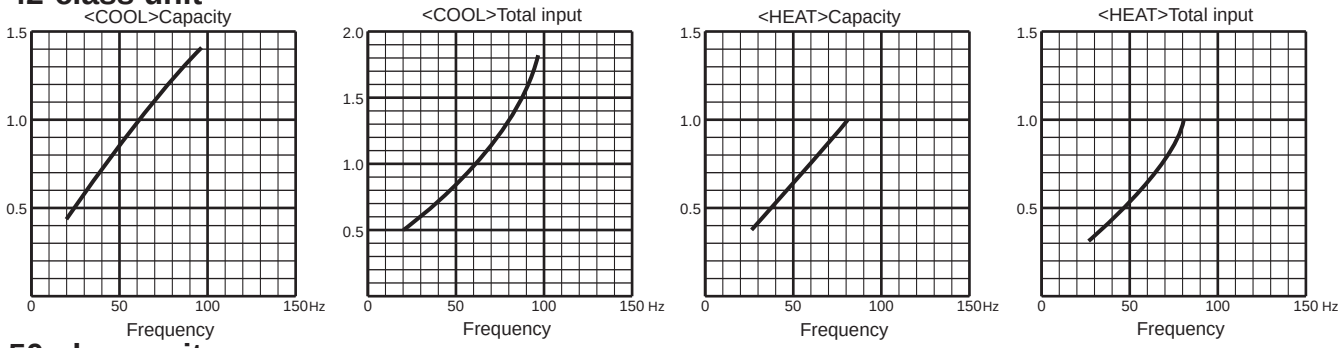
### 25-class unit



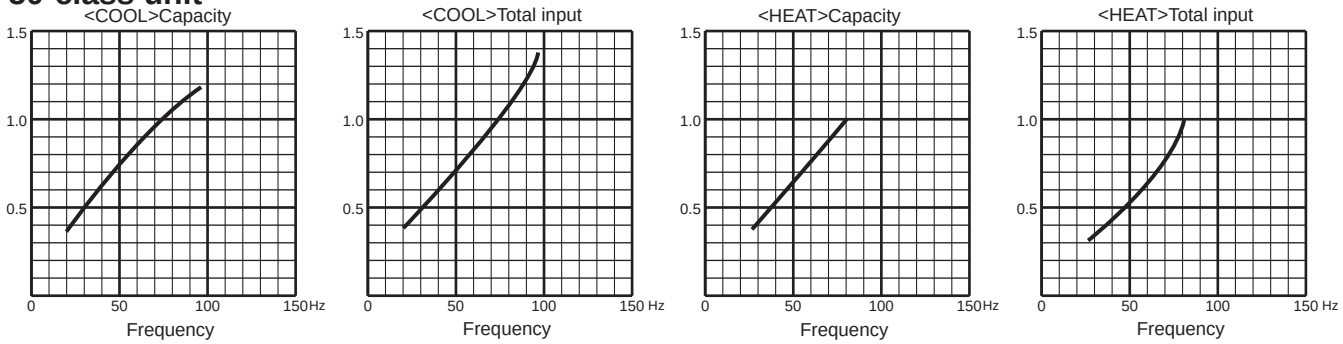

### 35-class unit




### 42-class unit

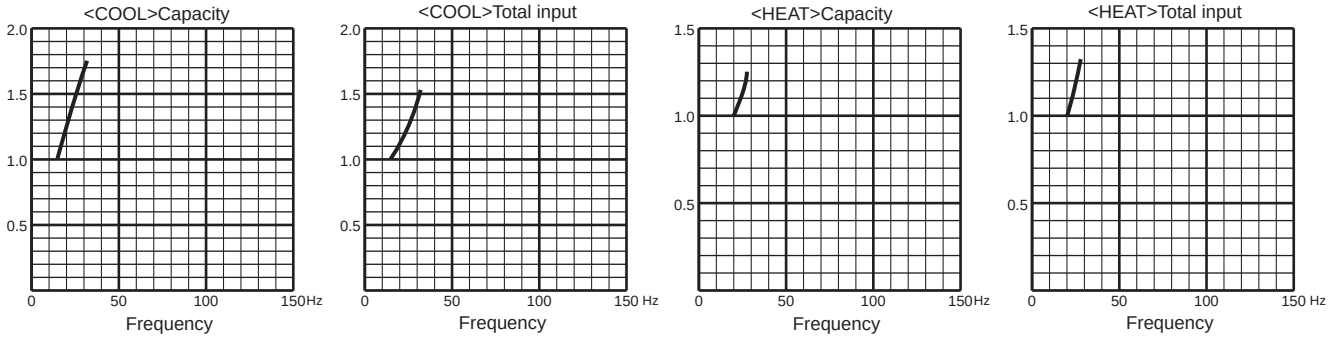



### 50-class unit

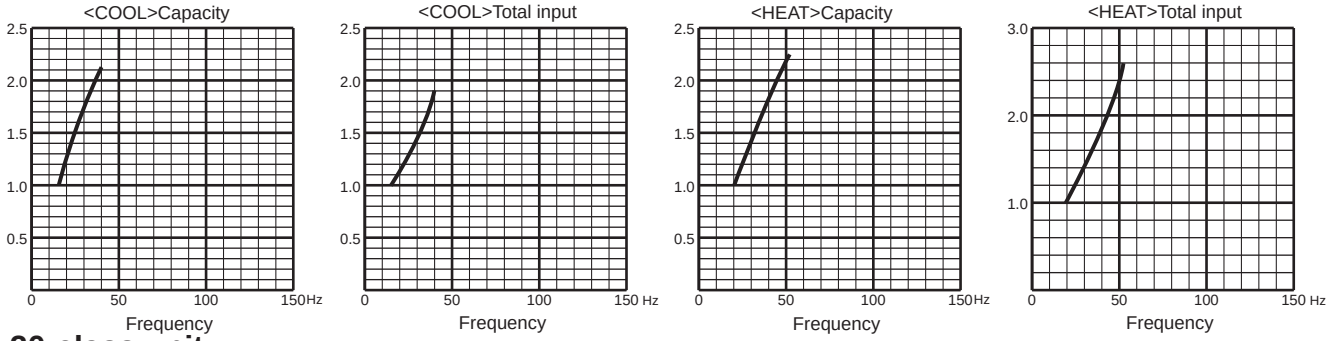


## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF3

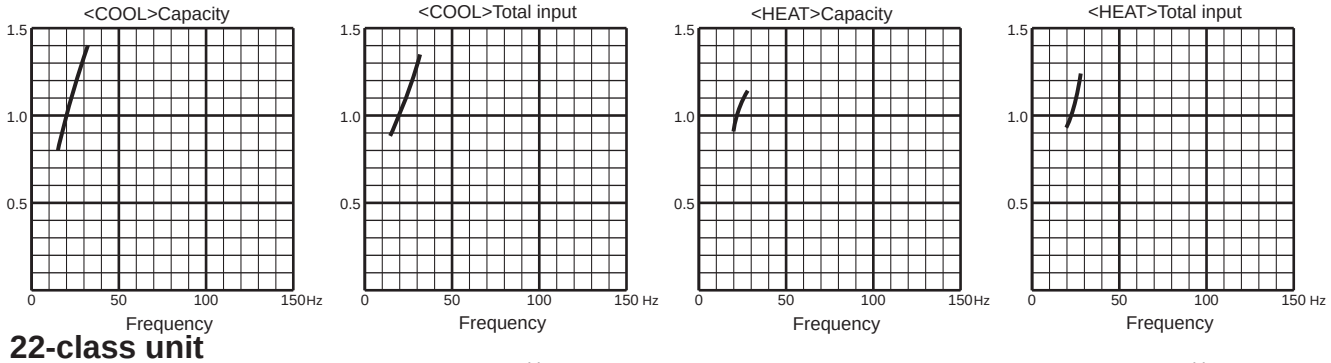
### 15-class unit



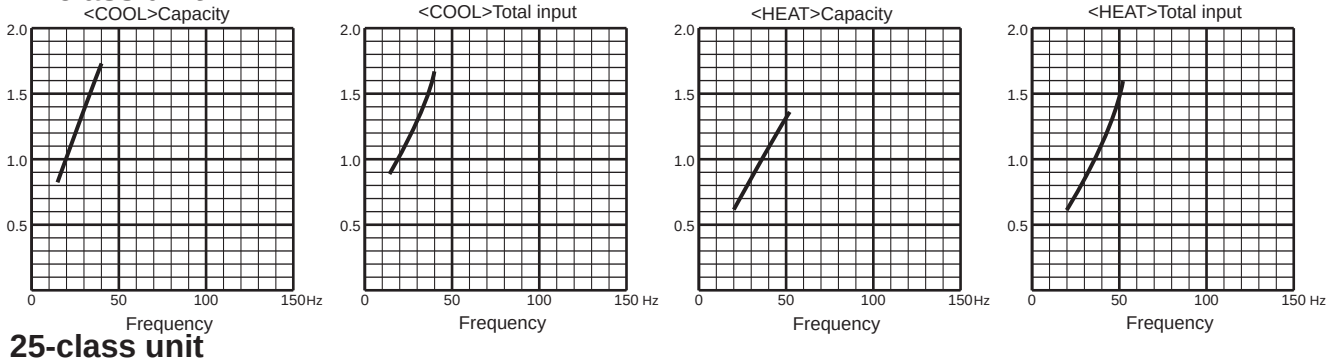

### 18-class unit



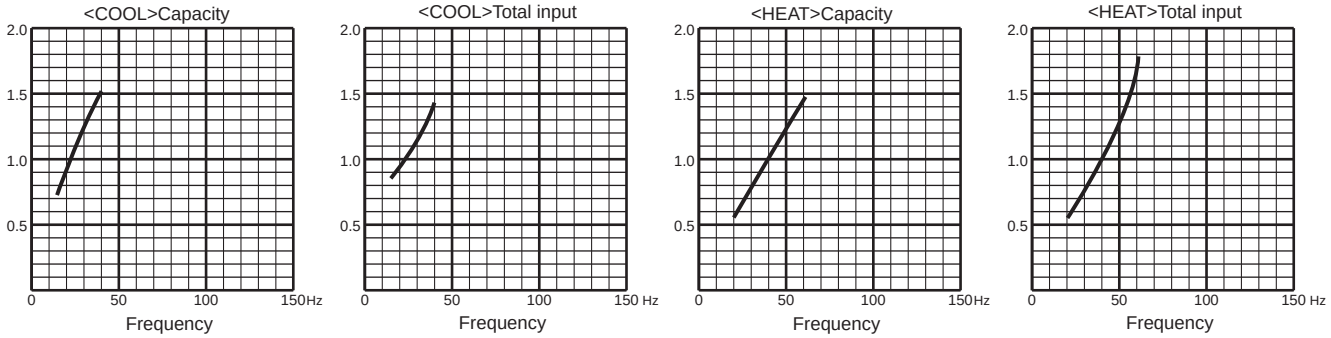

### 20-class unit




### 22-class unit

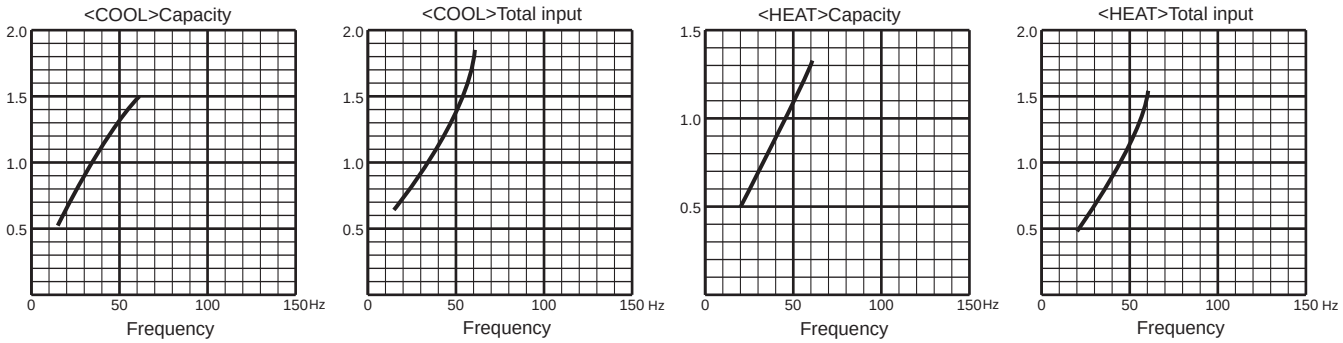



### 25-class unit

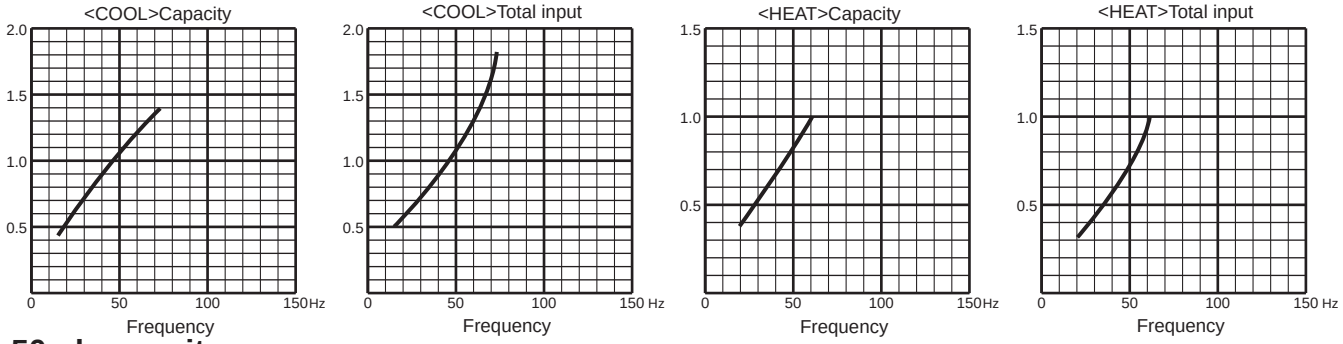


## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4

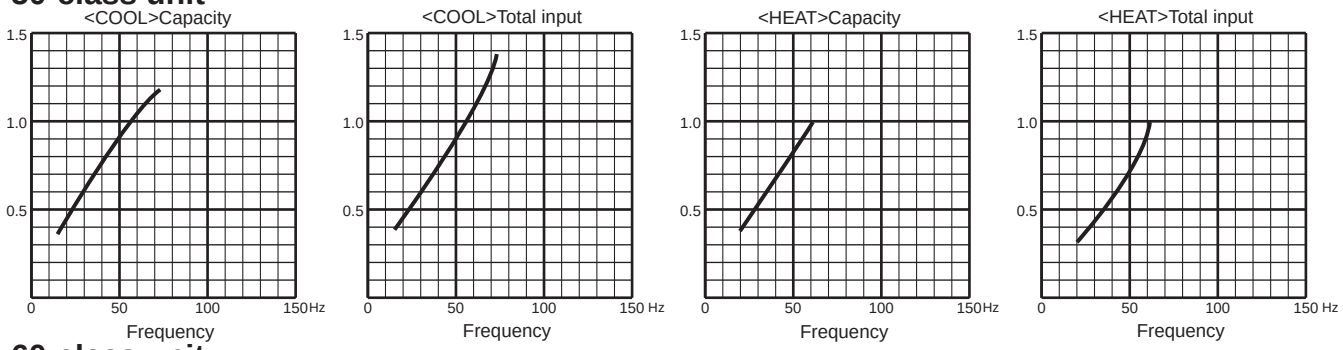
### 35-class unit



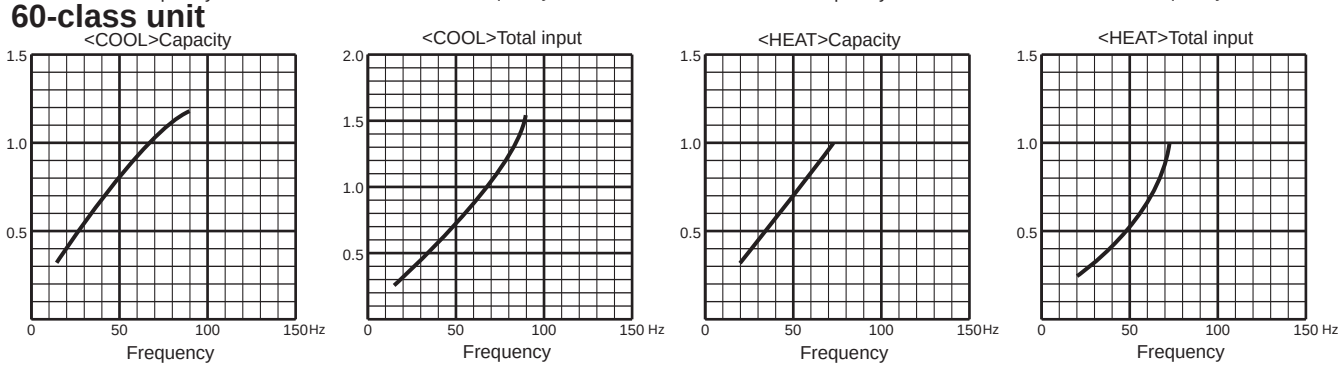

### 42-class unit




### 50-class unit

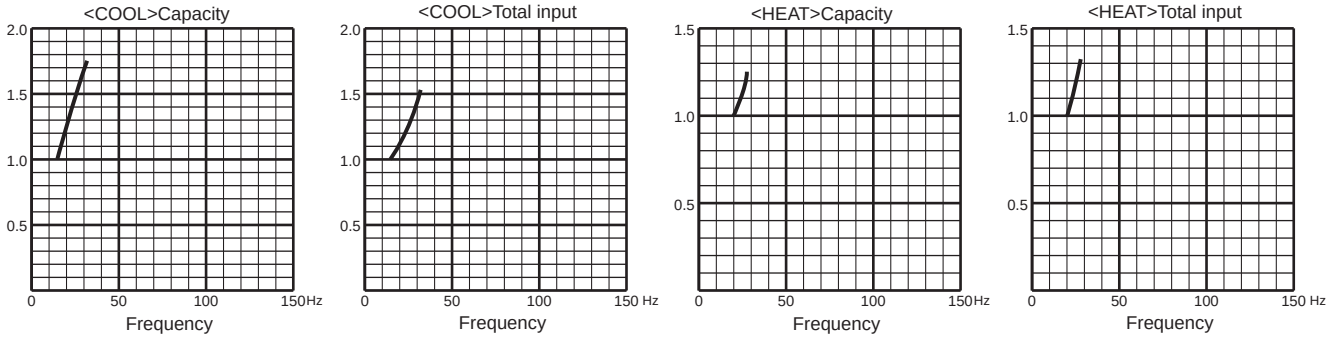



### 60-class unit

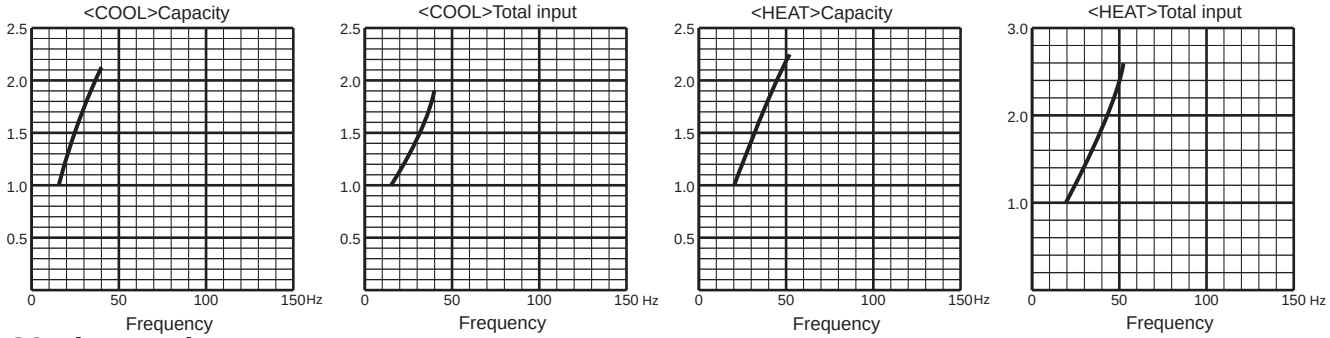


## MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

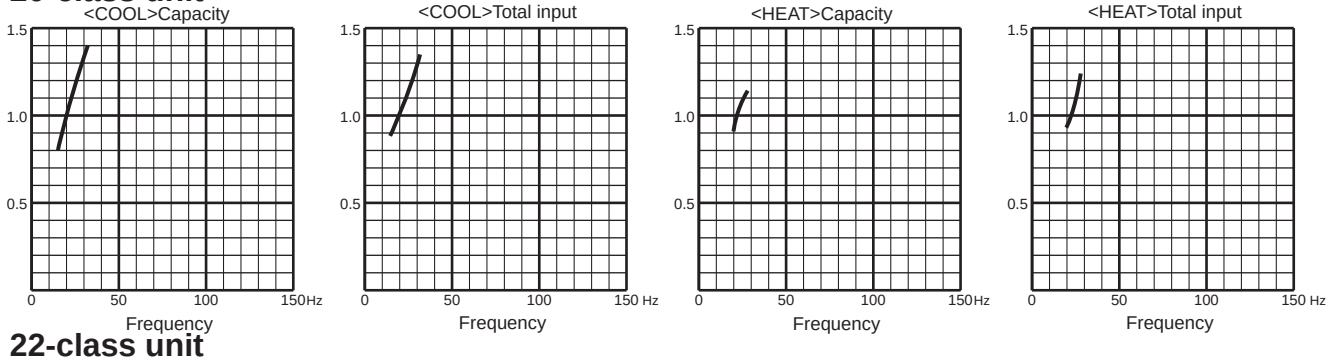
### 15-class unit



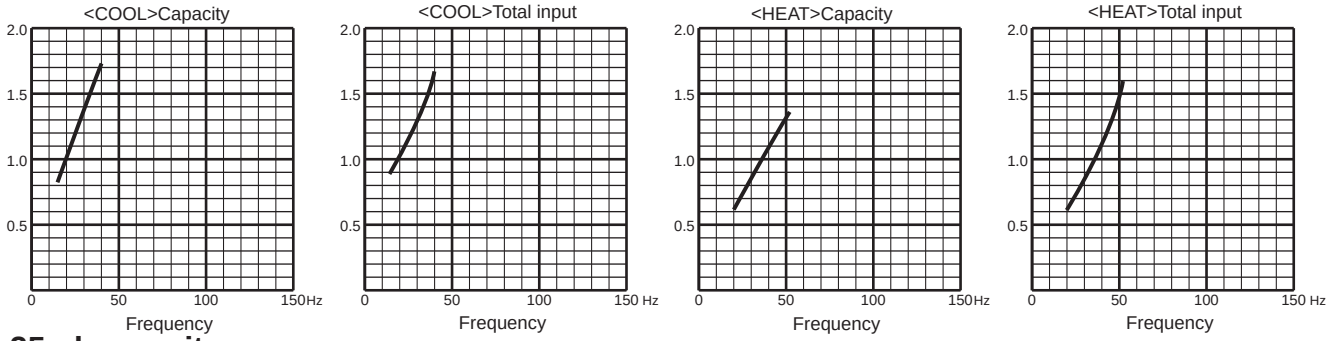

### 18-class unit



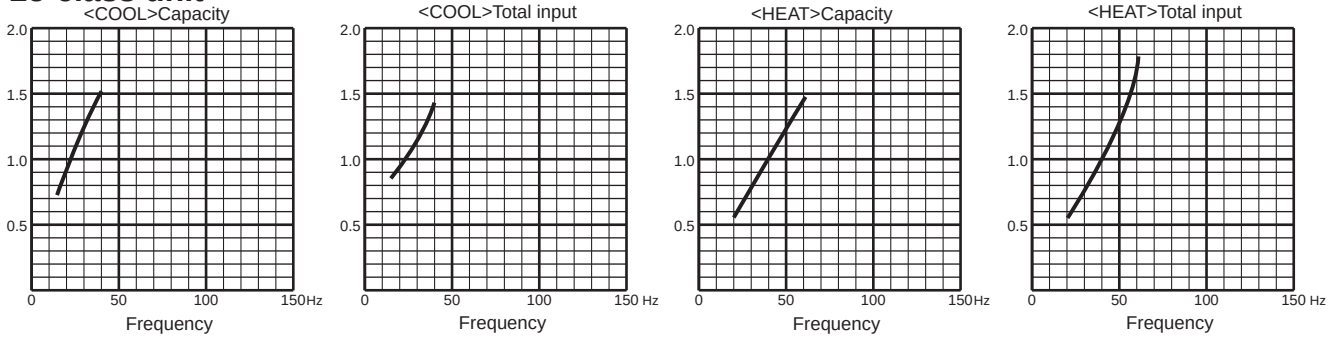

### 20-class unit




### 22-class unit



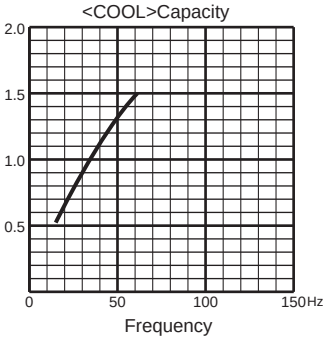

### 25-class unit



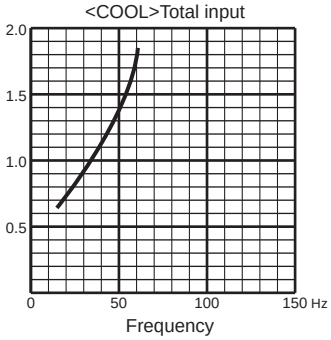
## MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

### 35-class unit

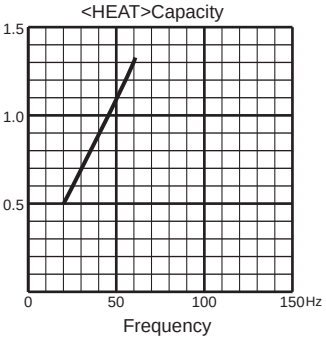
<COOL>Capacity



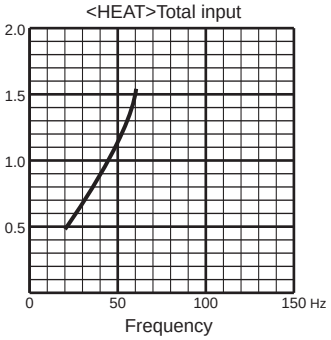

<COOL>Total input




<HEAT>Capacity

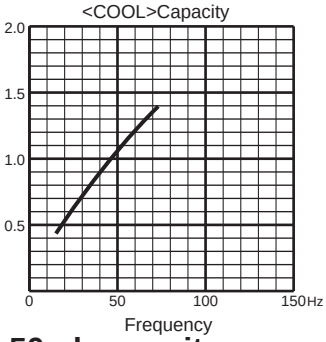



<HEAT>Total input

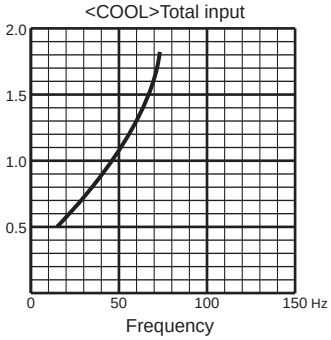



### 42-class unit

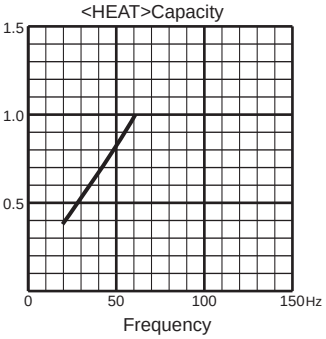
<COOL>Capacity



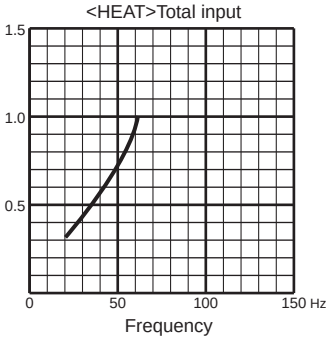

<COOL>Total input




<HEAT>Capacity

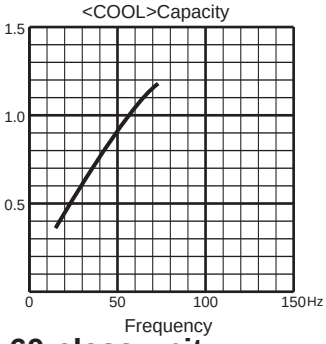



<HEAT>Total input

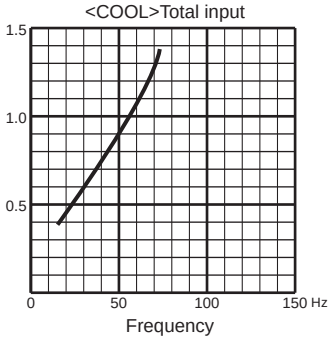



### 50-class unit

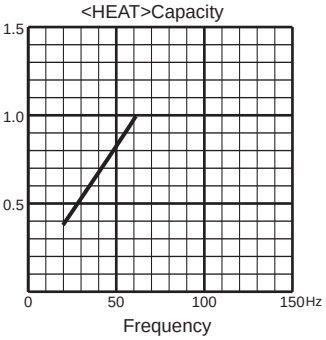
<COOL>Capacity



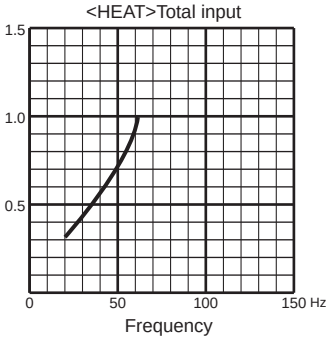

<COOL>Total input




<HEAT>Capacity

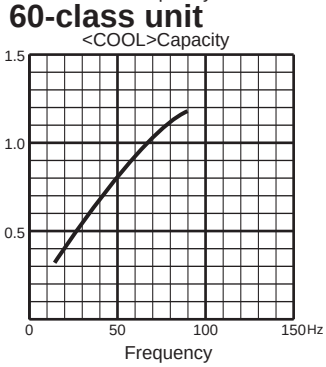



<HEAT>Total input

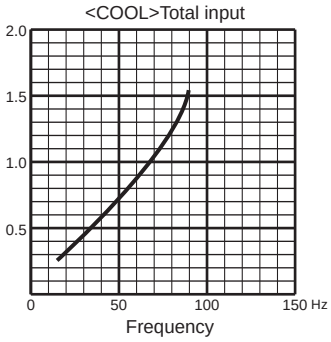



### 60-class unit

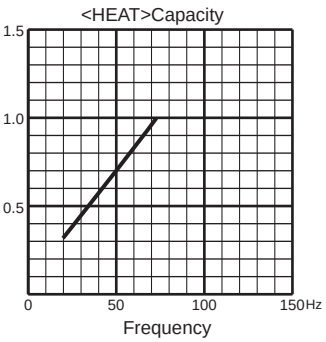
<COOL>Capacity



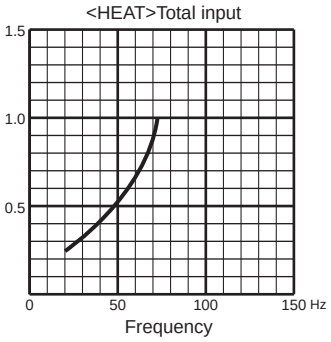

<COOL>Total input




<HEAT>Capacity

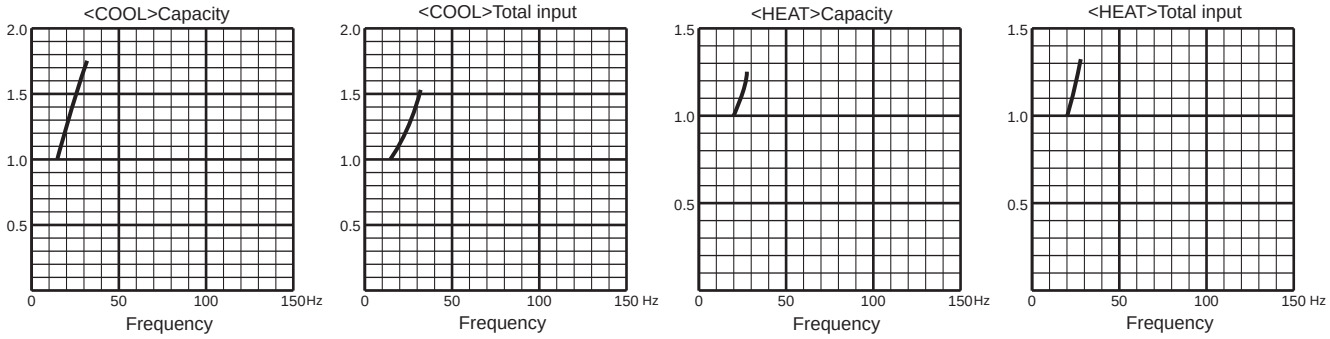



<HEAT>Total input

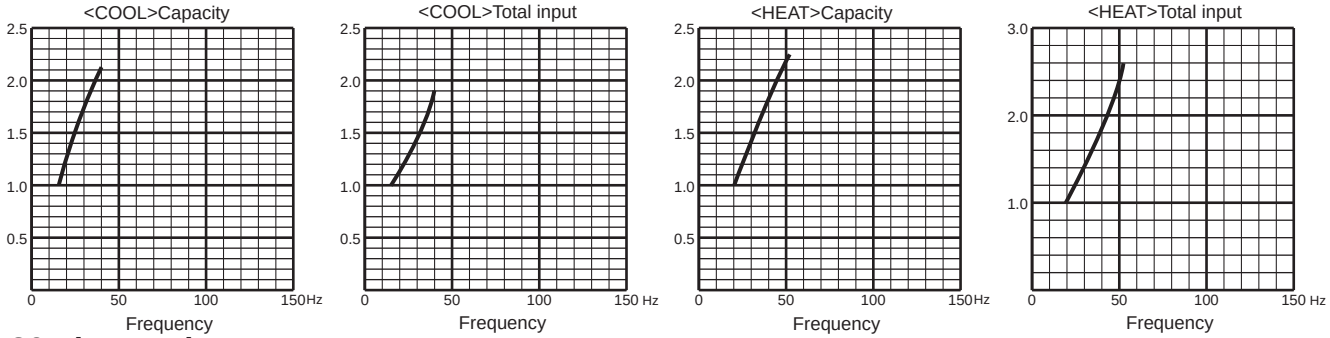


## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

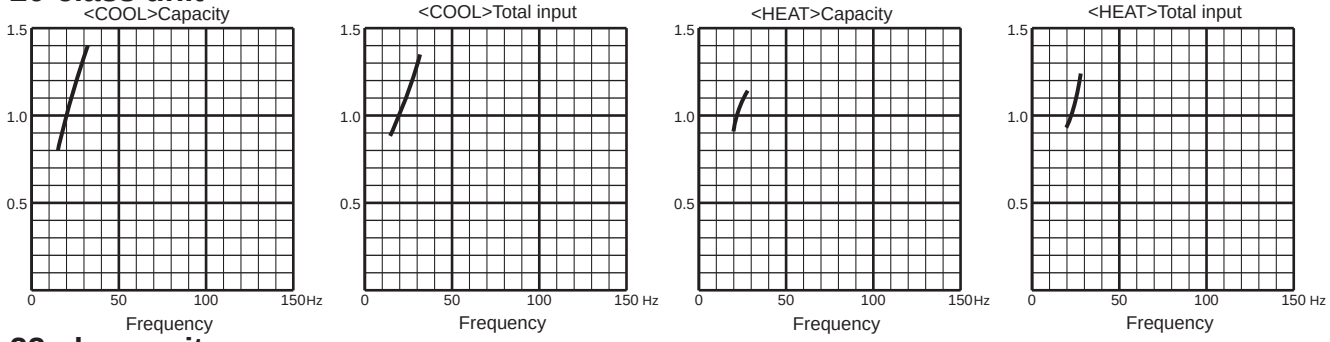
### 15-class unit



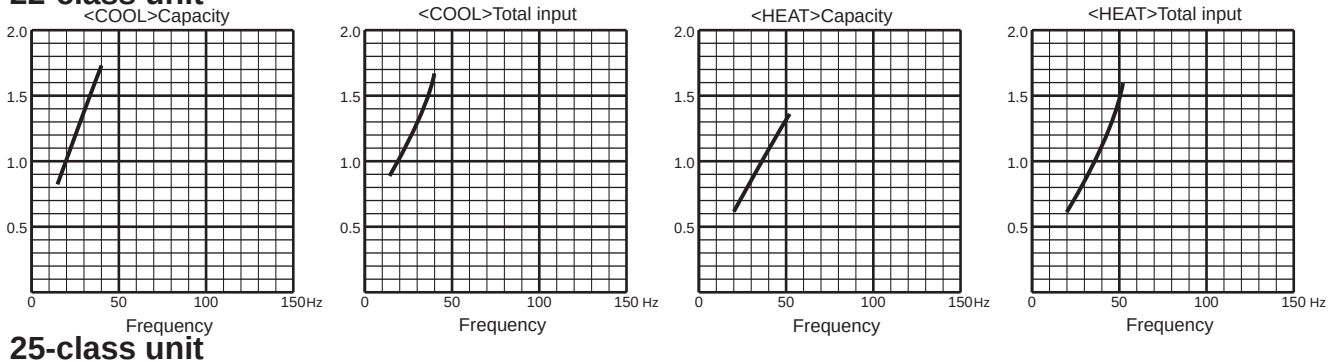

### 18-class unit



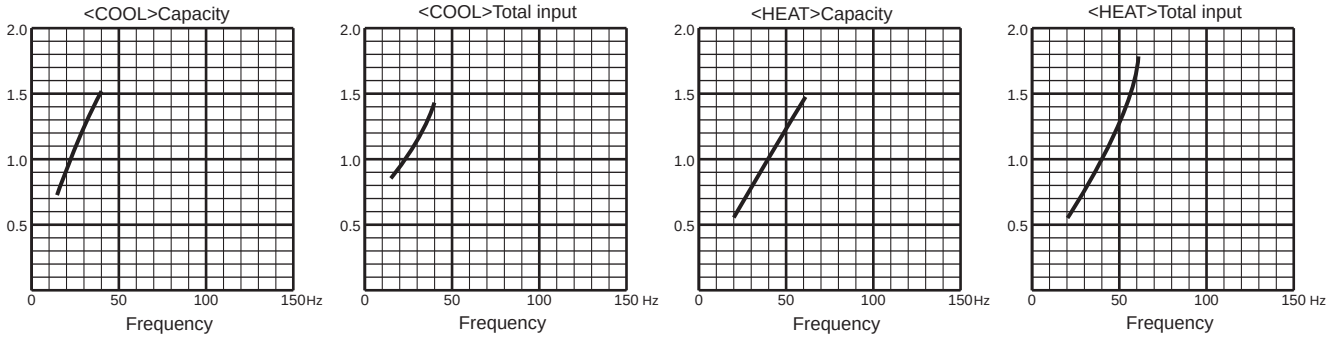

### 20-class unit




### 22-class unit

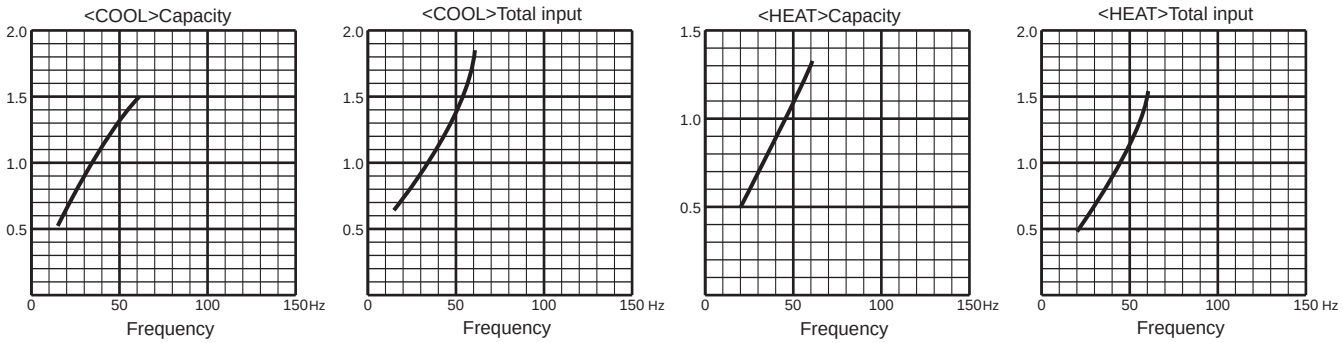



### 25-class unit

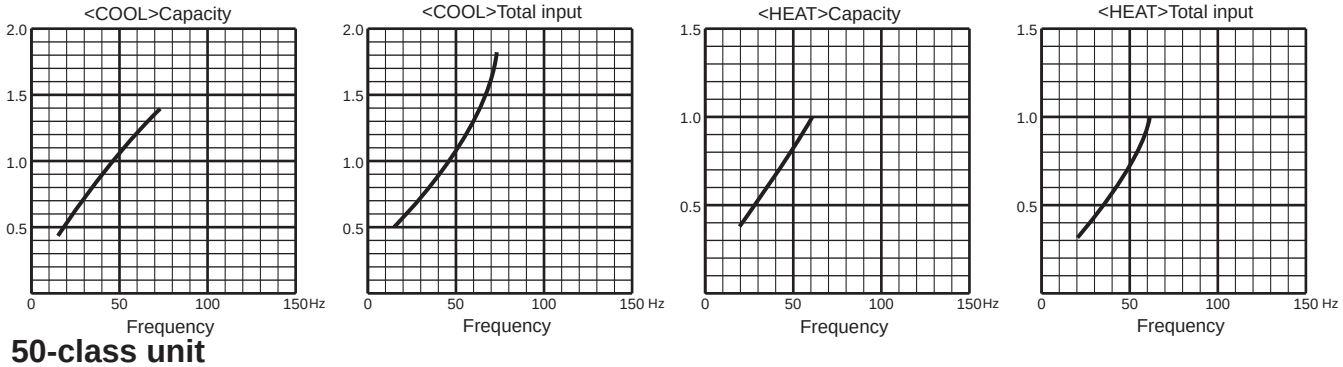


## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

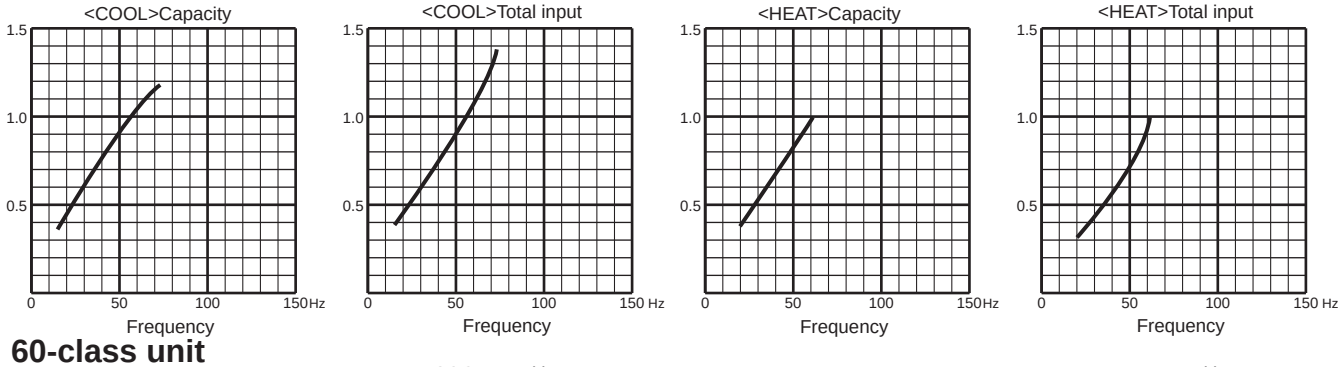
### 35-class unit



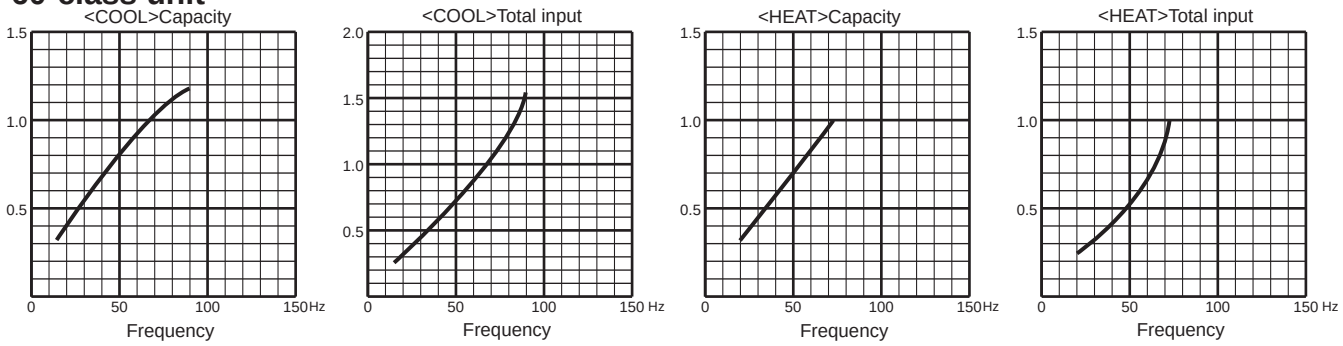

### 42-class unit




### 50-class unit

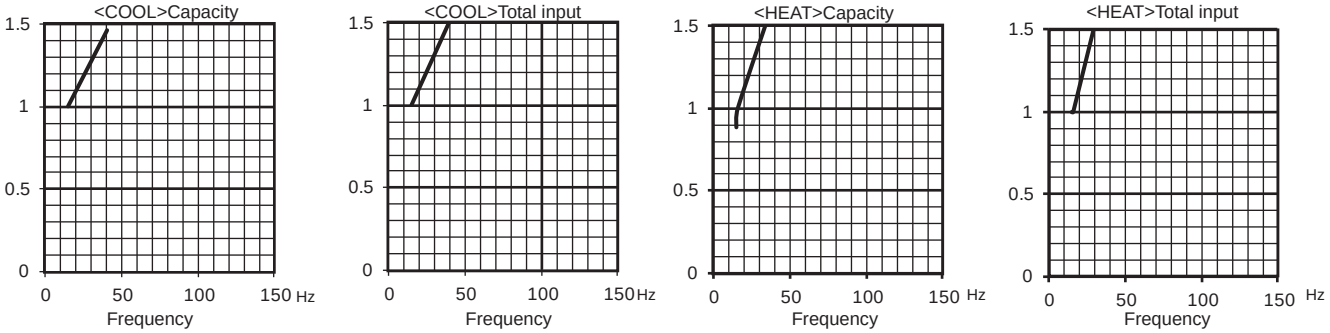



### 60-class unit

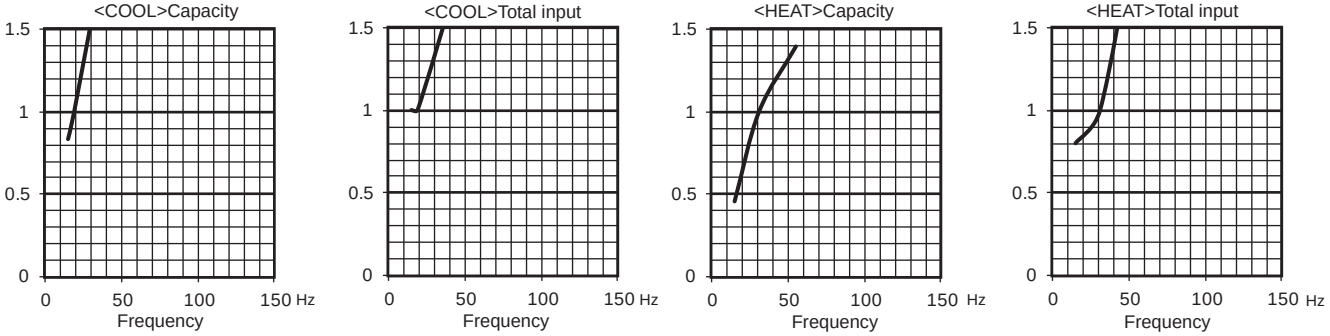


## MXZ-4F83VF MXZ-4F83VF2

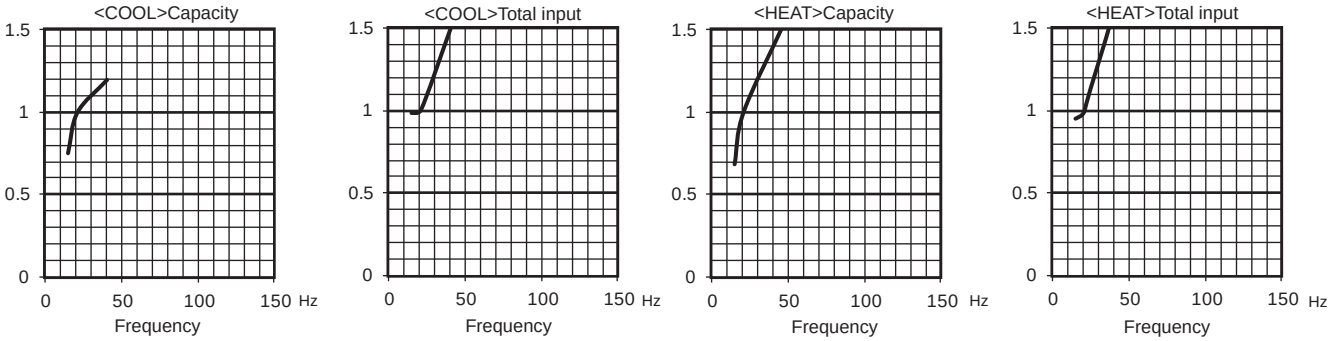
### 15-class unit



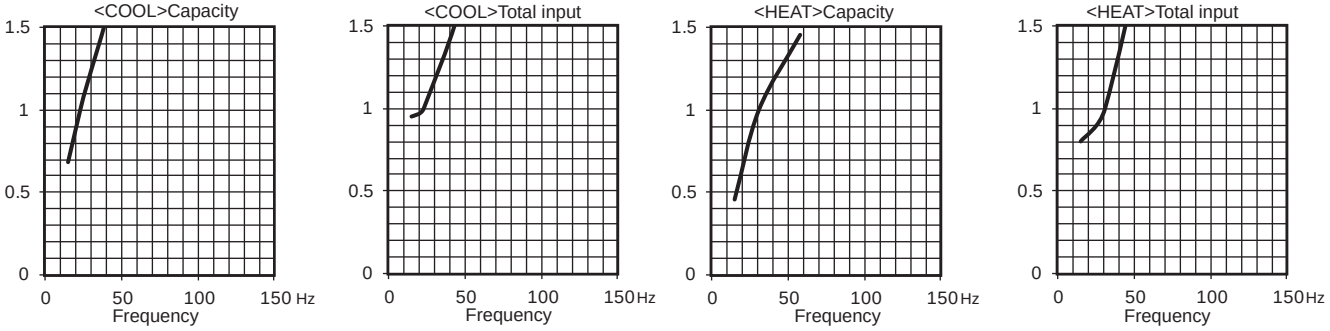

### 18-class unit



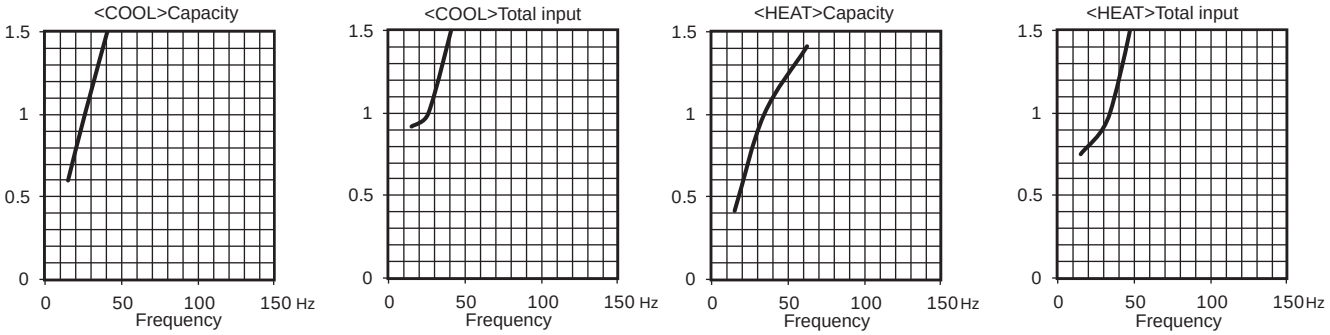

### 20-class unit




### 22-class unit

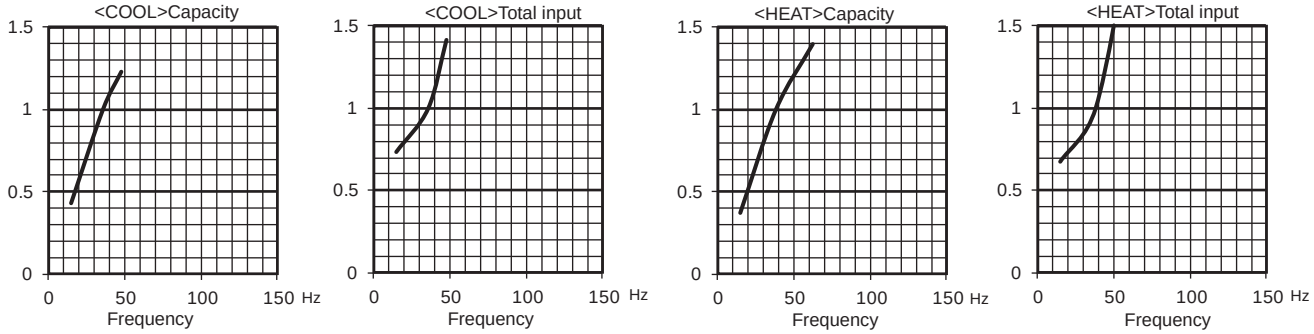



### 25-class unit

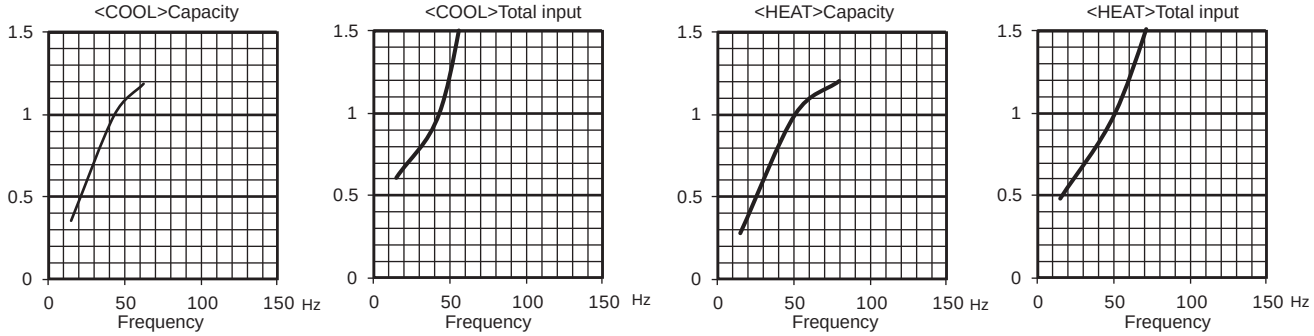


## MXZ-4F83VF MXZ-4F83VF2

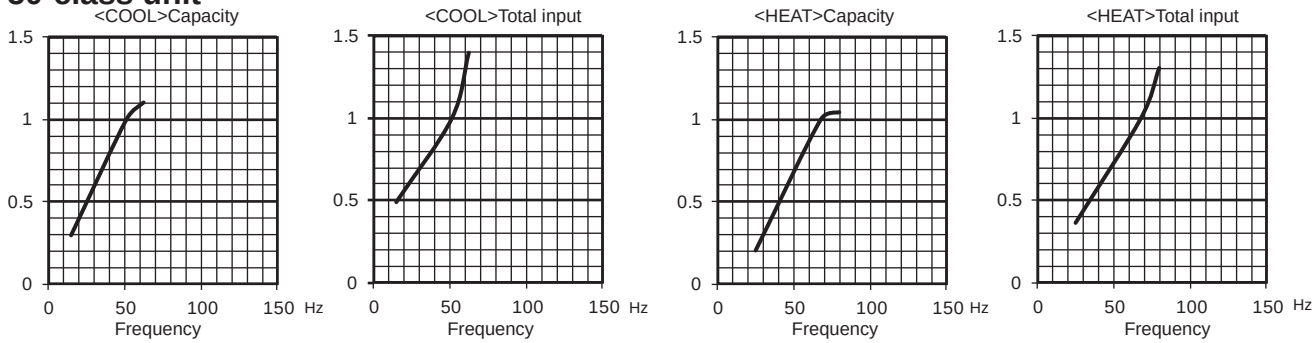
### 35-class unit



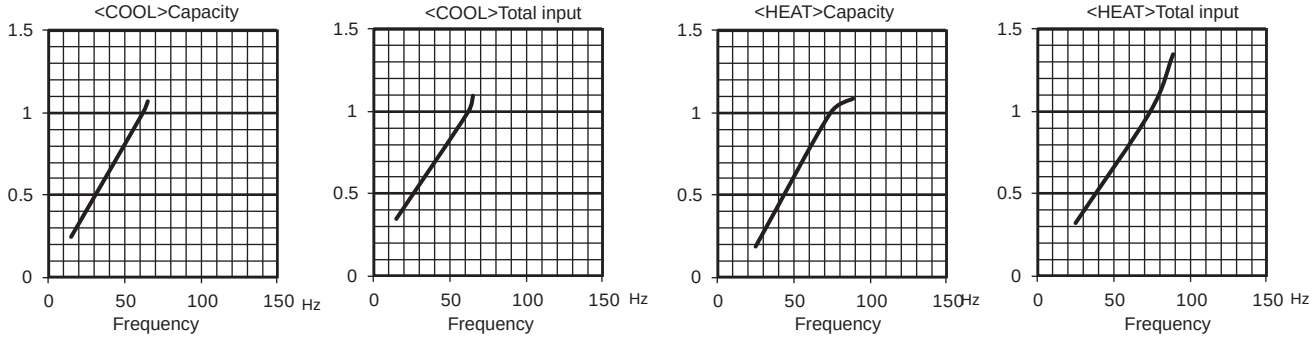

### 42-class unit



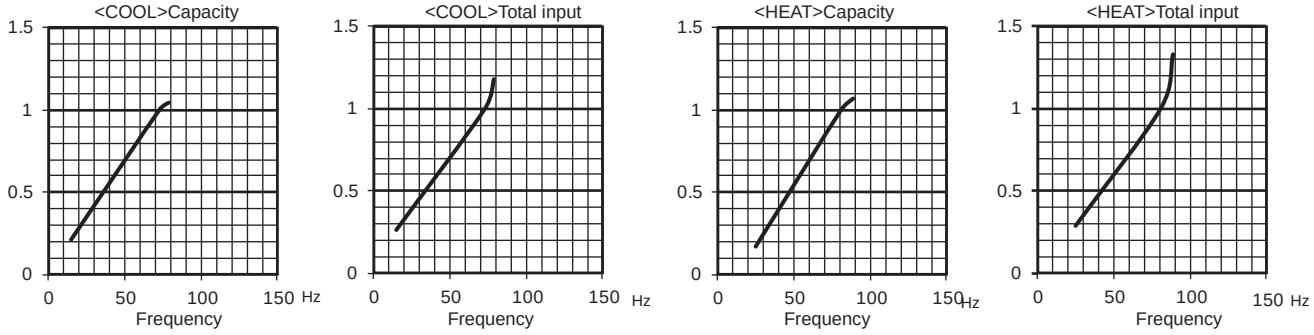

### 50-class unit




### 60-class unit

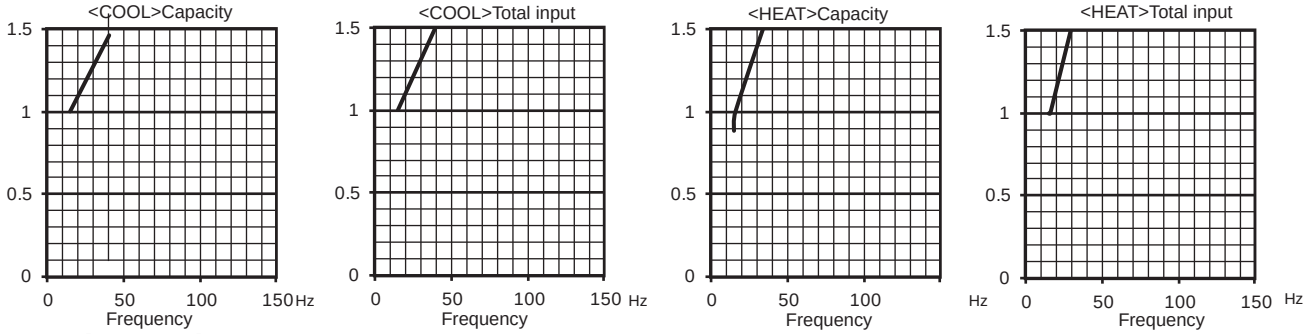



### 71-class unit

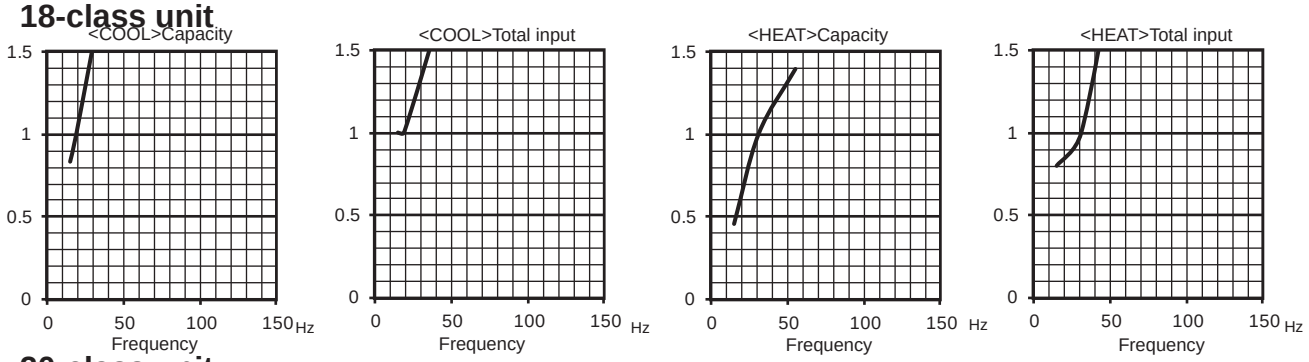


## MXZ-5F102VF MXZ-5F102VF2

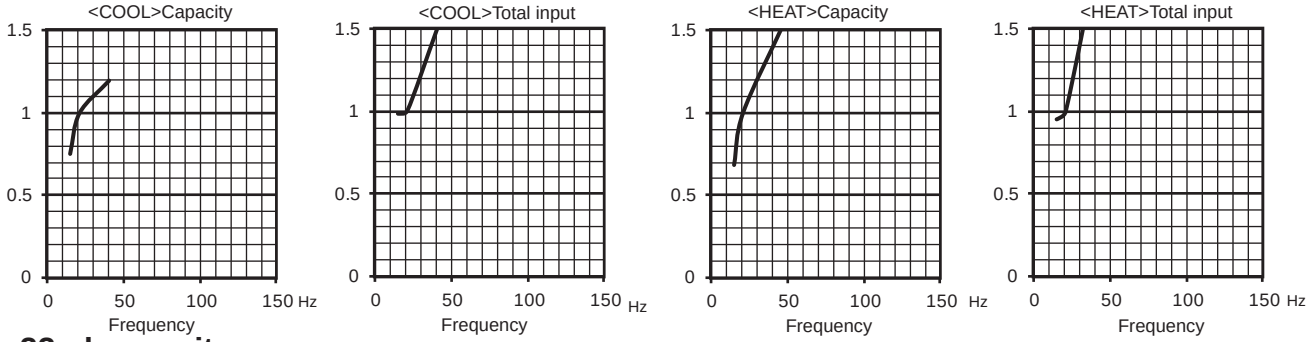
### 15-class unit



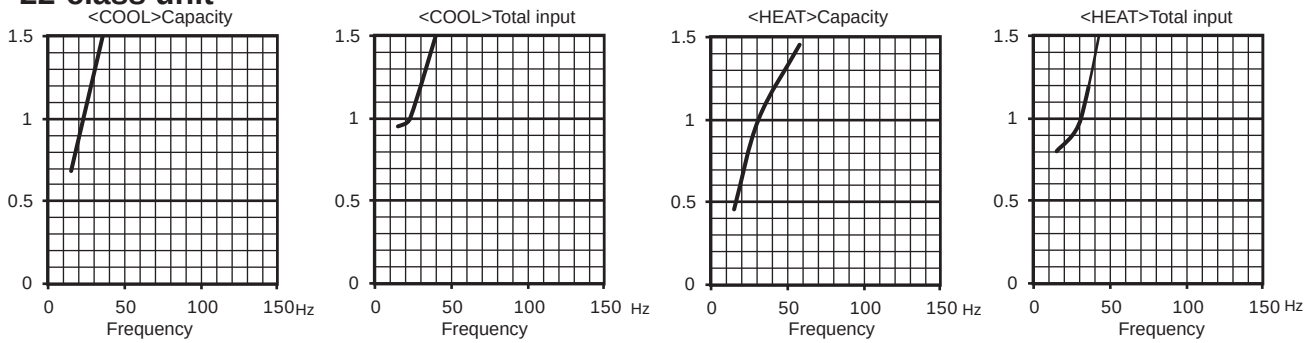

### 18-class unit



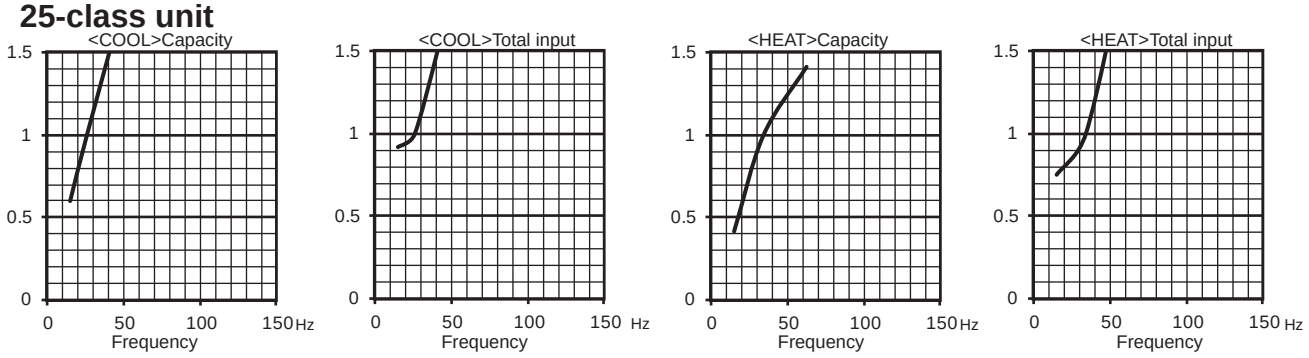

### 20-class unit




### 22-class unit

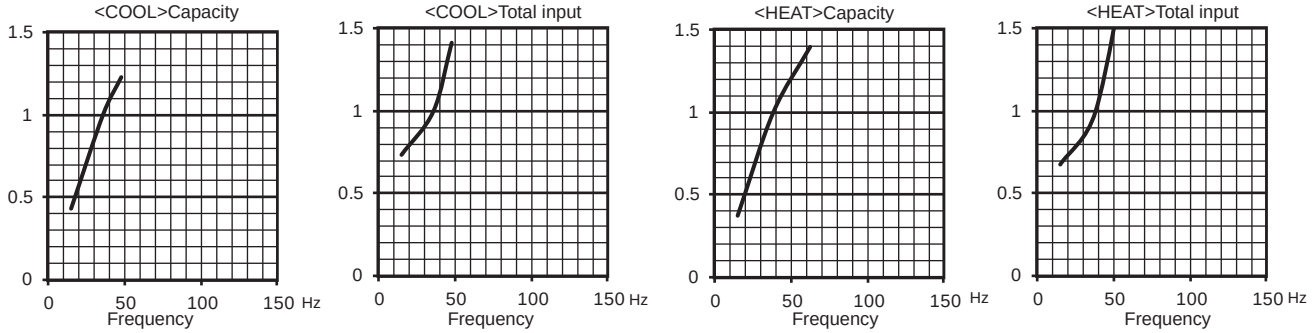



### 25-class unit

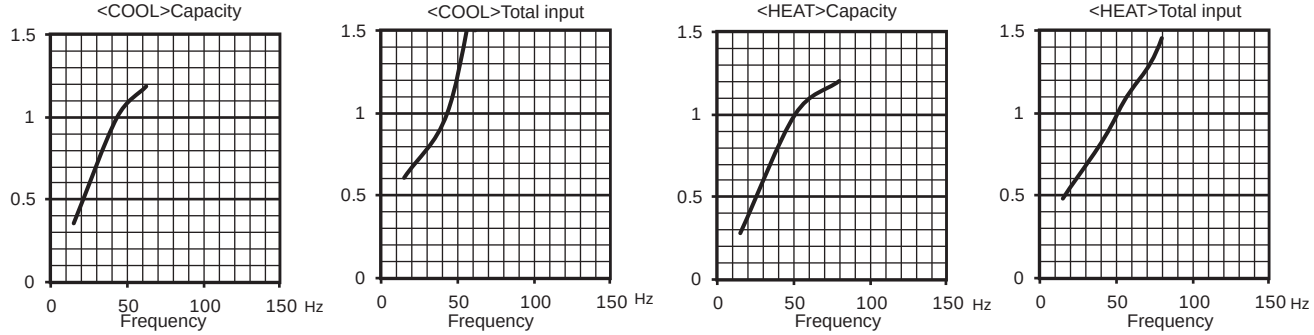


## MXZ-5F102VF MXZ-5F102VF2

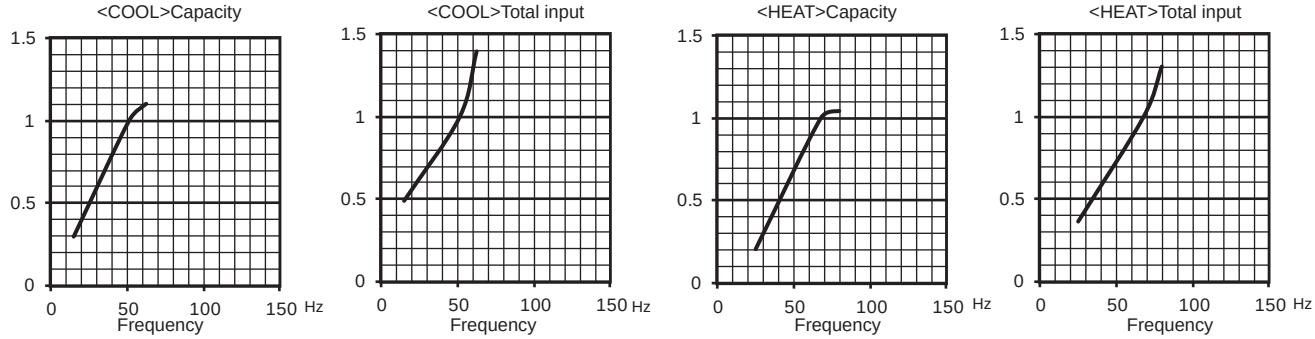
### 35-class unit



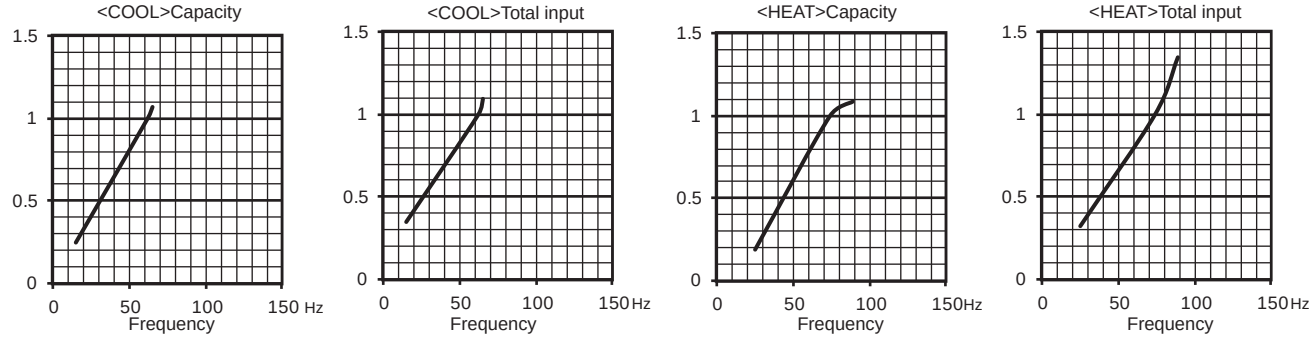

### 42-class unit



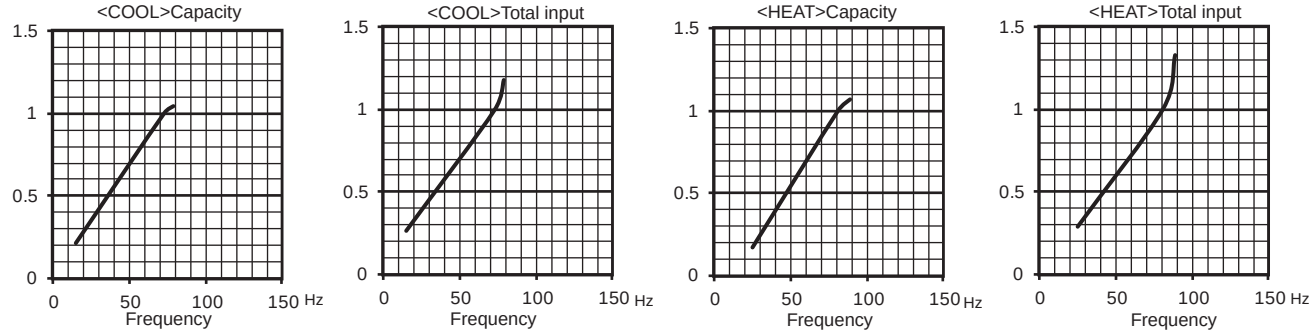

### 50-class unit




### 60-class unit

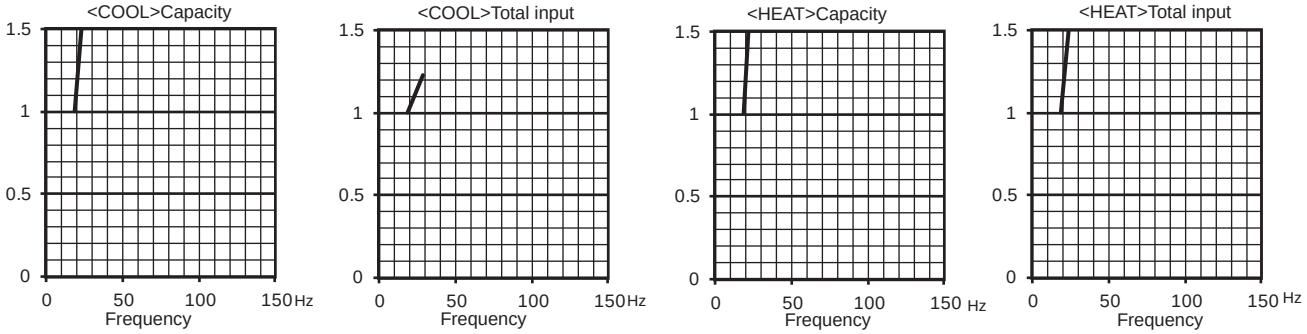



### 71-class unit

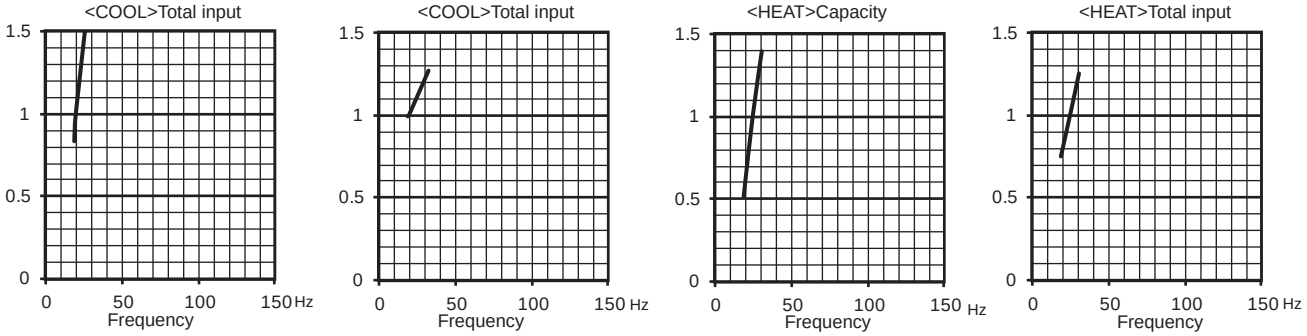


## MXZ-6F120VF2 MXZ-6F122VF

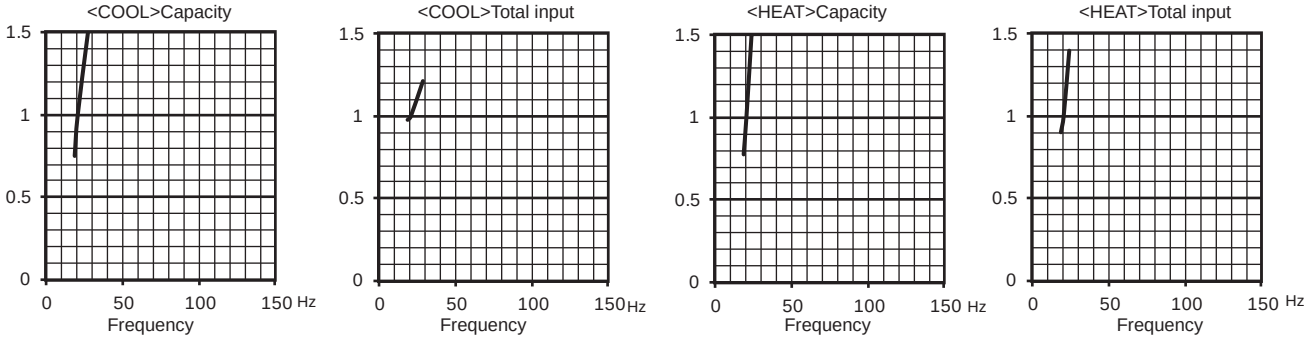
### 15-class unit



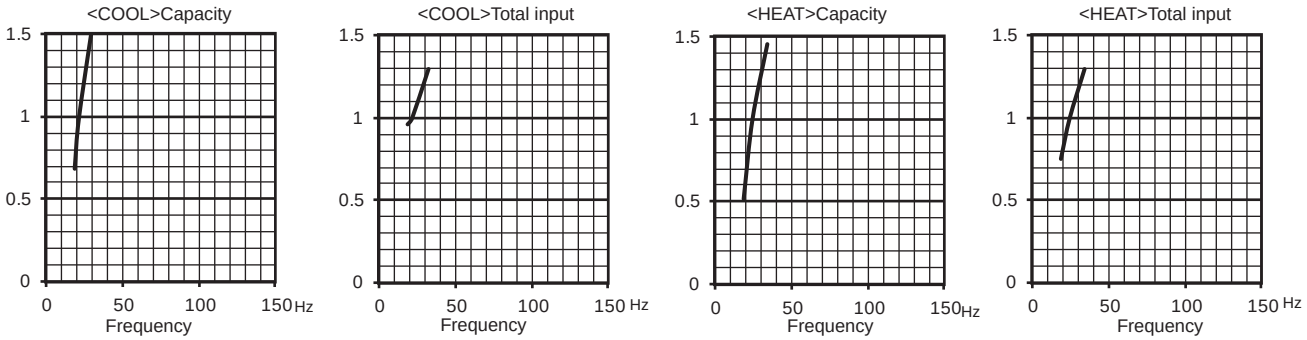

### 18-class unit



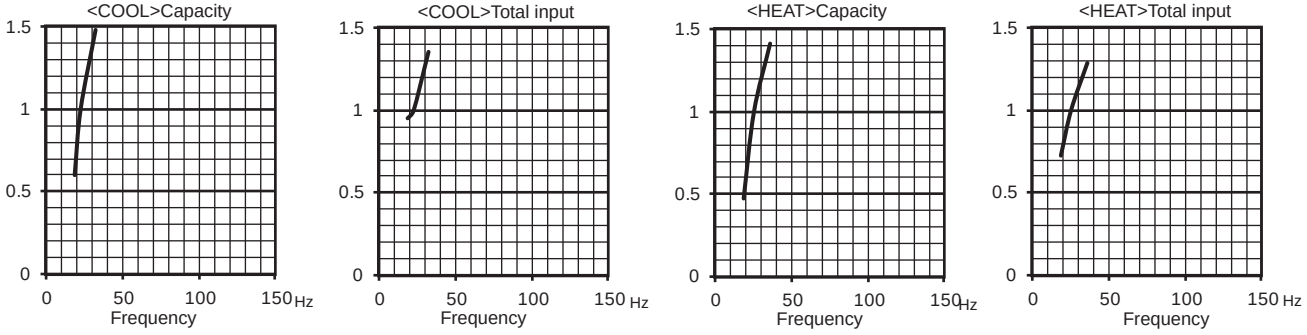

### 20-class unit




### 22-class unit

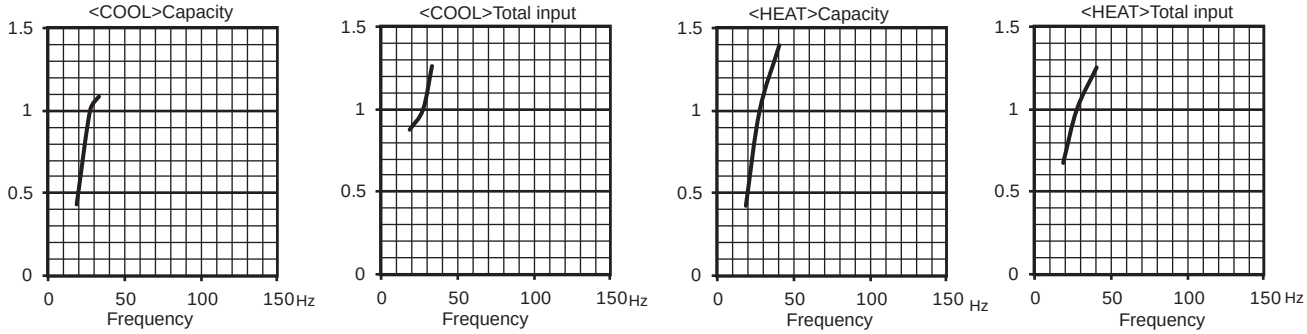



### 25-class unit

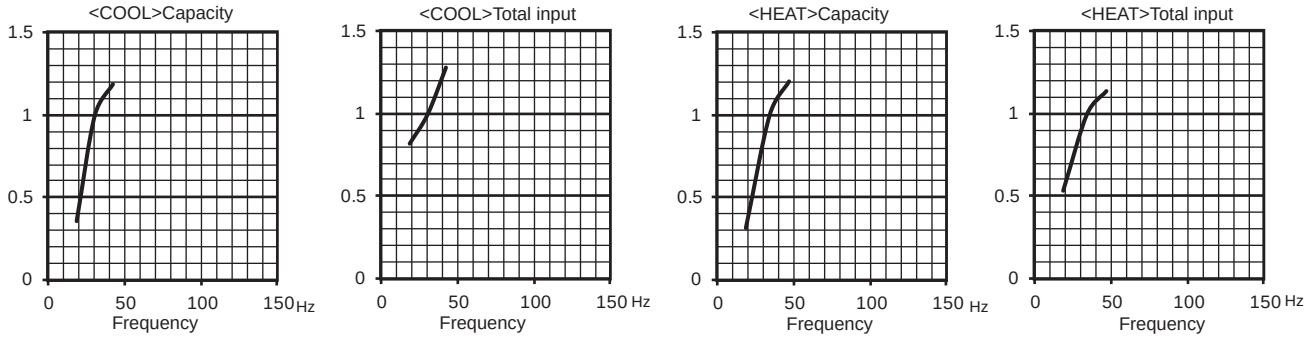


## MXZ-6F120VF2 MXZ-6F122VF

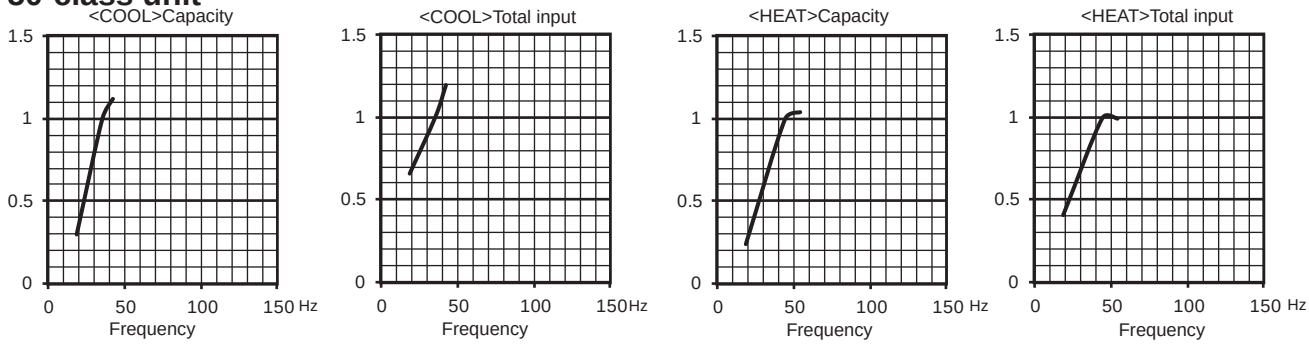
### 35-class unit



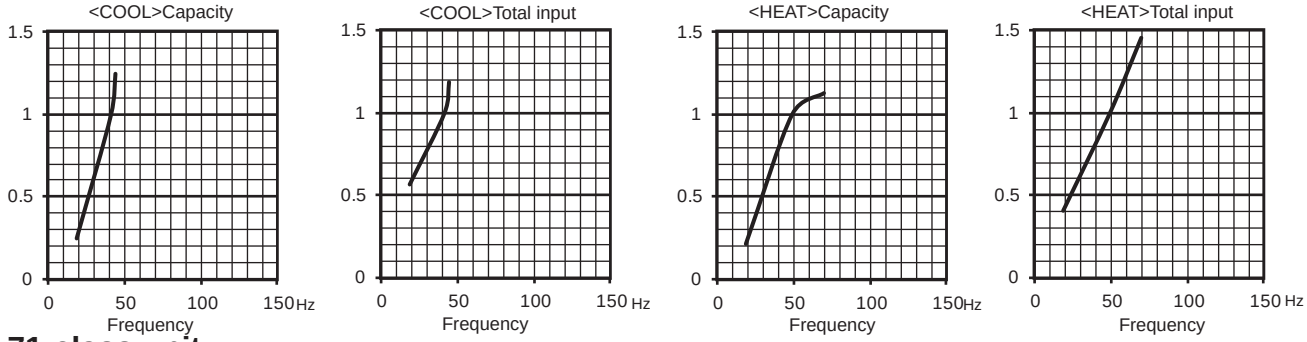

### 42-class unit



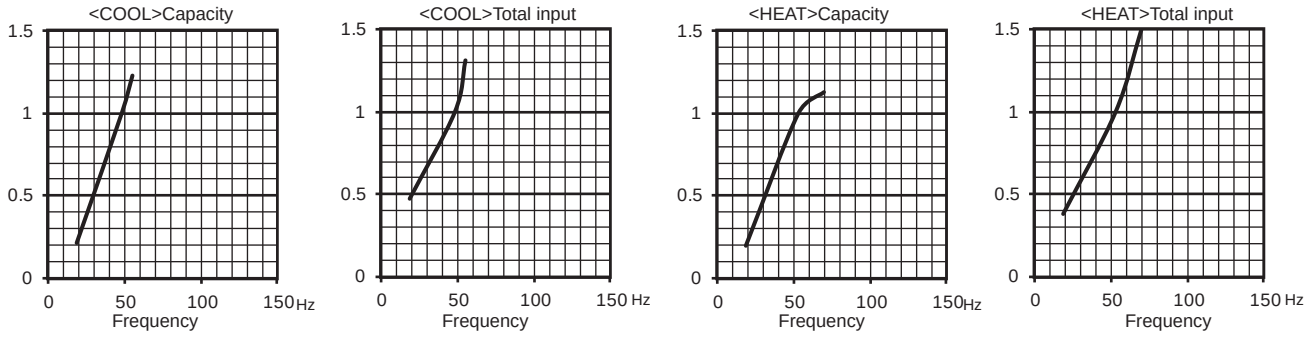

### 50-class unit




### 60-class unit

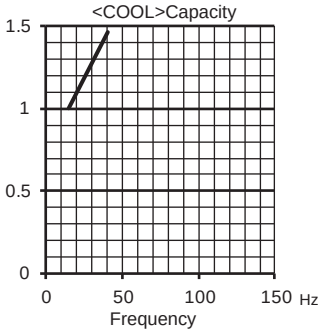


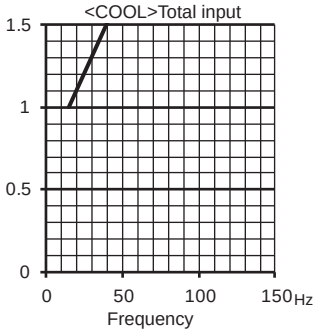

### 71-class unit

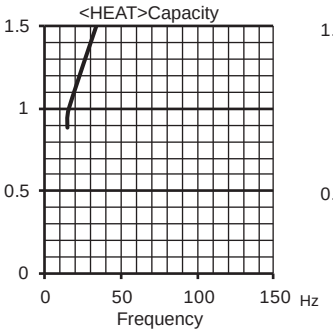


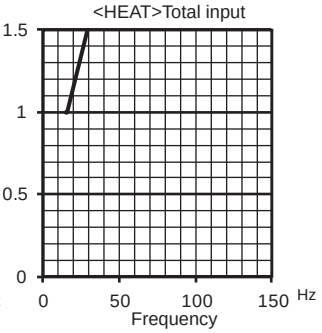
## MXZ-2F53VFHZ MXZ-2F53VFHZ2

### 15-class unit

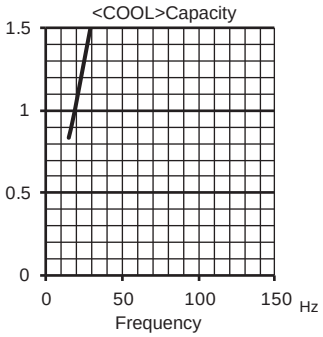


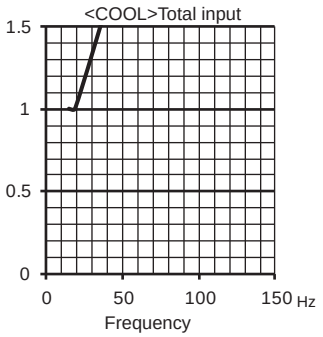



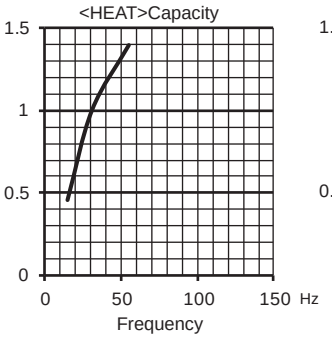



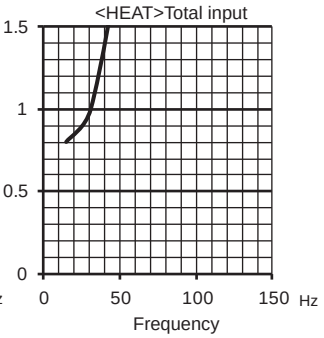




### 18-class unit

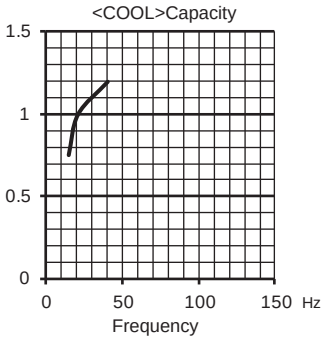


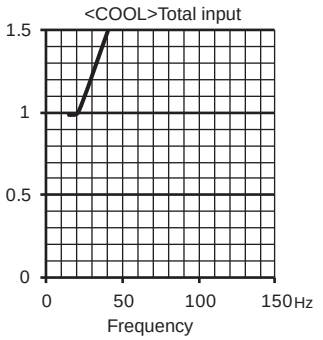



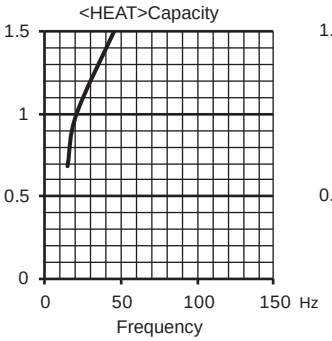



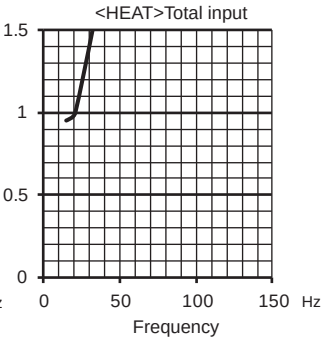




### 20-class unit

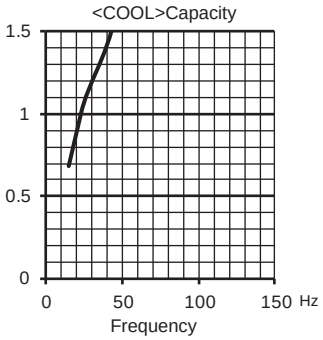


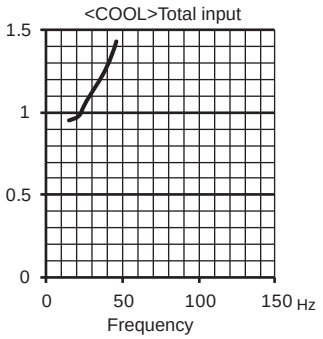



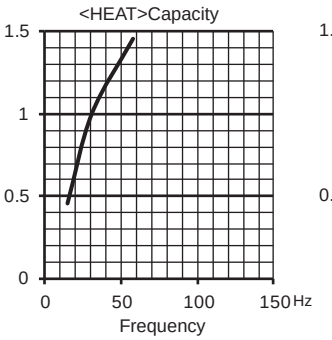



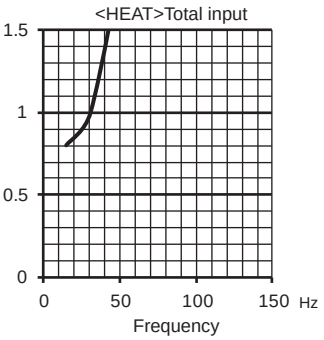




### 22-class unit

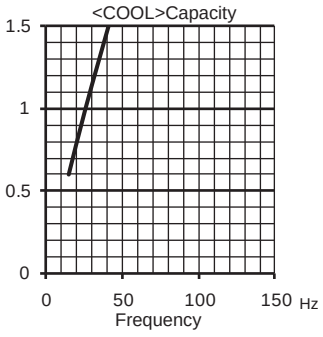


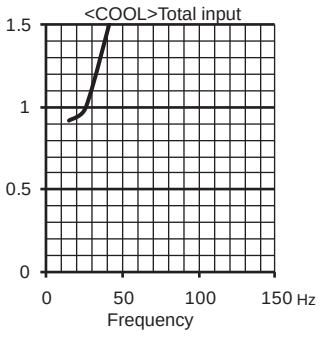



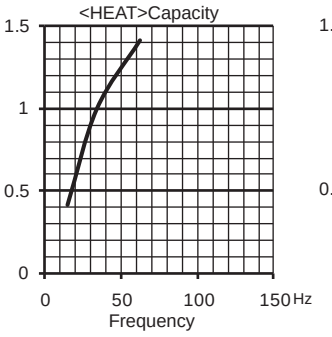



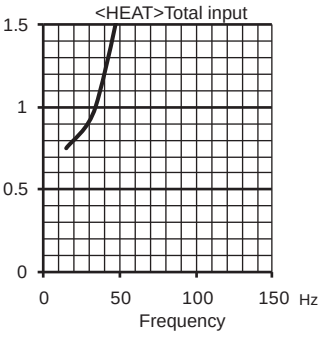




### 25-class unit



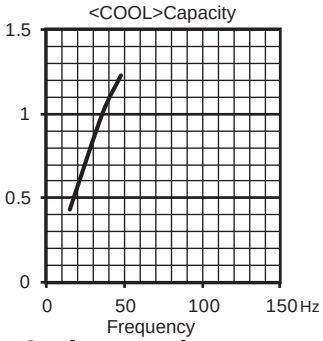



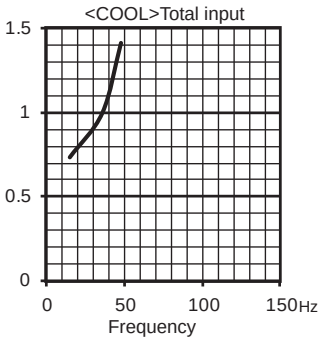



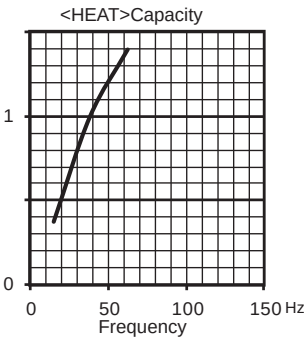



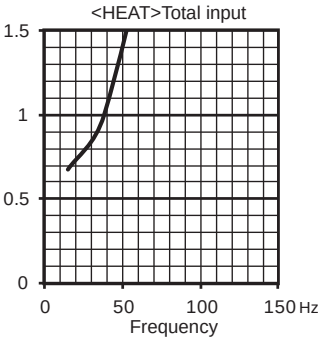
## MXZ-2F53VFHZ MXZ-2F53VFHZ2

### 35-class unit

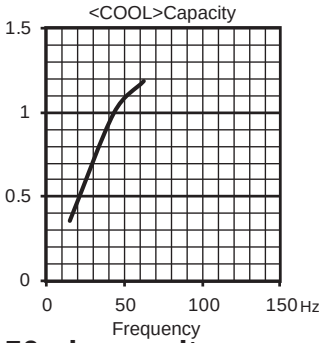


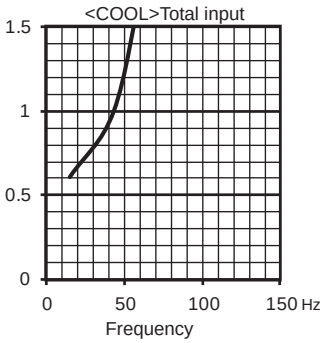



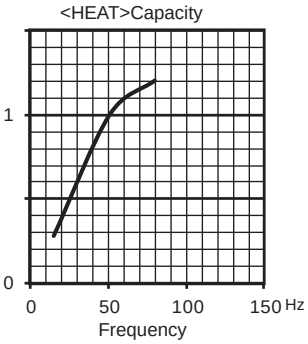



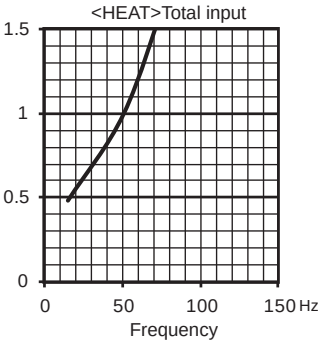




### 42-class unit

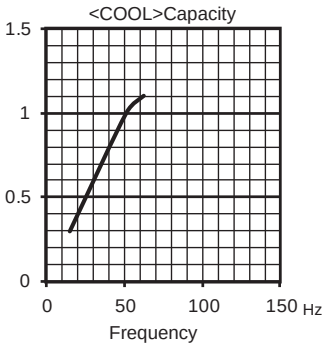


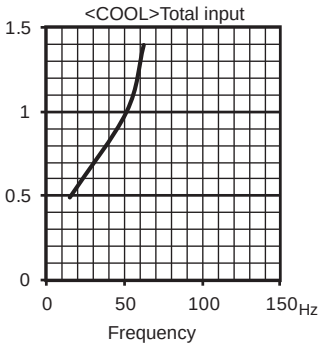



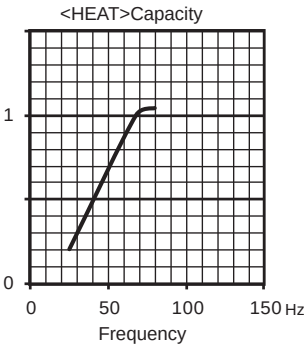



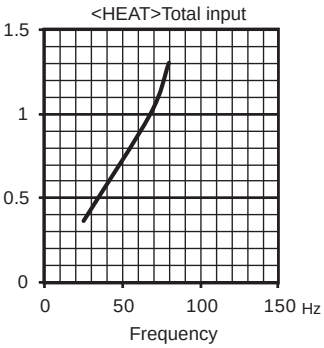




### 50-class unit



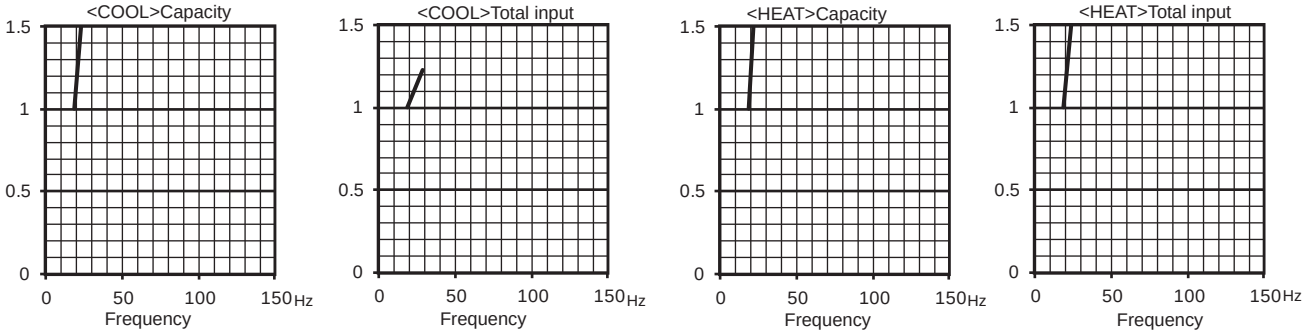



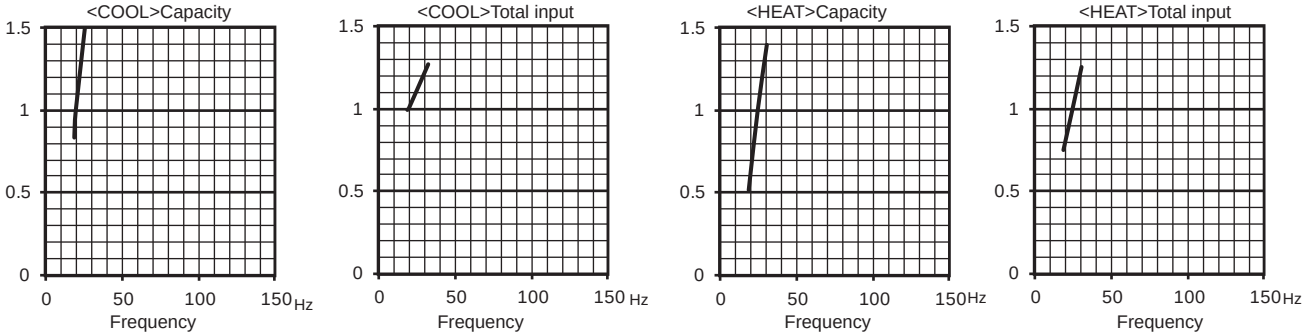



## MXZ-4F83VFHZ MXZ-4F83VFHZ2

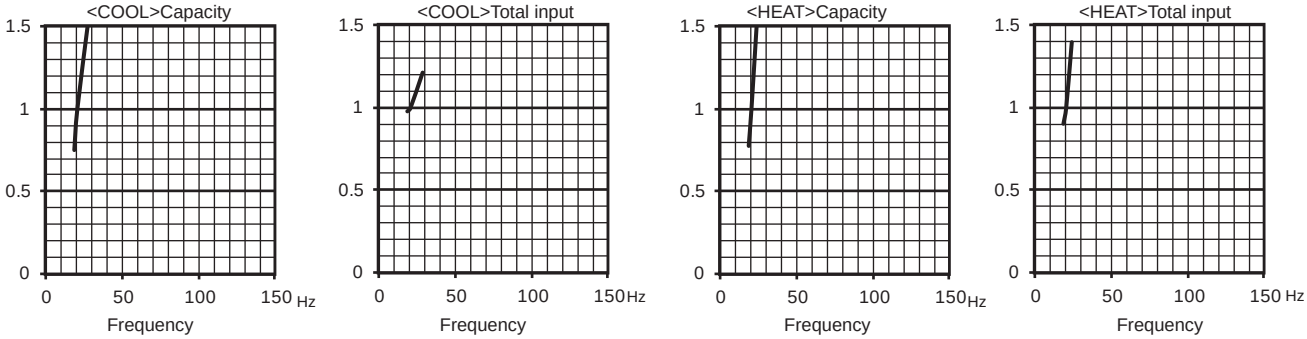
### 15-class unit



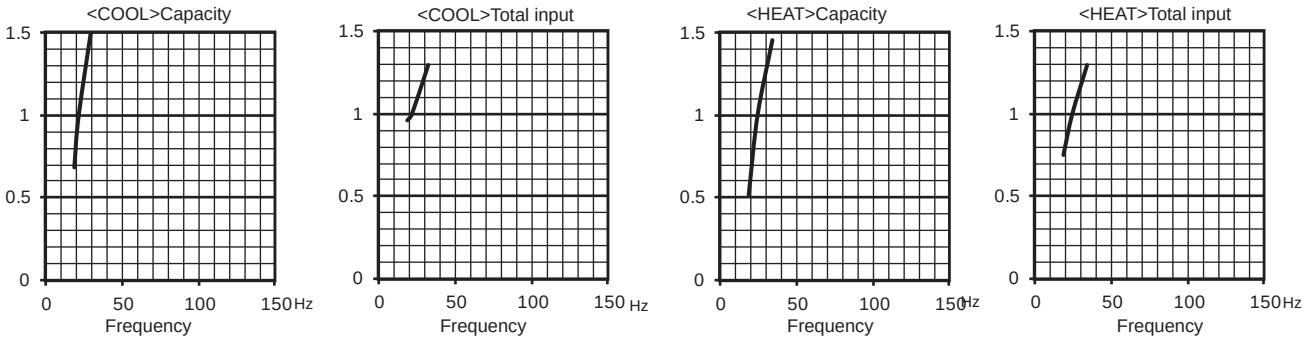

### 18-class unit



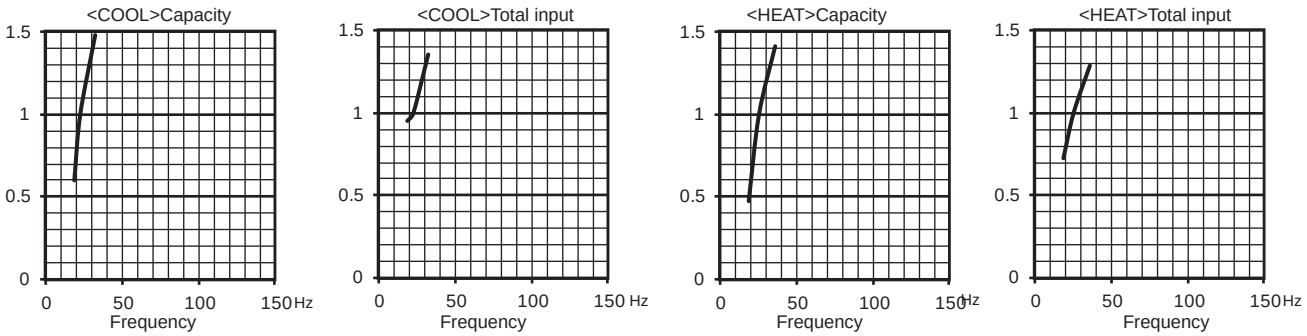

### 20-class unit




### 22-class unit

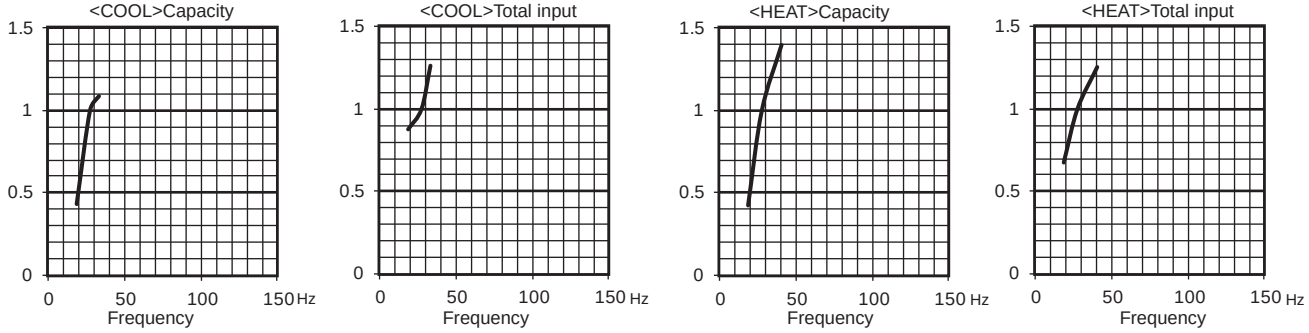



### 25-class unit

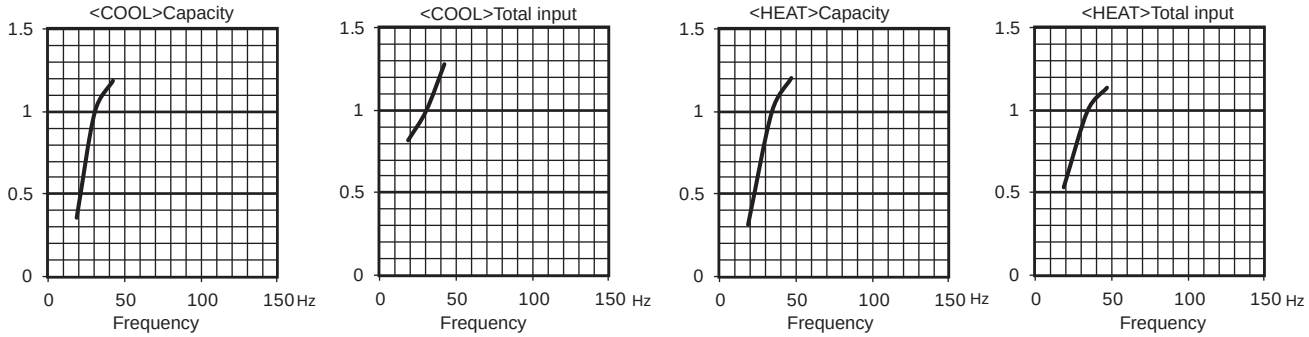


## MXZ-4F83VFHZ MXZ-4F83VFHZ2

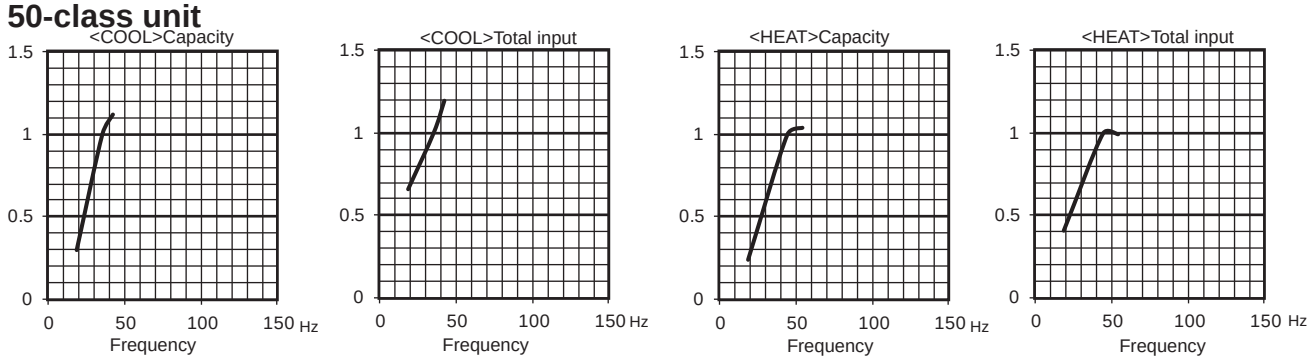
### 35-class unit



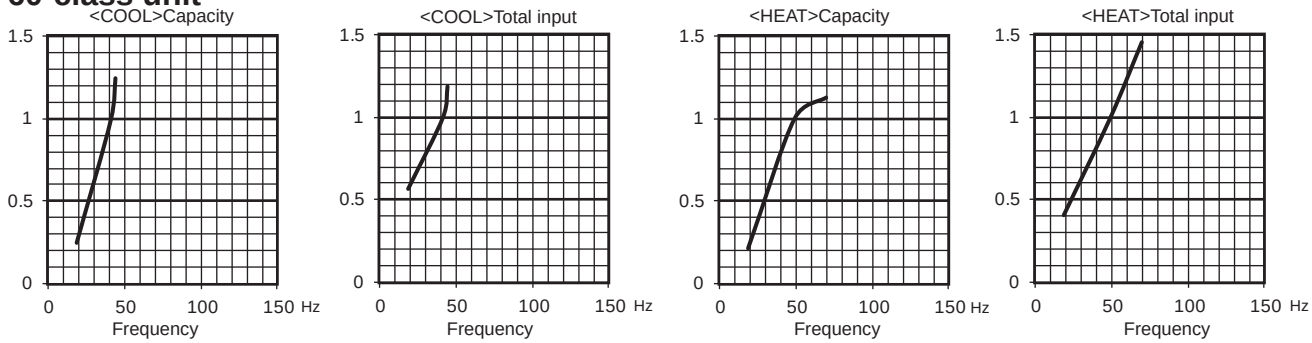

### 42-class unit



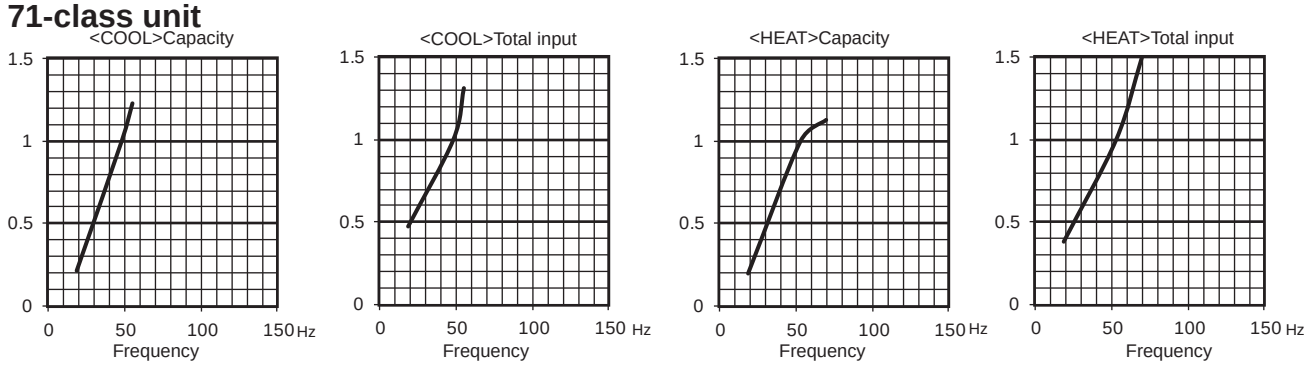

### 50-class unit




### 60-class unit




### 71-class unit



## 9-3. HOW TO OPERATE FIXED-FREQUENCY OPERATION <Test run operation>

1. Press the emergency operation switch to start COOL or HEAT mode (COOL : Press once, HEAT : Press twice).
2. Test run operation starts and continues to operate for 30 minutes.
3. Compressor operates at rated frequency.
4. Indoor fan operates at High speed.
5. After 30 minutes, test run operation finishes and EMERGENCY OPERATION starts (Operation frequency of compressor varies).
6. To cancel test run operation or EMERGENCY OPERATION, press the emergency operation switch or any button on remote controller.

## 9-4. OUTDOOR LOW PRESSURE AND OUTDOOR UNIT CURRENT CURVE (single operation)

**NOTE:** The unit of pressure has been changed to MPa on the international system of units (SI unit system).
The conversion factor is : **1 (MPa [Gauge]) = 10.2 (kgf/cm² [Gauge])**

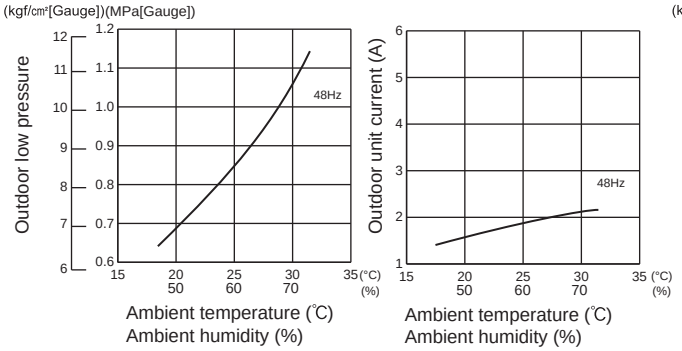
### (1) COOL operation

① Both indoor and outdoor units are under the same temperature/humidity condition.
② Operation : TEST RUN OPERATION (Refer to 9-3.)

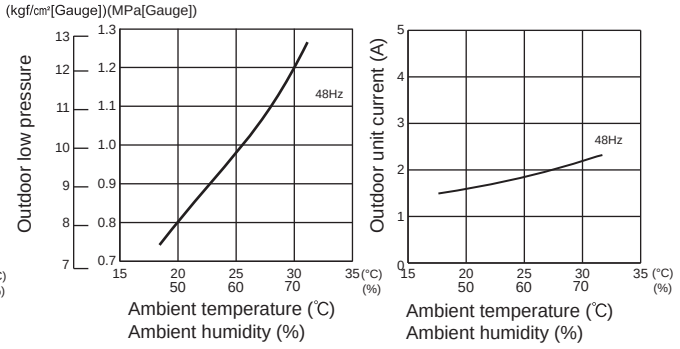
| Dry-bulb temperature (°C) | Relative humidity (%) |
|---|---|
| 20 | 50 |
| 25 | 60 |
| 30 | 70 |

### MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4

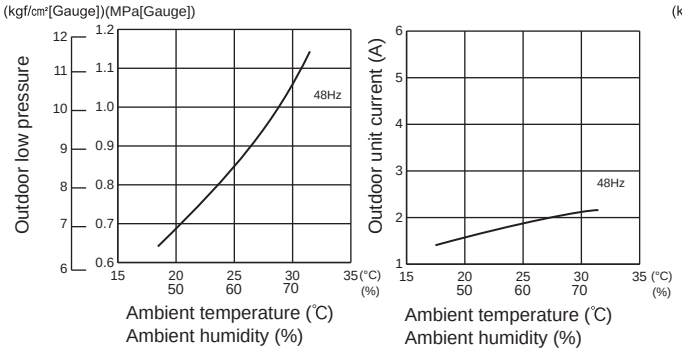
#### 15-class unit



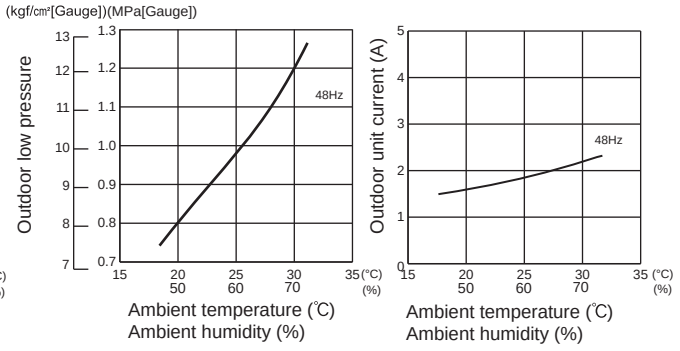

#### 18-class unit



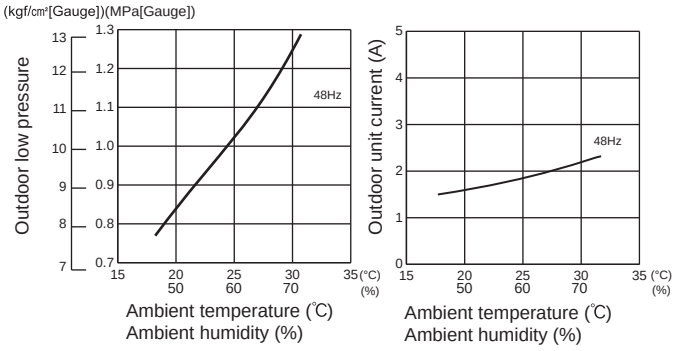

#### 20-class unit




#### 22-class unit

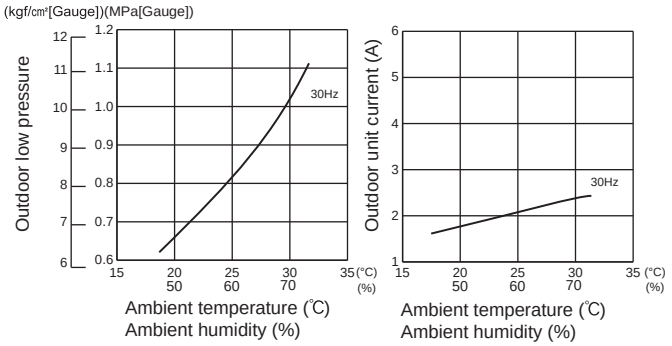



#### 25-class unit

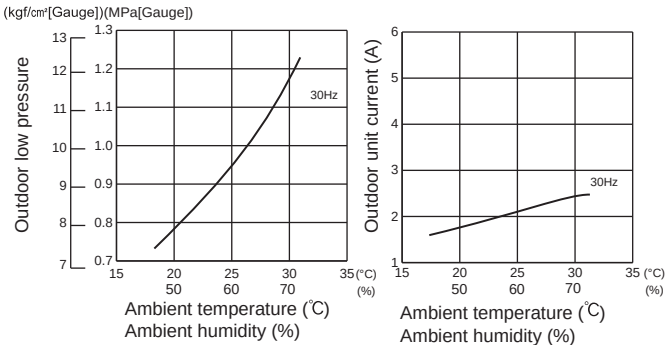


## MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F33VF4

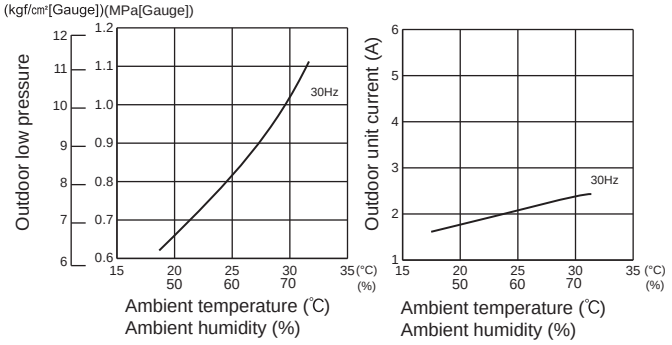
### 15-class unit



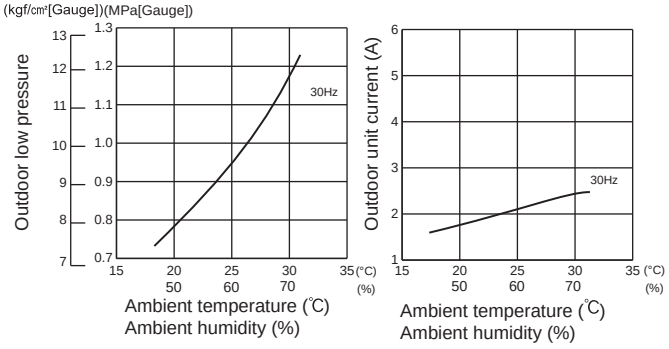

### 18-class unit



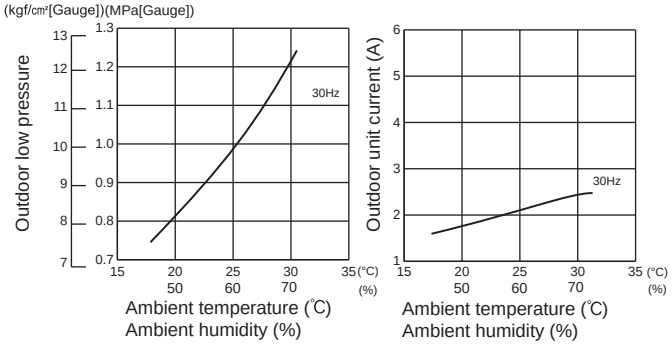

### 20-class unit



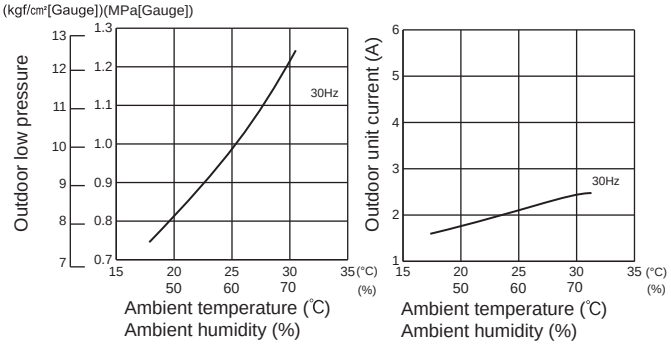

### 22-class unit




### 25-class unit

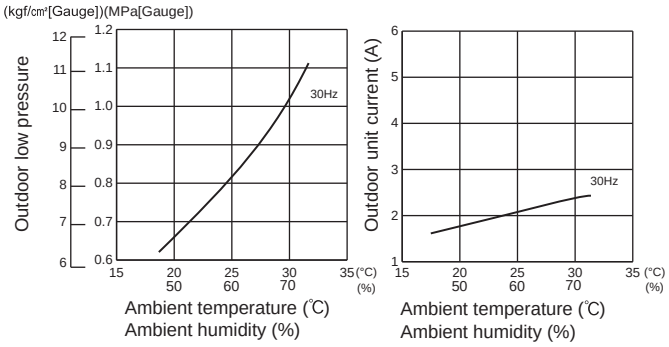



### 35-class unit

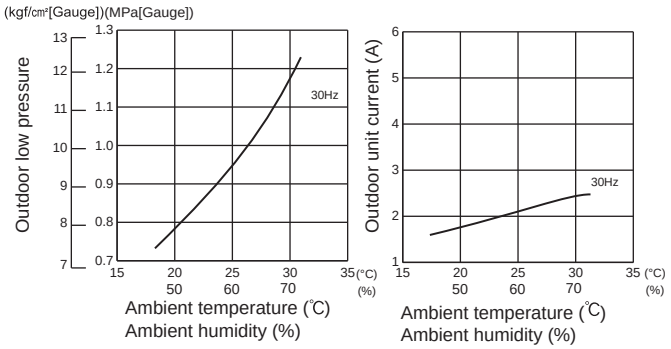


## MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4 MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4

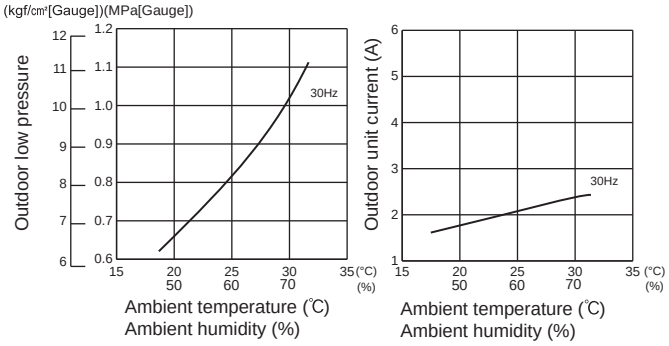
### 15-class unit



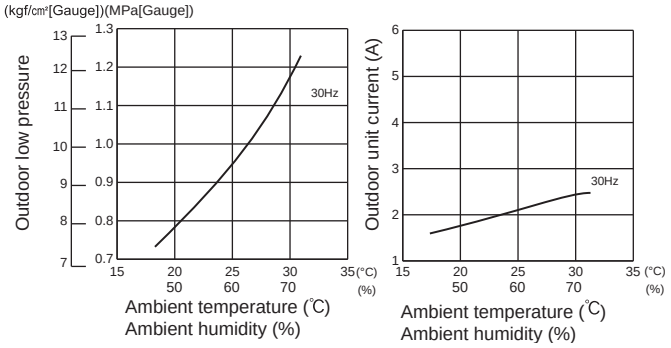

### 18-class unit



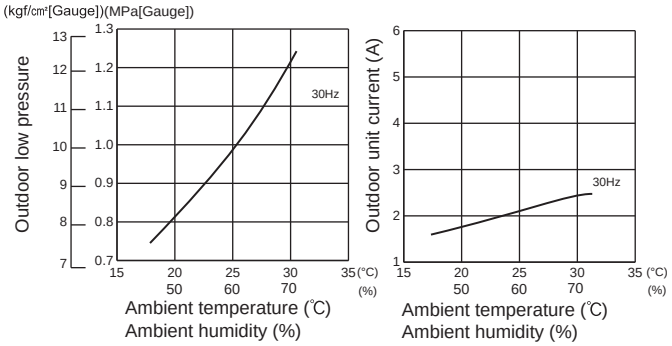

### 20-class unit



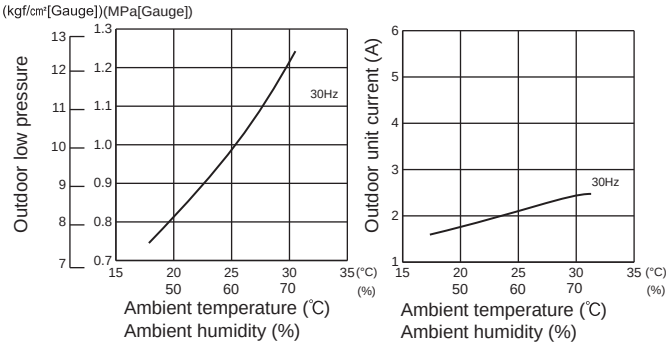

### 22-class unit



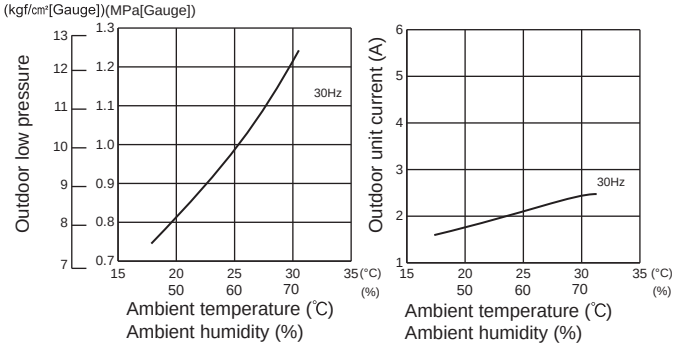

### 25-class unit



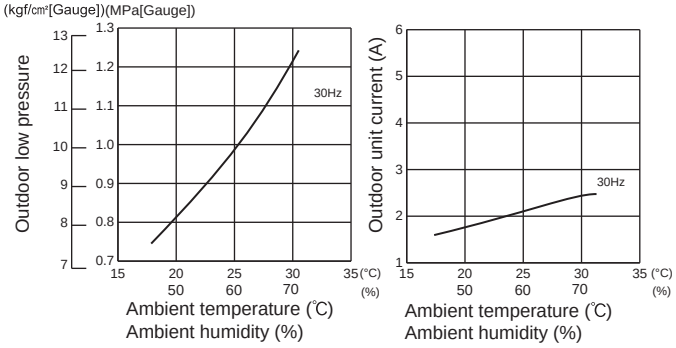

### 35-class unit




### 42-class unit

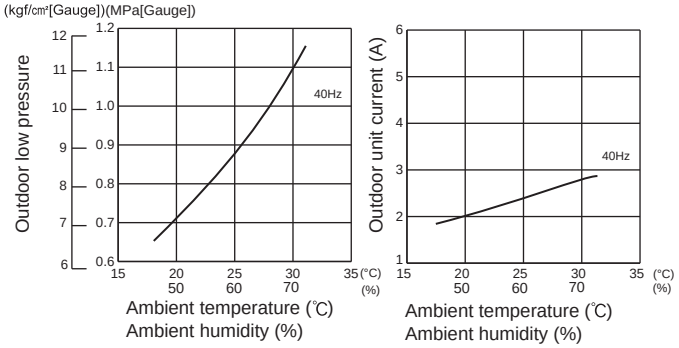



### 50-class unit

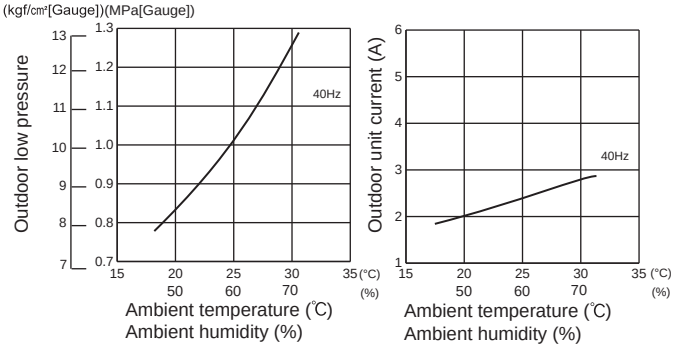


## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

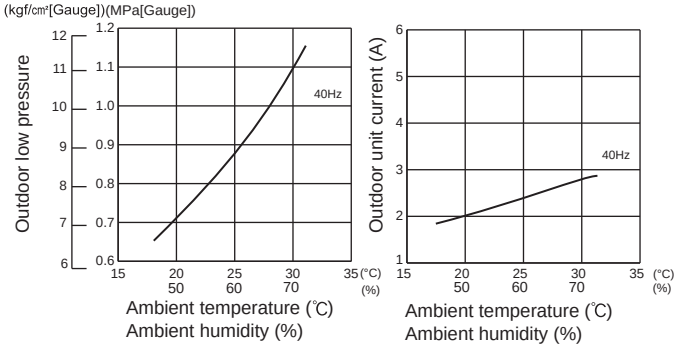
### 15-class unit



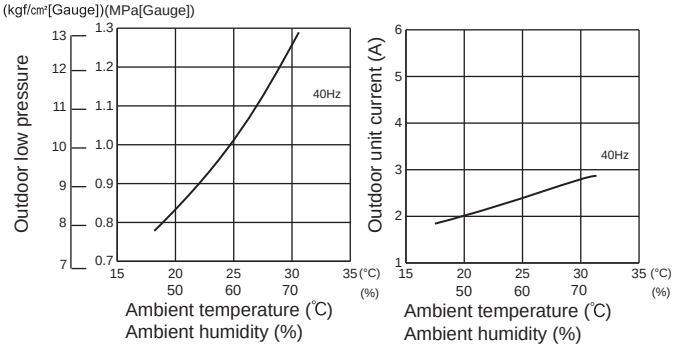

### 18-class unit



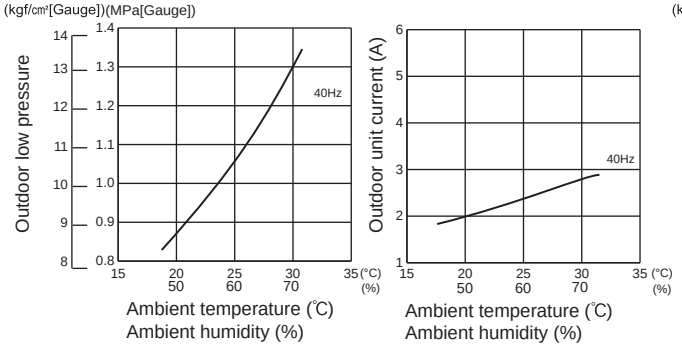

### 20-class unit



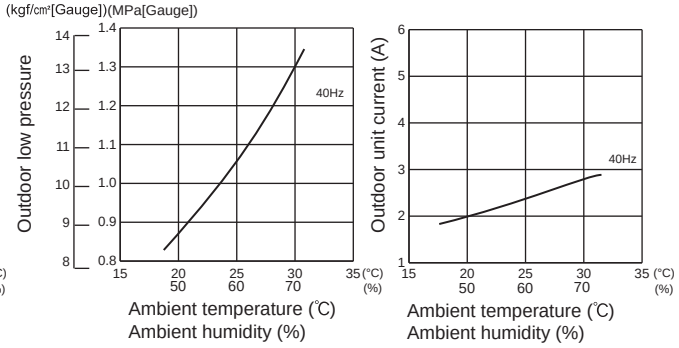

### 22-class unit



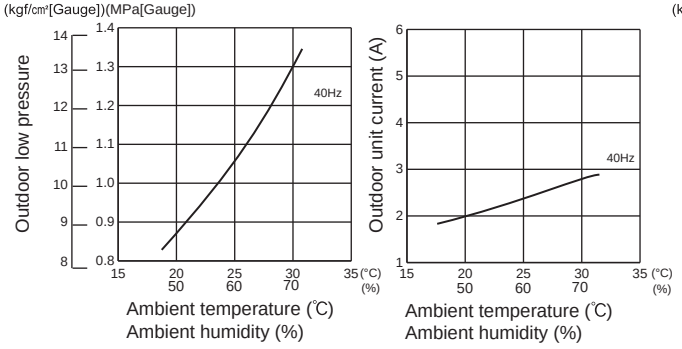

### 25-class unit



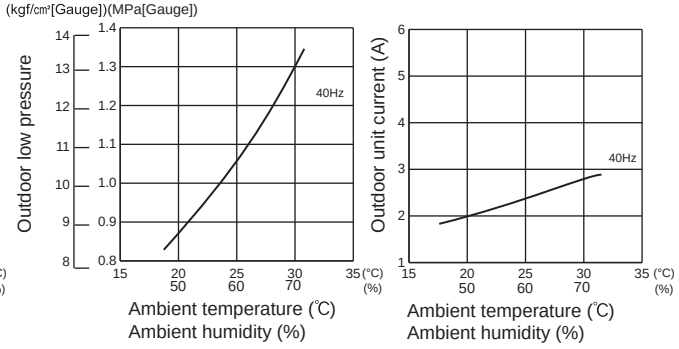

### 35-class unit




### 42-class unit

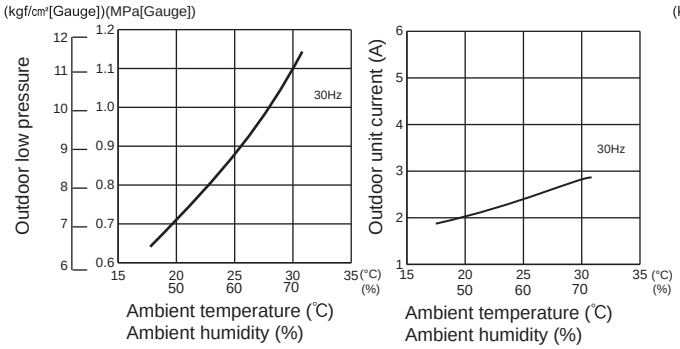



### 50-class unit

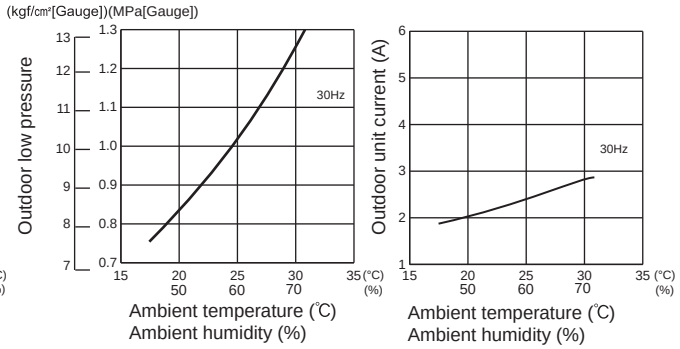


## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4 MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

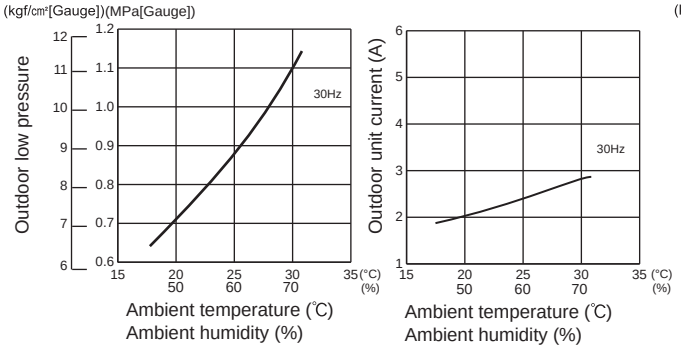
### 15-class unit



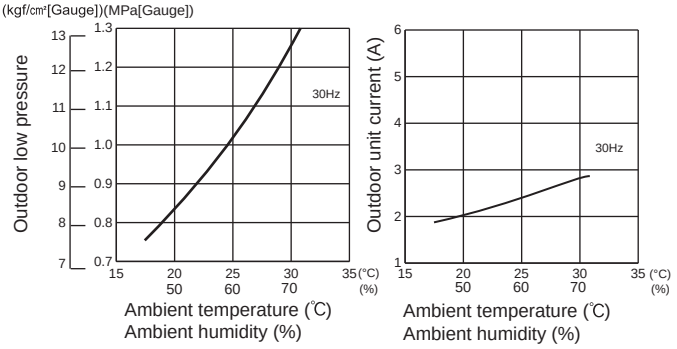

### 18-class unit



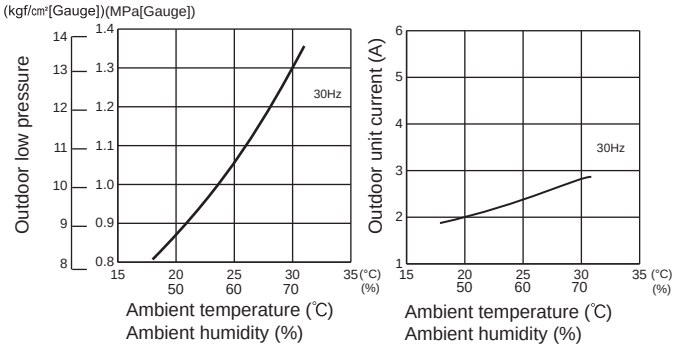

### 20-class unit



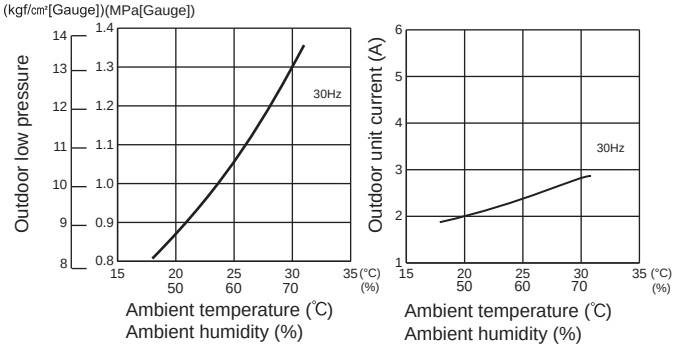

### 22-class unit



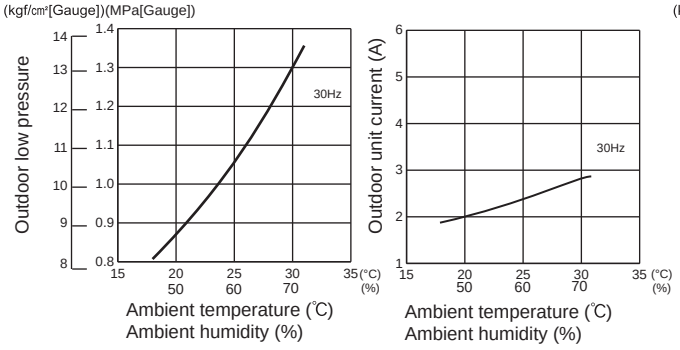

### 25-class unit



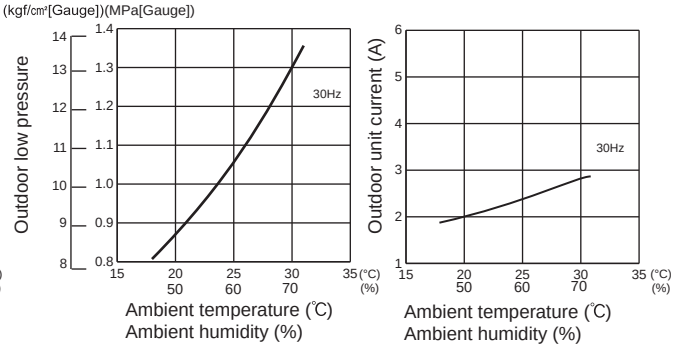

### 35-class unit




### 42-class unit

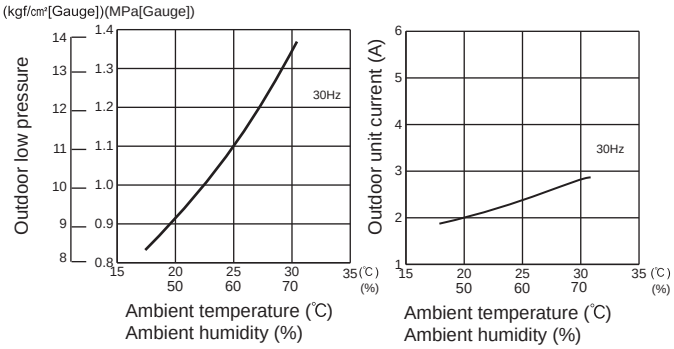



### 50-class unit



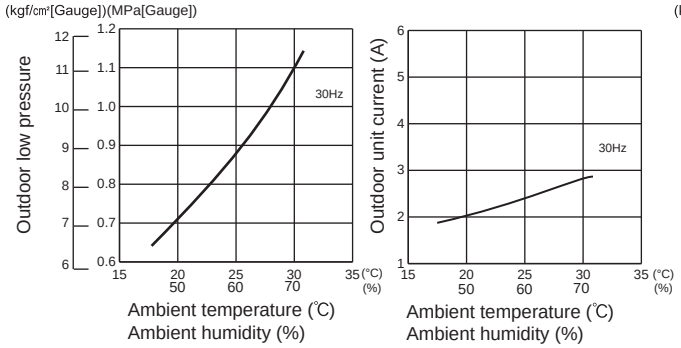
## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4 MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

### 60-class unit

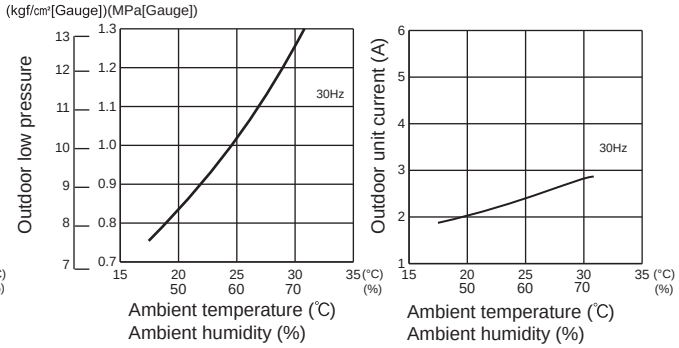



## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

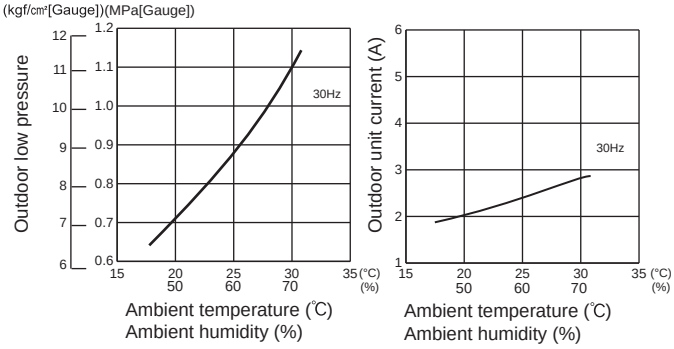
### 15-class unit



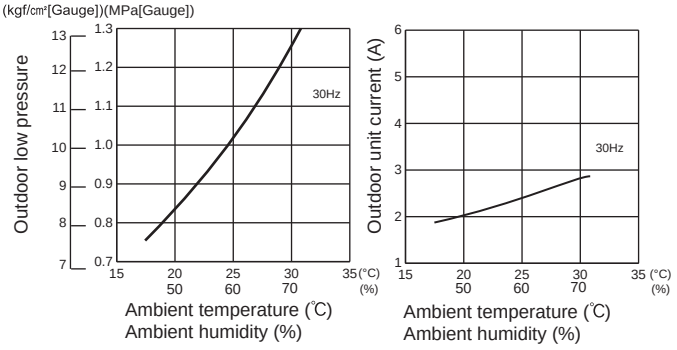

### 18-class unit



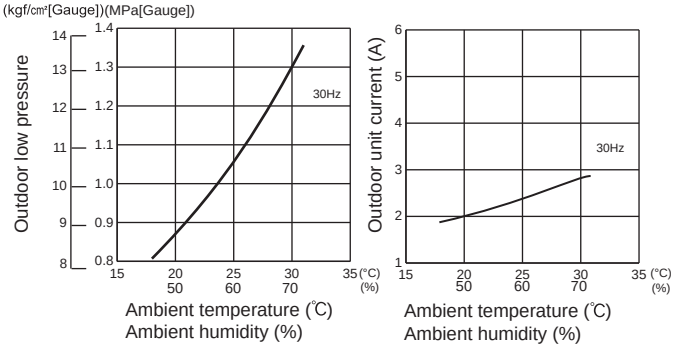

### 20-class unit



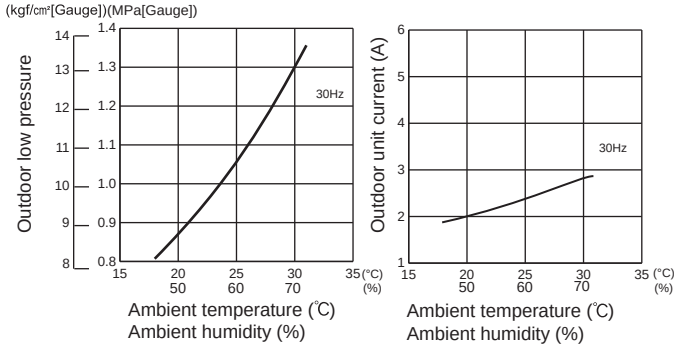

### 22-class unit




### 25-class unit

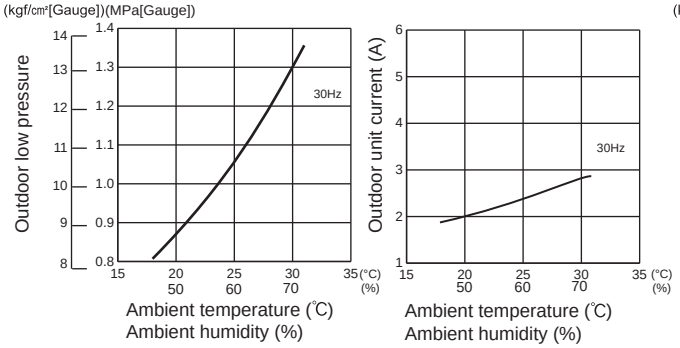



### 35-class unit

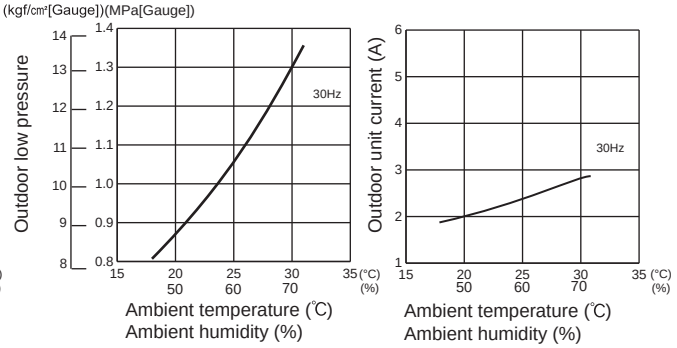


## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

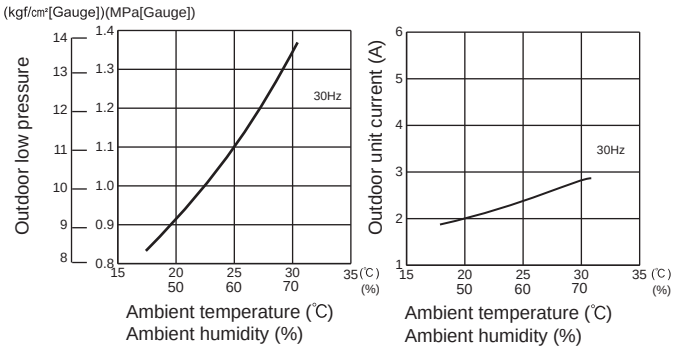
### 42-class unit




### 50-class unit

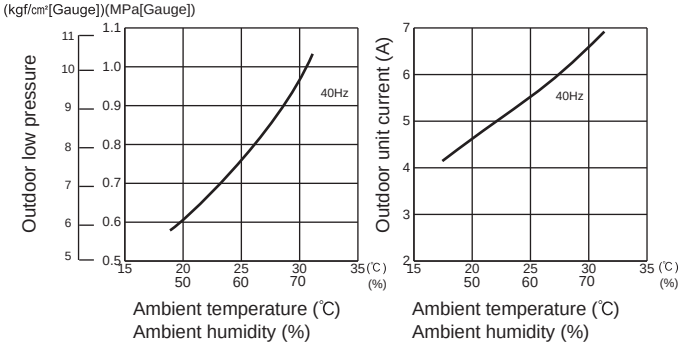



### 60-class unit

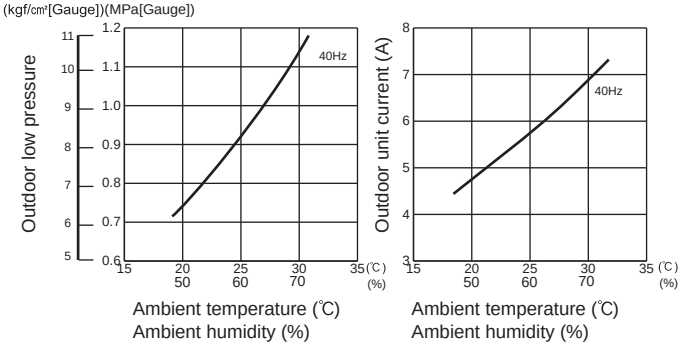



## MXZ-4F83VF MXZ-4F83VF2

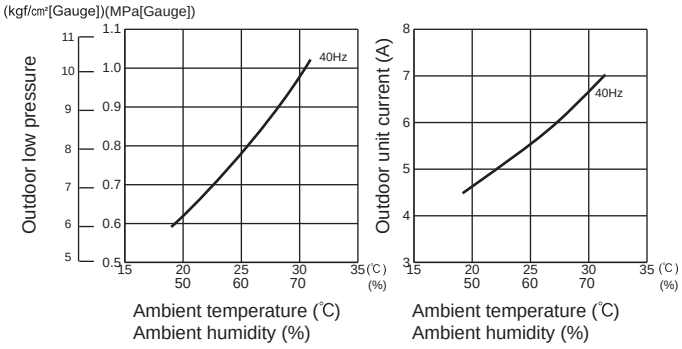
### 15-class unit



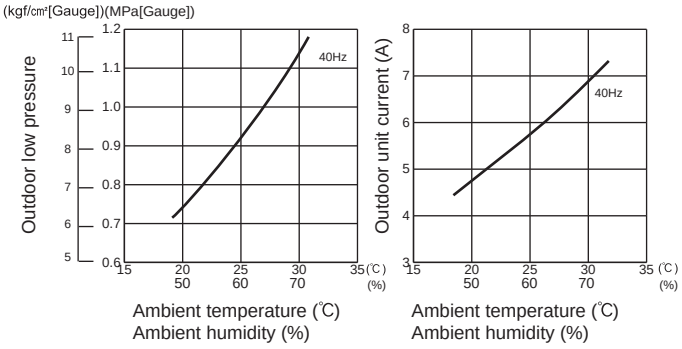

### 18-class unit




### 20-class unit

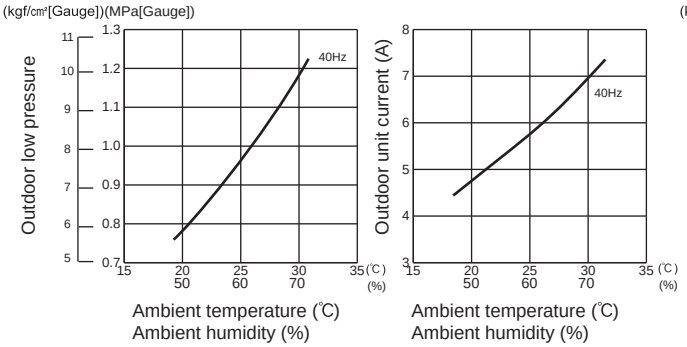



### 22-class unit

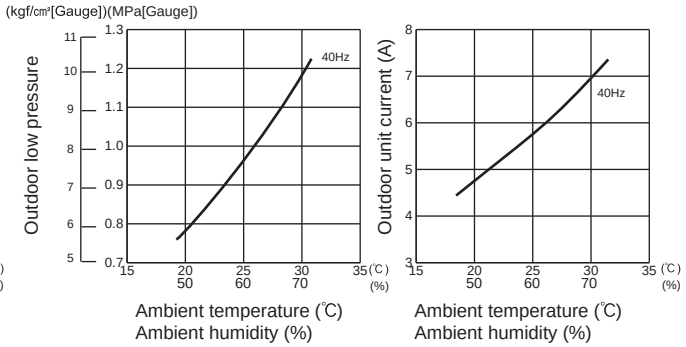


## MXZ-4F83VF MXZ-4F83VF2

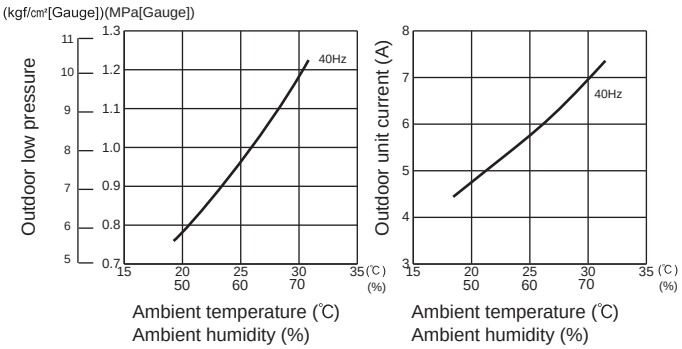
### 25-class unit



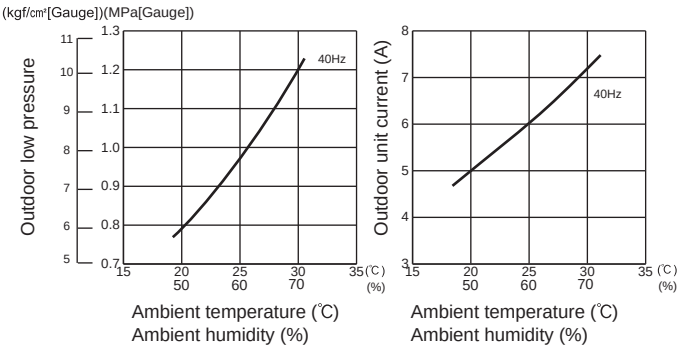

### 35-class unit



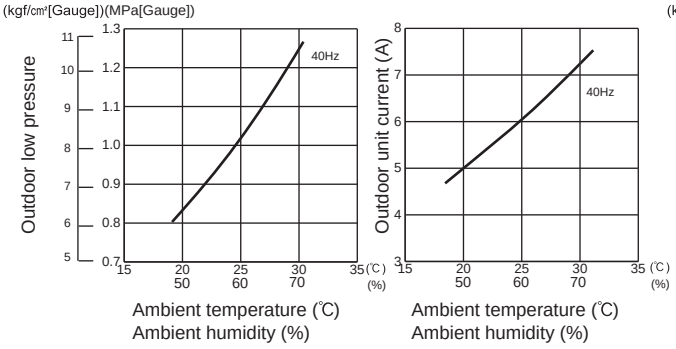

### 42-class unit



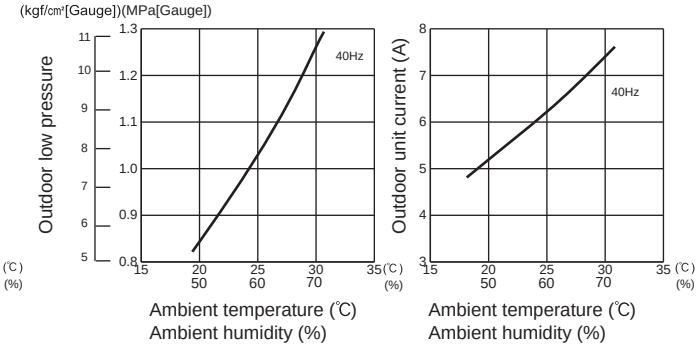

### 50-class unit




### 60-class unit

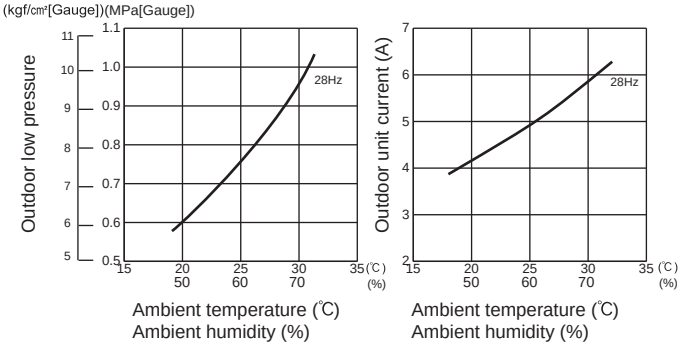



### 71-class unit

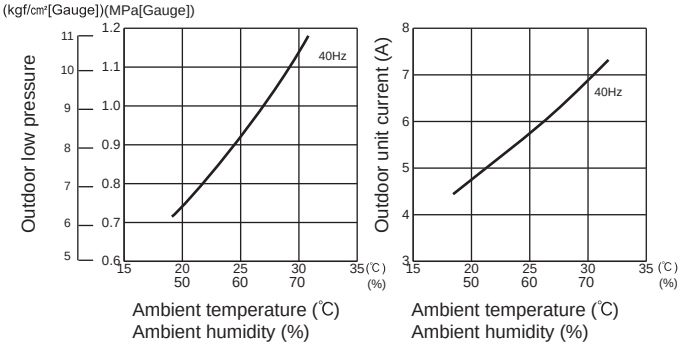



## MXZ-5F102VF MXZ-5F102VF2

### 15-class unit

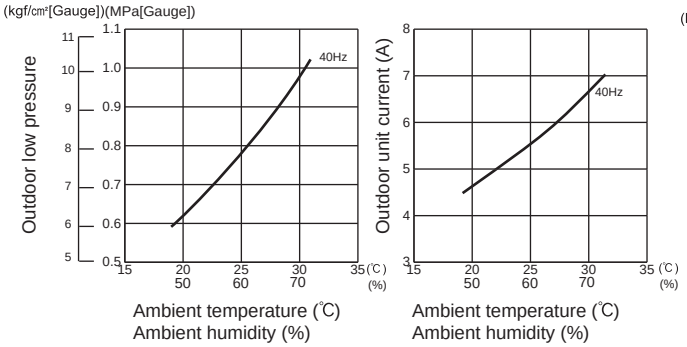



### 18-class unit

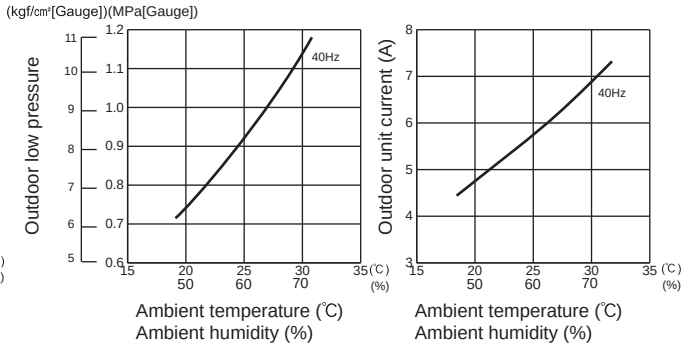


## MXZ-5F102VF2 MXZ-5F102VF

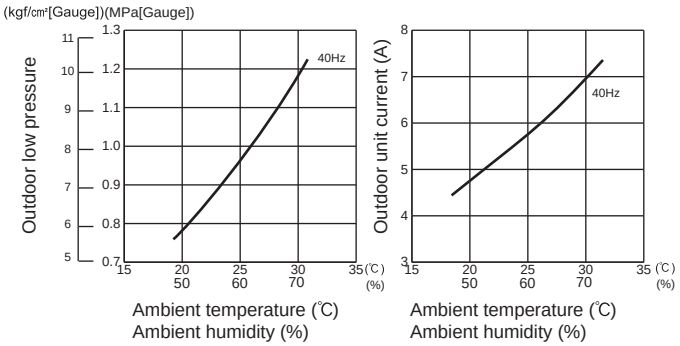
### 20-class unit



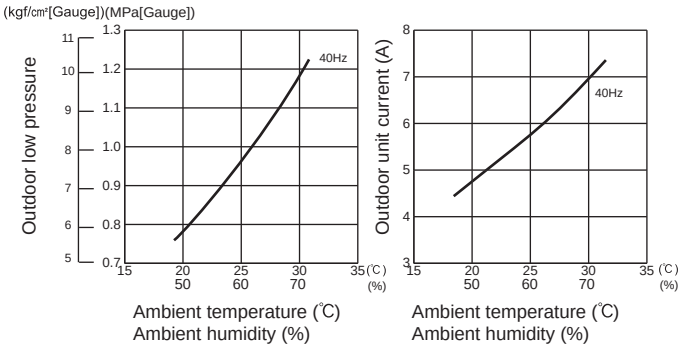

### 22-class unit



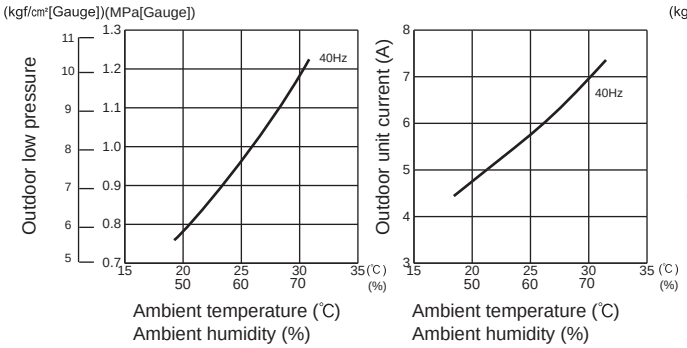

### 25-class unit



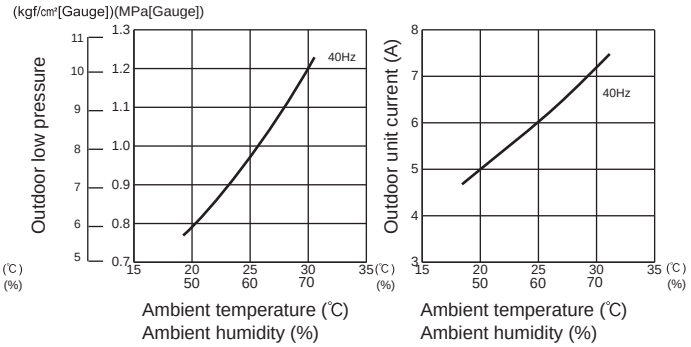

### 35-class unit



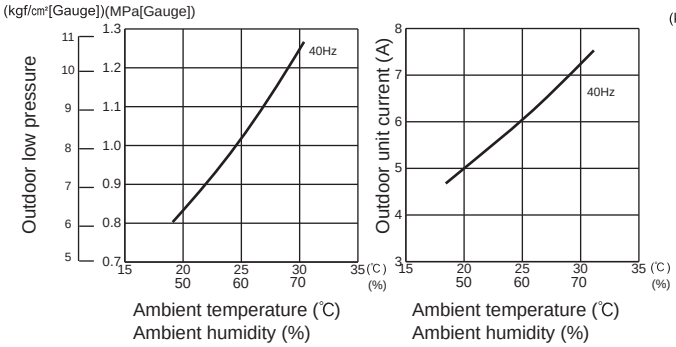

### 42-class unit



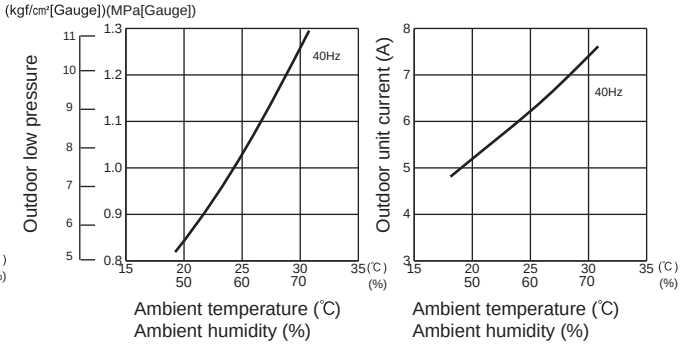

### 50-class unit




### 60-class unit

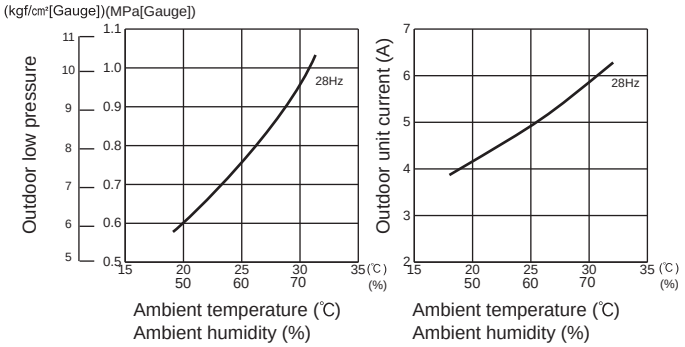



### 71-class unit

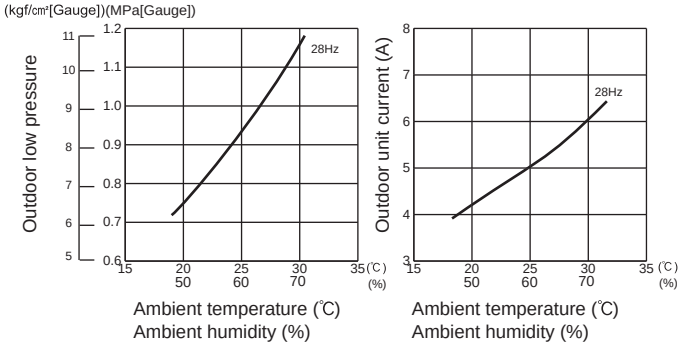


## MXZ-6F120VF2 MXZ-6F122VF

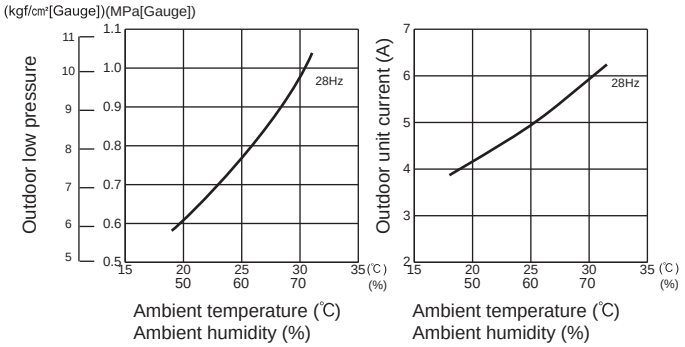
### 15-class unit



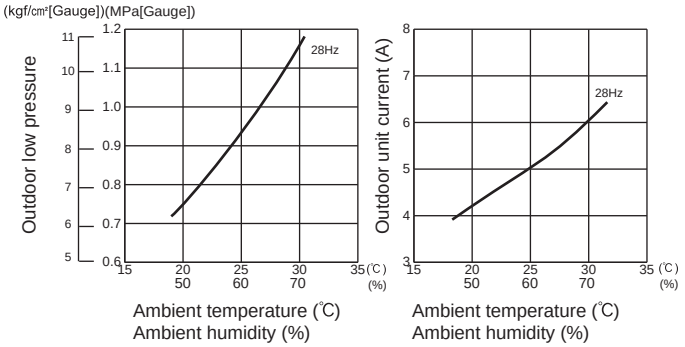

### 18-class unit



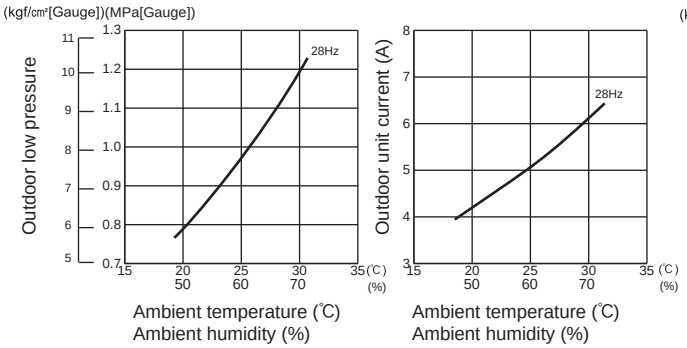

### 20-class unit



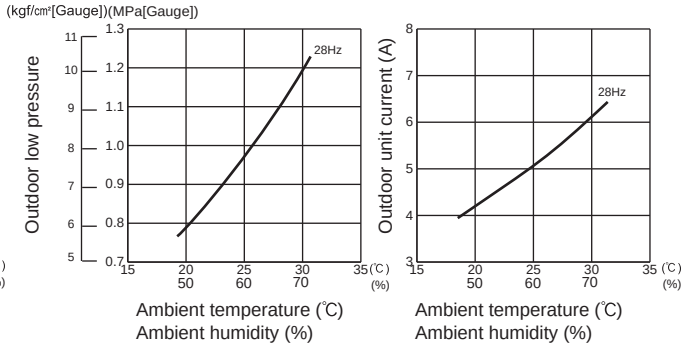

### 22-class unit



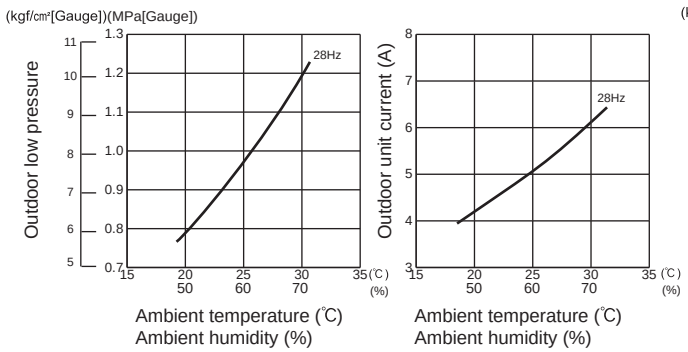

### 25-class unit



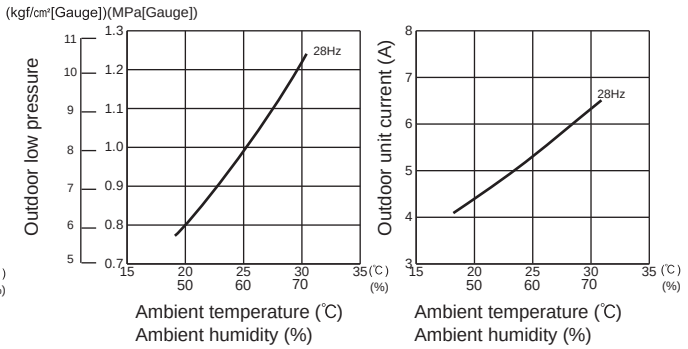

### 35-class unit



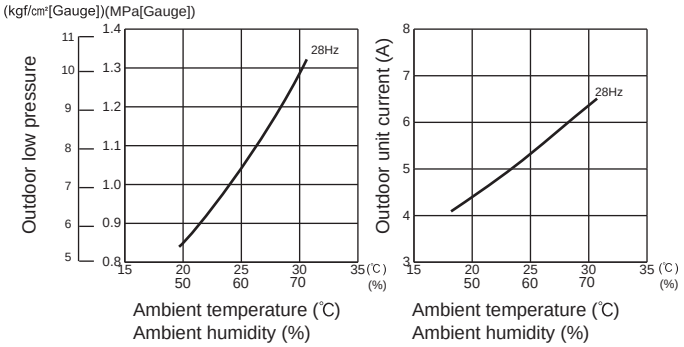

### 42-class unit



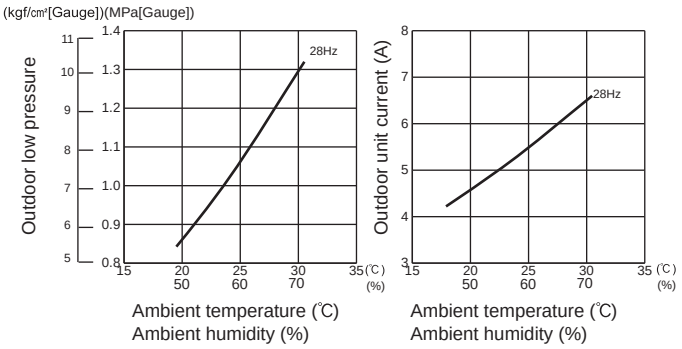

### 50-class unit



## 60-class unit

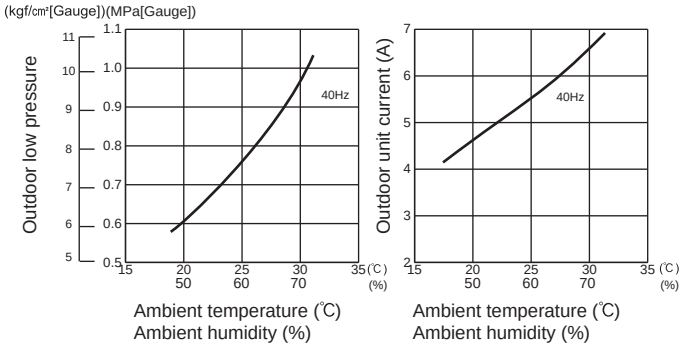



## 71-class unit

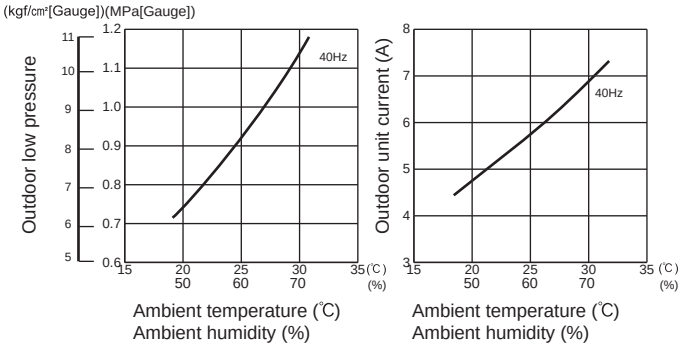



# MXZ-2F53VFHZ MXZ-2F53VFHZ2

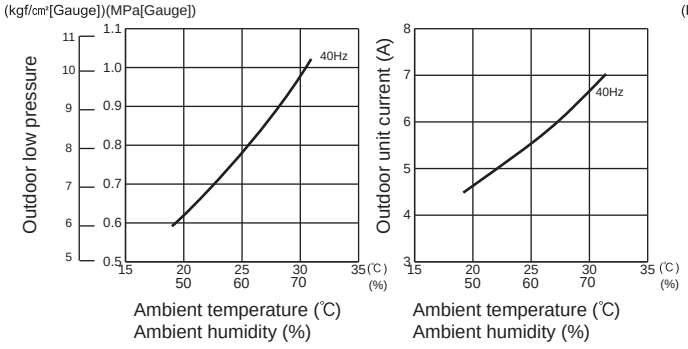
## 15-class unit



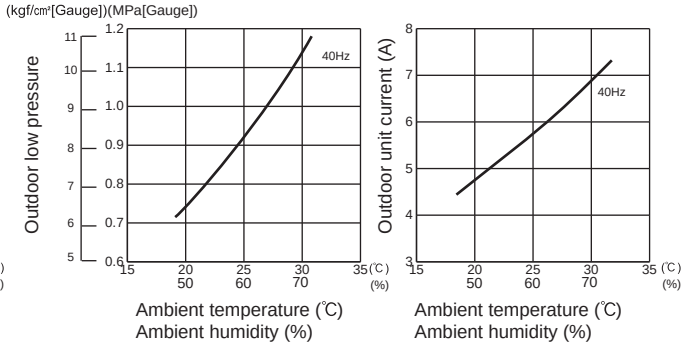

## 18-class unit



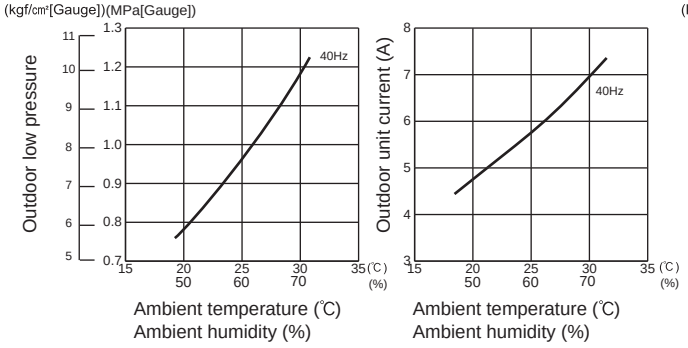

## 20-class unit



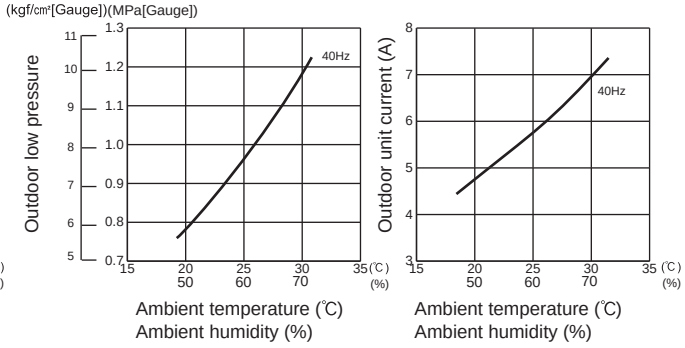

## 22-class unit




## 25-class unit

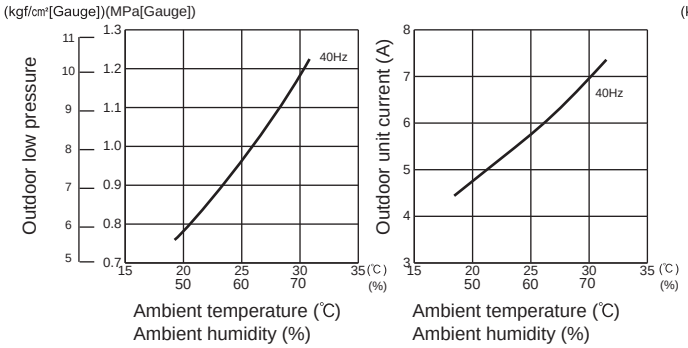



## 35-class unit

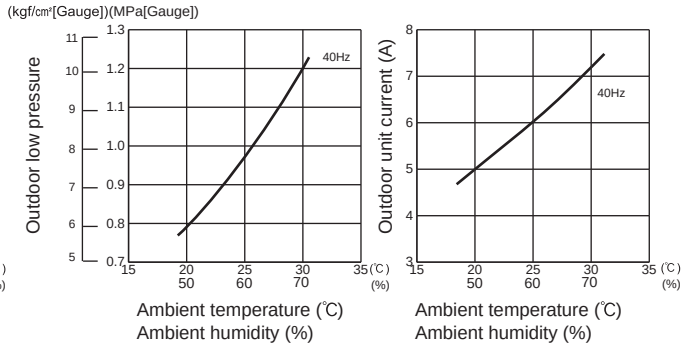


## MXZ-2F53VFHZ MXZ-2F53VFHZ2

### 42-class unit

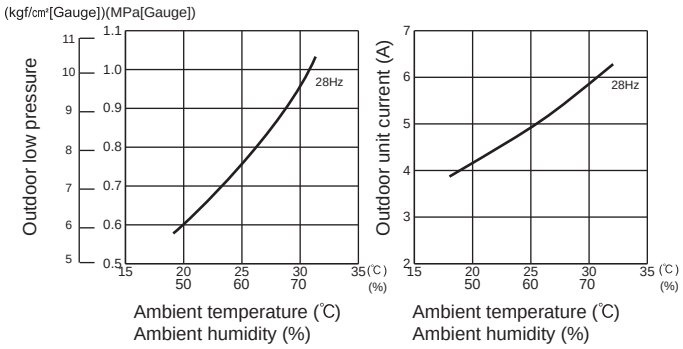



### 50-class unit

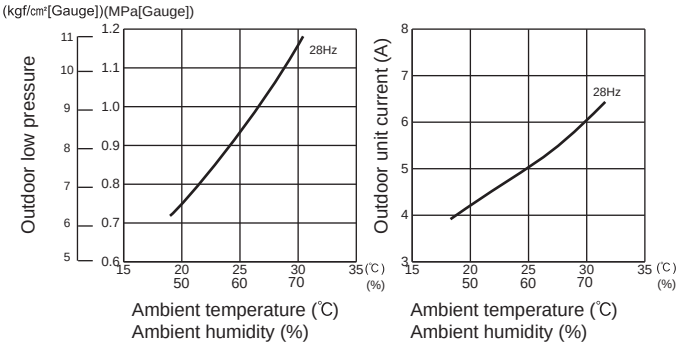



## MXZ-4F83VFHZ MXZ-4F83VFHZ2

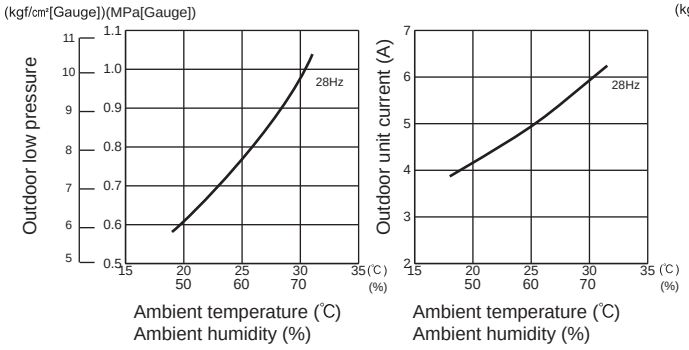
### 15-class unit



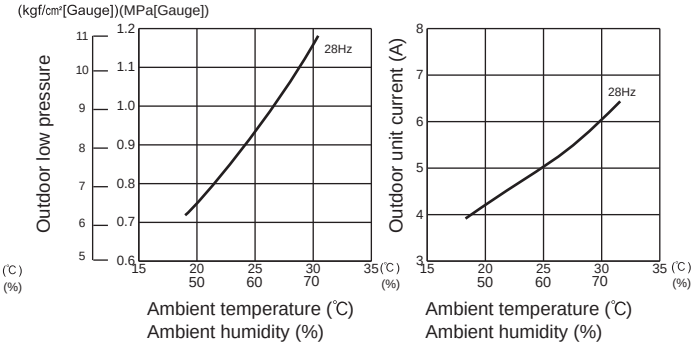

### 18-class unit



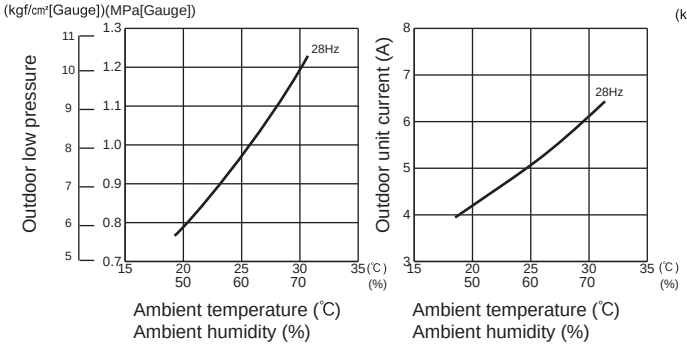

### 20-class unit



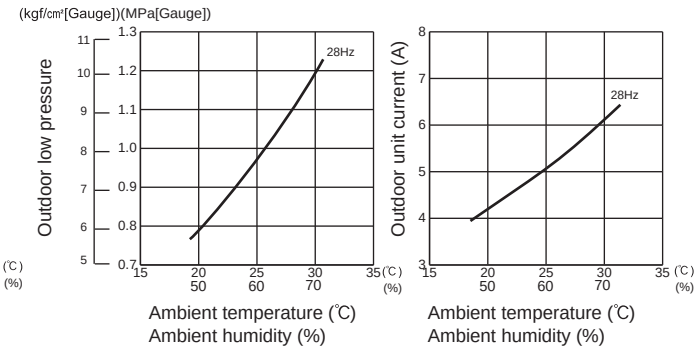

### 22-class unit




### 25-class unit

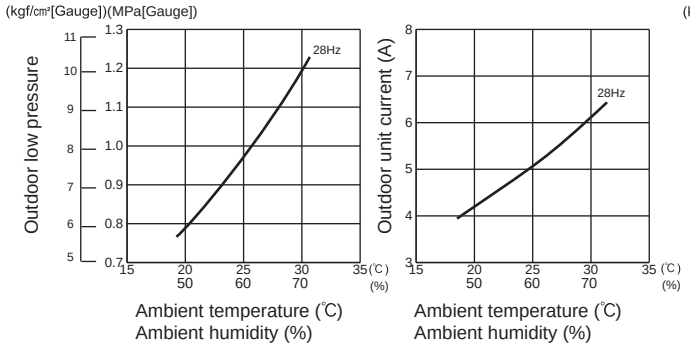



### 35-class unit

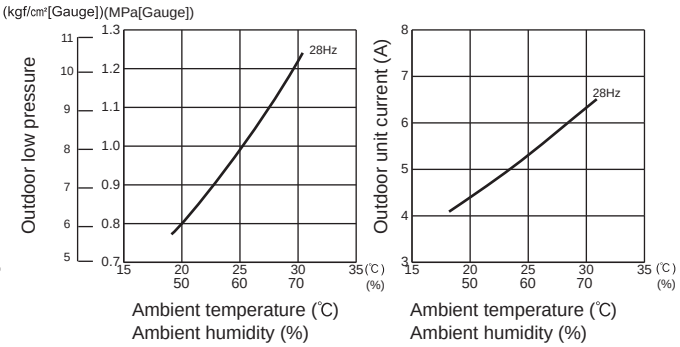


## MXZ-4F83VFHZ MXZ-4F83VFHZ2

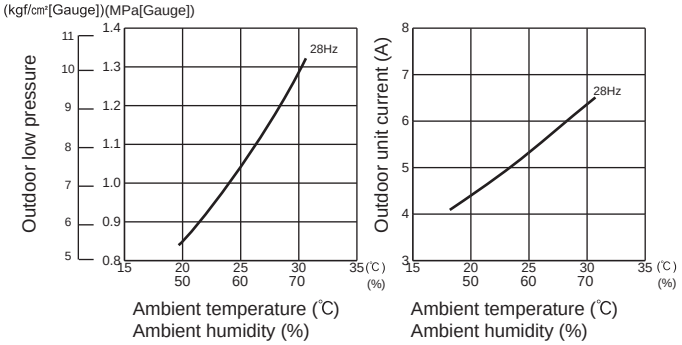
### 42-class unit



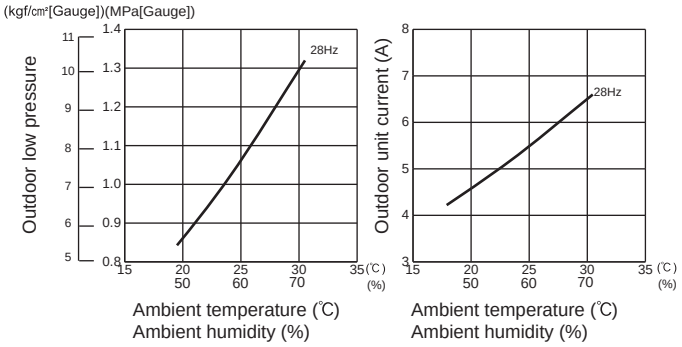

### 50-class unit




### 60-class unit




### 71-class unit



## (2) HEAT operation

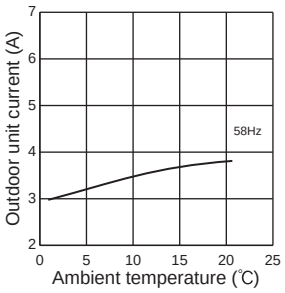
① Condition :

| | Indoor | Outdoor | | | |
|---|---|---|---|---|---|
| Dry bulb temperature (°C) | 20.0 | 2 | 7 | 15 | 20.0 |
| Wet bulb temperature (°C) | 14.5 | 1 | 6 | 12 | 14.5 |

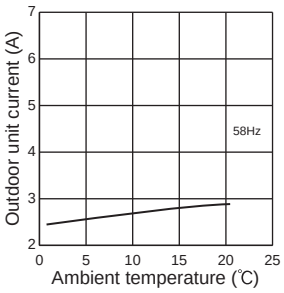
② Operation : TEST RUN OPERATION (Refer to 9-3.)

### MXZ-2F33VF MXZ-2F33VF2 MXZ-2F33VF3 MXZ-2F33VF4

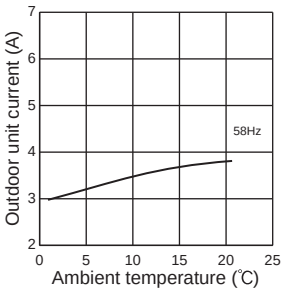
#### 15-class unit



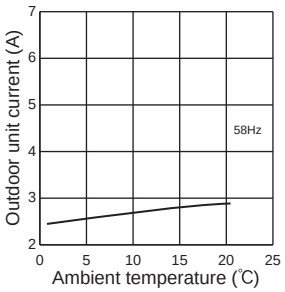

#### 18-class unit



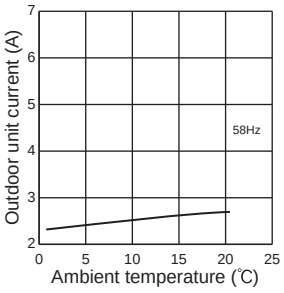

#### 20-class unit




#### 22-class unit

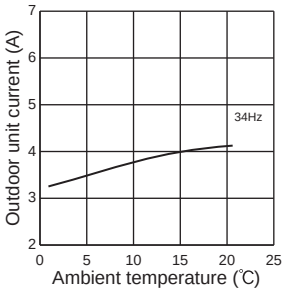



#### 25-class unit

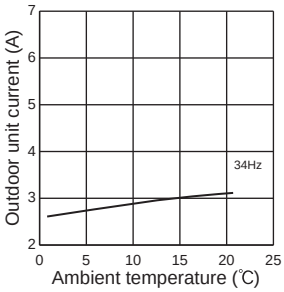



### MXZ-2F42VF MXZ-2F42VF2 MXZ-2F42VF3 MXZ-2F42VF4

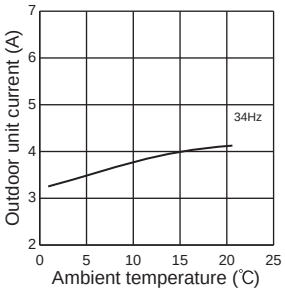
#### 15-class unit



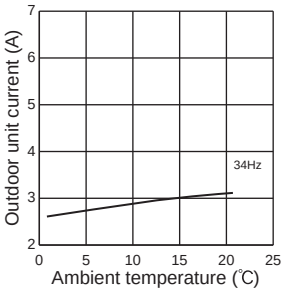

#### 18-class unit



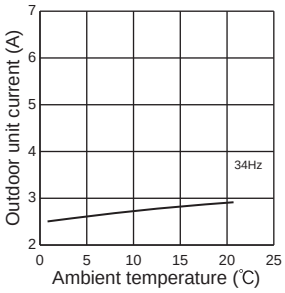

#### 20-class unit



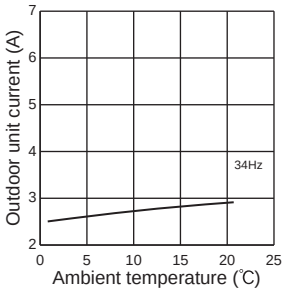

#### 22-class unit




#### 25-class unit

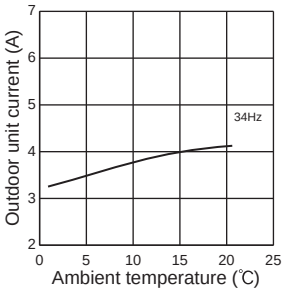



#### 35-class unit

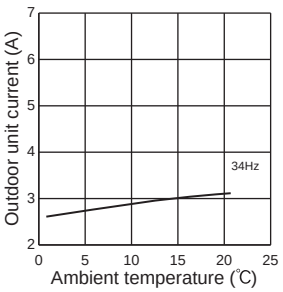


## MXZ-2F53VF MXZ-2F53VF2 MXZ-2F53VF3 MXZ-2F53VF4 MXZ-2F53VFH MXZ-2F53VFH2 MXZ-2F53VFH3 MXZ-2F53VFH4

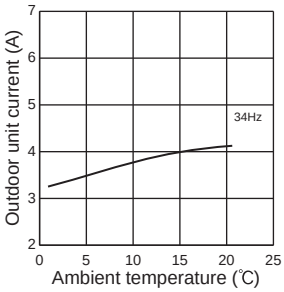
### 15-class unit



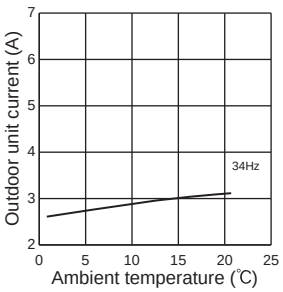

### 18-class unit



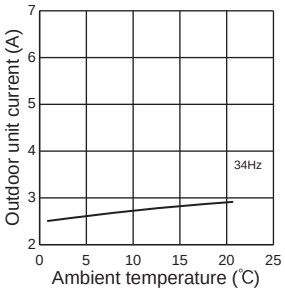

### 20-class unit



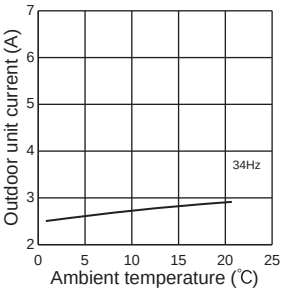

### 22-class unit



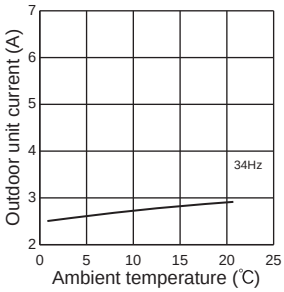

### 25-class unit



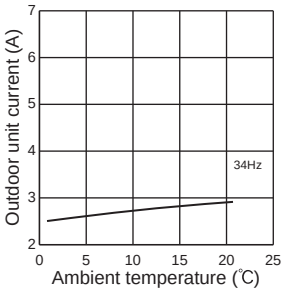

### 35-class unit




### 42-class unit

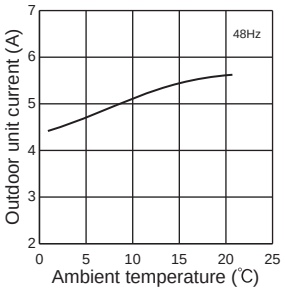



### 50-class unit

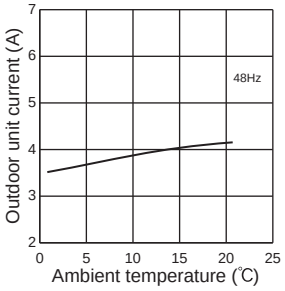



## MXZ-3F54VF MXZ-3F54VF2 MXZ-3F54VF3 MXZ-3F54VF4

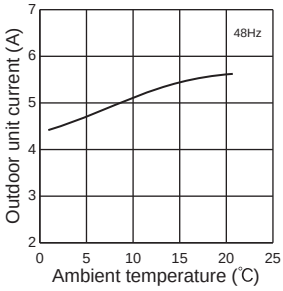
### 15-class unit



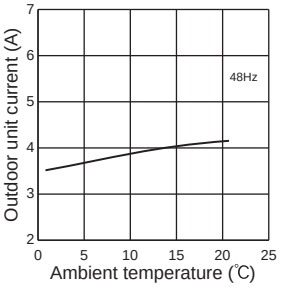

### 18-class unit



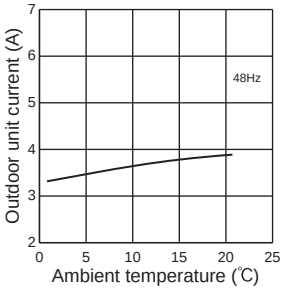

### 20-class unit



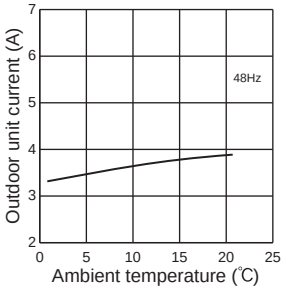

### 22-class unit



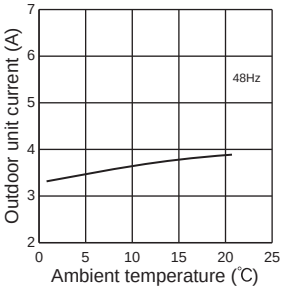

### 25-class unit



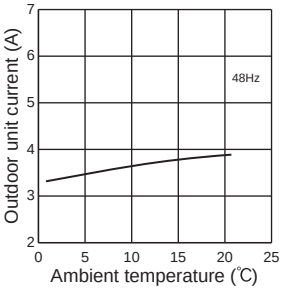

### 35-class unit




### 42-class unit

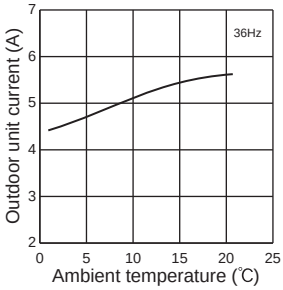



### 50-class unit

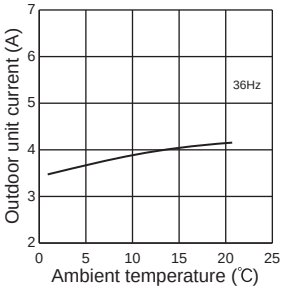


## MXZ-3F68VF MXZ-3F68VF2 MXZ-3F68VF3 MXZ-3F68VF4 MXZ-4F72VF MXZ-4F72VF2 MXZ-4F72VF3 MXZ-4F72VF4

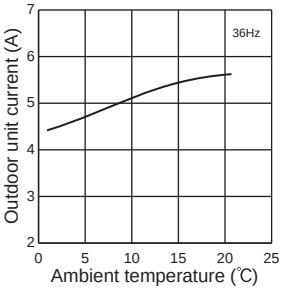
### 15-class unit



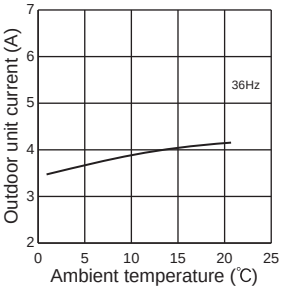

### 18-class unit



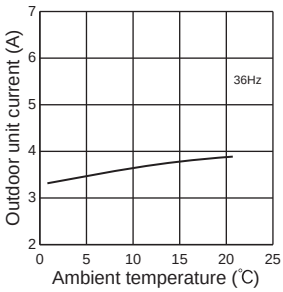

### 20-class unit



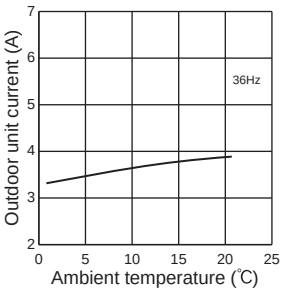

### 22-class unit



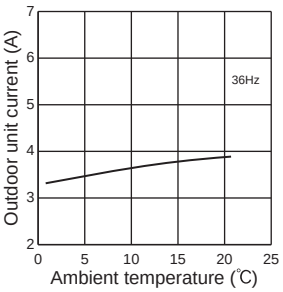

### 25-class unit



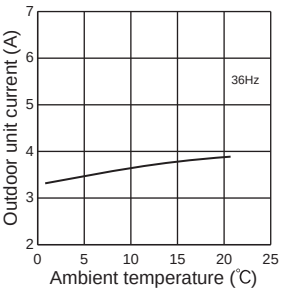

### 35-class unit



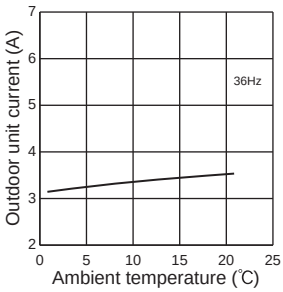

### 42-class unit




### 50-class unit

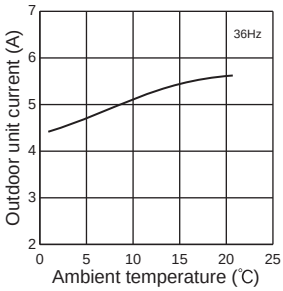



### 60-class unit

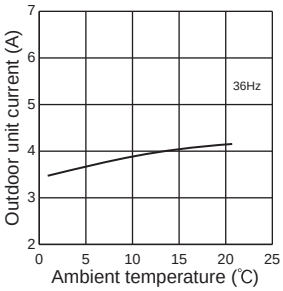



## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

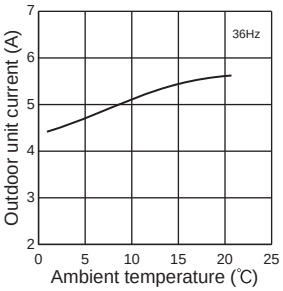
### 15-class unit



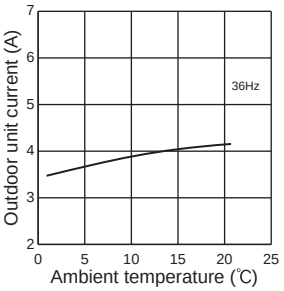

### 18-class unit



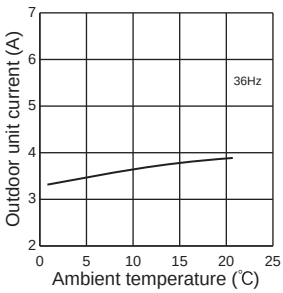

### 20-class unit



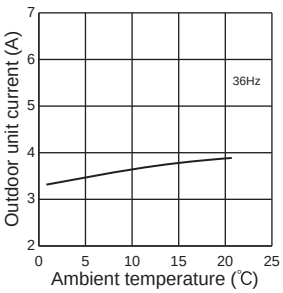

### 22-class unit



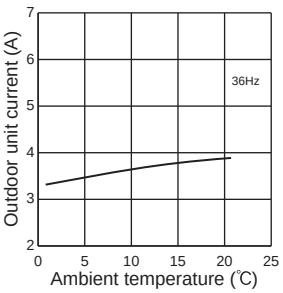

### 25-class unit



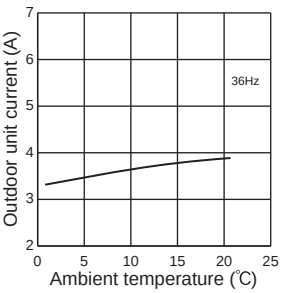

### 35-class unit




### 42-class unit

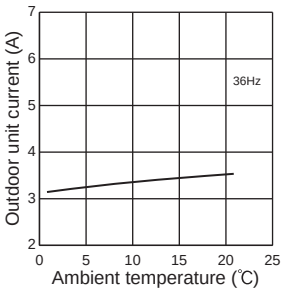



### 50-class unit



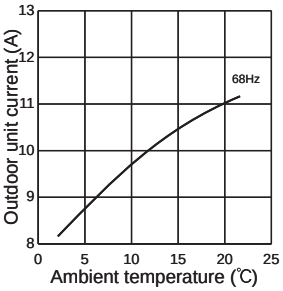
## MXZ-4F80VF2 MXZ-4F80VF3 MXZ-4F80VF4

### 60-class unit

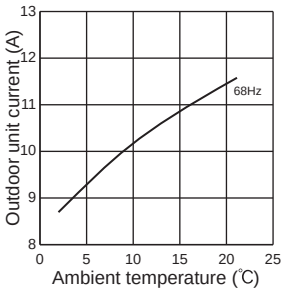



## MXZ-4F83VF MXZ-4F83VF2

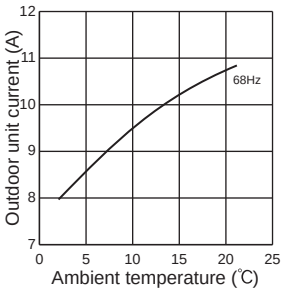
### 15-class unit



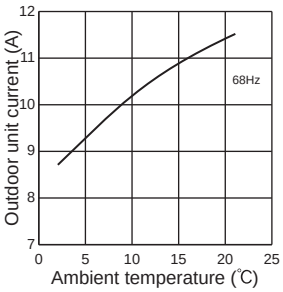

### 18-class unit



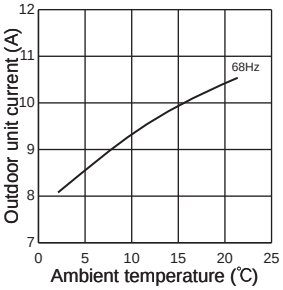

### 20-class unit



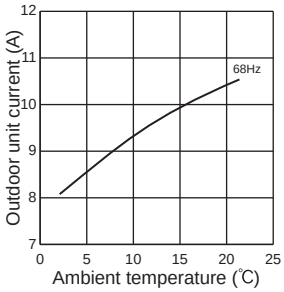

### 22-class unit



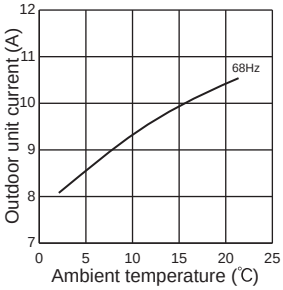

### 25-class unit



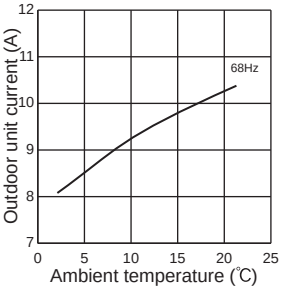

### 35-class unit



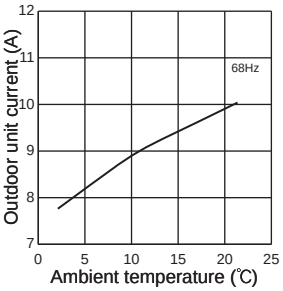

### 42-class unit



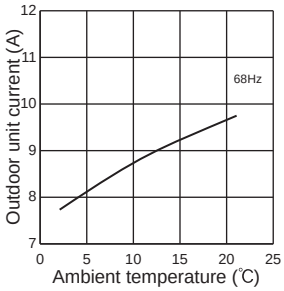

### 50-class unit




### 60-class unit

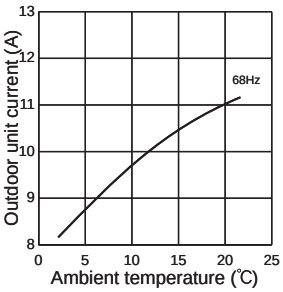



### 71-class unit

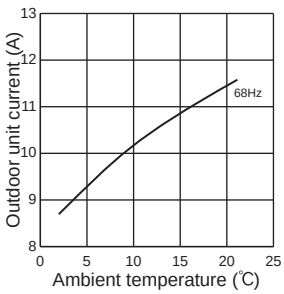


## MXZ-5F102VF MXZ-5F102VF2

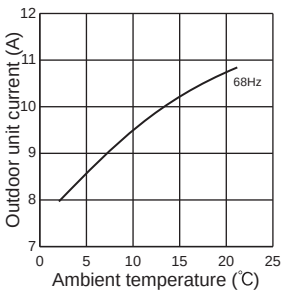
### 15-class unit



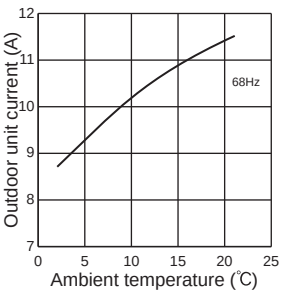

### 18-class unit



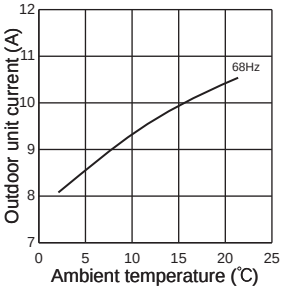

### 20-class unit



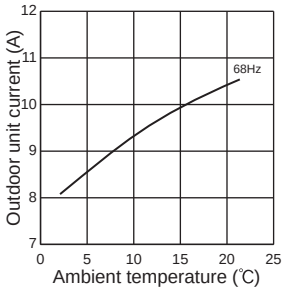

### 22-class unit



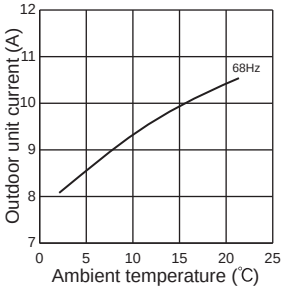

### 25-class unit



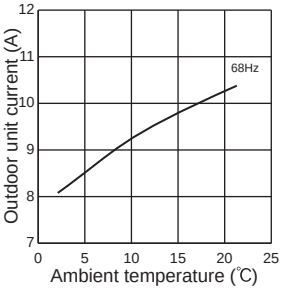

### 35-class unit



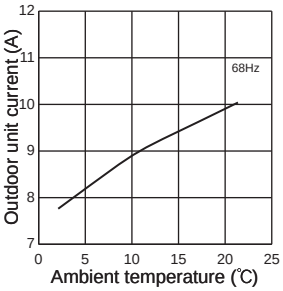

### 42-class unit



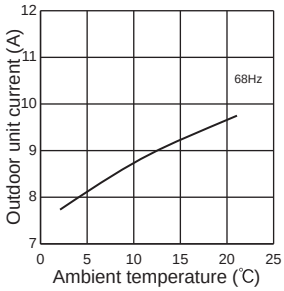

### 50-class unit




### 60-class unit

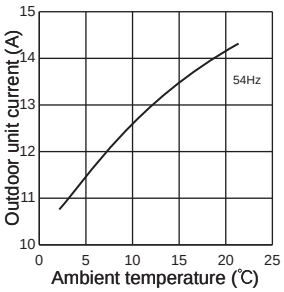



### 71-class unit

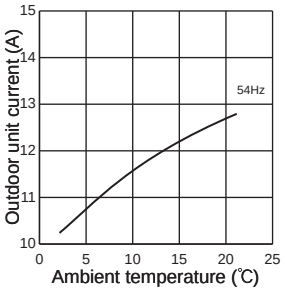


## MXZ-6F120VF2 MXZ-6F122VF

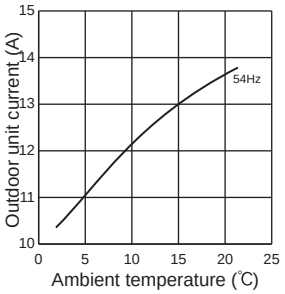
### 15-class unit



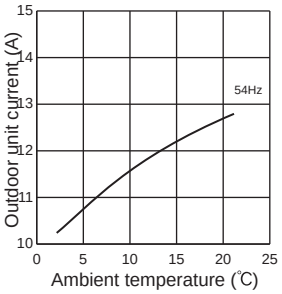

### 18-class unit



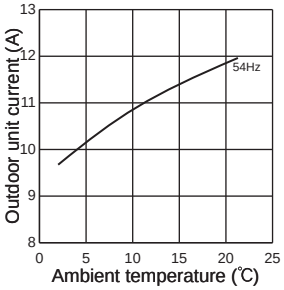

### 20-class unit



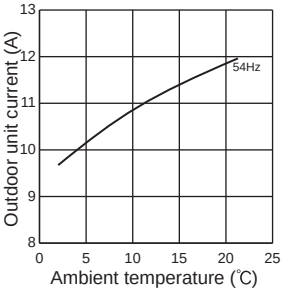

### 22-class unit



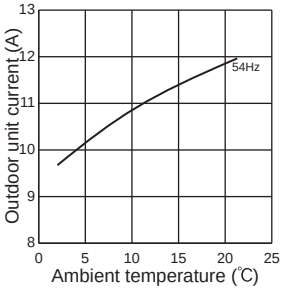

### 25-class unit



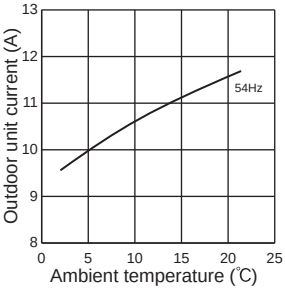

### 35-class unit



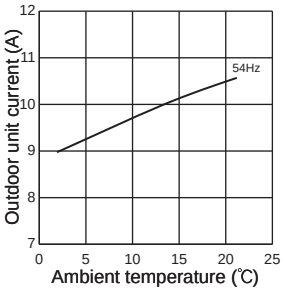

### 42-class unit



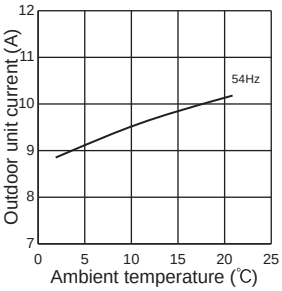

### 50-class unit




### 60-class unit

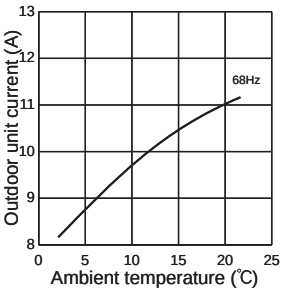



### 71-class unit

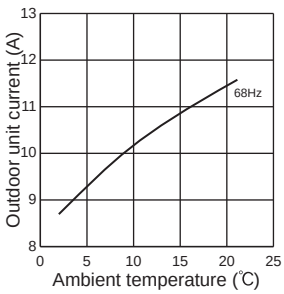


## MXZ-2F53VFHZ MXZ-2F53VFHZ2

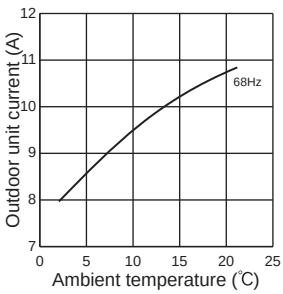
### 15-class unit



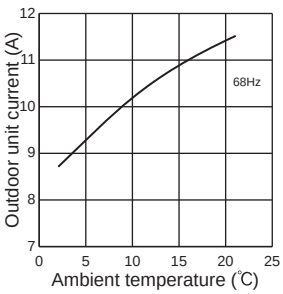

### 18-class unit



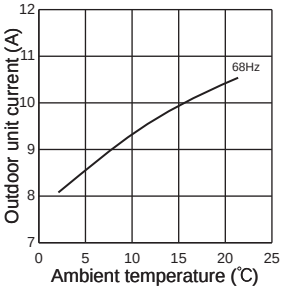

### 20-class unit



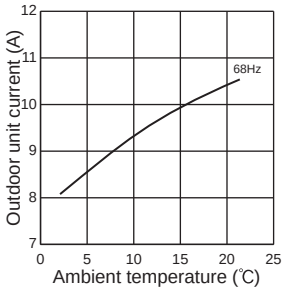

### 22-class unit



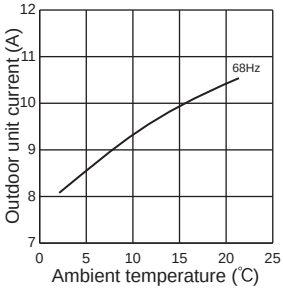

### 25-class unit



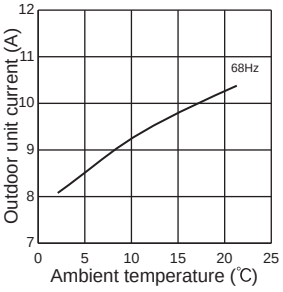

### 35-class unit




### 42-class unit

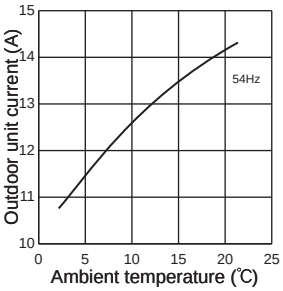



### 50-class unit

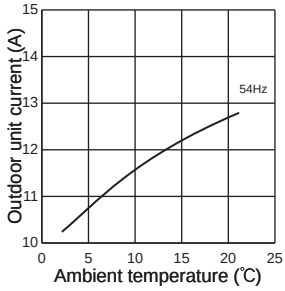



## MXZ-4F83VFHZ MXZ-4F83VFHZ2

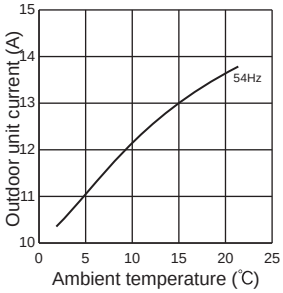
### 15-class unit



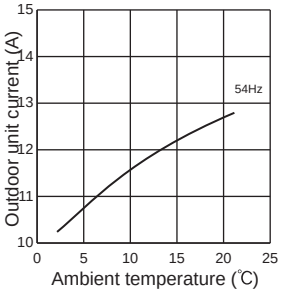

### 18-class unit



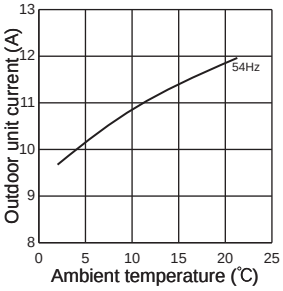

### 20-class unit



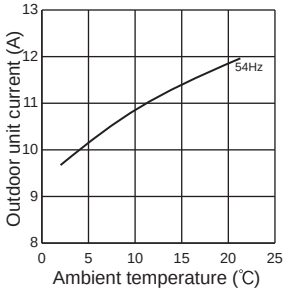

### 22-class unit



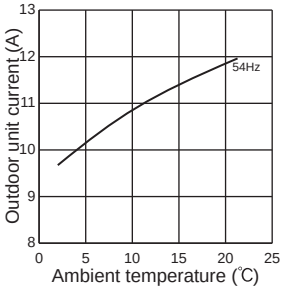

### 25-class unit



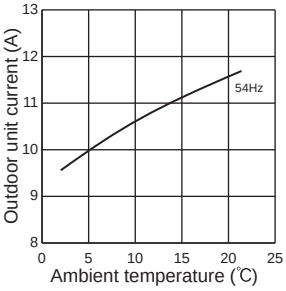

### 35-class unit



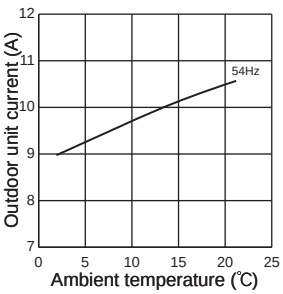

### 42-class unit



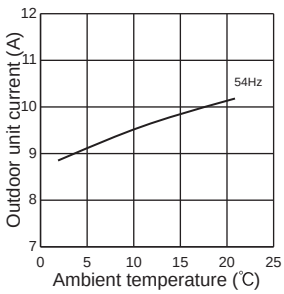

### 50-class unit




### 60-class unit




### 71-class unit



# 10 ACTUATOR CONTROL

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**

**Relation between main sensor and actuator**

| Sensor | Purpose | Actuator | | | | |
|---|---|---|---|---|---|---|
| | | Compressor | LEV | Outdoor fan motor | 4-way valve | Defrost heater *1 |
| Discharge temperature thermistor | Protection | ○ | ○ | | | |
| Indoor coil temperature thermistor | Cooling: Coil frost prevention | ○ | | | | |
| | Heating: High pressure protection | ○ | ○ | | | |
| Defrost thermistor | Heating: Defrosting | ○ | ○ | ○ | ○ | |
| Fin temperature thermistor | Protection | ○ | | ○ | | |
| Ambient temperature thermistor | Control/Protection | ○ | ○ | ○ | | |
| | Heating: Defrosting (Heater) | | | | | ○ |
| Outdoor heat exchanger temperature thermistor | Cooling: Control/Protection | ○ | ○ | ○ | | |
| Capacity code | Control | ○ | ○ | | | |

*1 **MXZ-2F53VFH**, **MXZ-2F53VFH2**, **MXZ-2F53VFH3**

**MXZ-4F83VF MXZ-5F102VF MXZ-6F120VF2**
**MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F122VF**
**MXZ-2F53VFHZ MXZ-4F83VFHZ**
**MXZ-2F53VFHZ2 MXZ-4F83VFHZ2**

**Relation between main sensor and actuator**

| Sensor | Purpose | Actuator | | | | | |
|---|---|---|---|---|---|---|---|
| | | Compressor | LEV | Outdoor fan motor | 4-way valve | 2-way solenoid valve *1 | Defrost heater *2 |
| Discharge temperature thermistor | Protection | ○ | ○ | | | ○ | |
| Indoor coil temperature thermistor | Cooling: Coil frost prevention | ○ | | | | ○ | |
| | Heating: High pressure protection | ○ | ○ | | | | |
| Defrost thermistor | Heating: Defrosting | ○ | ○ | ○ | ○ | | |
| Fin temperature thermistor | Protection | ○ | | ○ | | | |
| Ambient temperature thermistor | Control/Protection | ○ | ○ | ○ | | ○ | |
| | Heating: Defrosting (Heater) | | | | | | ○ |
| Outdoor heat exchanger temperature thermistor | Cooling: Control/Protection | ○ | ○ | ○ | | ○ | |
| Capacity code | Control | ○ | ○ | | | | |

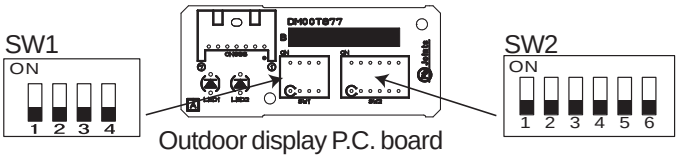
*1 **MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ, MXZ-4F83VFHZ2**
*2 **MXZ-2F53VFHZ**, **4F83VFHZ**, **2F53VFHZ2**, **4F83VFHZ2**

# 11 SERVICE FUNCTIONS

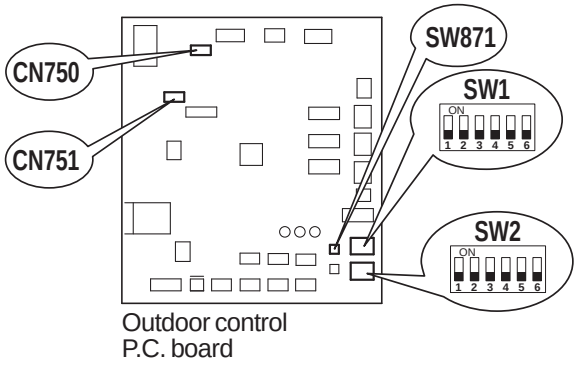
| | | | |
|---|---|---|---|
| MXZ-2F33VF | MXZ-2F42VF | MXZ-2F53VF | MXZ-2F53VFH |
| MXZ-2F33VF2 | MXZ-2F42VF2 | MXZ-2F53VF2 | MXZ-2F53VFH2 |
| MXZ-2F33VF3 | MXZ-2F42VF3 | MXZ-2F53VF3 | MXZ-2F53VFH3 |
| MXZ-2F33VF4 | MXZ-2F42VF4 | MXZ-2F53VF4 | MXZ-2F53VFH4 |
| MXZ-3F54VF | MXZ-3F68VF | MXZ-4F72VF | |
| MXZ-3F54VF2 | MXZ-3F68VF2 | MXZ-4F72VF2 | MXZ-4F80VF2 |
| MXZ-3F54VF3 | MXZ-3F68VF3 | MXZ-4F72VF3 | MXZ-4F80VF3 |
| MXZ-3F54VF4 | MXZ-3F68VF4 | MXZ-4F72VF4 | MXZ-4F80VF4 |
| MXZ-4F83VF | MXZ-5F102VF | MXZ-6F120VF2 | |
| MXZ-4F83VF2 | MXZ-5F102VF2 | MXZ-6F122VF | |
| MXZ-2F53VFHZ | MXZ-4F83VFHZ | | |
| MXZ-2F53VFHZ2 | MXZ-4F83VFHZ2 | | |

### 11-1. THE POSITION OF SWITCH

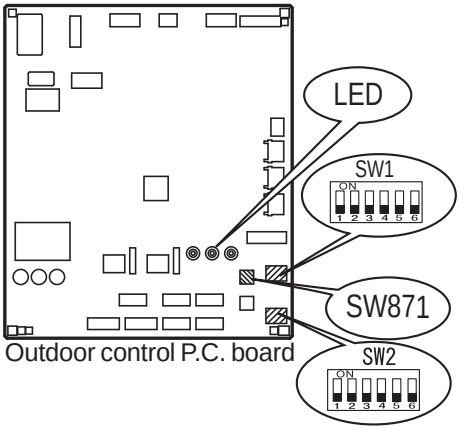
**<MXZ-2F33VF/2F42VF/2F53VF/2F53VFH, MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2, MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3/MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4>**




**<MXZ-3F54VF/3F68VF/4F72VF, MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2, MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3, MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4>**




**<MXZ-4F83/5F102/6F122VF/ MXZ-2F53VFHZ/4F83VFHZ MXZ-4F83/5F102/6F120VF2/ MXZ-2F53VFHZ2/4F83VFHZ2>**



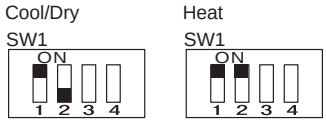
## 11-2. LOCKING THE OPERATION MODE OF THE AIR CONDITIONER (COOL, DRY, HEAT)

With this function, once the operation mode is locked to either COOL/DRY mode or HEAT mode, the air conditioner operates in that mode only.
Changing the setting is required to activate this function. Explain about this function to your customers and ask them whether they want to use it.

[How to lock the operation mode]
(1) Turn OFF the power supply and make sure that the LED goes off.
(2) Set SW1 as shown in the figure below.
(3) Turn ON the power supply.

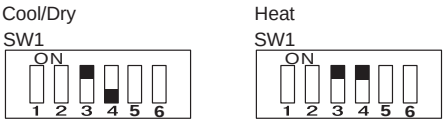
**<MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4>**

**SW1 on the outdoor display P.C. board**




**<MXZ-3F54VF/3F68VF/4F72VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**
**MXZ-4F83/5F102/6F122VF/2F53/4F83VFHZ**
**MXZ-4F83/5F102/6F120VF2/2F53/4F83VFHZ2>**

**SW1 on the outdoor control P.C. board**




## 11-3. HOW TO SET LOW STANDBY POWER MODE

**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**

•The factory setting of low standby power mode for above units is “Activated”.

In case that compressor is not in operation, and both LED1 (Red) and LED2 (Yellow) are not lit, check the setting of low standby power mode on the outdoor control P.C. board. And check the settings for dip switch (SW1) and jumper connector (SC751).
•Before turning on the breaker, settings for dip switch (SW1) and jumper connector (SC751) are necessary on the outdoor control P.C. board.
•When connecting one or more indoor units listed in Table 1, change the setting to deactivated low standby power mode.

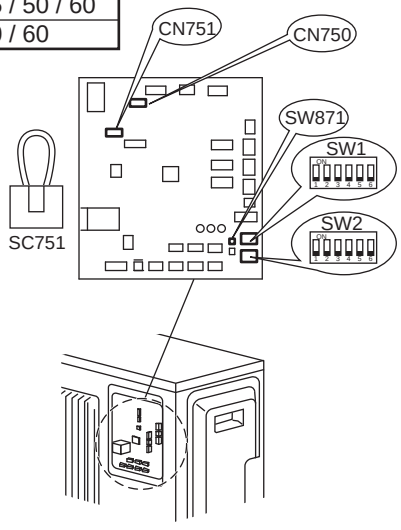
**NOTE:**
•Units come with low standby power mode activated as factory setting.
•When connecting one or more indoor units listed in Table 1, the outdoor unit does not work at activated low standby power mode.
•In the event that SC751 is missing, outdoor unit will not work.

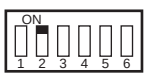
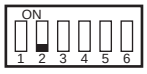
Table 1: List of the target models

| Type | Model name | Capacity |
|---|---|---|
| Wall-mounted | MSZ-AP**VF | 15 / 20 |
| 1way-cassette | MLZ-KP**VF | 25 / 35 / 50 |
| 4way-cassette | SLZ-M**FA | 15 / 25 / 35 / 50 |
| Ceiling-Concealed | PEAD-M**JA(L) | 50 |
| | SEZ-M**DA(L) | 25 / 35 / 50 / 60 |
| Ceiling-Suspended | PCA-M**KA | 50 / 60 |

**To activate low standby power mode:**
Connect SC751 to CN750.
Set “2” on SW1 to ON.

**To deactivate low standby power mode:**
Connect SC751 to CN751.
Set “2” on SW1 to OFF.




| SC751 | SW1 | MODE |
|---|---|---|
| CN750 |  | Activated |
| CN751 |  | Deactivated |

**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**
**MXZ-4F83VF MXZ-5F102VF MXZ-6F120VF2**
**MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F122VF**

•The factory setting of low standby power mode for above units is “Deactivated”.

In case that compressor is not in operation, and both LED1 (Red) and LED2 (Yellow) are not lit, check the setting of low standby power mode on the outdoor control P.C. board. And check the settings for dip switch (SW1) and jumper connector (SC751).

•Before turning on the breaker, settings for dip switch (SW1) and jumper connector (SC751) are necessary on the outdoor control P.C. board.

•It is recommended to activate the low standby power mode when none of the indoor units listed in Table 1 is connected.

**NOTE:**

•Units come with low standby power mode deactivated as factory setting.

•When connecting one or more indoor units listed in Table 1, the outdoor unit does not work at activated low standby power mode.

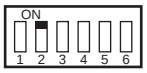
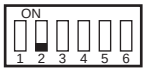
•In the event that SC751 is missing, outdoor unit will not work.

Table 1: List of the target models

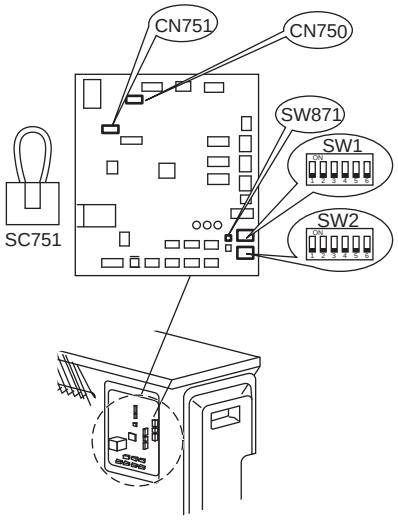
| Type | Model name |
|---|---|
| Wall-mounted | MSZ-AP**VF |
| 1way-cassette | MLZ-KP**VF |
| 4way-cassette | SLZ-M**FA |
| Ceiling-Concealed | PEAD-M**JA(L) |
| | SEZ-M**DA(L) |
| Ceiling-Suspended | PCA-M**KA |
| Floor-Standing | SFZ-M**VA |

**To activate low standby power mode:**
Connect SC751 to CN750.
Set “2” on SW1 to ON.

**To deactivate low standby power mode:**
Connect SC751 to CN751.
Set “2” on SW1 to OFF.

| SC751 | SW1 | MODE |
|---|---|---|
| CN750 |  | Activated |
| CN751 |  | Deactivated |





## 11-4. LOWERING THE OPERATING NOISE OF THE OUTDOOR UNIT

With this function, the operating noise of the outdoor unit can be lowered by reducing the operation load, for example, during nighttime in COOL mode.
However, note that the cooling and heating capacity may lower if this function is activated.
Changing the setting is required to activate this function. Explain about this function to your customers and ask them whether they want to use it.

**<MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4>**

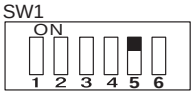
[How to lower the operating noise]
(1) Turn OFF the power supply and make sure that the LED goes off.
(2) Set "3" on SW1 to ON to enable this function.
(3) Turn ON the power supply.

### SW1 on the outdoor display P.C. board


**<MXZ-3F54VF/3F68VF/4F72VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**
**MXZ-4F83/5F102/6F122VF/MXZ-2F53/4F83VFHZ**
**MXZ-4F83/5F102/6F120VF2/MXZ-2F53/4F83VFHZ2>**

[How to lower the operating noise]
(1) Turn OFF the power supply and make sure that the LED goes off.
(2) Set "5" on SW1 to ON the enable this function.
(3) Turn ON the power supply.

### SW1 on the outdoor control P.C. board



## 11-5. AUTOMATIC LINE CORRECTING

**<MXZ-2F33VF/2F42VF/2F53VF/2F53VFH, MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2, MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3, MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4>**

This outdoor unit has an automatic line correcting function which automatically detects and corrects improper wiring or piping.

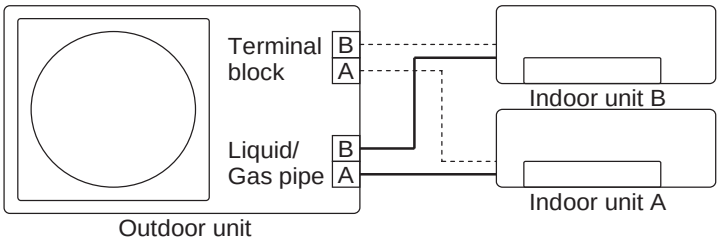
**<MXZ-2F33VF/2F42VF/2F53VF/2F53VFH, MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2, MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3, MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4>**

Improper wiring or piping can be automatically detected when one indoor unit is operated in COOL mode for 30 minutes. When improper wiring or piping is detected, wiring lines are corrected (A to B/ B to A) with the software.

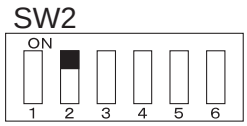
**NOTE:** This function may not work due to the condition or environment of the unit, such as the following:
- gas leak, closed stop valve
- unit failure such as defective LEV
- indoor/outdoor temperature

**NOTE:** This function does not work when "2" on SW2 on the outdoor display P.C. board is turned OFF.

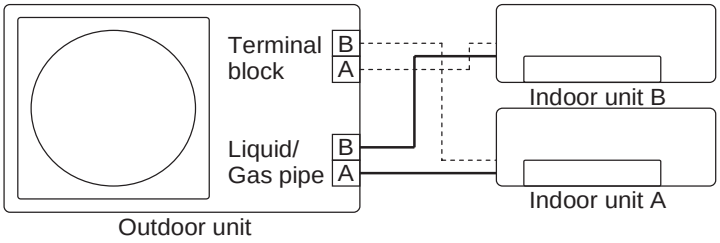
<Correct>

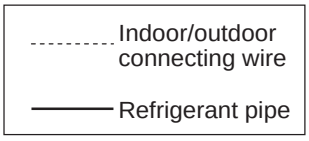



**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**
**SW2 on the outdoor display P.C. board**

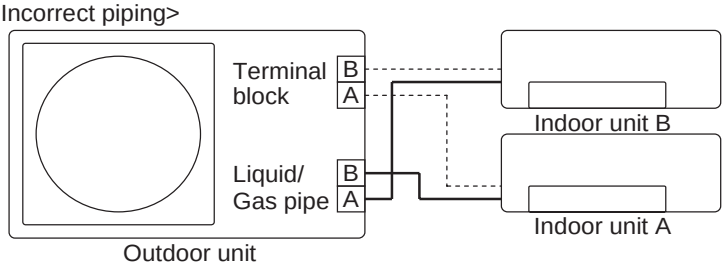



<Incorrect wiring>



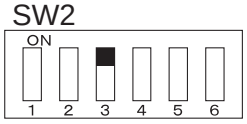

<Incorrect piping>




The record of automatic line correcting can be checked in the following way:
(1) Turn OFF the power supply and make sure that the LED goes off.
(2) Turn ON "3" on SW2 on the outdoor display P.C. board.
(3) Turn ON the power supply.
(4) Check the correction state with the LED lamps on the outdoor display P.C. board.
(5) Turn OFF the power supply and make sure that the LED goes off.
(6) Turn OFF "3" on SW2 on the outdoor display P.C. board.
(7) Turn ON the power supply.

| Number of blinks | | Wiring line |
|---|---|---|
| LED1 (Red) | LED2 (Yellow) | |
| Once | Once | Not corrected |
| 3 times | 3 times | Corrected |

**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**
**SW2 on the outdoor display P.C. board**



**<MXZ-3F54VF/3F68VF/4F72VF, MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2,**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3,MXZ-4F83/5F102/6F122VF, MXZ-2F53/4F83VFHZ**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4,MXZ-4F83/5F102/6F120VF2, MXZ-2F53/4F83VFHZ2>**

Outdoor unit has an auto line correcting function which automatically detects and corrects improper wiring or piping.

Improper wiring or piping can be automatically detected by pressing the piping/wiring correction switch (SW871).
When improper wiring or piping is detected, wiring lines are corrected.
This will be completed in about 10 to 15 minutes.

**[How to activate this function]**

1. Check that outside temperature is above 0˚C.
   (This function does not work when the outside temperature is 0˚C or below.)
2. Check that the stop valves of the liquid pipe and gas pipe are open.
3. Check that the wiring between indoor and outdoor unit is correct.
   (If the wiring is not correct, this function does not work.)
4. Turn ON the power supply and wait at least 1 minute.
5. Press the piping/wiring correction switch (SW871) on the outdoor control P.C. board.
   Do not touch energized parts.

   LED indication during detection:

| LED1 (Red) | LED2 (Yellow) | LED3 (Green) |
|---|---|---|
| Lit | Lit | Once |

   LED indication after detection:

| LED1 (Red) | LED2 (Yellow) | LED3 (Green) | Result |
|---|---|---|---|
| Lit | Not lit | Lit | Completed (Problem corrected/ normal) |
| Once | Once | Once | Not completed (Detection failed) |
| Other indications | | | Refer to "SAFETY PRECAUTIONS WHEN LED BLINKS" located behind the top panel. |

   *Make sure that the valves are open and the pipes are not collapsed or clogged.
6. Press the switch to cancel.

   LED indication after cancel :

| LED1 (Red) | LED2 (Yellow) | LED3 (Green) |
|---|---|---|
| Lit | Lit | Not lit |

**NOTE:** Indoor unit cannot be operated while this function is activated.
When this function is activated while indoor unit is operating, the operation will be stopped.
Operate indoor unit after the auto line correcting is finished.
Pressing the switch during detection cancels this function.

**The record of auto line correcting can be confirmed in the following way:**

Press the switch for more than 5 seconds.
LED will show the record of auto correcting for about 30 seconds as shown in the table below:

| Number of blinks | | | Wiring line |
|---|---|---|---|
| LED1 (Red) | LED2 (Yellow) | LED3 (Green) | |
| Once | Once | Lit | Not corrected |
| 3 times | 3 times | Lit | Corrected |

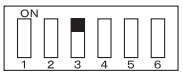
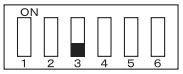
**NOTE:** Activate this function to confirm the correct wiring after replacing the outdoor control P.C. board.
(Previous records are deleted when the outdoor control P.C. board is replaced.)
The record cannot be shown if auto line correcting is not canceled (Refer to "How to activate this function").

## 11-6. CHANGING THE SET REFRIGERANT EVAPORATING TEMPERATURE

**NOTE:** If you lower the refrigerant evaporating temperature with the windows open, it may cause dew drop.

[How to change the refrigerant evaporating temperature]
(1) Make sure there is no possibility of causing dew drop before making the setting.
(2) Make the setting referring to the table below.

**SW2 on the outdoor control P.C. board**

| SW2 | **MXZ-3F54VF**<br>**MXZ-3F68VF**<br>**MXZ-4F72VF** | **MXZ-3F54VF2/VF3/VF4**<br>**MXZ-3F68VF2/VF3/VF4**<br>**MXZ-4F72VF2/VF3/VF4**<br>**MXZ-4F80VF2/VF3/VF4** | **MXZ-4F83VF/VF2**<br>**MXZ-5F102VF/VF2**<br>**MXZ-6F120VF2**<br>**MXZ-6F122VF**<br>**MXZ-2F53VFHZ/VFHZ2**<br>**MXZ-4F83VFHZ/VFHZ2** |
|---|---|---|---|
|  | 7 ºC or 9 ºC | 6 ºC | |
|  | Normal control | | |

## 11-7. CHANGING THE AMPERE LIMIT

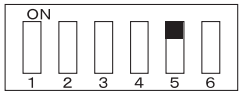
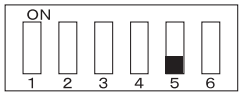
**<MXZ-2F53VFHZ/MXZ-2F53VFHZ2/4F83VFHZ/4F83VFHZ2/MXZ-6F120VF2/MXZ-6F122VF>**

With this function, the amount of current that flows in the outdoor unit can be changed.

**NOTE:** Use this function only when the amount of current exceeds the allowed value.

[How to change the ampere limit]
(1) Be sure to turn off the power supply for the air conditioner before making the setting.
(2) Make the setting referring to the table below.
(3) Turn ON the power supply.

**SW2 on the outdoor control P.C. board**

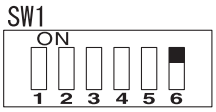
| SW2 | **MXZ-2F53VFHZ**<br>**MXZ-2F53VFHZ2** | **MXZ-4F83VFHZ**<br>**MXZ-4F83VFHZ2** | **MXZ-6F120VF2**<br>**MXZ-6F122VF** |
|---|---|---|---|
|  | 13.6 A<br>(Factory setting) | 21 A | 20 A |
|  | 18.4 A | Full<br>(Factory setting) | Full<br>(Factory setting) |

# MXZ-3F54/3F68/4F72/4F80VF4

## 11-8. SETTING WHEN THE PIPING LENGTH IS LONG

For a system that connects all rooms and has a total piping length of 40 m or more, change the setting to improve the circulation of the refrigerant.

**[How to perform the setting]**
(1) Be sure to turn off the main power of the air conditioner before performing the setting.
(2) To enable this function, set SW1 “6” on the outdoor controller board to ON.
(3) Turn on the main power of the air conditioner.



When the piping length is long

# 12 TROUBLESHOOTING

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**
**MXZ-4F83VF MXZ-5F102VF MXZ-6F120VF2**
**MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F122VF**
**MXZ-2F53VFHZ2 MXZ-4F83VFHZ**
**MXZ-2F53VFHZ2 MXZ-4F83VFHZ2**

## 12-1. CAUTIONS ON TROUBLESHOOTING

**1. Before troubleshooting, check the following:**

1) Check the power supply voltage.
2) Check the indoor/outdoor connecting wire for miswiring.

**2. Take care of the following during servicing**

1) Before servicing the air conditioner, be sure to turn OFF the unit first with the remote controller, and after confirming the horizontal vane is closed, turn OFF the breaker and/or disconnect the power plug.
2) Be sure to turn OFF the power supply before removing the front panel, the cabinet, the top panel, and the P.C. board.
3) When removing the electrical parts, be careful of the residual voltage of smoothing capacitor.
4) When removing the P.C. board, hold the edge of the board with care NOT to apply stress on the components.
5) When connecting or disconnecting the connectors, hold the connector housing. DO NOT pull the lead wires.

<Incorrect> <Correct>

**Lead wiring** **Connector housing**

**3. Troubleshooting procedure**

1) Check if the OPERATION INDICATOR lamp on the indoor unit is blinking on and off to indicate an abnormality. To make sure, check how many times the OPERATION INDICATOR lamp is blinking on and off before starting service work.
2) Before servicing, verify that all connectors and terminals are connected properly.
3) When the electronic control P.C. board seems to be defective, check for disconnection of the copper foil pattern and burnt or discolored components.
4) Refer to 12-2, 12-3 and 12-4.

## 12-2. FAILURE MODE RECALL FUNCTION

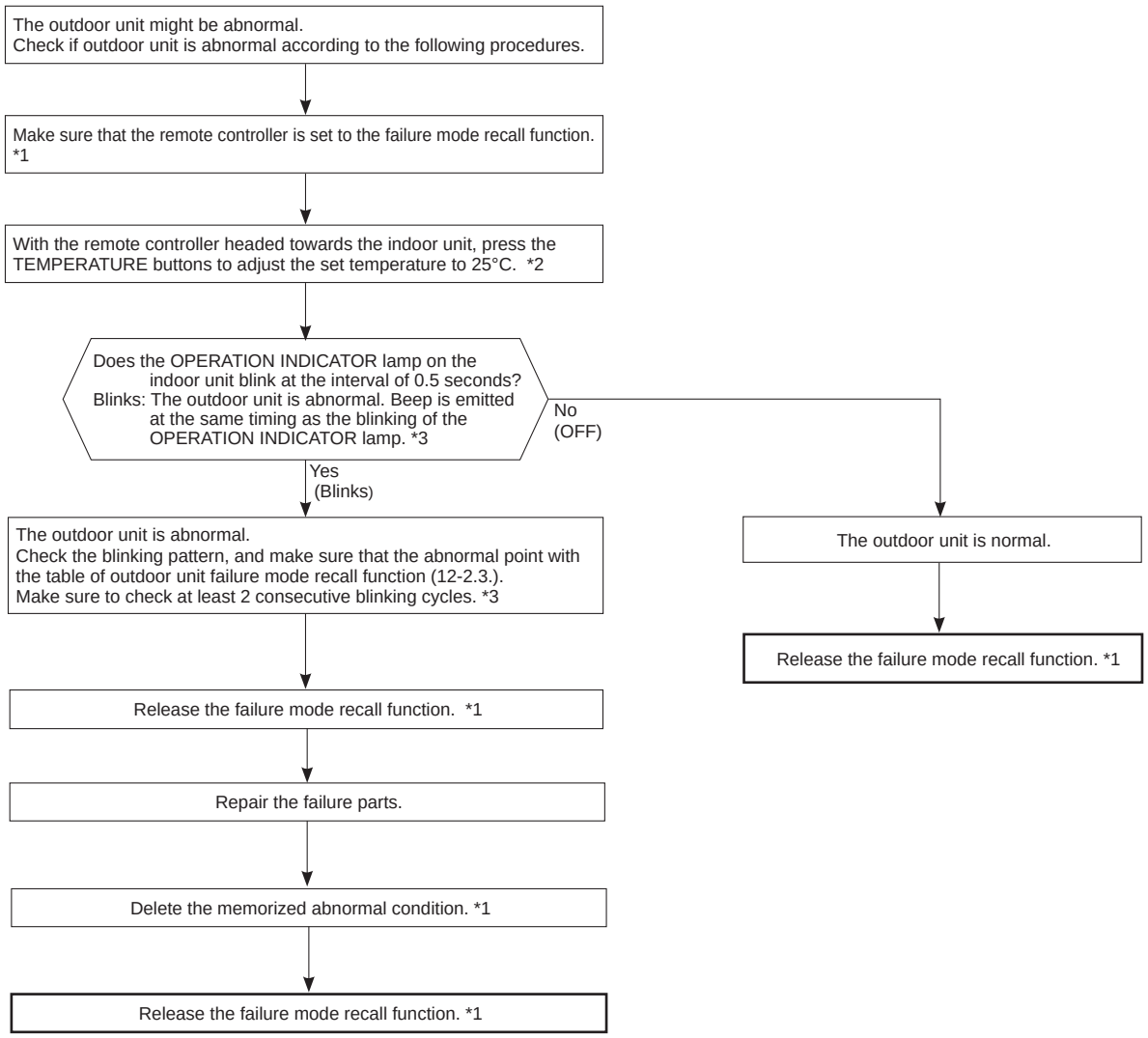
This air conditioner can memorize the abnormal condition which has occurred once.
Even though LED indication listed on the troubleshooting check table (12-4.) disappears, the memorized failure details can be recalled.

**1. Flow chart of failure mode recall function for the indoor/outdoor unit**

Refer to the service manual of indoor unit.

## 2. Flow chart of the detailed outdoor unit failure mode recall function

Operational procedure

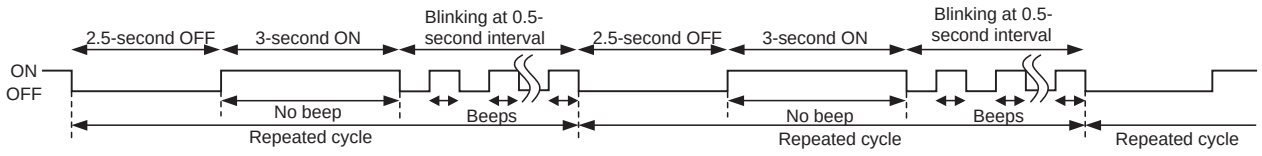



**NOTE**: 1. Make sure to release the failure mode recall function after it is set up, otherwise the unit cannot operate properly.
2. If the abnormal condition is not deleted from the memory, the last abnormal condition is kept memorized.

*1. Refer to the service manual of indoor unit.

*2. Regardless of normal or abnormal condition, 2 short beeps are emitted as the signal is received.

*3. Blinking pattern when outdoor unit is abnormal:



### 3. Table of outdoor unit failure mode recall function

**NOTE:** Blinking patterns of this mode differ from the ones of Troubleshooting check table (12-4).

**MXZ-2F33/42/53VF/VF2/VF3/VF4, MXZ-2F53VFH/VFH2/VFH3/VFH4**

| Upper or left lamp of OPERATION INDICATOR lamp (Indoor unit) | Abnormal point (Failure mode/protection) | LED indication (Outdoor P.C. board) LED 1 | LED 2 | Condition | Remedy | Indoor/ outdoor unit failure mode recall function |
|---|---|---|---|---|---|---|
| OFF | None (Normal) | Not lit | Not lit | — | — | — |
| 2-time blink | Outdoor power system | Lit | Lit | Overcurrent protection cut-out operates 3 consecutive times within 1 minute after the compressor gets started. Compressor protection cut-out operates 24 consecutive times within 10 seconds after the compressor gets started. | • Check the compressor connecting wire. • Refer to 12-6. Ⓔ "How to check inverter/compressor". • Check the stop valve. | ○ |
| 3-time blink | Discharge temperature thermistor | Lit | Once | Thermistor shorts or opens during compressor running. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". | ○ |
| | Defrost thermistor | Lit | Once | | | ○ |
| | Ambient temperature thermistor | Lit | Twice | | | ○ |
| | Fin temperature thermistor | Lit | 3 times | | | ○ |
| | P.C. board temperature thermistor | Lit | 4 times | | • Replace the inverter P.C. board. | ○ |
| | Outdoor heat exchanger temperature thermistor | Lit | 9 times | | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". | ○ |
| 4-time blink | Overcurrent | Once | Not lit | The overcurrent flows into intelligent power module. | • Check the compressor connecting wire. • Refer to 12-6. Ⓔ "How to check inverter/compressor". • Check the stop valve. | — |
| | Compressor | Twice | Not lit | The overcurrent flows into intelligent power module within 10 seconds after the compressor gets started. (The compressor gets restarted in 15 seconds.) | • Check the compressor connecting wire. • Refer to 12-6. Ⓔ "How to check inverter/compressor". | — |
| | | 9 times | Not lit | Waveform of compressor current is distorted. | | — |
| 5-time blink | Discharge temperature | Lit | Lit | Discharge temperature exceeds 116ºC during operation. | • Check the refrigerant circuit and the refrigerant amount. • Refer to 12-6. Ⓓ "Check of LEV". | — |
| 6-time blink | High pressure | Lit | Lit | The outdoor heat exchanger temperature exceeds 70ºC during cooling or the indoor gas pipe temperature exceeds 70ºC during heating. | • Check the refrigerant circuit and the refrigerant amount. • Check the stop valve. | — |
| 7-time blink | Fin temperature | 3 times | Not lit | The fin temperature exceeds 90ºC during operation. | • Check the around outdoor unit. • Check the outdoor unit air passage. | — |
| | P.C. board temperature | 4 times | Not lit | The P.C. board temperature exceeds 80ºC during operation. | • Refer to 12-6. Ⓖ "Check of outdoor fan motor". | — |
| 8-time blink | Outdoor fan motor | Lit | Lit | Failure occurs 3 consecutive times within 30 seconds after the fan gets started. | • Refer to 12-6. Ⓖ "Check of outdoor fan motor". | — |
| 9-time blink | Nonvolatile memory data | Lit | 5 times | Nonvolatile memory data cannot be read properly. | • Replace the inverter P.C. board. | ○ |
| | Power module | 7 times | Not lit | The output of the power module that drove the compressor was shorted or the winding of the compressor was shorted. | • Refer to 12-6. Ⓔ "How to check inverter/compressor". | ○ |
| 10-time blink | Discharge temperature | Lit | Lit | The discharge temperature is kept under 50ºC (COOL mode)/40ºC (HEAT mode) for more than 40 minutes. | • Check the refrigerant circuit and the refrigerant amount. • Refer to 12-6. Ⓓ "Check of LEV". | — |
| 11-time blink | Current sensor | 8 times | Not lit | The sensor circuit of current of compressor shorts or opens during compressor operate. | • Replace the inverter P.C. board. | ○ |
| | Bus-bar voltage | 6 times | Not lit | The bus-bar voltage exceeds 430 V or falls to 50 V or below during compressor operating. | • Check the power supply. • Replace the inverter P.C. board. | ○ |
| 14-time blink | Stop valve | Lit | 12 times | The current of compressor is power module is out of order. | • Check the stop valve. • Check the refrigerant circuit and the refrigerant amount. | ○ |
| | Refrigerant leakage (Sensor detection) | Lit | Lit | 1. Refrigerant leaks from the piping or the heat exchanger in the indoor unit. 2. The following items are used around the indoor unit. • Spray (LP gas including Freon, and whose main ingredient is propane and butane) • Aerosol insecticide (including ethanol) • Air spray painting (including dichloromethane) • Charcoal (charcoal fire) • Chemicals (such as ethanol) | • Turn off the power after the indoor unit finishes its FAN operation. (The FAN operation continues for 3 hours.) • Check the indoor unit to detect the part where refrigerant leaks. • Repair the part where refrigerant leaks. • Turn on the power again. • Replace the refrigerant sensor if the problem is not fixed. | ○ |

| Upper or left lamp of OPERATION INDICATOR lamp (Indoor unit) | Abnormal point (Failure mode/protection) | LED indication (Outdoor P.C. board) | | Condition | Remedy | Indoor/ outdoor unit failure mode recall function |
|---|---|---|---|---|---|---|
| | | LED 1 | LED 2 | | | |
| 14-time blink | Refrigerant leakage (Sensor detection) | Lit | Lit | The refrigerant sensor mounted on the indoor unit does not work.<br>The refrigerant sensor is not connected properly or the wire is broken. | • Connect the connector of the refrigerant sensor properly.<br>• Replace the refrigerant sensor. | ○ |
| | Incompatible unit combination | Lit | 11 times | The indoor unit which is not compatible with the outdoor unit is connected. | • Replace the indoor unit with the one which is compatible with the outdoor unit. | ○ |
| 17-time blink | Outdoor refrigerant system abnormality | Lit | 17 times | A closed valve and air trapped in the refrigerant circuit are detected based on the temperature sensed by the indoor and outdoor thermistors and the current of the compressor. | • Check for a gas leak in a connecting piping etc.<br>• Check the stop valve.<br>• Refer to 12-6. Ⓚ "Check of outdoor refrigerant circuit". | ○ |

**NOTE**: Blinking patterns of this mode differ from the ones of Troubleshooting check table (12-4.).

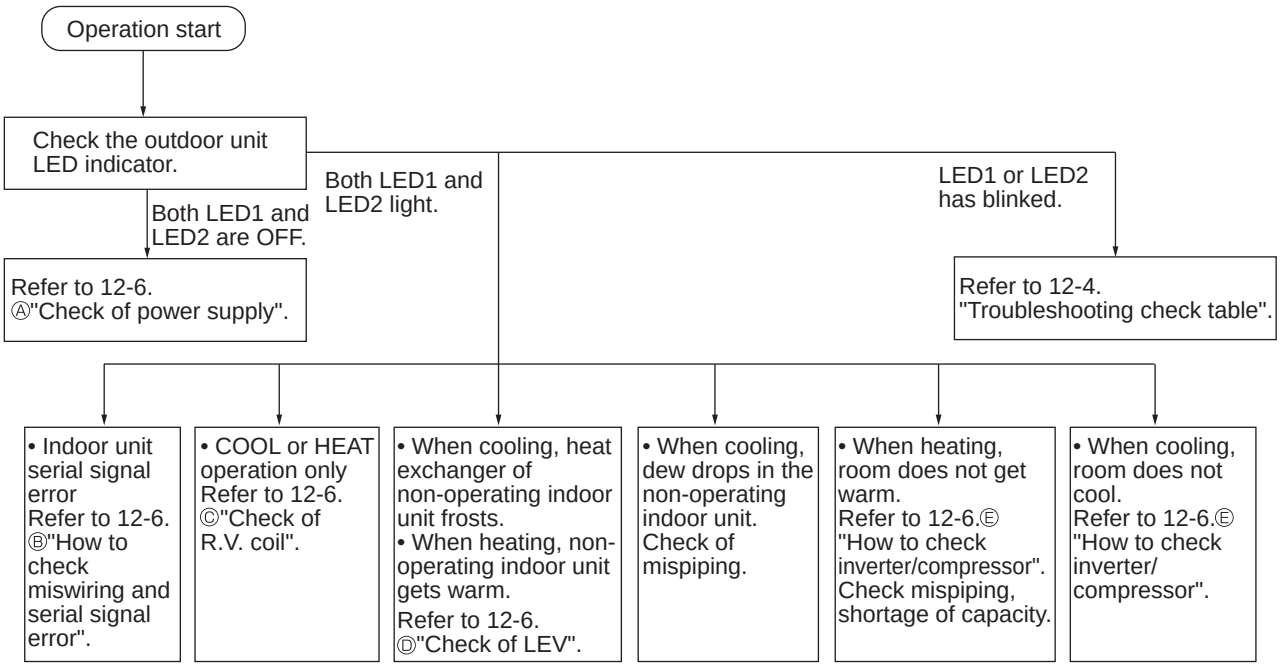
**MXZ-3F, 4F, 5F, 6F, MXZ-2F53VFHZ/VFHZ2, MXZ-4F83VFHZ/VFHZ2**

| The left lamp of OPERATION INDICATOR lamp (Indoor unit) | Abnormal point (Failure mode/protection) | LED indication (Outdoor P.C. board) | | Condition | Remedy | Indoor/outdoor unit failure mode recall function |
|---|---|---|---|---|---|---|
| | | LED1 | LED2 | | | |
| OFF | None (Normal) | Lit | Lit | — | — | — |
| 2-time blink | Outdoor power system | Lit | Lit | Overcurrent protection cut-out operates 3 consecutive times within 1 minute after the compressor gets started, or converter protection cut-out or bus-bar voltage protection cut-out operates 3 consecutive times within 3 minutes after startup. | • Check the connection of the compressor connecting wire.<br>• Refer to 12-6. Ⓔ "How to check inverter/compressor".<br>• Check the stop valve. | ○ |
| 3-time blink | Discharge temperature thermistor | Lit | Once | A thermistor shorts or opens during compressor running. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". | ○ |
| | Defrost thermistor | Lit | Once | | | |
| | Ambient temperature thermistor | Lit | Twice | | | |
| | Fin temperature thermistor | Lit | 3 times | | | |
| | P.C. board temperature thermistor | Lit | 4 times | | • Replace the outdoor control P.C. board. | |
| | Outdoor heat exchanger temperature thermistor | Lit | 9 times | | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". | |
| 4-time blink | Overcurrent | Once | Not lit | 21 A current flows into power module. | • Reconnect compressor connector.<br>• Refer to 12-6. Ⓔ "How to check inverter/compressor".<br>• Check the stop valve. | — |
| 5-time blink | Discharge temperature | Lit | Lit | The discharge temperature exceeds 115°C (**MXZ-3F54/3F68/4F72VF/VF2/VF3/4F80VF2/VF3/VF4**)/ 106°C(**MXZ-4F83/5F102VF, MXZ-2F53VFHZ**)/ 116°C (**MXZ-4F83VFHZ/VFHZ2**) during operation.<br>Compressor can restart if discharge temperature thermistor reads 80°C (**MXZ-3F54/3F68/4F72VF/VF2/VF3/VF4**)/ 95°C (**MXZ-4F83/5F102VF/VF2, MXZ-2F53VFHZ/VFHZ2**)/ 100°C (**MXZ-6F120VF2,MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**) or less 3 minutes later. | • Check refrigerant circuit and refrigerant amount.<br>• Refer to 12-6. Ⓓ "Check of LEV". | — |
| 6-time blink | High pressure | Lit | Lit | The outdoor heat exchanger temperature exceeds 70°C during cooling or the indoor gas pipe temperature exceeds 70°C during heating. | • Check refrigerant circuit and refrigerant amount.<br>• Check the stop valve. | — |
| 7-time blink | Fin temperature | 3 times | Not lit | The fin temperature exceeds 88°C (**MXZ-3F54/3F68/4F72VF/VF2/VF3/VF4, 4F83/5F102VF/VF2, MXZ-2F53VFHZ/VFHZ2**)/89°C (**MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**) during operation. | • Check around outdoor unit.<br>• Check outdoor unit air passage.<br>• Refer to 12-6. Ⓖ "Check of outdoor fan motor". | — |
| | P.C. board temperature | 4 times | Not lit | The P.C. board temperature exceeds 67°C (**MXZ-3F54/3F68/4F72VF/VF2/VF3/VF4 /4F80VF2/VF3/VF4/4F83/5F102VF/VF2, MXZ-2F53VFHZ**)/87°C (**MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**) during operation. | | |
| 8-time blink | Outdoor fan motor | Lit | Lit | A failure occurs 3 consecutive times within 30 seconds after the fan gets started. | • Refer to 12-6. Ⓖ "Check of outdoor fan motor". | — |
| | 4-way valve switching operation abnormality. | Lit | 12 times | Connector of R.V. coil is disconnected, poorly connected or 4-way valve is faulty. | • Refer to 12-6. Ⓒ "Check of R.V. coil".<br>• Check the 4-way valve. | ○ |
| 9-time blink | Outdoor control system | Lit | 5 times | Nonvolatile memory data cannot be read properly. | • Replace the outdoor control P.C. board. | ○ |
| 10-time blink | Low discharge temperature protection | Lit | Lit | The frequency of the compressor is kept 80 Hz or more and the discharge temperature is kept under 39°C for more than 20 minutes. | • Check refrigerant circuit and refrigerant amount.<br>• Refer to 12-6. Ⓓ "Check of LEV". | — |

| The left lamp of OPERATION INDICATOR lamp (Indoor unit) | Abnormal point (Failure mode/protection) | LED indication (Outdoor P.C. board) | | Condition | Remedy | Indoor/outdoor unit failure mode recall function |
|---|---|---|---|---|---|---|
| | | LED1 | LED2 | | | |
| 11-time blink | Communication error between P.C. boards | Lit | 6 times | Communication error occurs between the outdoor control P.C. board and outdoor power P.C. board for more than 10 seconds. | • Check the connecting wire between outdoor control P.C. board and outdoor power P.C. board. | — |
| | | | | The communication between boards protection cut-out operates 2 consecutive times. | | ○ |
| | Current sensor | Lit | 7 times | A short or open circuit is detected in the current sensor during compressor operating. | — | — |
| | | | | Current sensor protection cut-out operates 2 consecutive times. | | ○ |
| | Zero cross detecting circuit | 5 times | Not lit | Zero cross signal cannot be detected while the compressor is operating. | • Check the connecting wire among outdoor control P.C. board and outdoor power P.C. board. | — |
| | | | | The protection cut-out of the zero cross detecting circuit operates 10 consecutive times. | | ○ |
| | Converter | 5 times | Not lit | A failure is detected in the operation of the converter during operation. | • Check the voltage of power supply.<br>• Replace the outdoor power P.C. board. | — |
| | Bus-bar voltage | 5 times | Not lit | The bus-bar voltage exceeds 400 V or falls to low level during compressor operating. | • Check the voltage of power supply.<br>• Replace the outdoor control P.C. board. | |
| 14-time blink | Refrigerant leakage (Sensor detection) | Lit | Lit | 1.Refrigerant leaks from the piping or the heat exchanger in the indoor unit.<br>2.The following items are used around the indoor unit.<br>• Spray (LP gas including Freon, and whose main ingredient is propane and butane)<br>• Aerosol insecticide (including ethanol)<br>• Air spray painting (including dichloromethane)<br>• Charcoal (charcoal fire)<br>• Chemicals (such as ethanol) | • Turn off the power after the indoor unit finishes its FAN operation. (The FAN operation continues for 3 hours.)<br>• Check the indoor unit to detect the part where refrigerant leaks.<br>• Repair the part where refrigerant leaks.<br>• Turn on the power again.<br>• Replace the refrigerant sensor if the problem is not fixed. | ○ |
| 14-time blink | Refrigerant leakage (Sensor detection) | Lit | Lit | The refrigerant sensor mounted on the indoor unit does not work.<br>The refrigerant sensor is not connected properly or the wire is broken. | • Connect the connector of the refrigerant sensor properly.<br>• Replace the refrigerant sensor. | ○ |
| | Incompatible unit combination | Lit | 11 times | The indoor unit which is not compatible with the outdoor unit is connected. | • Replace the indoor unit with the one which is compatible with the outdoor unit. | ○ |
| | 4-way valve switching operation abnormality. | Lit | 12 times | Connector of R.V. coil is disconnected, poorly connected or 4-way valve is faulty. | • Refer to 12-6. Ⓒ “Check of R.V. coil”.<br>• Check the 4-way valve. | ○ |
| 15-time blink | LEV and drain pump | Lit | Lit | The indoor unit detects an abnormality in the LEV and drain pump. | • Refer to 12-6. Ⓓ "Check of LEV".<br>• Check the drain pump of the indoor unit. | — |

## 12-3. INSTRUCTION OF TROUBLESHOOTING

• Check the indoor unit referring to the indoor unit service manual, and confirm that there is any problem in the indoor unit. Then, check the outdoor unit with referring to this page.



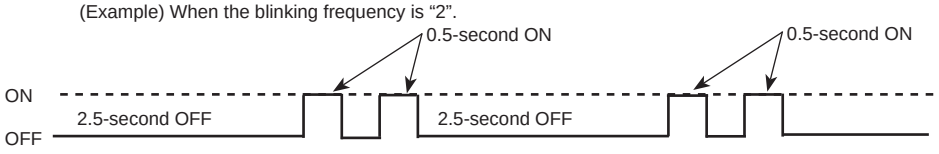
## 12-4. TROUBLESHOOTING CHECK TABLE

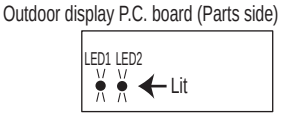
### MXZ-2F33/42/53VF/VF2/VF3/VF4, MXZ-2F53VFH/VFH2/VFH3/VFH4

| No. | Symptom | Indication | | Abnormal point / Condition | Condition | Remedy |
|---|---|---|---|---|---|---|
| | | LED1(Red) | LED2(Yellow) | | | |
| 1 | Outdoor unit does not operate. | Lit | Once | LEV and drain pump | The indoor unit detects an abnormality in the LEV and drain pump. | • Refer to 12-6. Ⓓ "Check of LEV".<br>• Check the drain pump of the indoor unit. |
| 2 | | Lit | Twice | Outdoor power system | Overcurrent protection cut-out operates 3 consecutive times within 1 minute after the compressor gets started. | • Check the connection of the compressor connecting wire.<br>• Refer to 12-6. Ⓔ "How to check inverter/ compressor".<br>• Check the stop valve. |
| 3 | | Lit | 3 times | Discharge temperature thermistor | A short circuit is detected in the thermistor during operation, or when an open circuit is detected in the thermistor after 10 minutes of compressor startup. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| 4 | | Lit | 4 times | Fin temperature thermistor | A short or open circuit is detected in the thermistor during operation. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| | | | | P.C board temperature thermistor | | • Replace the inverter P.C. board. |
| 5 | | Lit | 5 times | Ambient temperature thermistor | A short or open circuit is detected in the thermistor during operation. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| | | | | Outdoor heat exchanger temperature thermistor | A short circuit is detected in the thermistor during operation, or when an open circuit is detected in the thermistor after 5 minutes (in cooling) and 10 minutes (in heating) of compressor startup. | |
| | | | | Defrost thermistor | A short circuit is detected in the thermistor during operation, or when an open circuit is detected in the thermistor after 5 minutes of compressor startup. | |
| 6 | | Lit | 7 times | Nonvolatile memory data | The nonvolatile memory data cannot be read properly. | • Replace the inverter P.C. board. |
| 7 | | Lit | 11 times | Stop valve Closed valve | Closed valve is detected by compressor current. (**MXZ-2F33VF, MXZ-2F33VF2, MXZ-2F33VF3, MXZ-2F33VF4**) | • Check the stop valve. |
| 8 | | Lit | 17 times | Outdoor refrigerant system abnormality | A closed valve and air trapped in the refrigerant circuit are detected based on the temperature sensed by the indoor and outdoor thermistors and the current of the compressor. | • Check for a gas leak in a connecting piping etc.<br>• Check the stop valve.<br>• Refer to 12-6. Ⓚ "Check of outdoor refrigerant circuit". |
| 9 | | Lit | 18 times | Detection of refrigerant (Indoor unit) | 1. Refrigerant leaks from the piping or the heat exchanger in the indoor unit.<br>2. The following items are used around the indoor unit.<br>• Spray (LP gas including Freon, and whose main ingredient is propane and butane)<br>• Aerosol insecticide (including ethanol)<br>• Air spray painting (including dichloromethane)<br>• Charcoal (charcoal fire)<br>• Chemicals (such as ethanol) | • Turn off the power after the indoor unit finishes its fan operation.<br>(The fan operation continues for 3 hours.)<br>• Check the indoor unit to detect the part where refrigerant leaks.<br>• Repair the part where refrigerant leaks.<br>• Turn on the power again.<br>• Replace the refrigerant sensor if the problem is not fixed. |
| 10 | | Lit | 19 times | Abnormality of refrigerant leakage sensor (Indoor unit) | The refrigerant sensor mounted on the indoor unit does not work.<br>The refrigerant sensor is not connected properly or the wire is broken. | • Connect the connector of the refrigerant sensor properly.<br>• Replace the refrigerant sensor. |
| 11 | | Lit | 20 times | Incompatible unit combination error | The indoor unit which is not compatible with the outdoor unit is connected. | • Replace the indoor unit with the one which is compatible with the outdoor unit. |
| 12 | 'Outdoor unit stops and restarts 3 minutes later' is repeated. | Twice | Not lit | Overcurrent | 14 A (**MXZ-2F33VF, MXZ-2F33VF2, MXZ-2F33VF3, MXZ-2F33VF4**)/18 A (**MXZ-2F42VF, MXZ-2F42VF2 MXZ-2F42VF3, MXZ-2F42VF4, MXZ-2F53VF/VFH,MXZ-2F53VF2/VFH2, MXZ-2F53VF3/VFH3,MXZ-2F53VF4/VFH4**) current flows into intelligent power module. | • Reconnect compressor connector.<br>• Refer to 12-6. Ⓔ "How to check inverter/ compressor".<br>• Check the stop valve. |
| 13 | | 3 times | Not lit | Discharge temperature protection | Discharge temperature exceeds 116°C during operation. Compressor can restart if discharge temperature thermistor reads 100°C or less 3 minutes later. | • Check the amount of gas and the refrigerant circuit.<br>• Refer to 12-6. Ⓓ "Check of LEV". |
| 14 | | 4 times | Not lit | Fin temperature protection | The fin temperature exceeds 90°C during operation. | • Check the refrigerant circuit and the refrigerant amount.<br>• Refer to 12-6. Ⓖ "Check of outdoor fan motor". |
| | | | | P.C. board temperature protection | The P.C. board temperature exceeds 78°C during operation. | |
| 15 | | 5 times | Not lit | High pressure protection | The outdoor heat exchanger temperature exceeds 70°C during cooling or indoor gas pipe temperature exceeds 70°C during heating. | • Check the amount of gas and the refrigerant circuit.<br>• Check the stop valve. |
| 16 | | 9 times | Not lit | Bus-bar voltage protection | The bus-bar voltage exceeds 430 V or falls to 50 V or below during compressor operating. | • Replace the inverter P.C. board. |
| 17 | | 13 times | Not lit | Outdoor fan motor | Failure occurs 3 consecutive times within 30 seconds after the fan gets started. | • Refer to 12-6. Ⓖ "Check of outdoor fan motor". |
| 18 | | 8 times | Not lit | Current sensor protection | A short or open circuit is detected in the current sensor during compressor operating. | • Replace the inverter P.C. board. |

| No. | Symptom | Indication | | Abnormal point / Condition | Condition | Remedy |
|---|---|---|---|---|---|---|
| | | LED1(Red) | LED2(Yellow) | | | |
| 19 | 'Outdoor unit stops and restarts 3 minutes later' is repeated. | 10 times | Not lit | Compressor | The compressor does not synchronize with the operating power. | • Reconnect compressor connector.<br>• Refer to 12-6. Ⓔ "How to check inverter/ compressor".<br>• Check the stop valve. |
| 20 | Outdoor unit operates. | Once | Lit | Primary current protection | The input current exceeds 8 A (**MXZ-2F33VF, MXZ-2F33VF2, MXZ-2F33VF3, MXZ-2F33VF4**)/ 10 A (**MXZ-2F42VF, MXZ-2F42VF2, MXZ-2F42VF3, MXZ-2F42VF4, MXZ-2F53VF/VFH, MXZ-2F53VF2/ VFH2, MXZ-2F53VF3/VFH3, MXZ-2F53VF4 /VFH4**). | These symptoms do not mean any abnormality of the product, but check the following points.<br>• Check if indoor filters are clogged.<br>• Check if refrigerant is short.<br>• Check if indoor/outdoor unit air circulation is short cycled. |
| | | | | Secondary current protection | The current of the compressor exceeds 17 A. | |
| 21 | | Twice | Lit | High pressure protection | The indoor gas pipe temperature exceeds 45°C during heating. | |
| | | | | Defrosting in cooling | The indoor gas pipe temperature falls 3°C or below during cooling. | |
| 22 | | 3 times | Lit | Discharge temperature protection | The discharge temperature exceeds 100°C during operation. | • Check the refrigerant circuit and the refrigerant amount.<br>• Refer to 12-6. Ⓓ "Check of LEV".<br>• Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| 23 | | 4 times | Lit | Low discharge temperature protection | The frequency of the compressor is kept 68 Hz (**MXZ-2F33VF, MXZ-2F33VF2, MXZ-2F33VF3, MXZ-2F33VF4**)/80 Hz (**MXZ-2F42VF, MXZ-2F42VF2, MXZ-2F42VF3, MXZ-2F42VF3, MXZ-2F42VF4, MXZ-2F53VF/VFH, MXZ-2F53VF2/ VFH2, MXZ-2F53VF3/VFH3, MXZ-2F53VF4/VFH4**) or more and the discharge temperature is kept under 50°C (COOL mode)/40°C (HEAT mode) for more than 40 minutes. | • Refer to 12-6. Ⓓ "Check of LEV".<br>• Check the refrigerant circuit and the refrigerant amount. |
| 24 | | 5 times | Lit | Cooling high pressure protection | The outdoor heat exchanger temperature exceeds 58°C during operation. | This symptom does not mean any abnormality of the product, but check the following points.<br>• Check if indoor filters are clogged.<br>• Check if refrigerant is short.<br>• Check if indoor/outdoor unit air circulation is short cycled. |
| 25 | | 8 times | Lit | Converter protection | A failure is detected in the operation of the converter during operation. | • Check the voltage of power supply.<br>• Replace the inverter P.C. board. |
| 26 | Outdoor unit operates normally. | 9 times | Lit | Inverter check mode | The connector of compressor is disconnected. Inverter check mode starts. | – |
| 27 | | Lit | Lit | Normal | – | – |

NOTE 1. The location of LED is illustrated at the right figure. Refer to 12-7.4.
2. LED is lit during normal operation.
The blinking frequency shows the number of times the LED blinks after every 2.5-second OFF.
(Example) When the blinking frequency is "2".



**MXZ-3F, 4F, 5F, 6F, MXZ-2F53VFHZ/VFHZ2, MXZ-4F83VFHZ/VFHZ2**

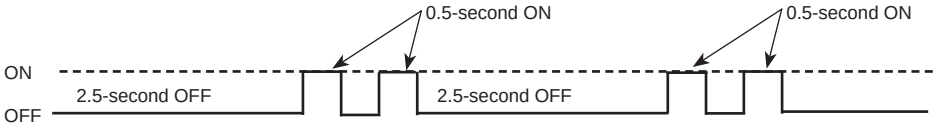
| No. | Symptom | Indication | | Abnormal point / Condition | Condition | Remedy |
|---|---|---|---|---|---|---|
| | | LED1(Red) | LED2(Yellow) | | | |
| 1 | Outdoor unit does not operate. | Lit | Once | LEV and drain pump | The indoor unit detects an abnormality in the LEV and drain pump. | • Refer to 12-6. Ⓓ "Check of LEV".<br>• Check the drain pump of the indoor unit. |
| 2 | | Lit | Twice | Outdoor power system | Overcurrent protection cut-out operates 3 consecutive times within 1 minute after the compressor gets started, or converter protection cut-out or bus-bar voltage protection cut-out operates 3 consecutive times within 3 minutes after startup. | • Check the connection of the compressor connecting wire.<br>• Refer to 12-6. Ⓔ "How to check inverter/ compressor".<br>• Check the stop valve. |
| 3 | | Lit | 3 times | Discharge temperature thermistor | A short circuit is detected in the thermistor during operation, or an open circuit is detected in the thermistor after 10 minutes of compressor startup. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| 4 | | Lit | 4 times | Fin temperature thermistor | A short or open circuit is detected in the thermistor during operation. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| | | | | P. C. board temperature thermistor | | • Replace the outdoor control P.C. board. |
| 5 | | Lit | 5 times | Ambient temperature thermistor | A short or open circuit is detected in the thermistor during operation. | • Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| | | | | Outdoor heat exchanger temperature thermistor | A short circuit is detected in the thermistor during operation, or an open circuit is detected in the thermistor after 5 minutes (in cooling) and 10 minutes (in heating) of compressor startup. | |
| | | | | Defrost thermistor | A short circuit is detected in the thermistor during operation, or an open circuit is detected in the thermistor after 5 minutes of compressor startup. | |
| 6 | | Lit | 6 times | Zero cross detecting circuit (Outdoor control P.C. board) | Zero cross signal cannot be detected. | • Replace the outdoor control P.C. board. |
| 7 | | Lit | 7 times | Outdoor control system | The nonvolatile memory data cannot be read properly. | • Replace the outdoor control P.C. board. |
| 8 | | Lit | 8 times | Current sensor | Current sensor protection cut-out operates 2 consecutive times. | • Replace the outdoor power P.C. board. |
| 9 | | Lit | 11 times | Communication error between P.C. boards | The communication protection cut-out between boards operates 2 consecutive times. | • Check the connecting wire between outdoor control P.C. board and outdoor power P.C. board. |
| | | | | M-NET communication error | M-NET adapter P.C. board detects an abnormality in the communication error. | • Check the connecting wire between M-NET adapter P.C. board and outdoor control P.C. board, or terminal block. |
| 10 | | Lit | 12 times | Zero cross detecting circuit (Outdoor power P.C. board) | The protection cut-out of the zero cross detecting circuit operates 10 consecutive times. | • Replace the outdoor power P.C. board. |
| 11 | | Lit | 13 times | Current sensor | A short or open circuit is detected in the input current detection circuit during operation. | • Replace the outdoor power P.C. board. |
| 12 | | Lit | 14 times | Voltage sensor | A short or open circuit is detected in the input voltage detection circuit during operation. | • Replace the outdoor power P.C. board. |
| 13 | | Lit | 15 times | Relay operation | No relay operation is detected during operation. | • Replace the outdoor power P.C. board. |
| 14 | | Lit | 18 times | Detection of refrigerant (Indoor unit) | 1. Refrigerant leaks from the piping or the heat exchanger in the indoor unit.<br>2. The following items are used around the indoor unit.<br>• Spray (LP gas including Freon, and whose main ingredient is propane and butane)<br>• Aerosol insecticide (including ethanol)<br>• Air spray painting (including dichloromethane)<br>• Charcoal (charcoal fire)<br>• Chemicals (such as ethanol) | • Turn off the power after the indoor unit finishes its fan operation.<br>(The fan operation continues for 3 hours.)<br>• Check the indoor unit to detect the part where refrigerant leaks.<br>• Repair the part where refrigerant leaks.<br>• Turn on the power again.<br>• Replace the refrigerant sensor if the problem is not fixed. |
| 15 | | Lit | 19 times | Abnormality of refrigerant leakage sensor (Indoor unit) | The refrigerant sensor mounted on the indoor unit does not work.<br>The refrigerant sensor is not connected properly or the wire is broken. | • Connect the connector of the refrigerant sensor properly.<br>• Replace the refrigerant sensor. |
| 16 | | Lit | 20 times | Incompatible unit combination error | The indoor unit which is not compatible with the outdoor unit is connected. | • Replace the indoor unit with the one which is compatible with the outdoor unit. |
| 17 | | Lit | 21 times | 4-way valve | Connector of R.V. coil is disconnected, poorly connected or 4-way valve is faulty. | • Refer to 12-6. Ⓒ "Check of R.V. coil".<br>• Check the 4-way valve. |
| 18 | 'Outdoor unit stops and restarts 3 minutes later' is repeated. | Twice | Not lit | IPM protection | Overcurrent is detected after 30 seconds of compressor startup. | • Reconnect compressor connector.<br>• Refer to 12-6. Ⓔ "How to check inverter/ compressor".<br>• Check the stop valve.<br>• Check the power module (PAM module). |
| | | | | Lock protection | Overcurrent is detected within 30 seconds of compressor startup. | |
| 19 | | 3 times | Not lit | Discharge temperature protection | The discharge temperature exceeds 115°C (**MXZ-3F54/3F68/4F72VF/VF2/VF3/4F80VF2/VF3/VF4**)/ 106°C(**MXZ-4F83/5F102VF/VF2, MXZ-2F53VFHZ/ VFHZ2**)/ 116°C (**MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**) during operation.<br>Compressor can restart if discharge temperature thermistor reads 80°C (**MXZ-3F54/3F68/4F72VF/ VF2/VF3/VF4/4F80VF2/VF3/VF4**)/95°C (**MXZ-4F83/5F102VF/VF2, MXZ-2F53VFHZ /VFHZ2**)/100°C (**MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**) or less 3 minutes later. | • Check the amount of gas and refrigerant circuit.<br>• Refer to 12-6. Ⓓ "Check of LEV". |

| No. | Symptom | Indication | | Abnormal point / Condition | Condition | Remedy |
|---|---|---|---|---|---|---|
| | | LED1(Red) | LED2(Yellow) | | | |
| 20 | 'Outdoor unit stops and restarts 3 minutes later' is repeated. | 4 times | Not lit | Fin temperature protection | The fin temperature exceeds during operation. | •Check refrigerant circuit and refrigerant amount.<br>•Refer to 12-6. Ⓖ "Check of outdoor fan motor". |
| | | | | P.C. board temperature protection | The P.C. board temperature exceeds during operation. | |
| 21 | | 5 times | Not lit | High pressure protection | High pressure is detected with the high pressure switch (HPS) during operation. | • Check around of gas and the refrigerant circuit.<br>• Check the stop valve. |
| | | | | | The outdoor heat exchanger temperature exceeds 70°C during cooling or the indoor gas pipe temperature exceeds 70°C during heating. | |
| 22 | | 6 times | Not lit | Pre-heating protection | Overcurrent is detected during pre-heating. | • Reconnect compressor connector.<br>• Refer to 12-6.Ⓔ "How to check inverter/ compressor".<br>• Check the power module. |
| 23 | | 8 times | Not lit | Converter protection | A failure is detected in the operation of the converter during operation. | • Replace the outdoor power P.C. board. |
| 24 | | 9 times | Not lit | Bus-bar voltage protection | The bus-bar voltage exceeds 400 V or falls to low level during compressor operating. | • Check the voltage of power supply.<br>• Replace the outdoor power P.C. board or the outdoor control P.C. board.<br>• Refer to 12-6. Ⓙ "Check of bus-bar voltage". |
| 25 | | 11 times | Not lit | Low outside temperature protection(cooling) | The ambient became -12°C or less. | — |
| 26 | | 13 times | Not lit | Outdoor fan motor | A failure occurs 3 consecutive times within 30 seconds after the fan gets started. | • Refer to 12-6. Ⓖ "Check of outdoor fan motor". |
| 27 | | 14 times | Not lit | 4-way valve switching operation | Connector of R.V. coil is disconnected, poorly connected or 4-way valve is faulty. | • Refer to 12-6. Ⓒ "Check of R.V. coil".<br>• Check the 4-way valve. |
| 28 | | Lit | 8 times | Current sensor protection | A short or open circuit is detected in the current sensor during compressor operating. | • Replace the outdoor power P.C. board. |
| 29 | | Lit | 11 times | Communication between P.C. boards protection | Communication error occurs between the outdoor control P.C. board and outdoor power P.C. board for more than 10 seconds. | • Check the connecting wire between outdoor control P.C. board and outdoor power P.C. board. |
| 30 | | Lit | 12 times | Zero cross detecting circuit (Outdoor power P.C. board) | Zero cross signal cannot be detected while the compressor is operating. | • Replace the outdoor power P.C. board. |
| 31 | Outdoor unit operates. | Once | Lit | Primary current protection | The input current exceeds 13.6 A (**MXZ-2F53VFHZ/VFHZ2**)/ 15 A (**MXZ-3F54/3F68/4F72VF/VF2/VF4/4F80VF2/VF3/VF4**)/18.4 A (**MXZ-4F83/5F102VF/VF2**)/26.8A **MXZ-6F120VF2,MXZ-6F122VF)/**25 A (**MXZ-4F83VFHZ/VFHZ2**). | These symptoms do not mean any abnormality of the product, but check the following points.<br>• Check if indoor filters are clogged.<br>• Check if refrigerant is short.<br>• Check if indoor/outdoor unit air circulation is short cycled. |
| 32 | | Twice | Lit | High pressure protection | The indoor gas pipe temperature exceeds 45°C during heating. | |
| | | | | Defrosting in cooling | The indoor gas pipe temperature falls 3°C or below during cooling. | |
| 33 | | 3 times | Lit | Discharge temperature protection | The frequency of the compressor is kept 80 Hz or more and the discharge temperature is kept under 50°C(COOL mode)/40°C(HEAT mode) for more than 40 minutes. | • Check refrigerant circuit and refrigerant amount.<br>• Refer to 12-6. Ⓓ "Check of LEV".<br>• Refer to 12-6. Ⓕ "Check of outdoor thermistors". |
| 34 | | 4 times | Lit | Low discharge temperature protection | The frequency of the compressor is kept 80 Hz or more and the discharge temperature is kept under 39°C for more than 20 minutes. | • Refer to 12-6. Ⓓ "Check of LEV".<br>• Check refrigerant circuit and refrigerant amount. |
| 35 | | 5 times | Lit | Cooling high pressure protection | The outdoor heat exchanger temperature exceeds 58°C during operation. | This symptom does not mean any abnormality of the product, but check the following points.<br>• Check if indoor filters are clogged.<br>• Check if refrigerant is short.<br>• Check if indoor/outdoor unit air circulation is short cycled. |
| 36 | | 7 times | Lit | High → Low Pressure bypass valve Cooling evaporating temperature drop prevention control | **MXZ-3F54/3F68/4F72VF/VF2/VF3/4F80VF2/VF3/VF4**<br>During cooling operation, the temperature of indoor heat exchanger becomes 3°C or less within 1 hour after the compressor starts running, or it becomes less than 12°C - 16°C* later than that.<br>* It depends on the difference between the set temperature and the room temperature. | This symptom does not mean any abnormality of the product, but check the following points.<br>• Check the indoor filters are not clogged.<br>• Check there is sufficient refrigerant.<br>• Check the indoor/outdoor unit air circulation is not short cycled. |
| | | | | High → Low pressure bypass valve High pressure protection control at startup of heating operation | **MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ/VFHZ2**<br>The room temperature is 24°C or more when 1 or 2 unit(s) start(s) the heating operation. | |
| | | | | High → Low pressure bypass valve Compressor oil tempering control at startup of heating operation | **MXZ-6F120VF2, MXZ-6F122VF, MXZ-4F83VFHZ /VFHZ2**<br>Both the following are true:<br>• The outside temperature is -2°C or less when the heating operation is started.<br>• [(Discharge temperature) - (Indoor heat exchanger temperature)] < 5°C | |

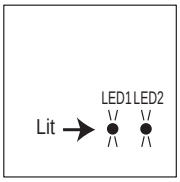
| No. | Symptom | Indication | | Abnormal point / Condition | Condition | Remedy |
|---|---|---|---|---|---|---|
| | | LED1(Red) | LED2(Yellow) | | | |
| 37 | Outdoor unit operates. | 11 times | Lit | M-NET communication error | M-NET adapter P.C. board detects an abnormality in the communication error. | • Check the connecting wire between M-NET adapter P.C. board and outdoor control P.C. board, or terminal block. |
| 38 | Outdoor unit operates normally. | 8 times | Lit | Cooling evaporating temperature protection | During cooling operation, the temperature of indoor heat exchanger becomes 7°C - 11°C* or less within 1 hour after the compressor starts running, or it becomes 9°C - 17°C* or less later than that.<br>* It depends on the indoor unit type/model or the difference between the set temperature and the room temperature. | This symptom does not mean any abnormality of the product. |
| 39 | | 9 times | Lit | Inverter check mode | The unit is operated with the emergency operation switch. | — |
| 40 | | Lit | Lit | Normal | — | — |

NOTE 1. The location of LED is illustrated at the right figure. Refer to 12-7.2.
2. LED is lit during normal operation.

The blinking frequency shows the number of times the LED blinks after every 2.5-second OFF.
(Example) When the blinking frequency is “2”.

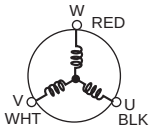
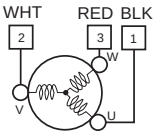


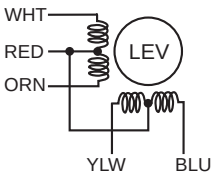

Outdoor control P.C. board (Parts side)



## 12-5. TROUBLESHOOTING CRITERION OF MAIN PARTS

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**
**MXZ-4F83VF MXZ-5F102VF MXZ-6F122VF**
**MXZ-4F83VF2 MXZ-5F102VF2 MXZ-6F120VF2**
**MXZ-2F53VFHZ MXZ-4F83VFHZ**
**MXZ-2F53VFHZ2 MXZ-4F83VFHZ2**

<table>
<tr><th>Part name</th><th>Check method and criterion</th><th>Figure</th></tr>
<tr><td>Defrost thermistor (RT61)<br>Fin temperature thermistor (RT64)<br>Ambient temperature thermistor (RT65)<br>Outdoor heat exchanger temperature thermistor (RT68)</td><td>Measure the resistance with a multimeter.<br><br>Refer to 12-7. "TEST POINT DIAGRAM AND VOLTAGE" 1. "Inverter P.C. board", 2. "Outdoor control P.C. board " or 3. "Outdoor power P.C. board" for the chart of thermistor.</td><td></td></tr>
<tr><td>Discharge temperature thermistor (RT62)</td><td>Measure the resistance with a multimeter.<br>Before measurement, hold the thermistor with your hands to warm it up.<br>Refer to 12-7. "TEST POINT DIAGRAM AND VOLTAGE" 1. "Inverter P.C. board", 2. "Outdoor control P.C. board ", for the chart of thermistor.</td><td></td></tr>
<tr><td>Compressor</td><td>Measure the resistance between terminals with a multimeter.<br>(Winding temperature : -10°C - 40°C)<br>
<table>
<tr><th colspan="2">Normal (Each phase)</th></tr>
<tr><td>MXZ-2F33VF/VF2/VF3</td><td>MXZ-2F42VF/VF2/VF3/VF4<br>MXZ-2F53VF/VF2/VF3/VF4<br>MXZ-2F53VFH/VFH2/VFH3/VFH4<br>MXZ-3F54VF/VF2/VF3/VF4</td></tr>
<tr><td>1.59 Ω - 2.16 Ω</td><td>0.86 Ω - 1.06 Ω</td></tr>
</table>
<table>
<tr><th colspan="3">Normal (Each phase)</th></tr>
<tr><td>MXZ-3F68VF/VF2/VF3/VF4<br>MXZ-4F72VF/VF2/VF3/VF4<br>MXZ-4F80VF2/VF3/VF4</td><td>MXZ-4F83VF/VF2<br>MXZ-5F102VF/VF2<br>MXZ-2F53VFHZ/<br>VFHZ2</td><td>MXZ-6F102VF2/<br>MXZ-6F122VF<br>MXZ-4F83VFHZ/<br>VFHZ2</td></tr>
<tr><td>0.91 Ω - 1.13 Ω</td><td>0.83 Ω - 1.03 Ω</td><td>0.77 Ω - 0.95 Ω</td></tr>
</table></td><td> 
</td></tr>
<tr><td>Outdoor fan motor<br>MXZ-2F33VF/VF2/VF3/VF4<br>MXZ-2F42VF/VF2/VF3/VF4<br>MXZ-2F53VF/VF2/VF3/VF4<br>MXZ-2F53VFH/VFH2/VFH3/VFH4</td><td>Measure the resistance between lead wires with a multimeter.<br>(Part temperature : -10°C - 40°C)<br>
<table>
<tr><th>Normal (Each phase)</th></tr>
<tr><td>MXZ-2F33VF/42VF/53VF/53VFH</td></tr>
<tr><td>12 Ω - 16 Ω</td></tr>
</table>
<table>
<tr><td>MXZ-2F33VF2/42VF2/53VF2/53VFH2<br>MXZ-2F33VF3/42VF3/53VF3/53VFH3<br>MXZ-2F33VF4/42VF4/53VF4/53VFH4</td></tr>
<tr><td>32 Ω - 43 Ω</td></tr>
</table></td><td> 
</td></tr>
<tr><td>Outdoor fan motor<br>MXZ-3F54VF/VF2/VF3/VF4<br>MXZ-3F68VF/VF2/VF3/VF4<br>MXZ-4F72VF/VF2/VF3/VF4<br>MXZ-4F80VF2/VF3/VF4<br>MXZ-4F83VF/VF2<br>MXZ-5F102VF/VF2<br>MXZ-6F120VF2<br>MXZ-6F122VF<br>MXZ-2F53VFHZ/VFHZ2<br>MXZ-4F83VFHZ/VFHZ2</td><td>Refer to 12-6. Ⓖ.</td><td></td></tr>
</table>

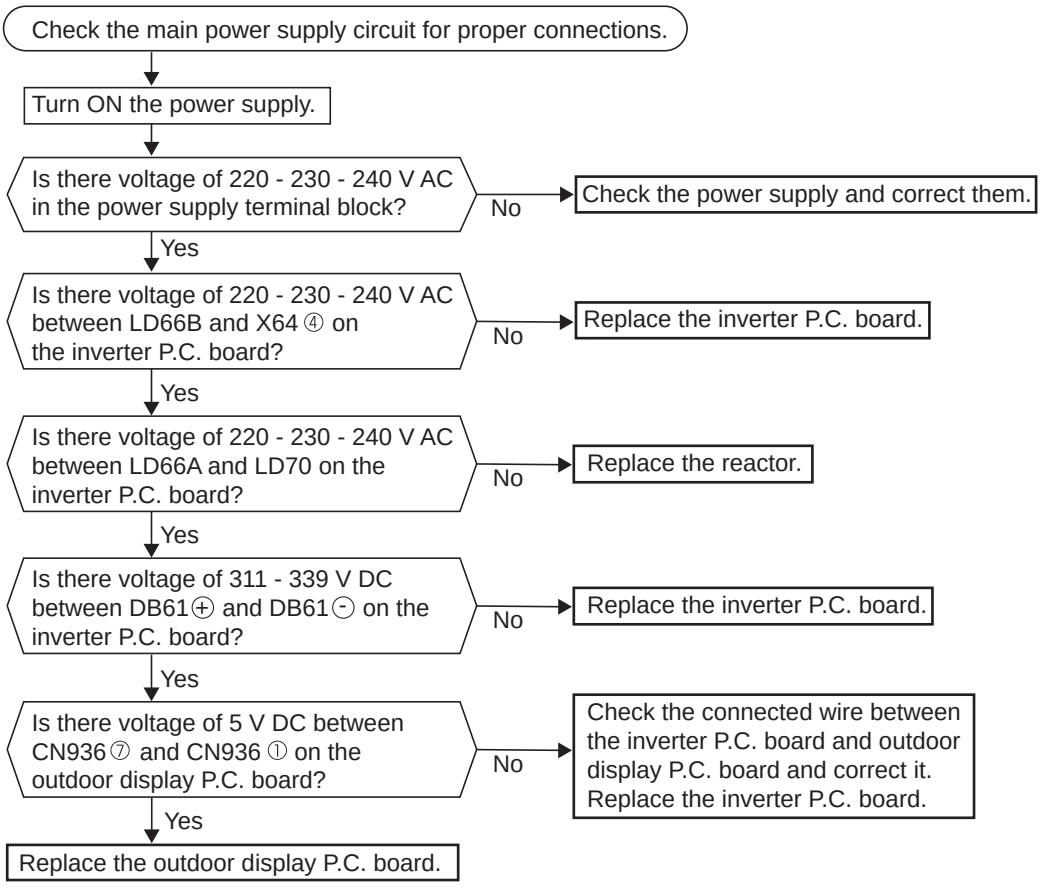
<table>
<tr><th>Part name</th><th>Check method and criterion</th><th>Figure</th></tr>
<tr><td>R.V. coil</td><td>Measure the resistance with a multimeter.<br>(Part temperature : -10°C - 40°C)
<table>
<tr><th colspan="2">Normal</th></tr>
<tr><td>MXZ-2F33VF/VF2/VF3/VF4<br>MXZ-2F42VF/VF2/VF3/VF4<br>MXZ-2F53VF/VF2/VF3/VF4<br>MXZ-2F53VFH/VFH2/VFH3/VF4</td><td>MXZ-3F54VF/VF2/VF3/VF4<br>MXZ-3F68VF/VF2/VF3/VF4<br>MXZ-4F72VF/VF2/VF3/VF4<br>MXZ-4F80VF2/VF3/VF4</td></tr>
<tr><td>1.20 kΩ - 1.56 kΩ</td><td>1.26 kΩ - 1.62 kΩ</td></tr>
</table>
<table>
<tr><th colspan="2">Normal</th></tr>
<tr><td>MXZ-4F83VF/VF2<br>MXZ-5F102VF/VF2<br>MXZ-2F53VFHZ/VFHZ2</td><td>MXZ-6F120VF2<br>MXZ-6F122VF<br>MXZ-4F83VFHZ/VFHZ2</td></tr>
<tr><td>1.20 kΩ - 1.77 kΩ</td><td>1.24 kΩ - 1.86 kΩ</td></tr>
</table></td><td></td></tr>
<tr><td>Linear expansion valve</td><td>Measure the resistance with a multimeter.<br>(Part temperature : -10°C - 40°C)
<table>
<tr><th>Color of lead wire</th><th>Normal</th></tr>
<tr><td>WHT - RED</td><td rowspan="4">37.4 Ω - 53.9 Ω</td></tr>
<tr><td>RED - ORN</td></tr>
<tr><td>YLW - RED</td></tr>
<tr><td>RED - BLU</td></tr>
</table></td><td> 
</td></tr>
<tr><td>High pressure switch (HPS)<br>MXZ-3F54VF/VF2/VF3/VF4<br>MXZ-3F68VF/VF2/VF3/VF4<br>MXZ-4F72VF/VF2/VF3/VF4<br>MXZ-4F80VF2/VF3/VF4<br>MXZ-4F83VF/VF2<br>MXZ-5F102VF/VF2<br>MXZ-6F120VF2<br>MXZ-6F122VF<br>MXZ-2F53VFHZ/VFHZ2<br>MXZ-4F83VFHZ/VFHZ2</td><td>
<table>
<tr><th colspan="2">Pressure</th><th>Normal</th></tr>
<tr><td></td><td>MXZ-3F54VF/VF2/VF3/VF4<br>MXZ-3F68VF/VF2/VF3/VF4<br>MXZ-4F72VF/VF2/VF3/VF4<br>MXZ-4F80VF2/VF3/VF4</td><td>MXZ-4F83VF/VF2<br>MXZ-5F102VF/VF2<br>MXZ-6F120VF2<br>MXZ-6F122VF<br>MXZ-2F53VFHZ/VFHZ2<br>MXZ-4F83VFHZ/VFHZ2</td><td>Normal</td></tr>
<tr><td rowspan="2">HPS</td><td colspan="2">3.14 ± 0.15 MPa</td><td>Close</td></tr>
<tr><td colspan="2">4.14 ± 0.1 MPa</td><td>Open</td></tr>
</table></td><td></td></tr>
<tr><td>Defrost heater<br>MXZ-2F53VFH<br>MXZ-2F53VFH2<br>MXZ-2F53VFH3<br>MXZ-2F53VFH4<br>MXZ-2F53VFHZ<br>MXZ-2F53VFHZ2<br>MXZ-4F83VFHZ<br>MXZ-4F83VFHZ2</td><td>Measure the resistance with a multimeter.<br>(Part temperature : -10°C - 40°C)
<table>
<tr><th>Normal</th></tr>
<tr><td>349 Ω - 428 Ω</td></tr>
</table></td><td></td></tr>
</table>

## 12-6. TROUBLESHOOTING FLOW

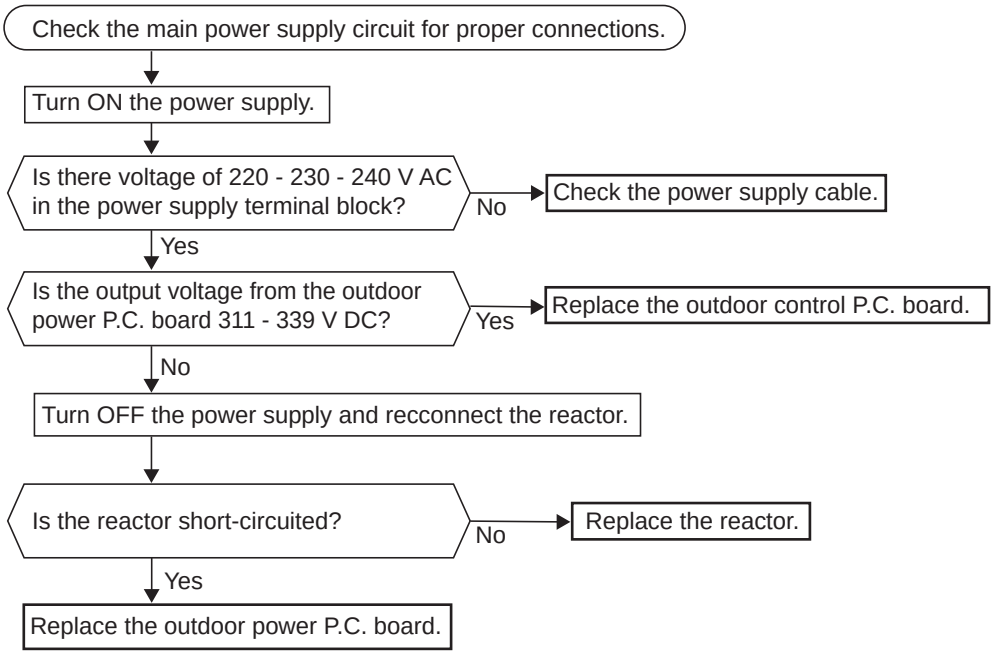
**Outdoor unit does not operate.**

### Ⓐ Check of power supply

**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH** **MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3** **MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**




**MXZ-3F54VF/3F68VF/4F72VF** **MXZ-4F83/5F102/6F122VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2** **MXZ-2F53/4F83VFHZ**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3** **MXZ-4F83/5F102/6F120VF2**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4** **MXZ-2F53/4F83VFHZ2**



- **When the indoor unit does not operate, it cannot be operated either with the remote controller or with the emergency operation switch.**
- **When the outdoor unit does not operate, the OPERATION INDICATOR lamp on the indoor unit blinks ON and OFF every 0.5-second.**

## Ⓑ How to check miswiring and serial signal error (when outdoor unit does not work)

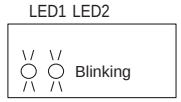
**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3 MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**

**LED indication for communication status**

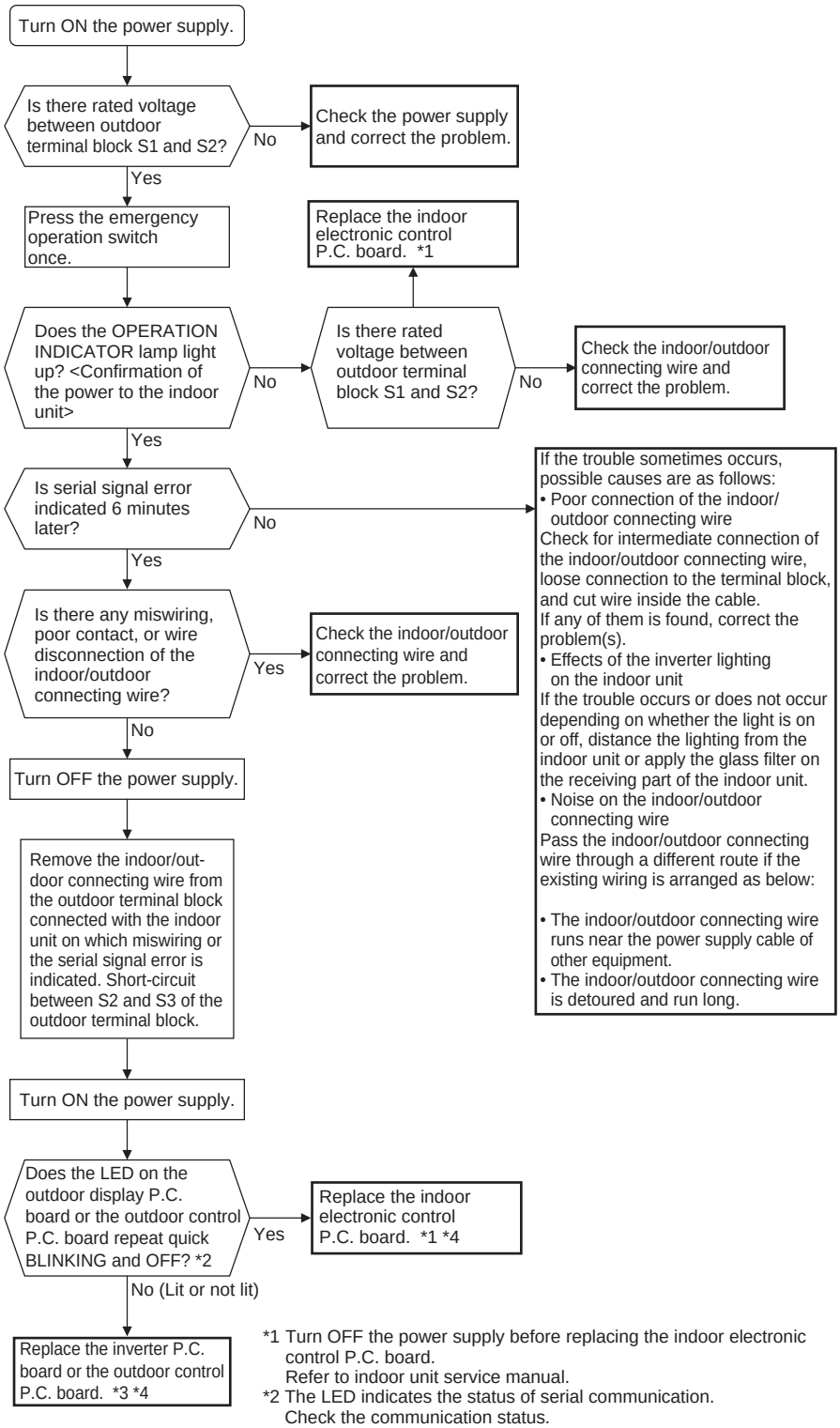
Communication status is indicated by the LED.

Unit status
Blinking: normal communication
Lighted: abnormal communication or not connected
Not lighted: The outdoor P.C. board is abnormal.
NOTE: "Lighted" and "Not lighted" in the table below does not indicate abnormal.

Outdoor display P.C. board




| LED 1 | LED 2 |
|---|---|
| Unit A status | Unit B status |




*1 Turn OFF the power supply before replacing the indoor electronic control P.C. board.
Refer to indoor unit service manual.
*2 The LED indicates the status of serial communication.
Check the communication status.
*3 Turn OFF the power supply before replacing the inverter P.C. board.
Be careful of residual voltage of smoothing capacitor.
*4 Remove the short-circuit between outdoor terminal block S2 and S3. Connect the indoor/outdoor connecting wire.

**MXZ-3F54VF/3F68VF/4F72VF** **MXZ-4F83/5F102/6F122VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2** **MXZ-2F53/4F83VFHZ**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3** **MXZ-4F83/5F102/6F120VF2**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4** **MXZ-2F53/4F83VFHZ2**

**LED indication for communication status**

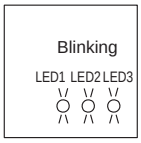
Communication status is indicated by the LED.

Unit status
Blinking: normal communication
Lighting: abnormal communication or not connected

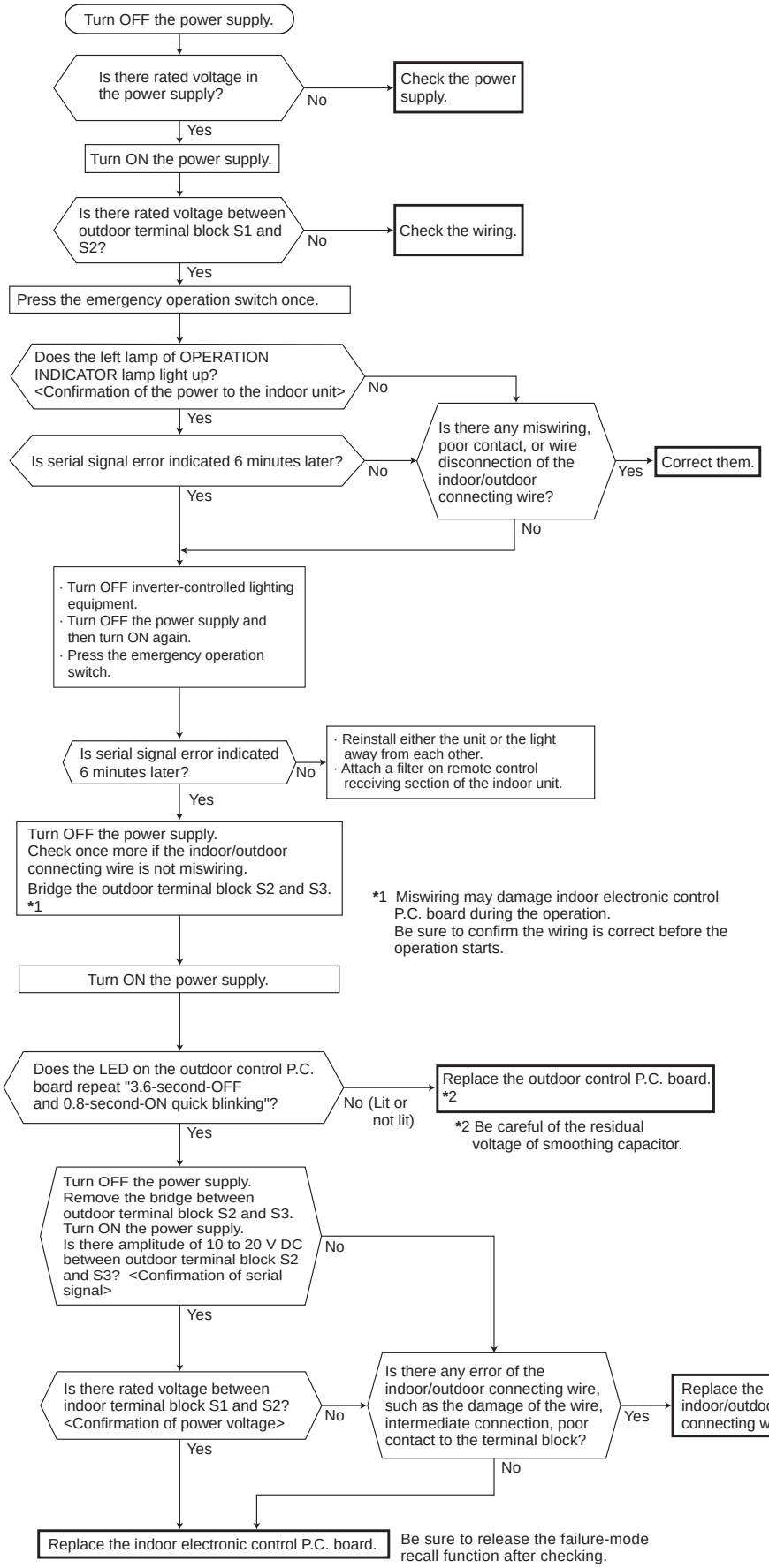
Pattern 1 and 2 is repeatedly displayed alternately. Each pattern is displayed for 10 seconds.

**NOTE:** "Lighting" in the table below does not indicate abnormal communication.

Outdoor control P.C. board




| Pattern | LED 1 | LED 2 | LED 3 |
|---|---|---|---|
| 1 | Unit A status | Unit B status | Lit |
| 2 | Unit C status | Unit D status | Not lit |




*1 Miswiring may damage indoor electronic control P.C. board during the operation.
Be sure to confirm the wiring is correct before the operation starts.

*2 Be careful of the residual voltage of smoothing capacitor.

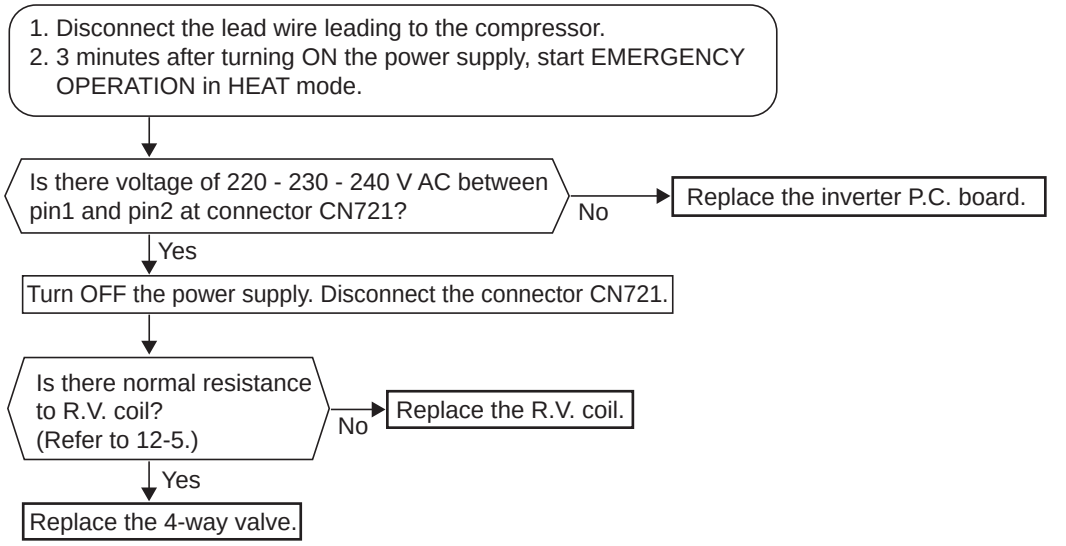
**The cooling operation or heating operation does not operate.**

## © Check of R.V. coil

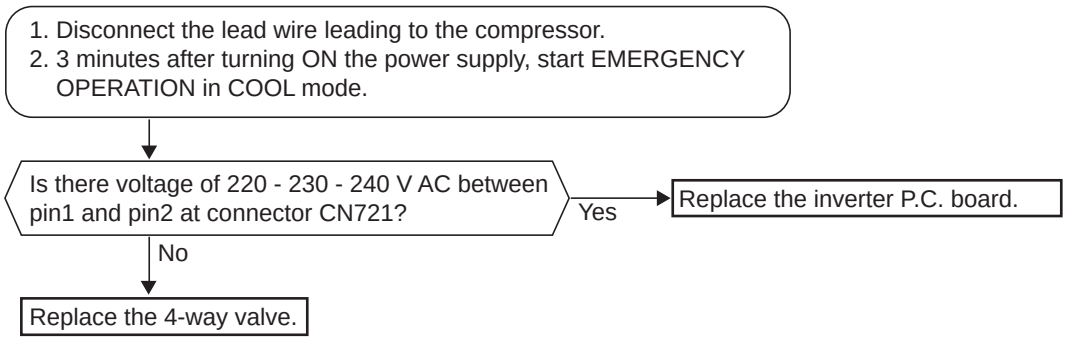
**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**

| Connector | **MXZ-2F** |
|---|---|
| CN721 | Inverter P.C. board |

**• The heating operation does not work.**



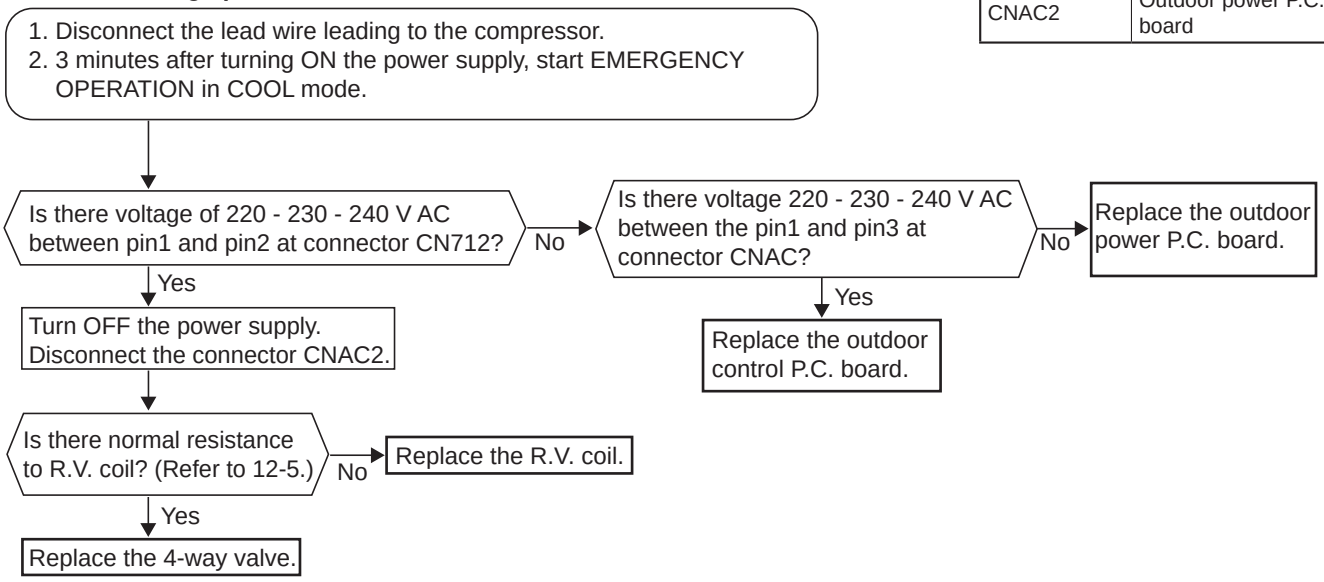

**• The cooling operation does not work.**



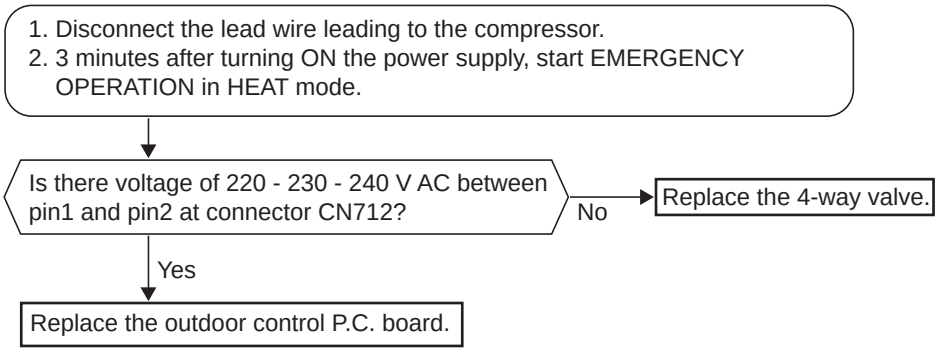
**MXZ-3F54VF/3F68VF/4F72VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**
**MXZ-4F83/5F102/6F122VF**
**MXZ-2F53/4F83VFHZ**
**MXZ-4F83/5F102/6F120VF2**
**MXZ-2F53/4F83VFHZ2**

| Connector | **MXZ-3F, 4F, 5F, 6F 2F53/4F83VFHZ** |
|---|---|
| CNAC CN712 | Outdoor control P.C. board |
| CNAC2 | Outdoor power P.C. board |

**• When cooling operation does not work.**

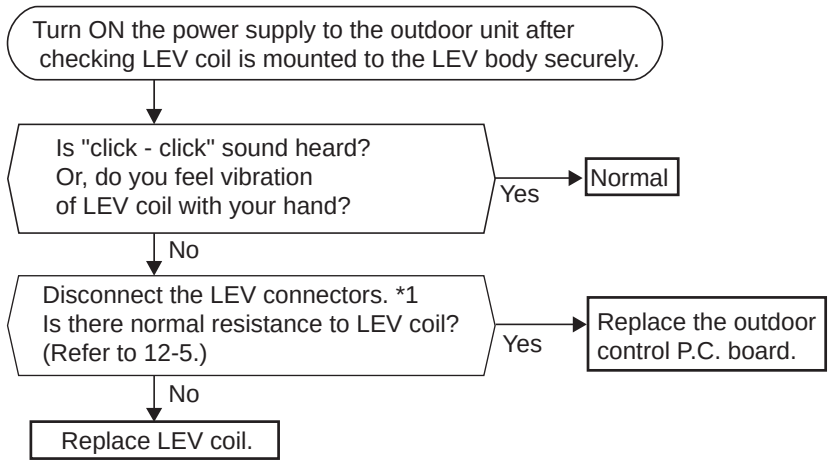



**• When heating operation does not work.**



**• When cooling, heat exchanger of non-operating indoor unit frosts.**
**• When heating, non-operating indoor unit gets warm.**

## Ⓓ Check of LEV



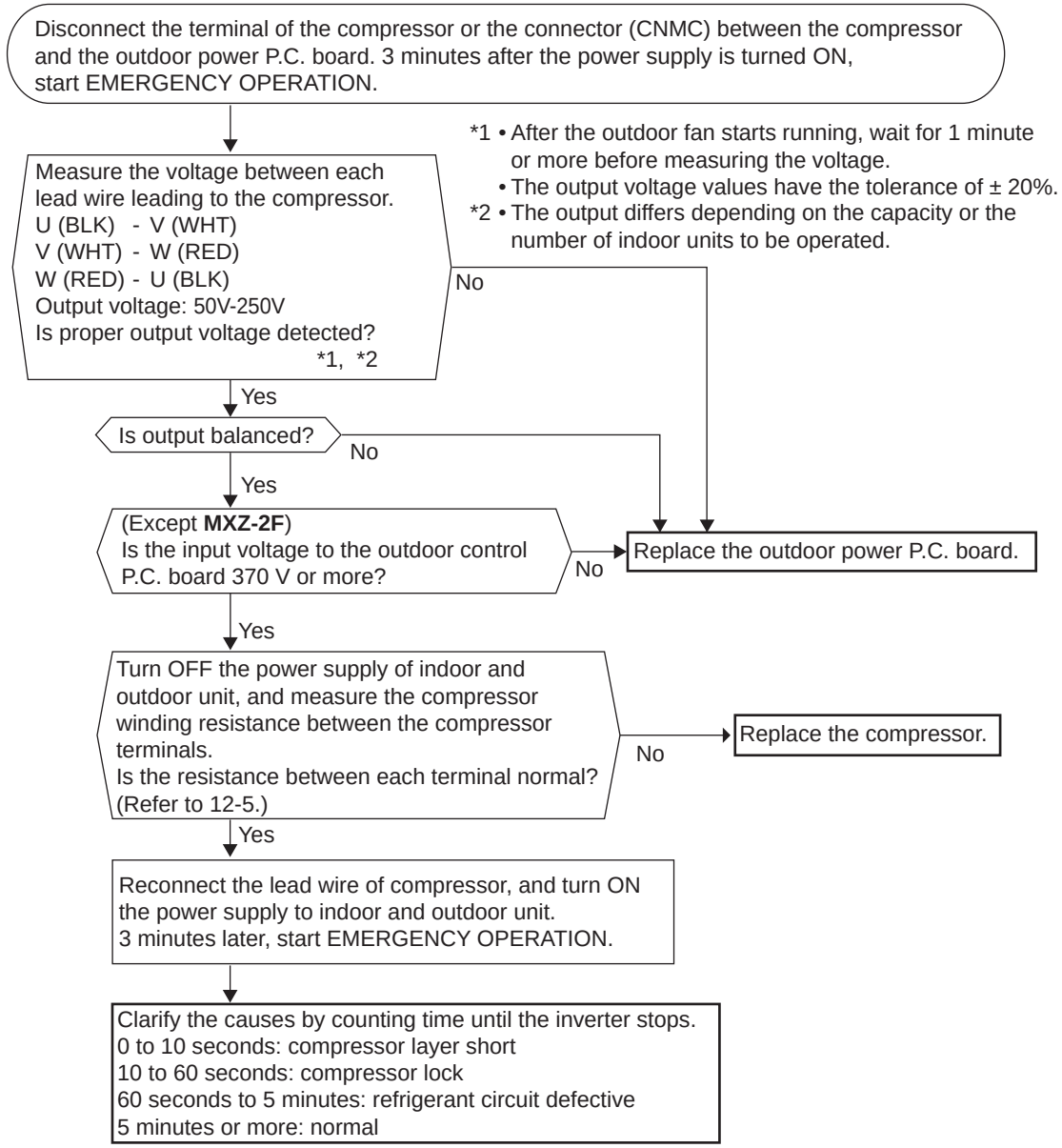

| Connector | MXZ-2F | MXZ-3F, 4F, 5F, 6F 2F53/4F83VFHZ |
|---|---|---|
| CN724<br>CN725 | Inverter P.C. board | —— |
| CN791<br>CN792<br>CN793<br>CN794<br>CN795<br>CN796<br>CN797 | —— | Outdoor control P.C. board |

***1**

| LEV Connector | LEV | MXZ-2F | MXZ-3F | MXZ-4F72 MXZ-4F80VF | MXZ-4F83VF | MXZ-5F | MXZ-6F | MXZ-2F53VFHZ | MXZ-4F83VFHZ |
|---|---|---|---|---|---|---|---|---|---|
| CN724 | LEV A | ● | — | — | — | — | — | — | — |
| CN725 | LEV B | ● | — | — | — | — | — | — | — |
| CN791 | LEV A | — | ● | ● | ● | ● | ● | ● | ● |
| CN792 | LEV B | — | ● | ● | ● | ● | ● | ● | ● |
| CN793 | LEV C | — | ● | ● | ● | ● | ● | — | ● |
| CN794 | LEV D | — | — | ● | ● | ● | ● | — | ● |
| CN795 | LEV E | — | — | — | — | ● | ● | — | — |
| CN796 | LEV F | — | — | — | — | — | ● | — | — |
| CN797 | LEV R | — | ● | ● | — | — | — | — | — |

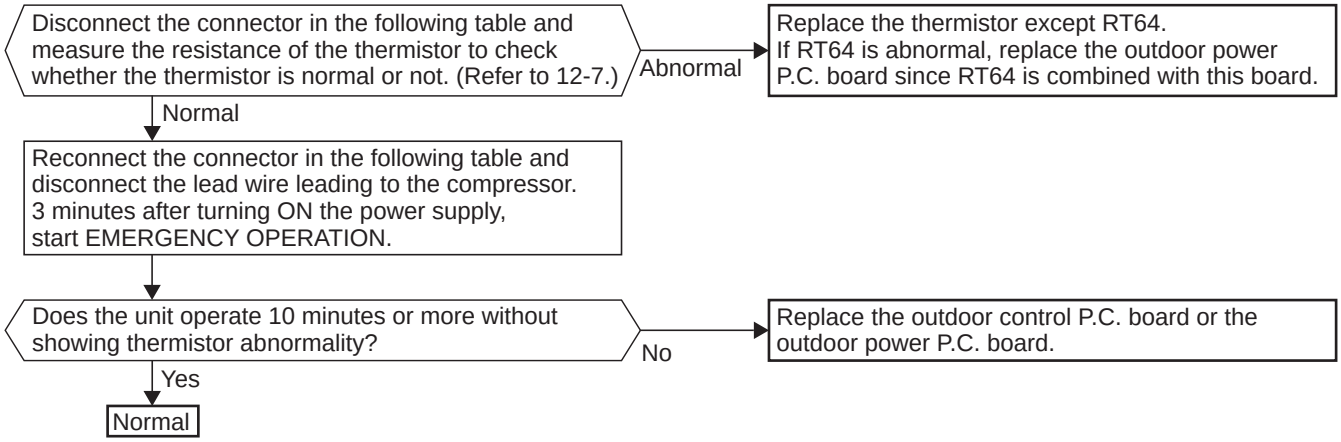
**• When heating, room does not get warm.**
**• When cooling, room does not get cool.**

## Ⓔ How to check inverter/compressor



**• When thermistor is abnormal.**

## Ⓕ Check of outdoor thermistors




**MXZ-2F33VF/2F42VF/2F53VF**
**MXZ-2F33VF2/2F42VF2/2F53VF2**
**MXZ-2F33VF3/2F42VF3/2F53VF3**
**MXZ-2F33VF4/2F42VF4/2F53VF4**
**MXZ-2F53VFH**
**MXZ-2F53VFH2**
**MXZ-2F53VFH3**
**MXZ-2F53VFH4**

| Thermistor | Symbol | Connector, Pin No. | Board |
|---|---|---|---|
| Defrost | RT61 | CN641 pin1 and pin2 | Inverter P.C. board |
| Discharge temperature | RT62 | CN641 pin3 and pin4 | |
| Fin temperature | RT64 | CN642 pin1 and pin2 | |
| Ambient temperature | RT65 | CN643 pin1 and pin2 | |
| Outdoor heat exchanger temperature | RT68 | CN644 pin1 and pin3 | |

**MXZ-3F54VF/3F68VF/4F72VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**
**MXZ-4F83/5F102/6F112VF**
**MXZ-2F53/4F83VFHZ**
**MXZ-4F83/5F102/6F112VF2**
**MXZ-2F53/4F83VFHZ2**

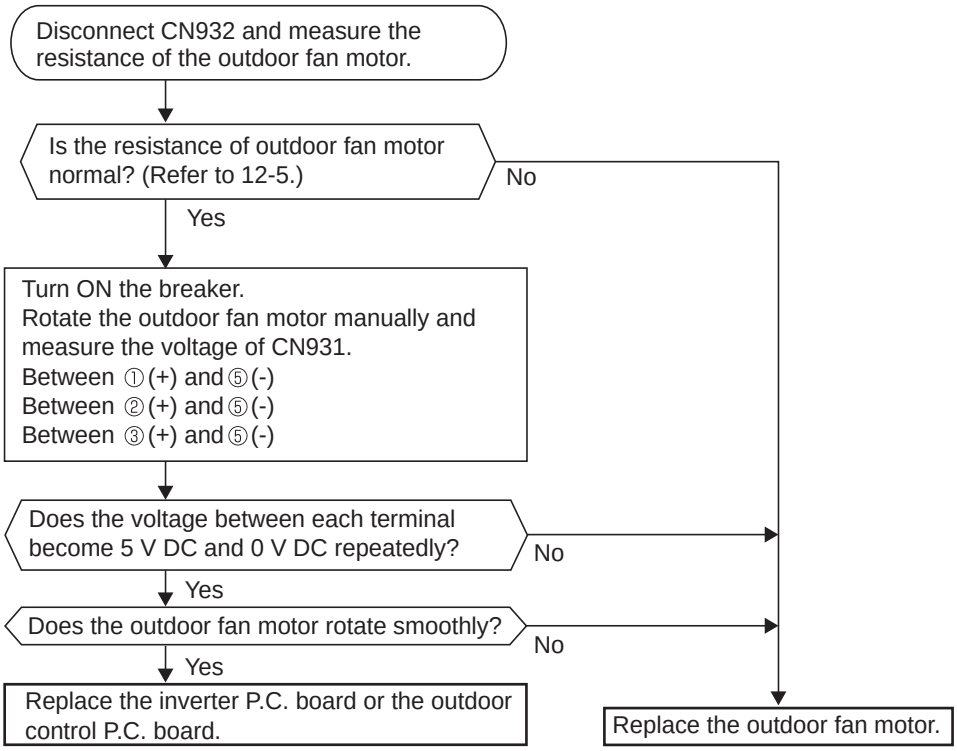
| Thermistor | Symbol | Connector, Pin No. | Board |
|---|---|---|---|
| Defrost | RT61 | Between CNTH1 pin1 and pin2 | Outdoor control P.C. board |
| Discharge temperature | RT62 | Between CNTH1 pin3 and pin4 | |
| Outdoor heat exchanger temperature | RT68 | Between CNTH1 pin7 and pin8 | |
| Ambient temperature | RT65 | Between CNTH2 pin1 and pin2 | |
| Fin temperature | RT64 | Between CN171 pin1 and pin2 | Outdoor power P.C. board |

**• Fan motor does not operate or stops operating shortly after starting the operation.**

## Ⓖ Check of outdoor fan motor

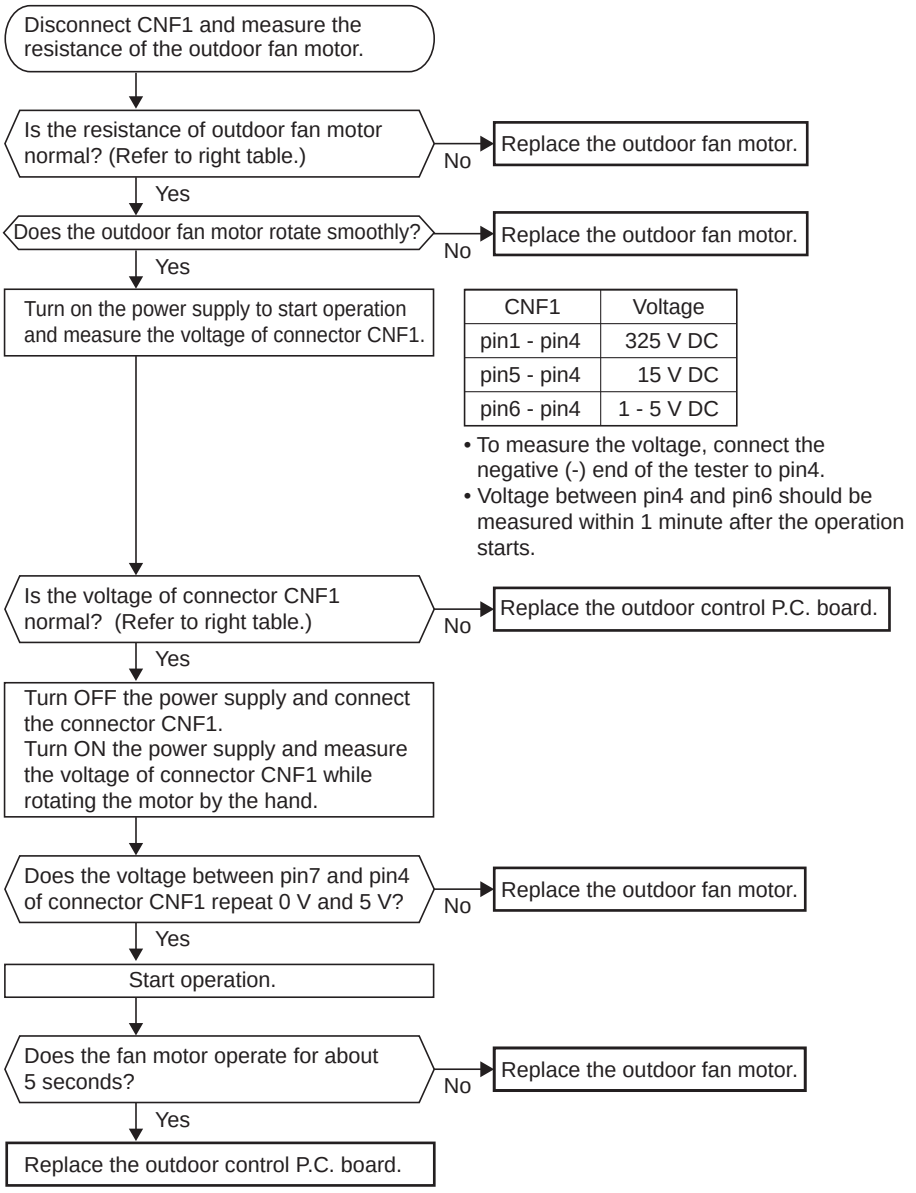
| Connector | MXZ-2F |
|---|---|
| CN931<br>CN932 | Inverter P.C. board |

**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**



**MXZ-3F54VF/3F68VF/4F72VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4**
**MXZ-4F83/5F102/6F122VF**
**MXZ-2F53/4F83VFHZ**
**MXZ-4F83/5F102/6F120VF2**
**MXZ-2F53/4F83VFHZ2**

| Connector | **MXZ-3F, 4F, 5F, 6F 2F53/4F83VFHZ** |
|---|---|
| CNF1 | Outdoor control P.C. board |




| CNF1 | Voltage |
|---|---|
| pin1 - pin4 | 325 V DC |
| pin5 - pin4 | 15 V DC |
| pin6 - pin4 | 1 - 5 V DC |

- To measure the voltage, connect the negative (-) end of the tester to pin4.
- Voltage between pin4 and pin6 should be measured within 1 minute after the operation starts.

**Model name of fan motor *:**
**SIC-71XX-XXXX-X, SIC-81XX-XXXX-X**

| Measuring points | Resistance |
|---|---|
| pin1 - pin4 | ∞ |
| pin5 - pin4 | 60 kΩ |
| pin6 - pin4 | 160 kΩ |
| pin7 - pin4 | ∞ |

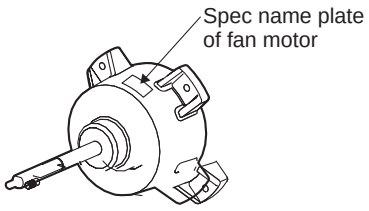
**Model name of fan motor *:**
**SIC-82XX-XXXX-X, SIC-88XX-XXXX-X**

| Measuring points | Resistance |
|---|---|
| pin1 - pin4 | 1.1 MΩ |
| pin5 - pin4 | 40 kΩ |
| pin6 - pin4 | 220 kΩ |
| pin7 - pin4 | ∞ |

**Model name of fan motor *:**
**ZWB27XXXXXX**

| Measuring points | Resistance |
|---|---|
| pin1 - pin4 | 0.9 - 1.2 MΩ |
| pin5 - pin4 | 42 - 52 kΩ |
| pin6 - pin4 | 170 - 210 kΩ |
| pin7 - pin4 | 5.8 - 7.1 MΩ |

* To measure the resistance, connect the negative (-) end of the tester to pin4.
* See the spec name plate indicated in the diagram for the model name of fan motor.
* Where "X" in model name of fan motor represents numbers and letters

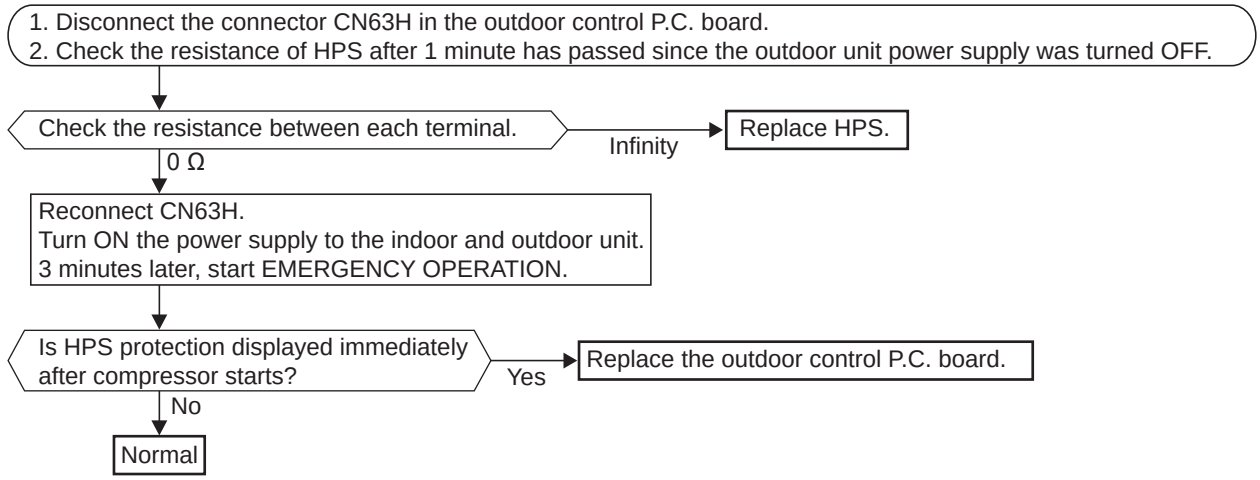


**• When the operation frequency does not go up from the lowest frequency.**

## Ⓗ Check of HPS

| Connector | MXZ-3F, 4F, 5F, 6F 2F53/4F83VFHZ |
|---|---|
| CN63H | Outdoor control P.C. board |

**MXZ-3F54VF/3F68VF/4F72VF** **MXZ-4F83/5F102VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2** **MXZ-2F53/4F83VFHZ**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3** **MXZ-4F83/5F102VF2**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4** **MXZ-2F53/4F83VFHZ2**



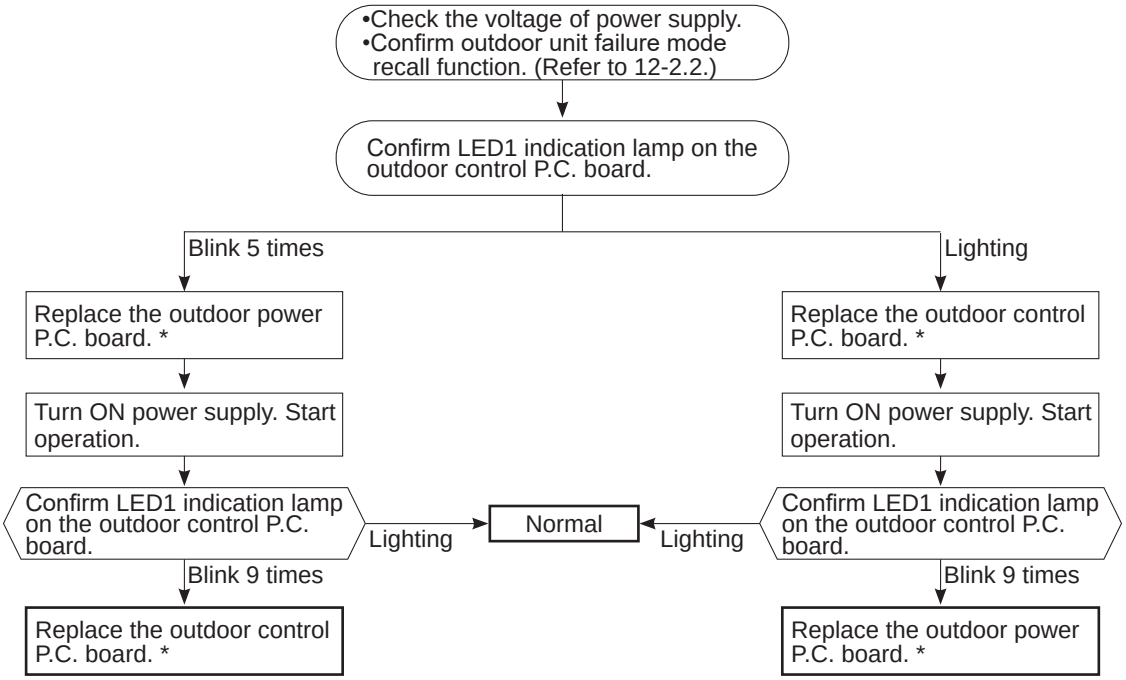

## Ⓘ The other cases

Indoor unit does not operate. (different operating models in multi system)

- When you try to run 2 indoor units simultaneously, one for cooling and the other for heating, the unit which transmits signal to the outdoor unit first decides the operation mode.
- When the above situation occurs, set all the indoor units to the same mode, turn OFF the indoor units, and then turn them back ON.
- Though the top of the indoor unit sometimes gets warm, this does not mean malfunction. The reason is that the refrigerant gas continuously flows into the indoor unit even while it is not operating.

## Ⓙ Check of bus-bar voltage

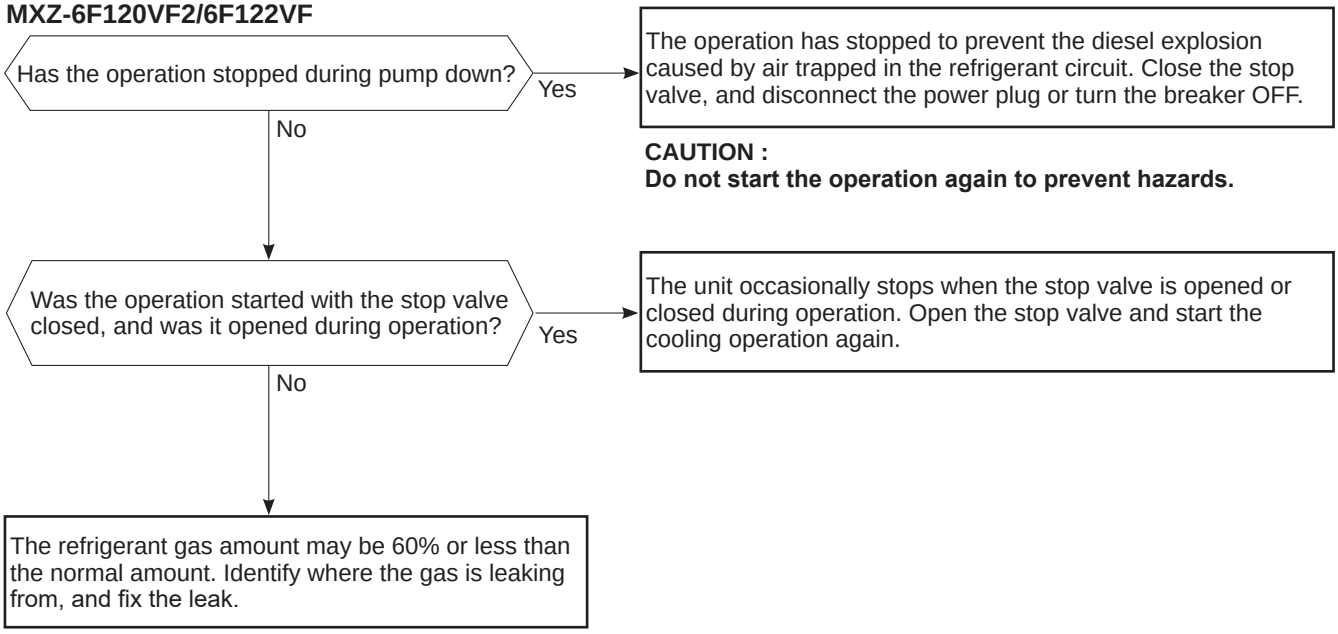
**MXZ-3F54VF/3F68VF/4F72VF** **MXZ-4F83/5F102VF**
**MXZ-3F54VF2/3F68VF2/4F72VF2/4F80VF2** **MXZ-2F53/4F83VFHZ**
**MXZ-3F54VF3/3F68VF3/4F72VF3/4F80VF3** **MXZ-4F83/5F102VF2**
**MXZ-3F54VF4/3F68VF4/4F72VF4/4F80VF4** **MXZ-2F53/4F83VFHZ2**




*Turn OFF power supply before removing P.C. board.

## Ⓚ Check of outdoor refrigerant circuit

**MXZ-2F33VF/2F42VF/2F53VF/2F53VFH**
**MXZ-2F33VF2/2F42VF2/2F53VF2/2F53VFH2**
**MXZ-2F33VF3/2F42VF3/2F53VF3/2F53VFH3**
**MXZ-2F33VF4/2F42VF4/2F53VF4/2F53VFH4**
**MXZ-6F120VF2/6F122VF**

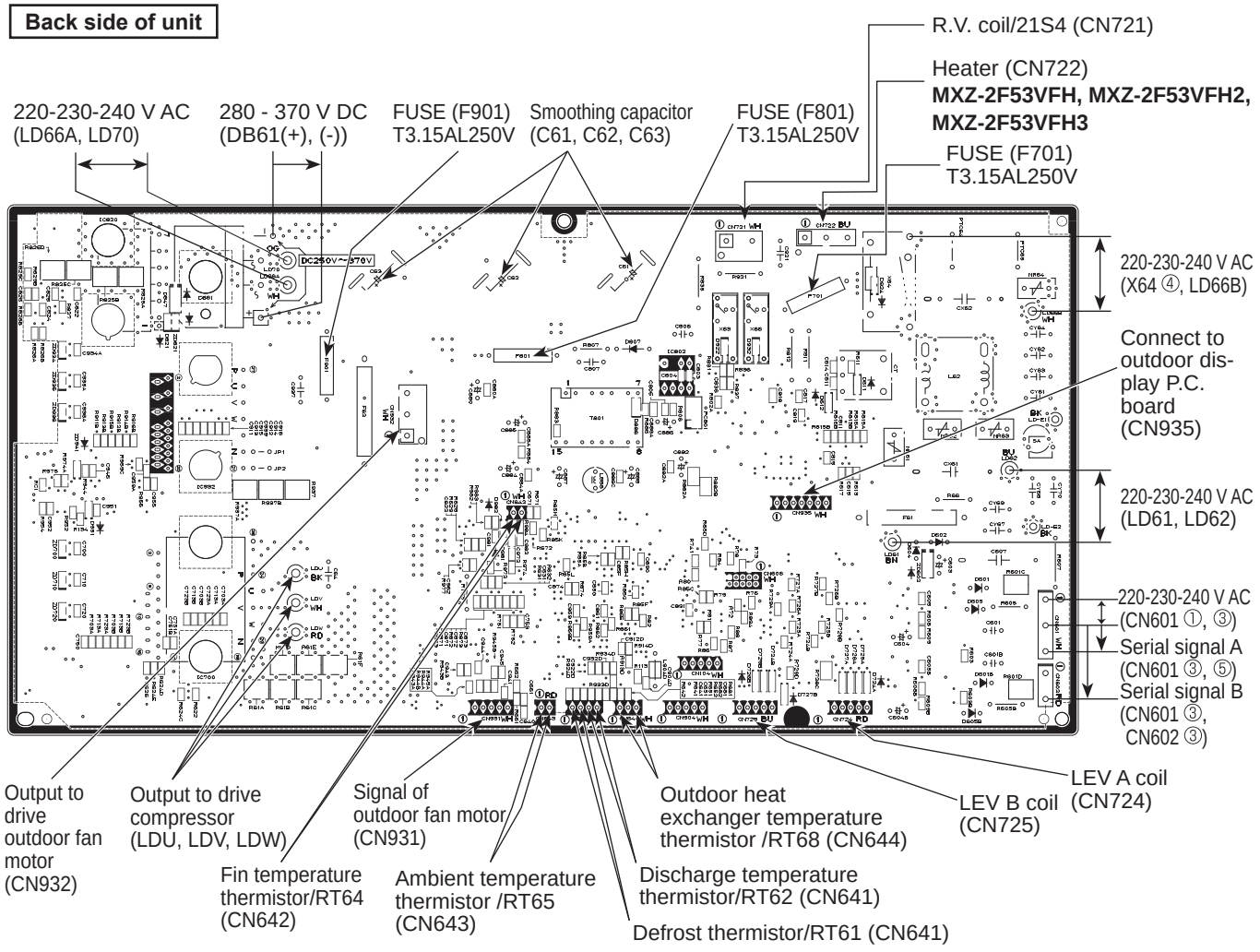


## 12-7. TEST POINT DIAGRAM AND VOLTAGE

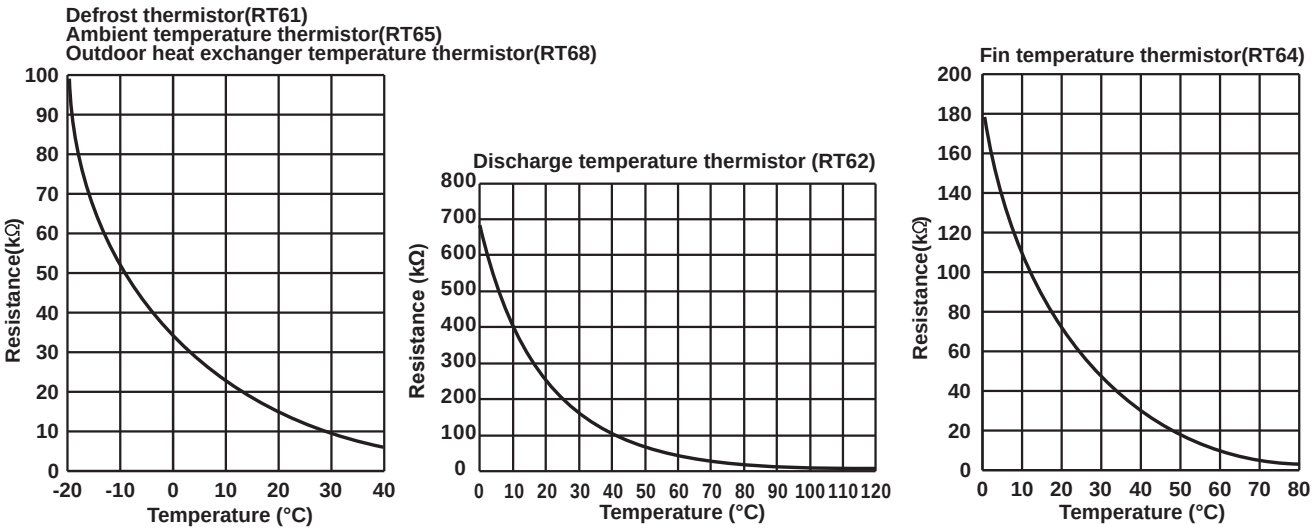
### 1. Inverter P.C. board

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**

**Back side of unit**

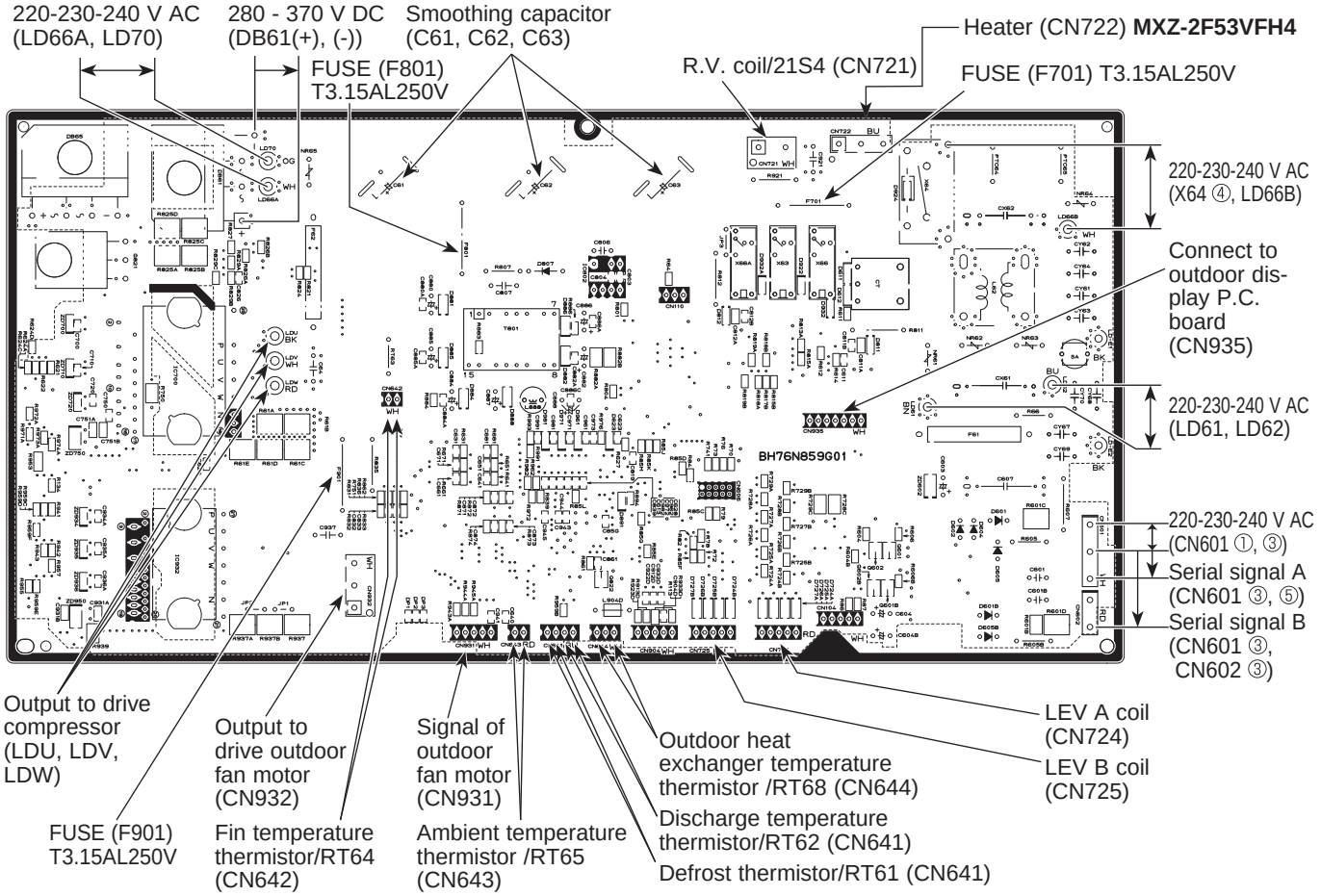



**Front side of unit**

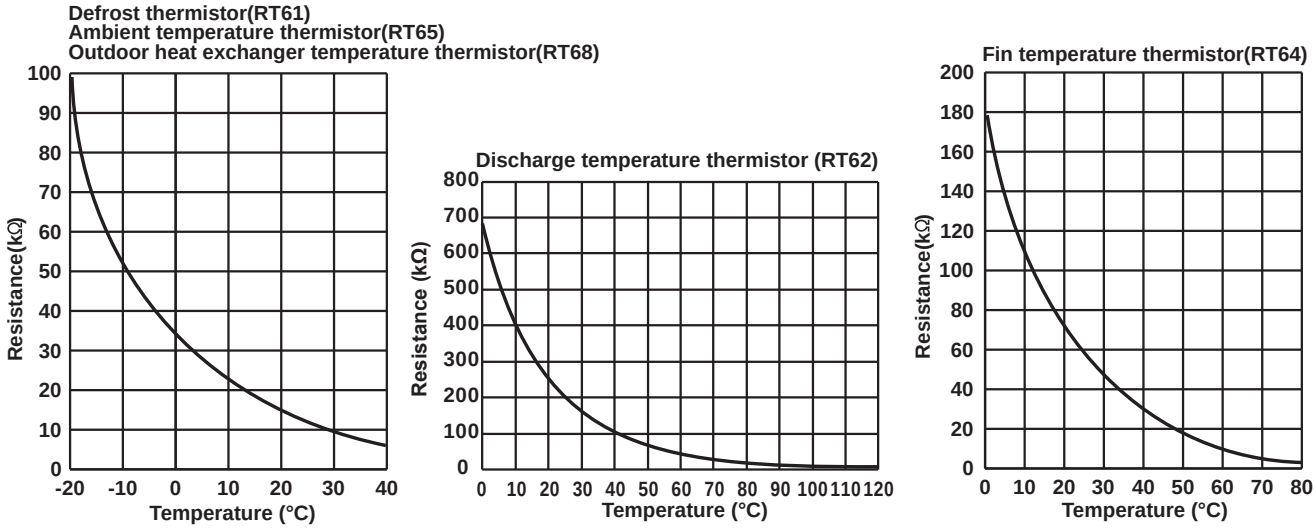


## MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4

**Back side of unit**

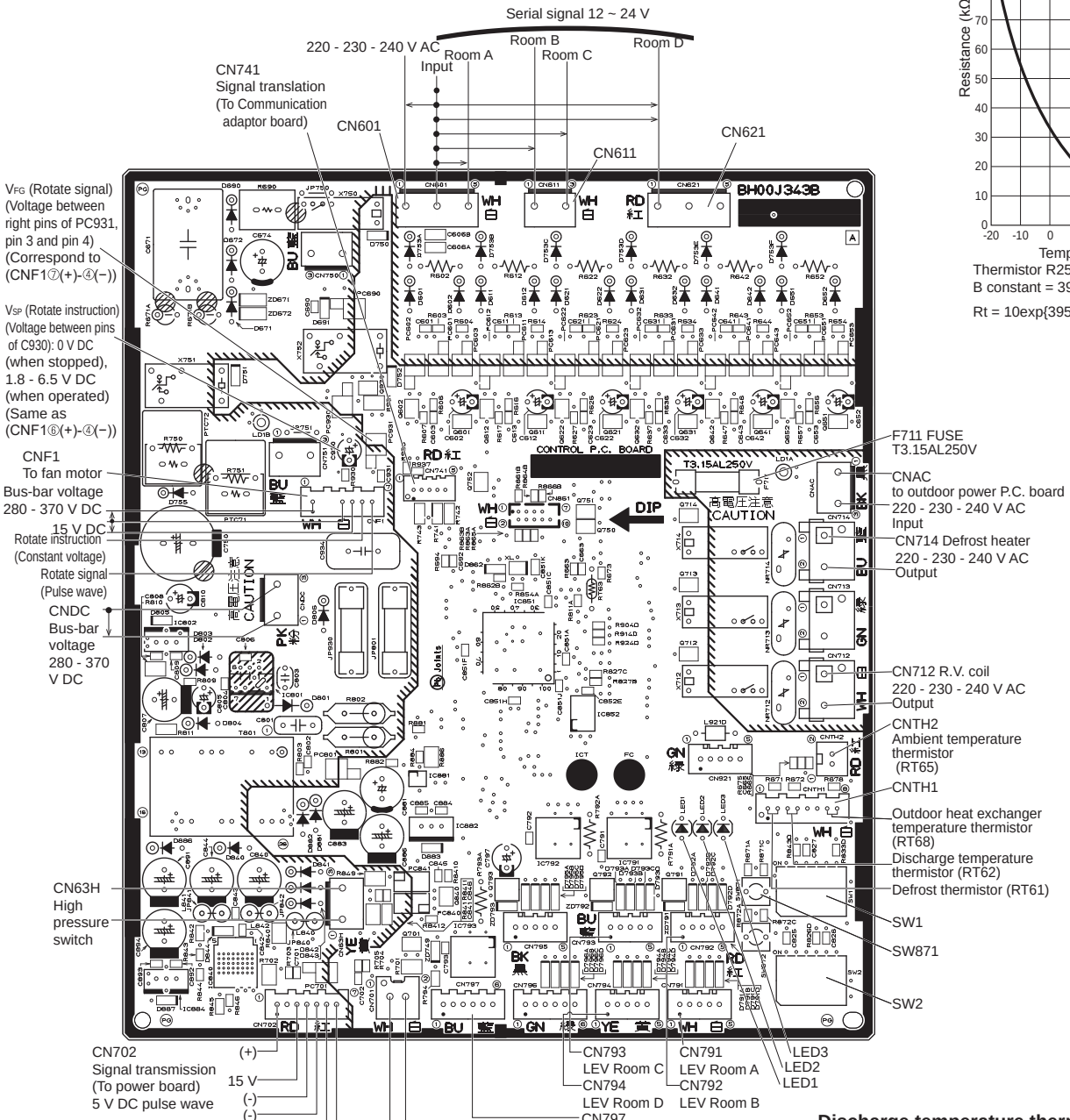



**Front side of unit**

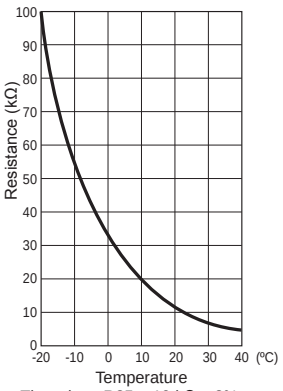


## 2. Outdoor control P.C. board

**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**



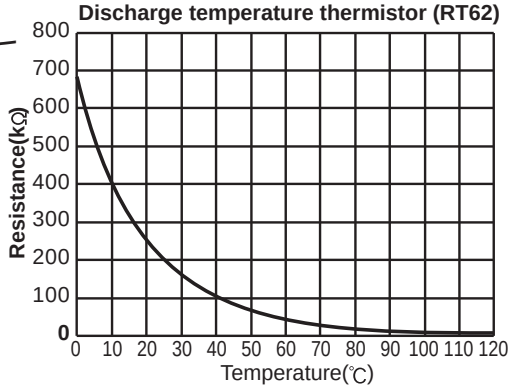

**Defrost thermistor (RT61)**
**Ambient temperature thermistor (RT65)**
**Outdoor heat exchanger temperature thermistor (RT68)**




Thermistor R25 = 10 kΩ ± 2%
B constant = 3950 ± 2%

$$Rt = 10\exp\{3950(\frac{1}{273+t} - \frac{1}{298})\}$$

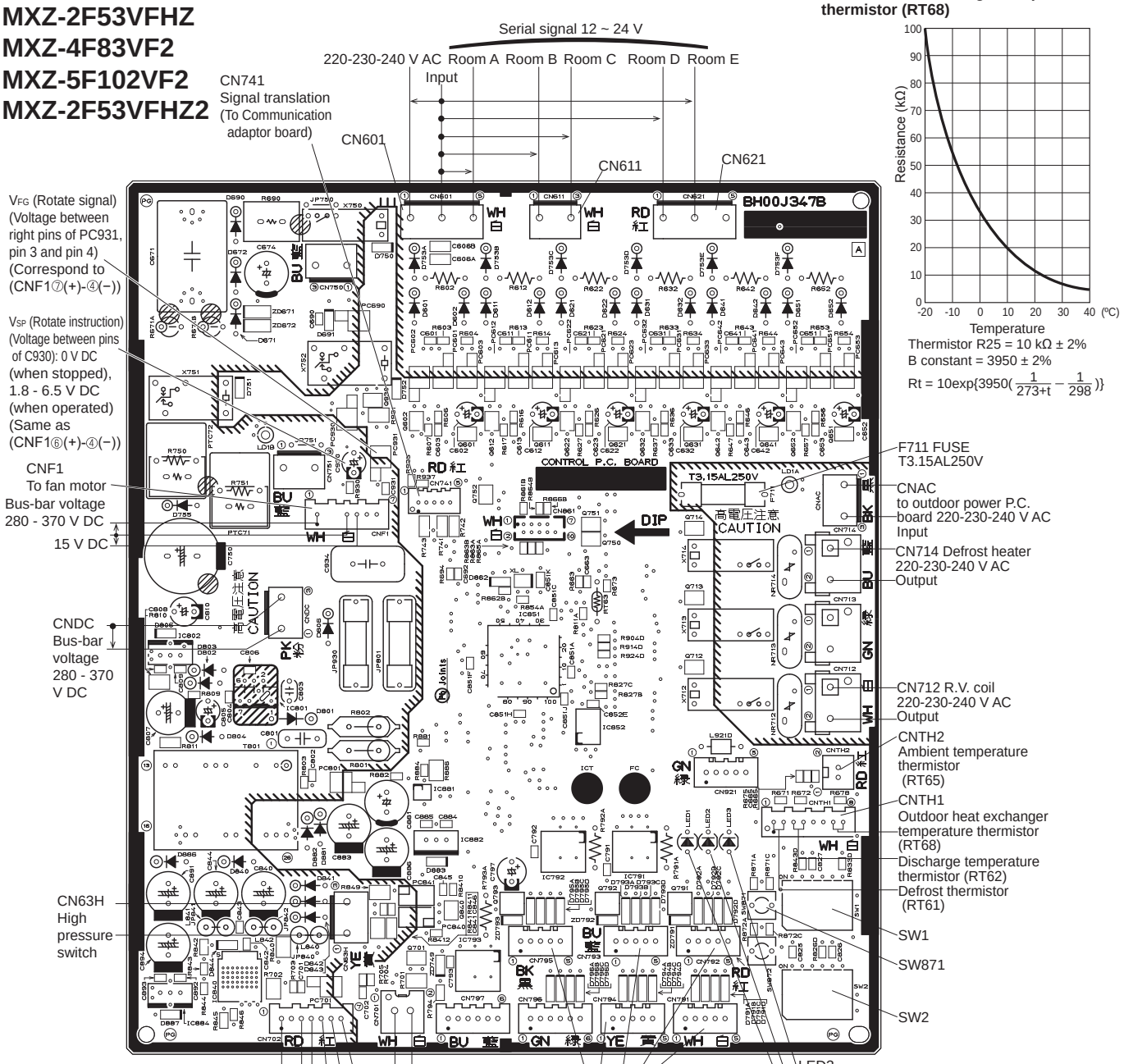
**Discharge temperature thermistor (RT62)**




Thermistor R100 = 13.36 kΩ ± 2%
B constant = 4014 ± 2%

$$Rt = 13.36\exp\{4014(\frac{1}{273+t} - \frac{1}{373})\}$$

**MXZ-4F83VF**
**MXZ-5F102VF**
**MXZ-2F53VFHZ**
**MXZ-4F83VF2**
**MXZ-5F102VF2**
**MXZ-2F53VFHZ2**



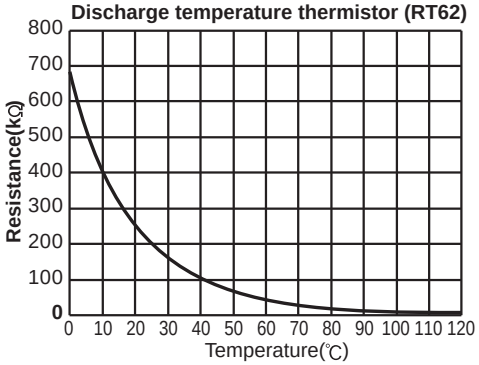

**Defrost thermistor (RT61)**
**Ambient temperature thermistor (RT65)**
**Outdoor heat exchanger temperature thermistor (RT68)**




Thermistor R25 = 10 kΩ ± 2%
B constant = 3950 ± 2%

$$Rt = 10\exp\{3950(\frac{1}{273+t} - \frac{1}{298})\}$$

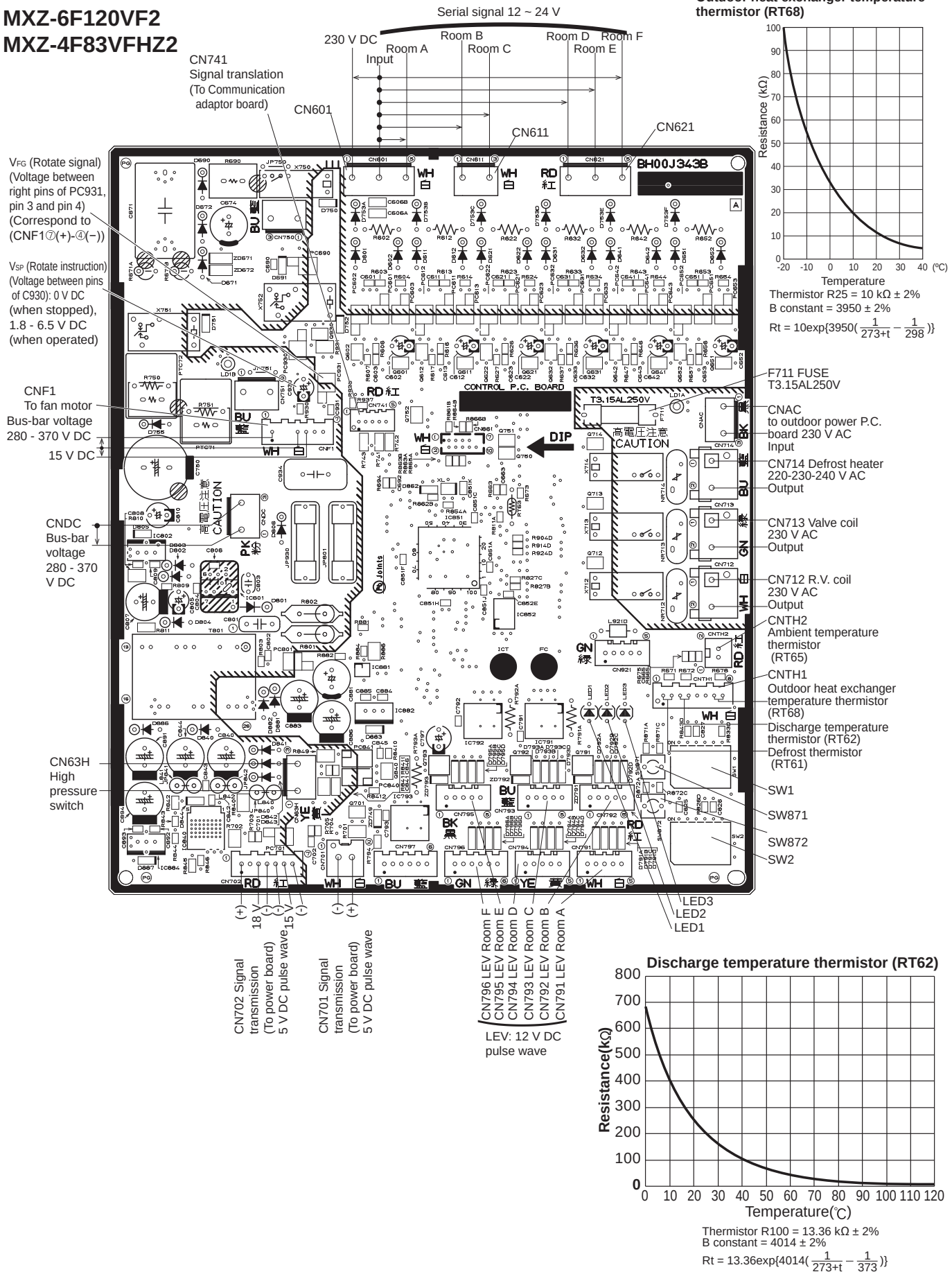
**Discharge temperature thermistor (RT62)**




Thermistor R100 = 13.36 kΩ ± 2%
B constant = 4014 ± 2%

$$Rt = 13.36\exp\{4014(\frac{1}{273+t} - \frac{1}{373})\}$$

**MXZ-6F122VF**
**MXZ-4F83VFHZ**
**MXZ-6F120VF2**
**MXZ-4F83VFHZ2**




**Defrost thermistor (RT61)**
**Ambient temperature thermistor (RT65)**
**Outdoor heat exchanger temperature thermistor (RT68)**




Thermistor R25 = 10 kΩ ± 2%
B constant = 3950 ± 2%

$$Rt = 10\exp\{3950(\frac{1}{273+t} - \frac{1}{298})\}$$

**Discharge temperature thermistor (RT62)**

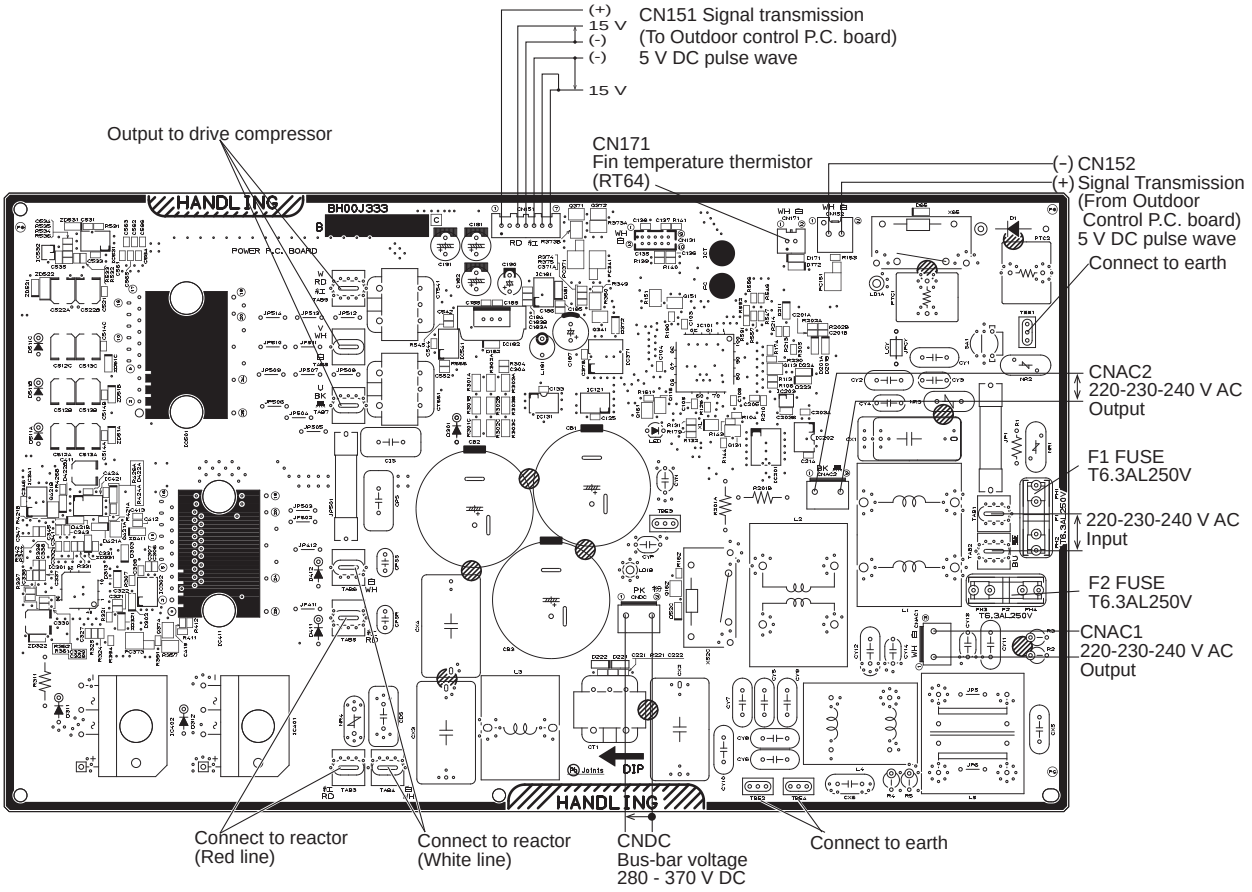



Thermistor R100 = 13.36 kΩ ± 2%
B constant = 4014 ± 2%

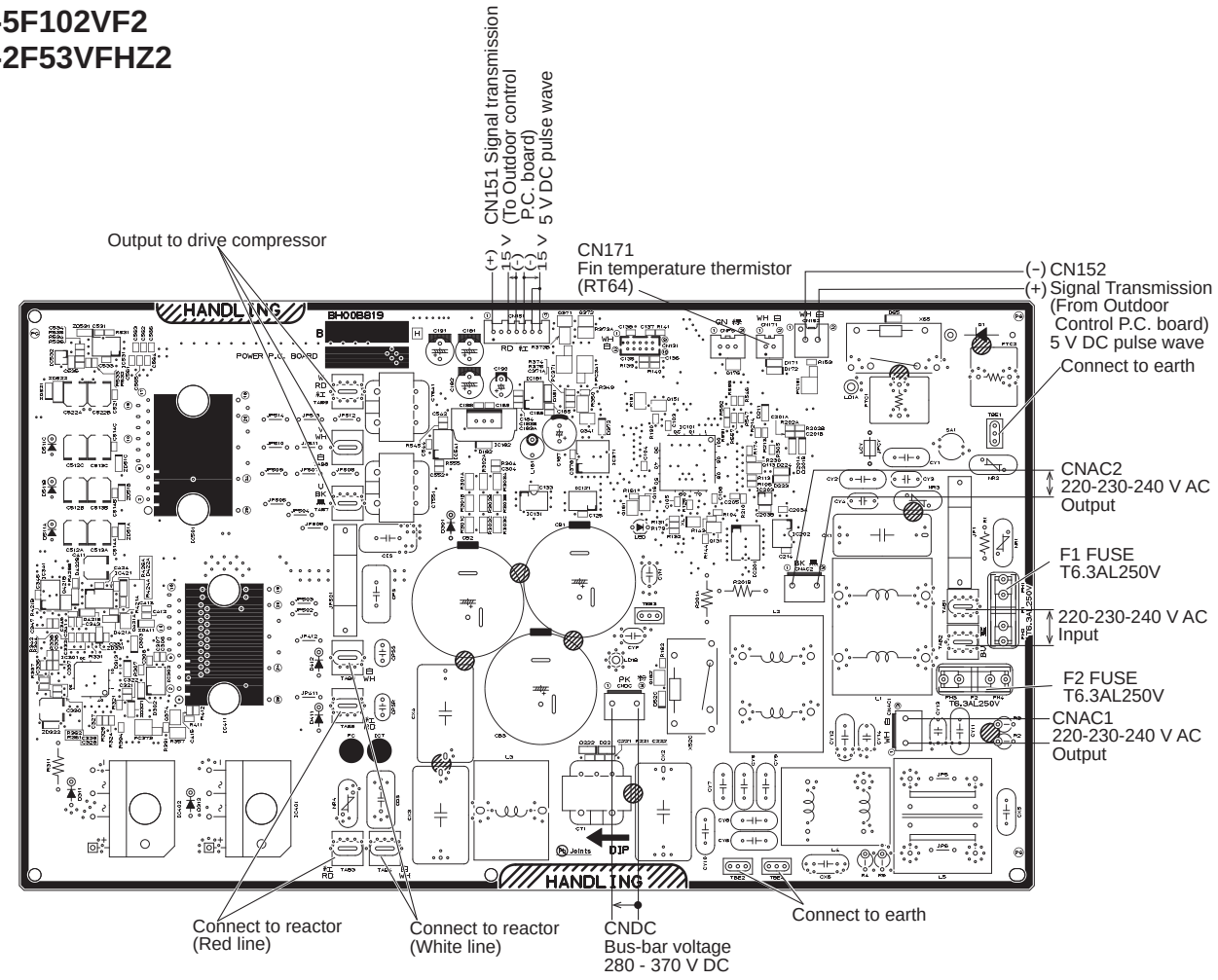
$$Rt = 13.36\exp\{4014(\frac{1}{273+t} - \frac{1}{373})\}$$

### 3. Outdoor power P.C. board

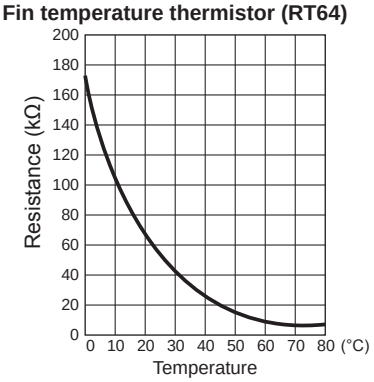
**MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF**
**MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2**
**MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3**
**MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4**



**MXZ-4F83VF**
**MXZ-5F102VF**
**MXZ-2F53VFHZ**
**MXZ-4F83VF2**
**MXZ-5F102VF2**
**MXZ-2F53VFHZ2**



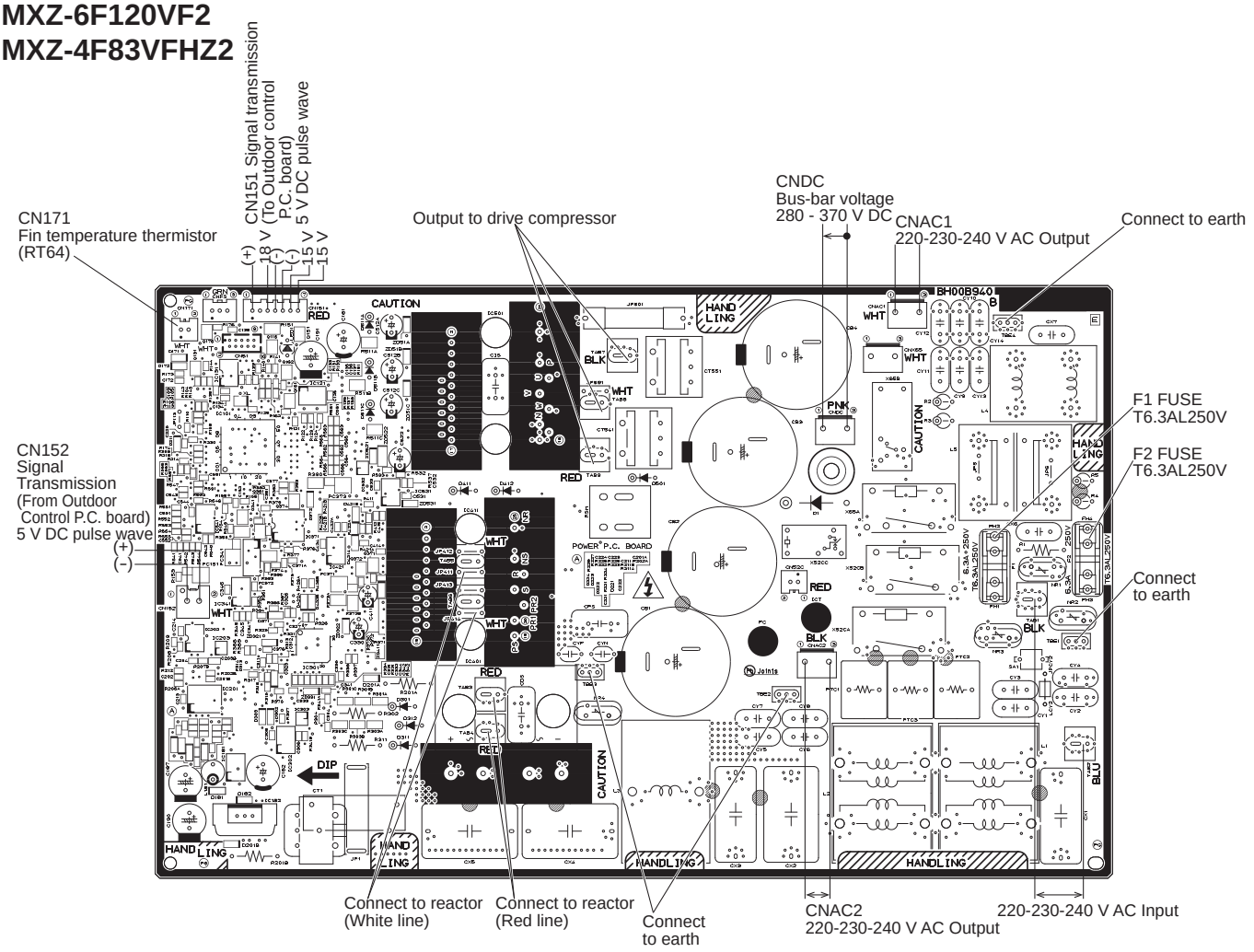

**Fin temperature thermistor (RT64)**



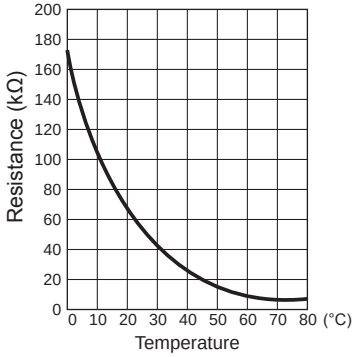

Thermistor R50 = 17 kΩ ± 2%
B constant = 4150 ± 3%

$$Rt = 17\exp\{4150(\frac{1}{273+t} - \frac{1}{323})\}$$

**MXZ-6F122VF**
**MXZ-4F83VFHZ**
**MXZ-6F120VF2**
**MXZ-4F83VFHZ2**




**Fin temperature thermistor (RT64)**

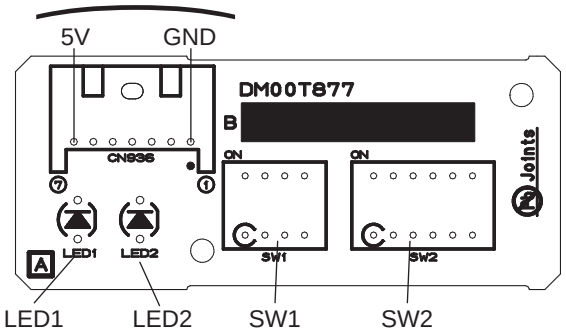



Thermistor R50 = 17 kΩ ± 2%
B constant = 4150 ± 3%
$Rt = 17\exp\{4150(\frac{1}{273+t} - \frac{1}{323})\}$

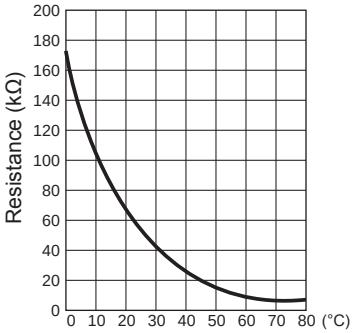
**4. Outdoor display P.C. board**

**MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH**
**MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2**
**MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3**
**MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4**

To inverter P.C. board (CN936)




**Fin temperature thermistor (RT64)**



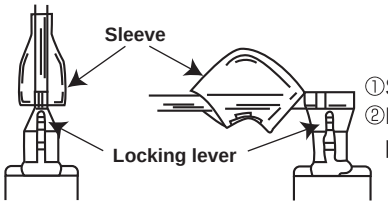

Thermistor R50 = 17 kΩ ± 2%
B constant = 4150 ± 3%

$Rt = 17\exp\{4150(\frac{1}{273+t} - \frac{1}{323})\}$

# 13 DISASSEMBLY INSTRUCTIONS

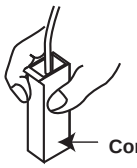
<Detaching method of the terminal with locking mechanism>
The terminal which has the locking mechanism can be detached as shown below.
There are 2 types of the terminal with locking mechanism.
The terminal without locking mechanism can be detached by pulling it out.
Check the shape of the terminal before detaching.

(1) Slide the sleeve and check if there is a locking lever or not.




①Slide the sleeve.
②Pull the terminal while pushing the locking lever.

(2) The terminal with the connector shown below has the locking mechanism.

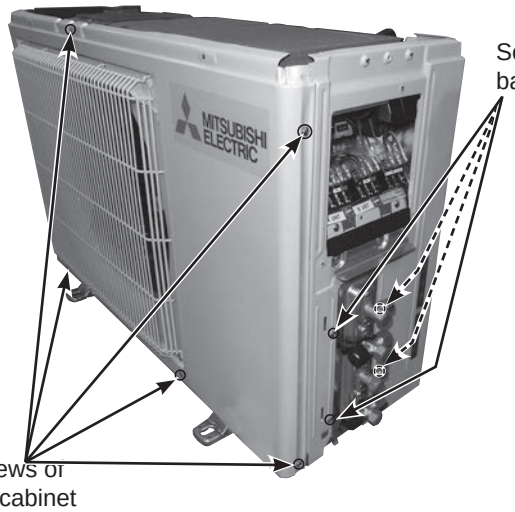
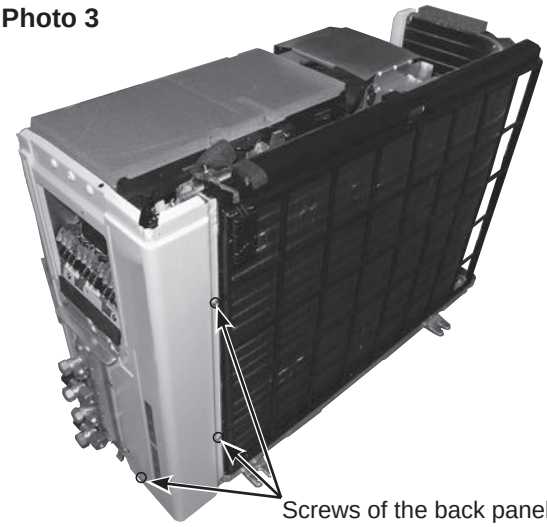



①Hold the sleeve, and pull out the terminal slowly.

## 13-1. MXZ-2F33VF MXZ-2F42VF MXZ-2F53VF MXZ-2F53VFH
## MXZ-2F33VF2 MXZ-2F42VF2 MXZ-2F53VF2 MXZ-2F53VFH2
## MXZ-2F33VF3 MXZ-2F42VF3 MXZ-2F53VF3 MXZ-2F53VFH3
## MXZ-2F33VF4 MXZ-2F42VF4 MXZ-2F53VF4 MXZ-2F53VFH4

**NOTE**: Turn OFF the power supply before disassembly.

→: Indicates the visible parts in the photos/figures.
⇢: Indicates the invisible parts in the photos/figures.

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **1. Removing the cabinet and the panels**<br>(1) Remove the screws fixing the service panel.<br>(2) Pull down the service panel and remove it.<br>(3) Disconnect the power supply and indoor/outdoor connecting wire.<br>(4) Remove the screws fixing the top panel.<br>(5) Remove the top panel.<br>(6) Remove the screws fixing the cabinet.<br>(7) Remove the cabinet.<br>(8) Remove the screws fixing the back panel.<br>(9) Remove the back panel. | **Photo 1**<br>  <br> |
| **Photo 2**<br>  <br> | **Photo 3**<br>  <br> |

## OPERATING PROCEDURE

**2. Removing the inverter assembly and the inverter P.C. board**

(1) Remove the service panel, the top panel and the cabinet (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire and remove the back panel (Refer to section 1).
(3) Disconnect all connectors and lead wires on the inverter P.C. board.
(4) Remove the compressor connector (CNMC).
(5) Remove the screws fixing the heat sink support and the separator.
(6) Remove the screws of the terminal block support and the back panel. (Photo 2)
(7) Remove the inverter assembly.
(8) Remove the screw of the earth wire and screws of the terminal block support.
(9) Remove the hooks of the heat sink support and remove the heat sink support from the P.C. board support.
(10) Remove the screw fixing the inverter P.C. board and remove the inverter P.C. board from the P.C. board support.

**3. Removing the R.V. coil**

(1) Remove the service panel, the top panel and the cabinet (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire and remove the back panel (Refer to section 1).
(3) Remove the inverter assembly (Refer to section 2).
(4) Remove the R.V. coil.

**4. Removing the discharge temperature thermistor, defrost thermistor and outdoor heat exchanger temperature thermistor**

(1) Remove the service panel, the top panel and the cabinet (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire and remove the back panel (Refer to section 1).
(3) Remove the inverter assembly (Refer to section 2).
(4) Remove the terminal cover, and remove the thermal protector (TRS).
(5) Pull out the discharge temperature thermistor from its holder.
(6) Pull out the defrost thermistor from its holder (Photo 7).
(7) Pull out the outdoor heat exchanger temperature thermistor from its holder (Photo 7).

## PHOTOS/FIGURES

**Photo 4**

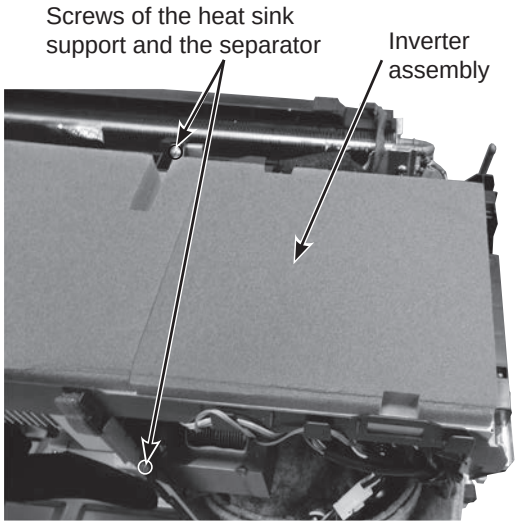



**Photo 5**

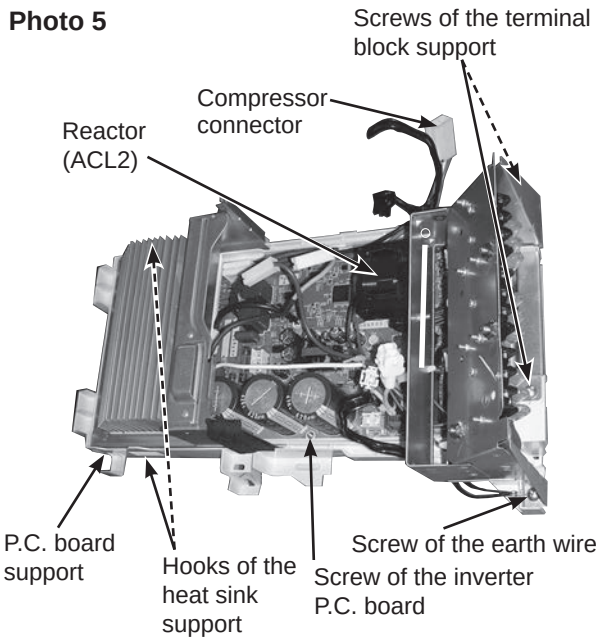
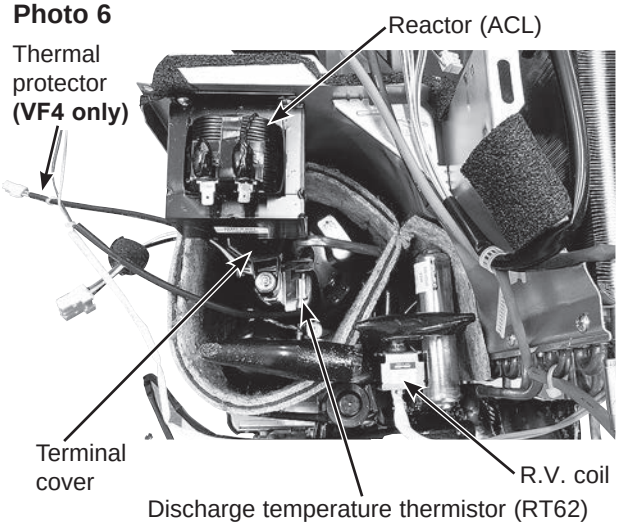



**Photo 6**



## OPERATING PROCEDURE

**5. Removing the outdoor fan motor**

(1) Remove the service panel, the top panel and the cabinet (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire.
(3) Disconnect the connectors for outdoor fan motor.
(4) Remove the propeller fan nut.
(5) Remove the propeller fan.
(6) Remove the screws fixing the fan motor.
(7) Remove the fan motor.

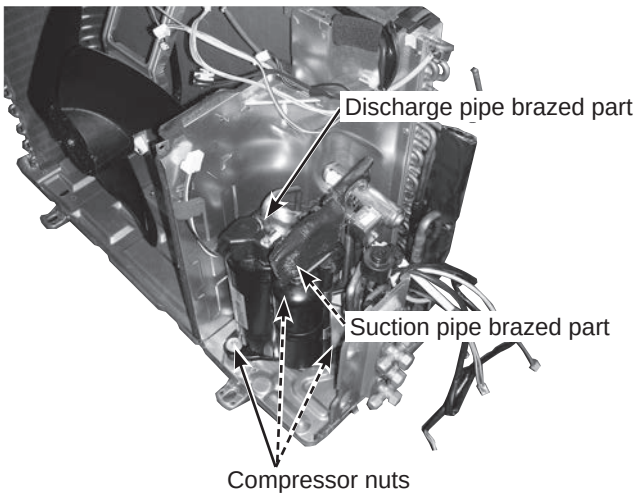
**6. Removing the compressor and the 4-way valve**

(1) Remove the service panel, the top panel and the cabinet (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire and remove the back panel (Refer to section 1).
(3) Remove the inverter assembly (Refer to section 2).
(4) Remove the terminal cover, and remove the thermal protector (TRS).
(5) Pull out the discharge temperature thermistor from its holder.
(6) Recover gas from the refrigerant circuit.

**NOTE:** Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).

(7) Detach the brazed part of the suction and the discharge pipe connected with compressor.
(8) Remove the nuts of compressor legs.
(9) Remove the compressor.
(10) Detach the brazed part of pipes connected with 4-way valve.

**Photo 10**




## PHOTOS/FIGURES

**Photo 7**

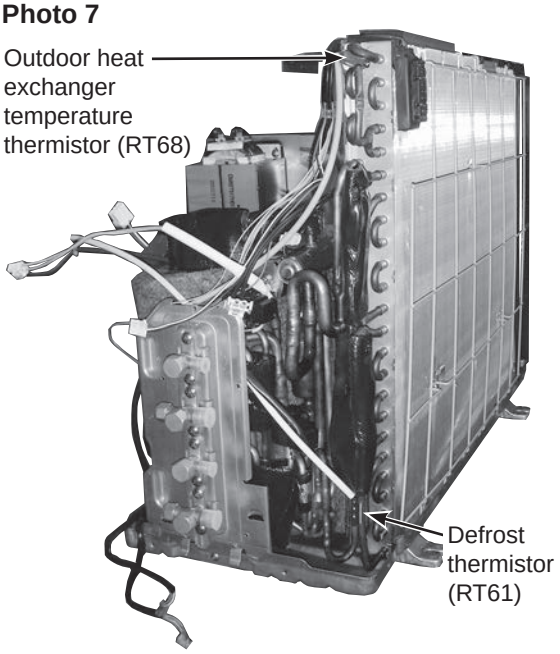



**Photo 8**

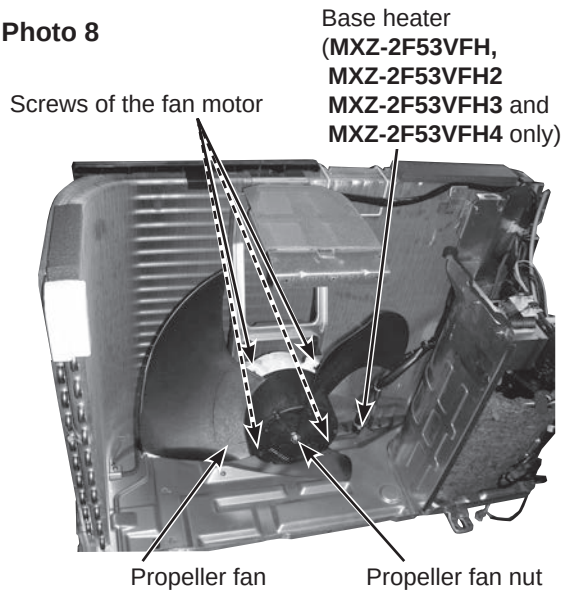
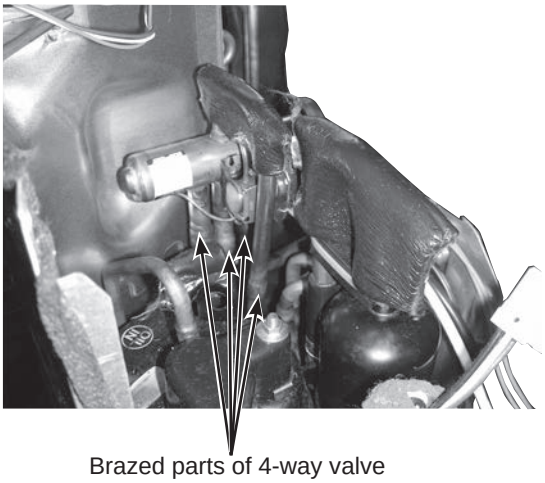
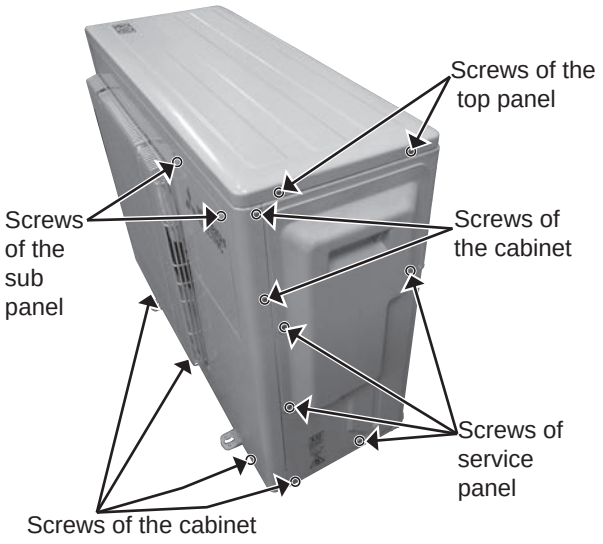
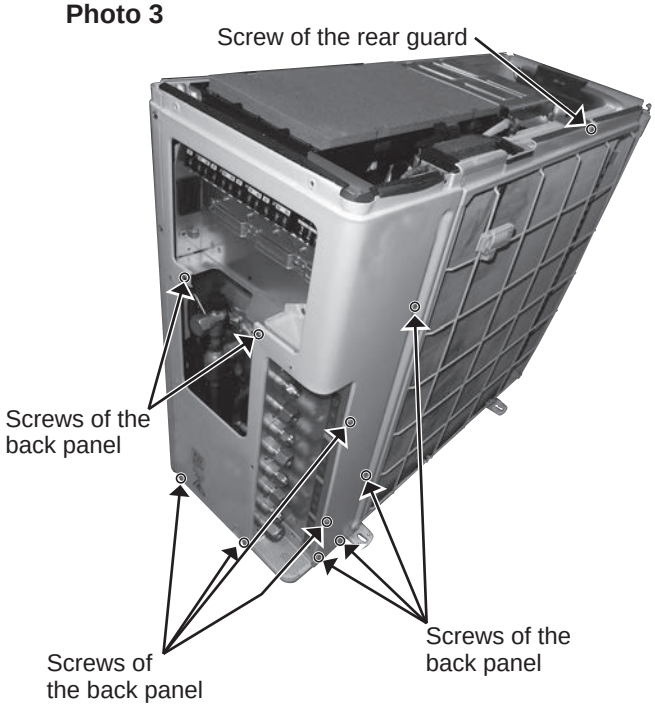
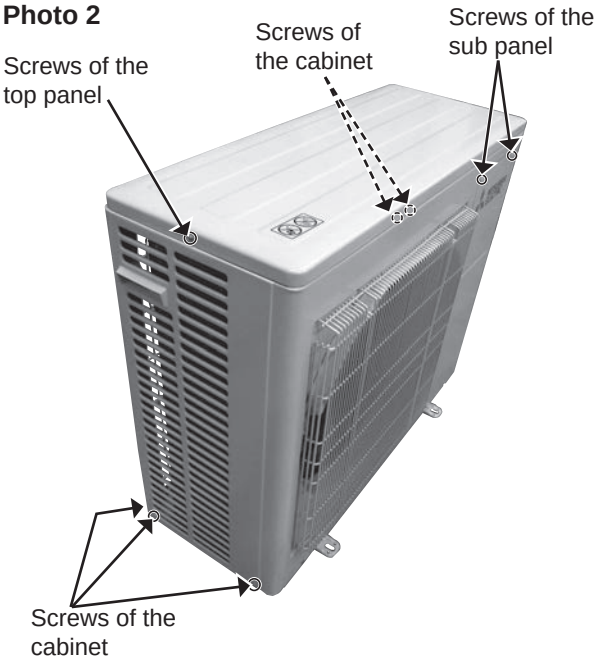



**Photo 9**



## 13-2. MXZ-3F54VF MXZ-3F68VF MXZ-4F72VF
## MXZ-3F54VF2 MXZ-3F68VF2 MXZ-4F72VF2 MXZ-4F80VF2
## MXZ-3F54VF3 MXZ-3F68VF3 MXZ-4F72VF3 MXZ-4F80VF3
## MXZ-3F54VF4 MXZ-3F68VF4 MXZ-4F72VF4 MXZ-4F80VF4

**NOTE**: Turn OFF the power supply before disassembly.

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **1. Removing the cabinet and the panels**<br>(1) Remove the screws of the service panel, and remove the service panel.<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Remove the screws of the top panel, and remove the top panel.<br>(4) Remove the screws of the cabinet, and remove the cabinet.<br>(5) Remove the screws of the back panel, and remove the back panel (Photo 3). | **Photo 1**<br>  <br> |
| **Photo 3**<br>  <br> | **Photo 2**<br>  <br> |

## OPERATING PROCEDURE

**2. Removing the outdoor control P.C. board, the outdoor power P.C. board and the reactor**

(1) Remove the service panel (Photo 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire.
(3) Remove the top panel, the cabinet, and the back panel (Photo 1, 2, 3).
(4) Disconnect all connectors and lead wires on the outdoor control P.C. board.
(5) Unhook the catches of the outdoor control P.C. board, and remove the outdoor control P.C. board.
(6) Remove the screws of the electrical box assembly, unhook the catches of the electrical box assembly, and remove the electrical box assembly.
(7) Remove the screws of outdoor control P.C. board holder, and remove the outdoor control P.C. board holder.
(8) Remove the screws of the reactor, and remove the reactor.
(9) Remove the screws of the reactor bed, and remove the reactor bed.
(10) Remove the screws of the heat sink support, and remove the heat sink support.
(11) Remove the screws fixing the outdoor power P.C. board.
(12) Disconnect all connectors and lead wires on the outdoor power P.C. board.

## PHOTOS/FIGURES

**Photo 4**

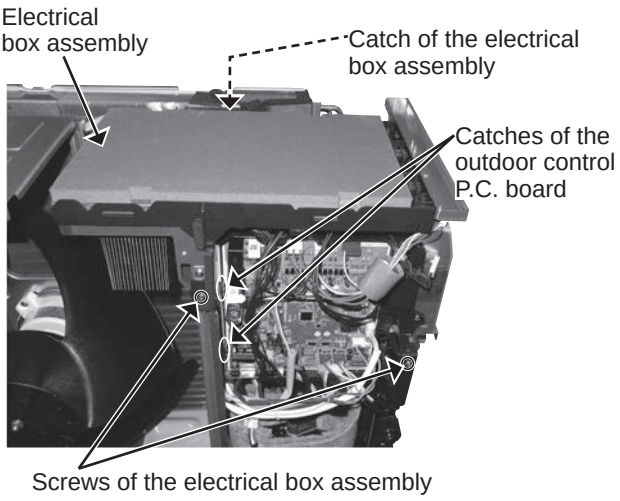



**Photo 5**

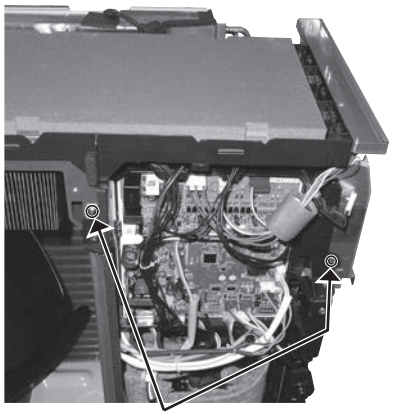



**Photo 6**

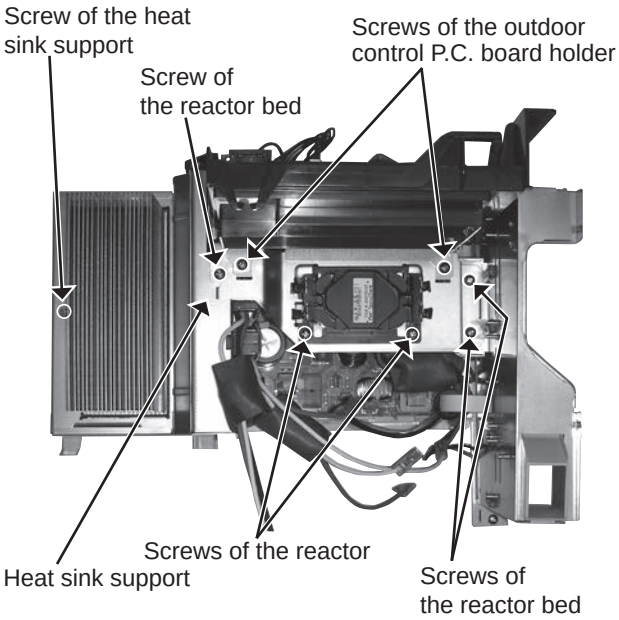
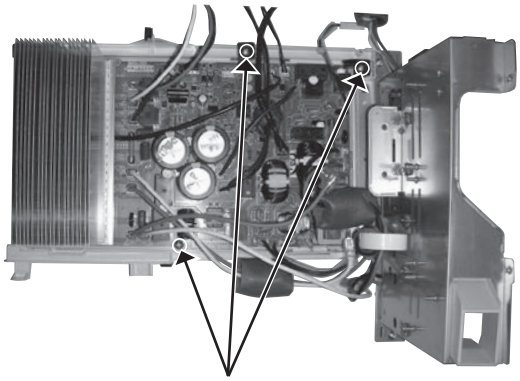
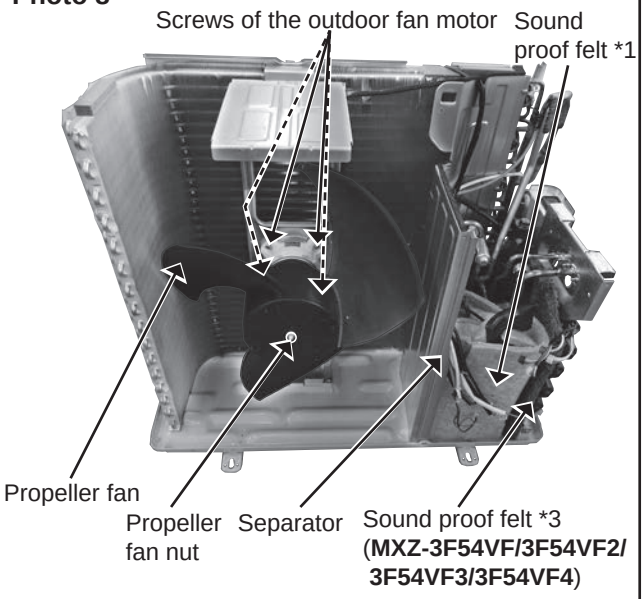
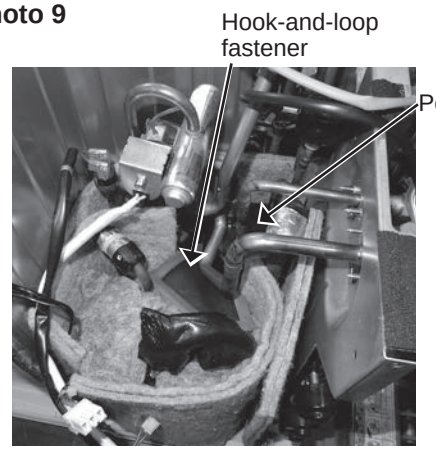
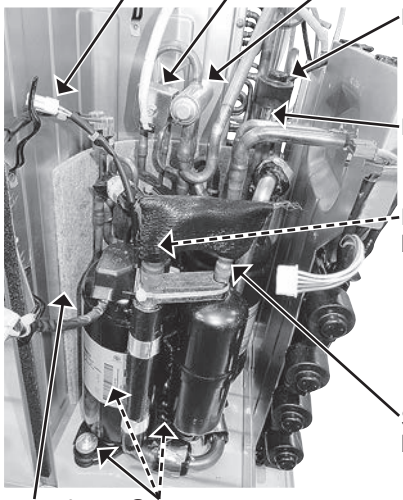
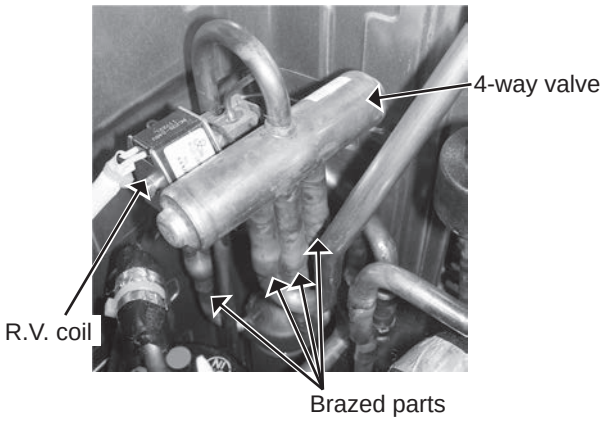
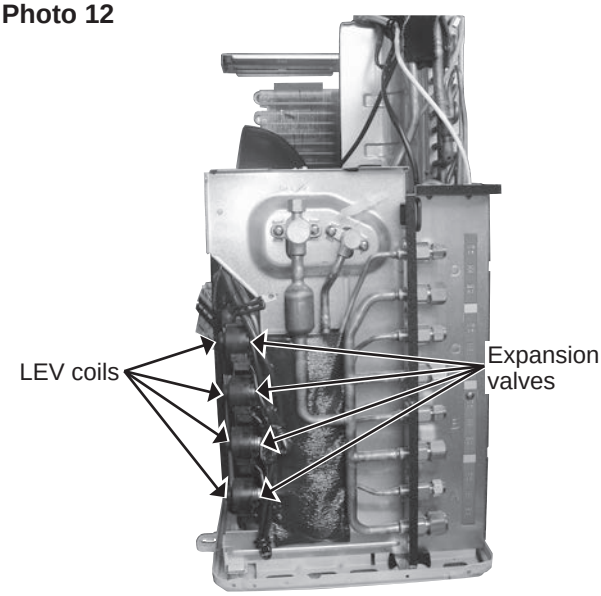



**Photo 7**



| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **3. Removing the fan motor**<br>(1) Remove the service panel (Photo 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Remove the top panel, the cabinet, and the back panel (Photo 1, 2, 3).<br>(4) Disconnect connectors CN712, CNF1, CNTH1, CNTH2, CN63H, CN791, CN792, CN793, CN794 (**MXZ-4F72VF/4F72VF2/4F72VF3/4F72VF4/4F80VF2/4F80VF3/4F80VF4**), CN797 on the outdoor control P.C. board and disconnect the relay connector of the compressor lead wire.<br>(5) Remove the screws of the electrical box assembly, and remove the electrical box assembly (Photo 4).<br>(6) Remove the propeller fan.<br>(7) Remove the fan motor. | **Photo 8**<br>  <br> |
| **4. Removing the compressor and the 4-way valve**<br>(1) Remove the service panel (Photo 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Remove the top panel, the cabinet, and the back panel (Photo 1, 2, 3).<br>(4) Recover gas from the refrigerant circuit.<br>**NOTE**: Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).<br>(5) Disconnect the outdoor control P.C. board connectors: CN712, CNF1, CNTH1, CNTH2, CN63H, CN791,CN792, CN793, CN794 (**MXZ-4F72VF/4F72VF2/4F72VF3/4F72VF4/4F80VF2/4F80VF3/4F80VF4**), CN797.<br>(6) Remove terminal cover and the thermal protector (TRS).<br>(7) Disconnect the compressor lead wire from the terminal of the compressor (U, V, W).<br>(8) Remove the screws of the electrical box assembly, and remove the electrical box assembly (Photo 4).<br>(9) Remove the propeller fan.<br>(10) Remove the sound proof felt *1, *2 and *3 (**MXZ-3F54VF/3F54VF2/3F54VF3/3F54VF4**).<br>**NOTE**: Before removing the sound proof felt, remove the hook-and-loop fastener of the top felt by the power receiver.<br>(11) Remove the screws of the separator, and remove the separator.<br>(12) Detach the brazed parts of the compressor suction and discharge pipes.<br>(13) Remove the compressor nuts and remove the compressor.<br>(14) Detach the brazed parts of the 4-way valve and pipe. | **Photo 9**<br>  <br><br>**Photo 10**<br>  <br> |

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **5. Removing the expansion valve**<br>(1) Remove the service panel (Photo 1).<br>(2) Remove the top panel, the cabinet, and the back panel (Photo 1, 2, 3).<br>(Gas recovery is not required if the unit is pumped down.)<br>(3) Remove the electrical parts for removing LEV R (Photo 4, 8).<br>(4) Remove the LEV coils.<br>(5) Detach the brazed parts of expansion valves and pipes. | **Photo 11**<br>  <br><br>**Photo 12**<br>  <br> |

## 13-3. MXZ-4F83VF MXZ-4F83VF2 MXZ-5F102VF MXZ-5F102VF2

**NOTE**: Turn OFF the power supply before disassembly.

### OPERATING PROCEDURE

**1. Removing the panels**

(1) Remove the screws fixing the service panel, and remove the service panel.
(2) Remove the screws fixing the top panel and remove the top panel.
(3) Remove the screws fixing the handle (R Rear), and remove the handle (R Rear).
(4) Disconnect the power supply and indoor/outdoor connecting wire.
(5) Remove the screws fixing the front panel, and remove the front panel.
(6) Remove the screws fixing the back panel, and remove the back panel.

### PHOTOS/FIGURES

**Photo 1**

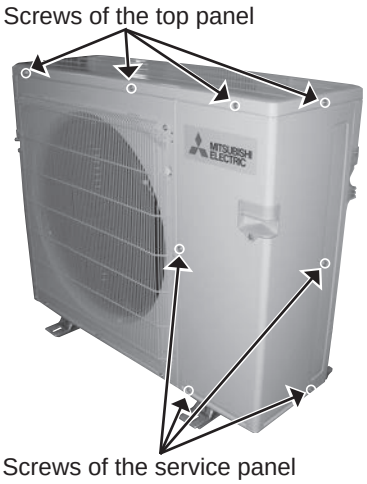



**Photo 3**

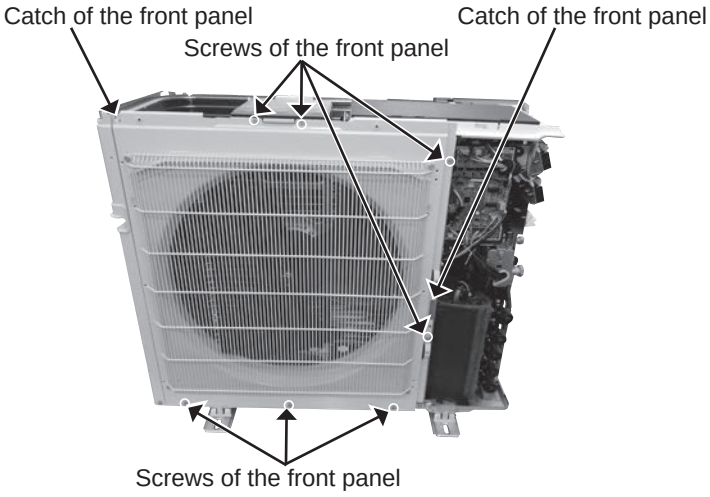



**Photo 2**

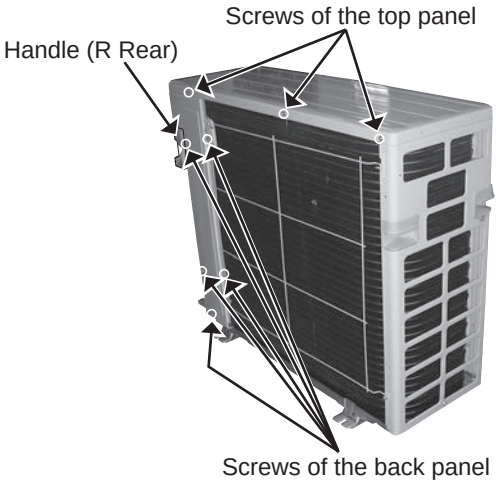



**Photo 4-1**

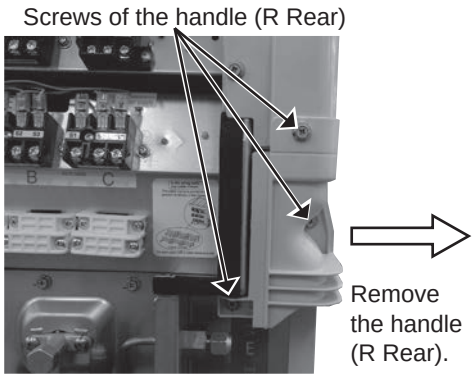
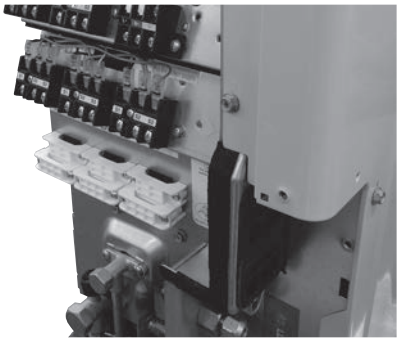
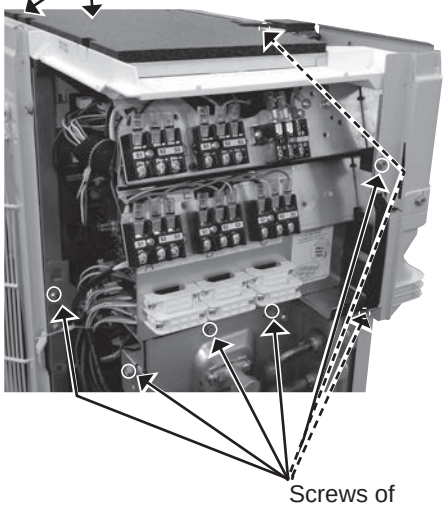
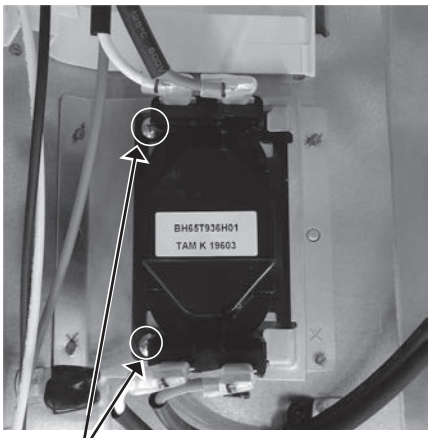
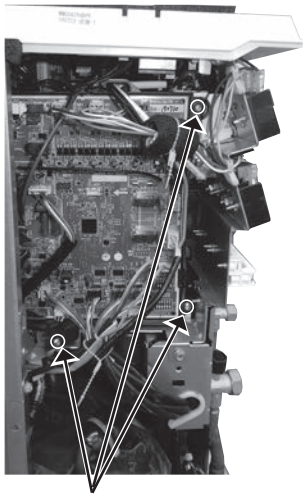
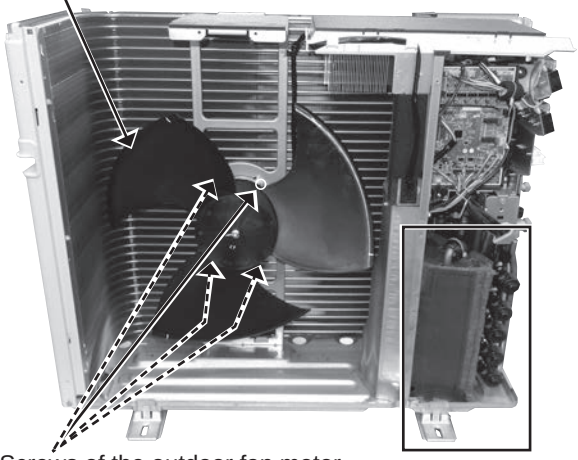
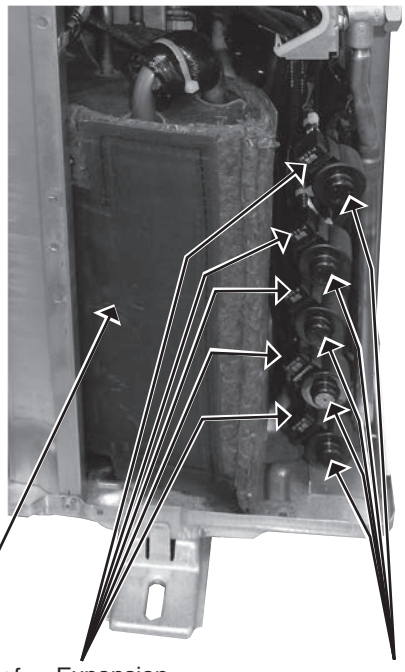



**Photo 4-2**



| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **2. Removing the outdoor control P.C. board, the reactor and the outdoor power P.C. board**<br>(1) Remove the service panel and the top panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the connectors on the outdoor control P.C. board.<br>(4) Remove the screws fixing the outdoor control P.C. board holder, and remove the outdoor control P.C. board.<br>(5) Disconnect the lead wire from the reactor.<br>(6) Remove the screws fixing the reactor, and remove the reactor.<br>(7) Disconnect the lead wire of the power P.C. board.<br>(8) Disconnect the catches of the PB cover, and remove the PB cover.<br>(9) Remove the outdoor power P.C. board. | **Photo 5**<br>Catches of the PB cover<br>  <br>Screws of the electrical parts |
| **Photo 7**<br>  <br><br>Screws of the reactor | **Photo 6**<br>  <br>Screws of the outdoor control P.C. board holder |

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **3. Removing the fan motor**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the connector CNF1 on the outdoor control P.C. board.<br>(4) Remove the propeller fan.<br>(5) Remove the fan motor. | **Photo 8**<br>Propeller fan<br>  <br>Screws of the outdoor fan motor |
| **4. Removing the expansion valve**<br>(1) Remove the service panel and the top panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(Gas recovery is not required if the unit is pumped down.)<br>(3) Remove the LEV coils.<br>(4) Detach the brazed parts of the expansion valves and pipes. | **Photo 9**<br>  <br>Soundpfoof felt<br>Expansion valves<br>LEV coils |

## OPERATING PROCEDURE

**5. Removing the compressor and 4-way valve**

(1) Remove the service panel, the top panel, the handle (R Rear), the back panel and the front panel (Refer to section 1).

(2) Disconnect the power supply and indoor/outdoor connecting wire, and remove the back panel.

(3) Recover gas from the refrigerant circuit.

**NOTE:** Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).

(4) Remove the terminal cover, and remove thermal protector (TRS).

(5) Disconnect the compressor lead wire from the terminal of the compressor (U, V, W).

(6) Disconnect the outdoor control P.C. board connectors: CNF1, CNTH1, CNTH2, CN63H, CN712, CN791, CN792, CN793, CN794, CN795 (**MXZ-5F**)

(7) Remove the screws fixing the electrical parts, and remove the electrical parts (Photo 5).

(8) Remove the propeller fan.

(9) Remove the screws fixing the separator, and remove the separator.

(10) Remove the soundproof felt.

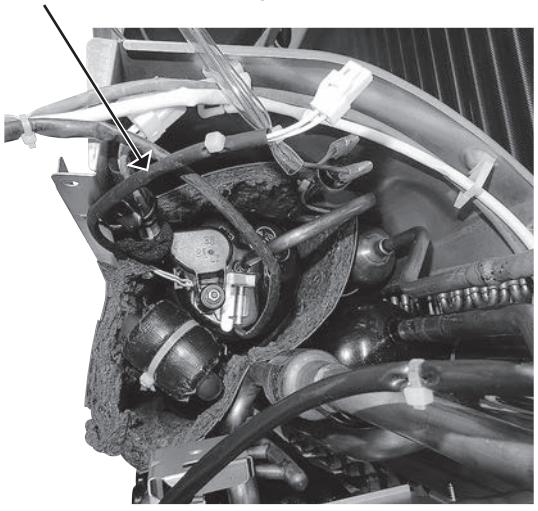
(11) Detach the brazed parts of the compressor suction pipe and discharge pipe.

(12) Remove the compressor nuts and remove the compressor.

(13) Detach the brazed parts of 4-way valve and pipes.

**Photo 11**

Thermal protector **(VF2 only)**



## PHOTOS/FIGURES

**Photo 10**

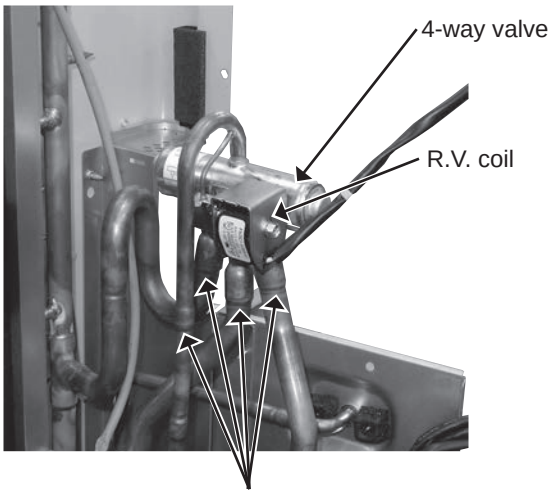
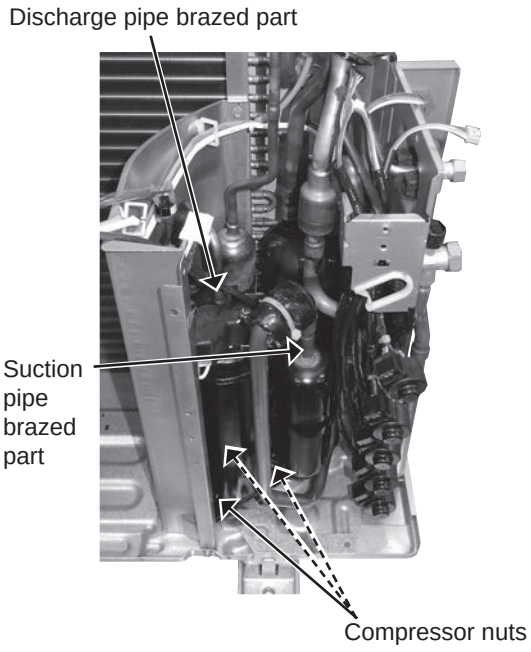



**Photo 12**



## 13-4. MXZ-2F53VFHZ MXZ-2F53VFHZ2

**NOTE**: Turn OFF the power supply before disassembly.

### OPERATING PROCEDURE

**1. Removing the panels**

(1) Remove the screws fixing the service panel, and remove the service panel.
(2) Remove the screws fixing the top panel and remove the top panel.
(3) Remove the screws fixing the handle (R Rear), and remove the handle (R Rear).
(4) Disconnect the power supply and indoor/outdoor connecting wire.
(5) Remove the screws fixing the front panel, and remove the front panel.
(6) Remove the screws fixing the back panel, and remove the back panel.

### PHOTOS/FIGURES

**Photo 1**

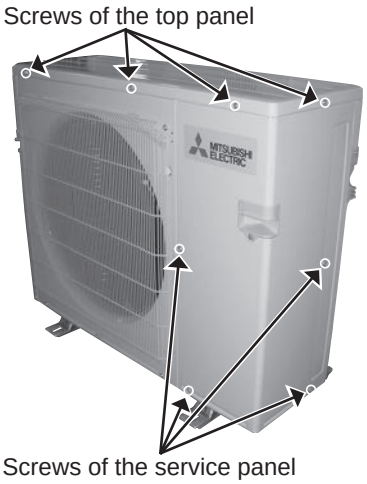



**Photo 2**

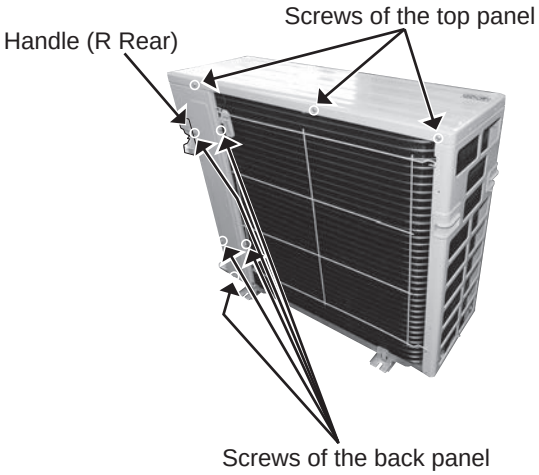



**Photo 3**

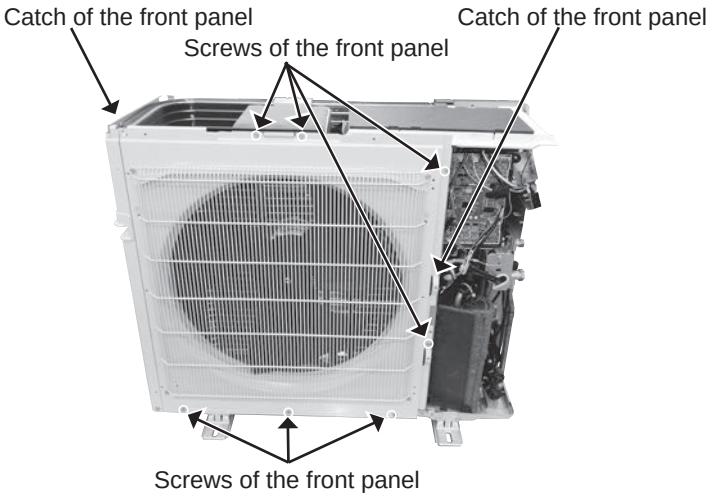
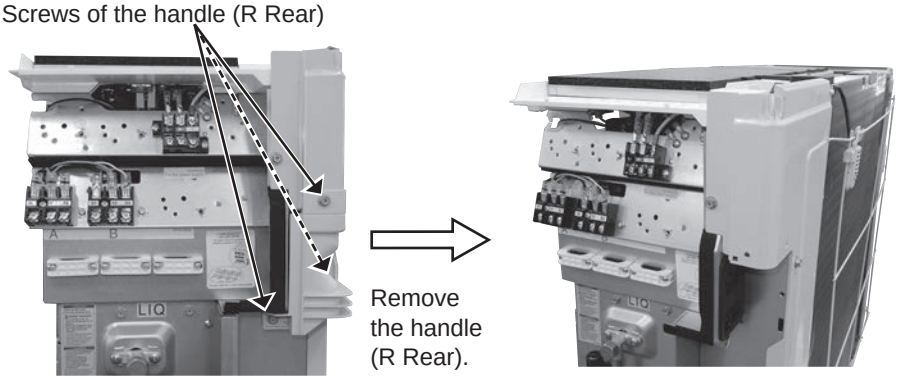



**Photo 4**

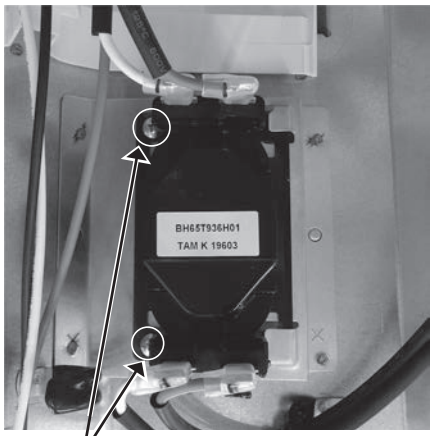


## OPERATING PROCEDURE

**2. Removing the outdoor control P.C. board, the reactor and the outdoor power P.C. board**

(1) Remove the service panel and the top panel (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire.
(3) Disconnect the connectors on the outdoor control P.C. board.
(4) Remove the screws fixing the outdoor control P.C. board holder, and remove the outdoor control P.C. board.
(5) Disconnect the lead wire from the reactor.
(6) Remove the screws fixing the reactor, and remove the reactor.
(7) Disconnect the lead wire of the power P.C. board.
(8) Disconnect the catches of the PB cover, and remove the PB cover.
(9) Remove the outdoor power P.C. board.

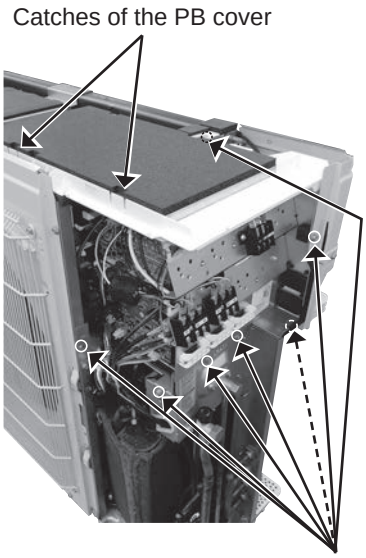
**Photo 7**




Screws of the reactor

## PHOTOS/FIGURES

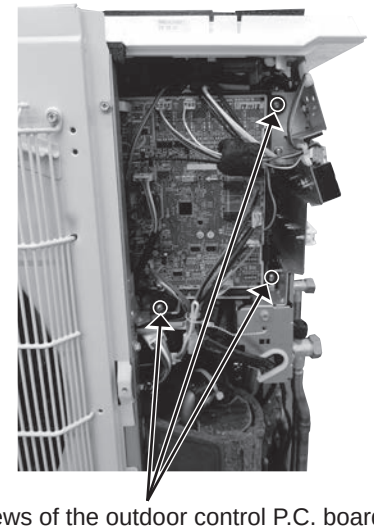
**Photo 5**



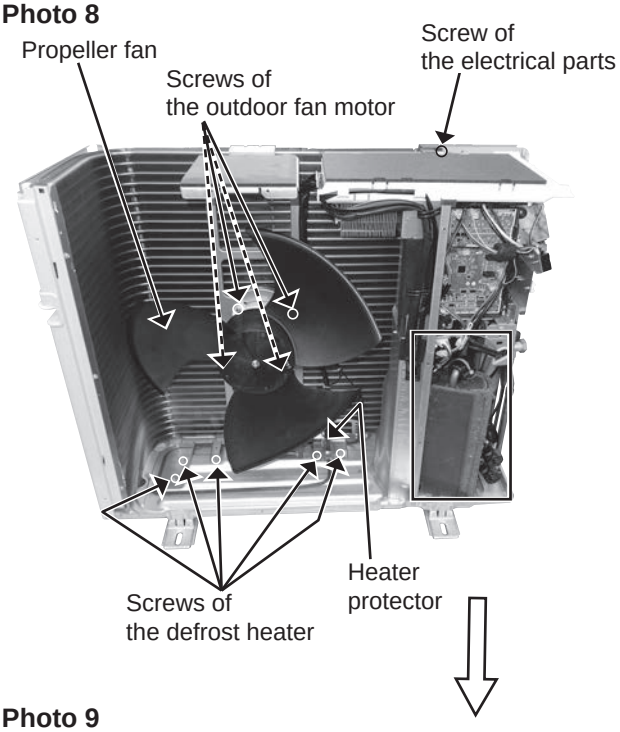
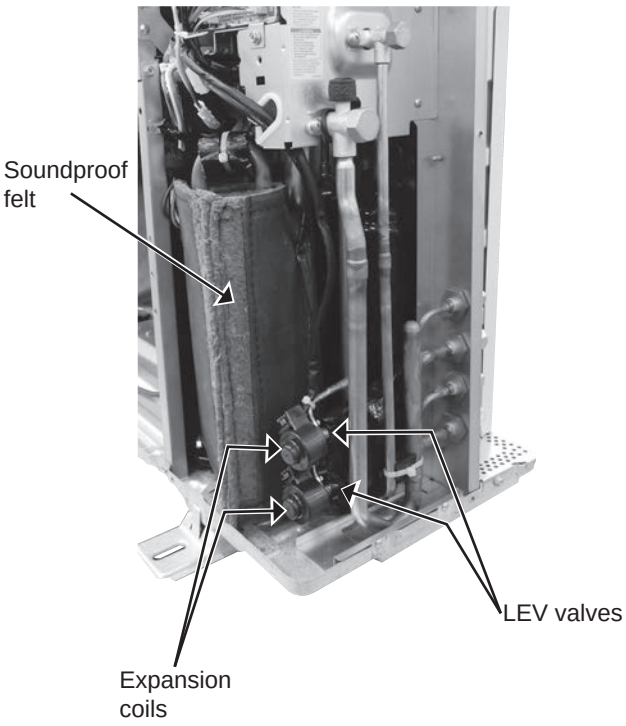
Catches of the PB cover

Screws of the electrical parts

**Photo 6**



Screws of the outdoor control P.C. board holder

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **3. Removing the fan motor**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the connector CNF1 on the outdoor control P.C. board.<br>(4) Remove the propeller fan.<br>(5) Remove the fan motor. | **Photo 8**<br>  <br> |
| **4. Removing the expansion valve**<br>(1) Remove the service panel and the top panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(Gas recovery is not required if the unit is pumped down.)<br>(3) Remove the LEV coils.<br>(4) Detach the brazed parts of the expansion valves and pipes. | **Photo 9**<br>  <br> |
| **5. Removing the defrost heater**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1.).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the defrost heater lead wires from CN714 on the outdoor control P.C. board.<br>(4) Remove the defrost heater lead wires from the lead clamp.<br>(5) Remove the screws of the defrost heater.<br>(6) Remove the heater protector and the defrost heater. | |

## OPERATING PROCEDURE

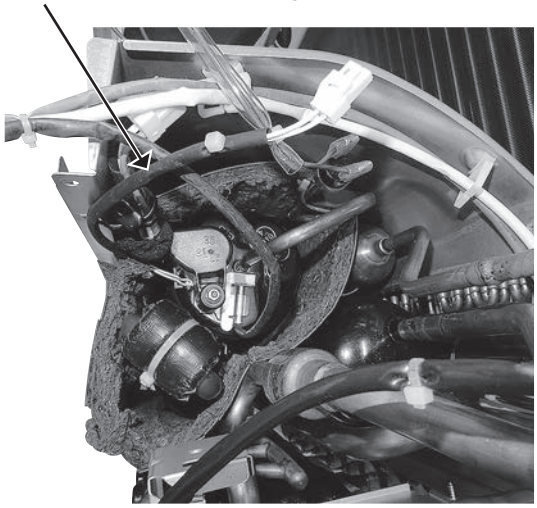
**6. Removing the compressor and 4-way valve**

(1) Remove the service panel, the top panel, the handle (R Rear), the back panel and the front panel (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire, and remove the back panel.
(3) Recover gas from the refrigerant circuit.
**NOTE:** Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).

(4) Remove the terminal cover, and remove thermal protector (TRS).
(5) Disconnect the compressor lead wire from the terminal of the compressor (U, V, W).
(6) Disconnect the outdoor control P.C. board connectors: CNF1, CNTH1, CNTH2, CN63H, CN712, CN791, CN792, CN714
(7) Remove the screws fixing the electrical parts, and remove the electrical parts (Photo 5).
(8) Remove the propeller fan.
(9) Remove the screws fixing the separator, and remove the separator.
(10) Remove the soundproof felt.
(11) Detach the brazed parts of the compressor suction pipe and discharge pipe.
(12) Remove the compressor nuts and remove the compressor.
(13) Detach the brazed parts of 4-way valve and pipes.

**Photo 11**

Thermal protector **(VFHZ2 only)**



## PHOTOS/FIGURES

**Photo 10**

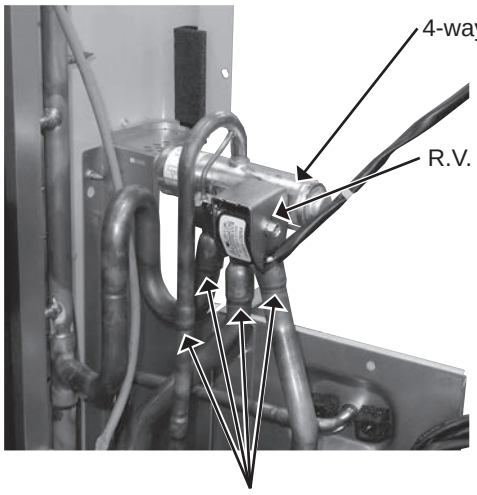
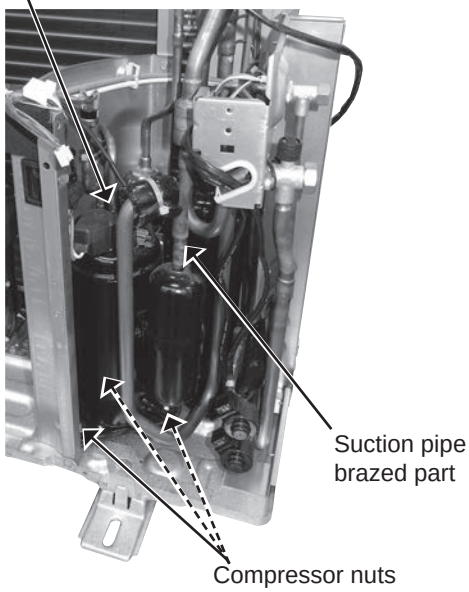
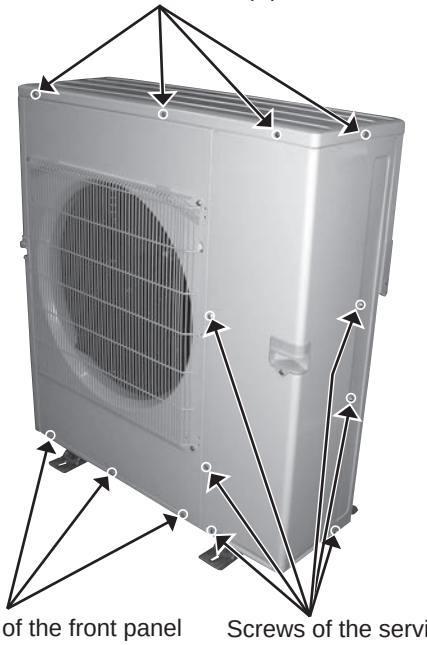
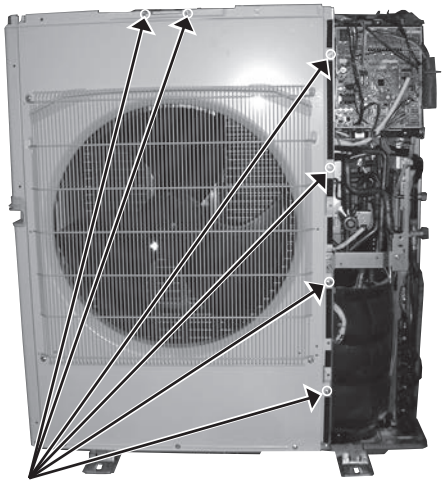
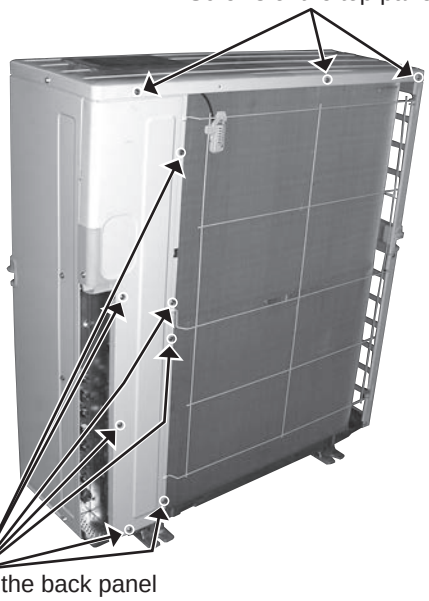



**Photo 12**



## 13-5. MXZ-4F83VFHZ MXZ-4F83VFHZ2

**NOTE**: Turn OFF the power supply before disassembly.

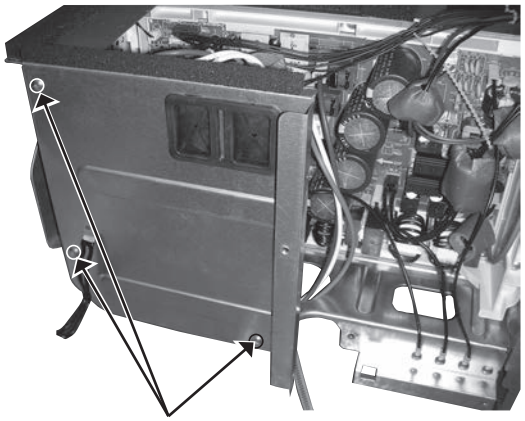
| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **1. Removing the panels**<br>(1) Remove the screws fixing the service panel, and remove the service panel.<br>(2) Remove the screws fixing the top panel, remove the top panel.<br>(3) Disconnect the power supply and indoor/outdoor connecting wire.<br>(4) Remove the screws fixing the front panel, and remove the front panel.<br>(5) Remove the screws fixing the back panel, and remove the back panel. | **Photo 1**<br>Screws of the top panel<br>  <br>Screws of the front panel<br>Screws of the service panel |
| **Photo 3**<br>  <br>Screws of the front panel | **Photo 2**<br>Screws of the top panel<br>  <br>Screws of the back panel |

## OPERATING PROCEDURE

**2. Removing the outdoor control P.C. board, the reactor and the outdoor power P.C. board**

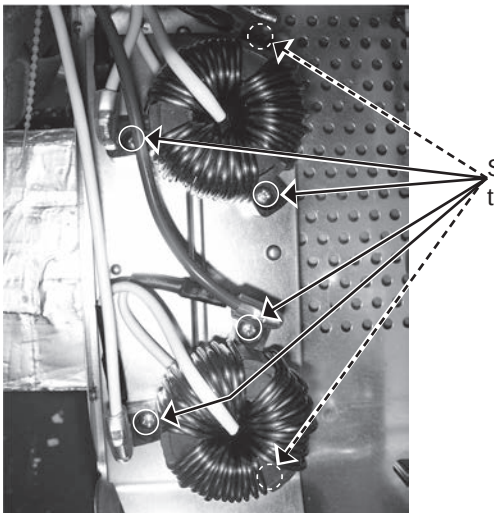
(1) Remove the service panel, the top panel and the front panel (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire.
(3) Disconnect the connectors on the outdoor control P.C. board.
(4) Remove the screws fixing the outdoor control P.C. board, and remove the outdoor control P.C. board.
(5) Remove the screws fixing the electrical parts, and remove the electrical parts.
(6) Remove the screws fixing the TB support, and remove the TB support.
(7) Remove the screws fixing the control box separator, and remove the control box separator.
(8) Disconnect the lead wire of the outdoor power P.C. board.
(9) Remove the screws fixing the outdoor power P.C. board, and remove the outdoor power P.C. board with the outdoor P.C. board holder.
(10) Remove the screws fixing the control box F, and remove the control box F.
(11) Remove the screws fixing the reactors, and remove the reactors.

**Photo 7**



Screws of the control box F

**Photo 8**




## PHOTOS/FIGURES

**Photo 4**

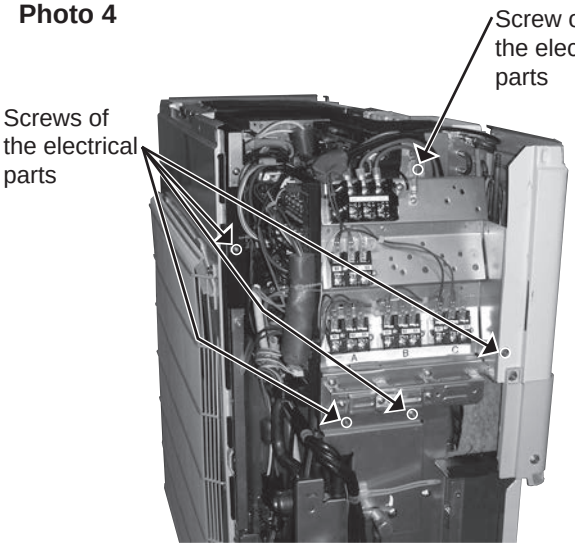



**Photo 5**

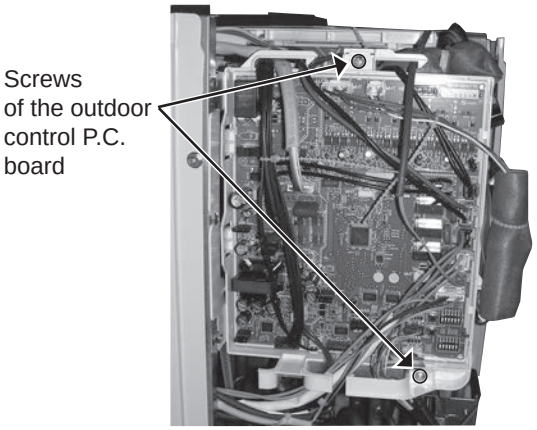
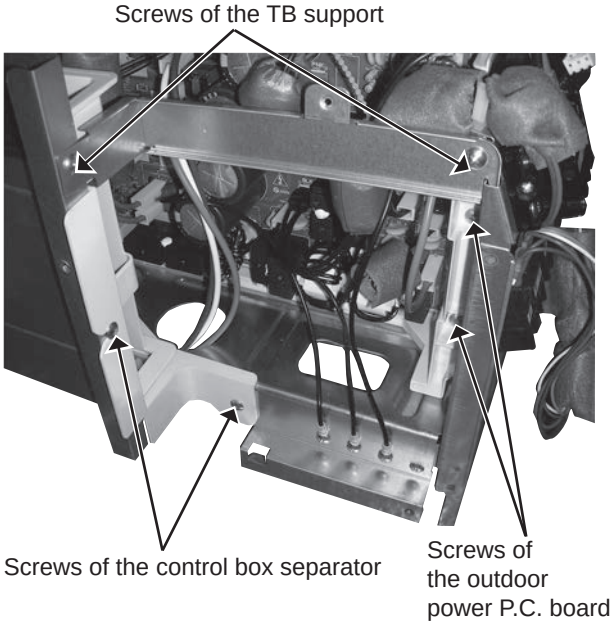
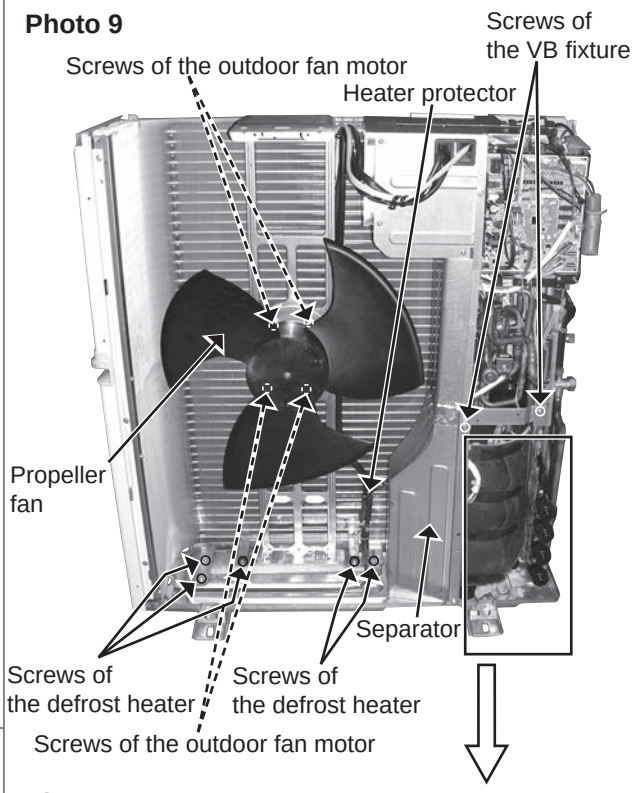
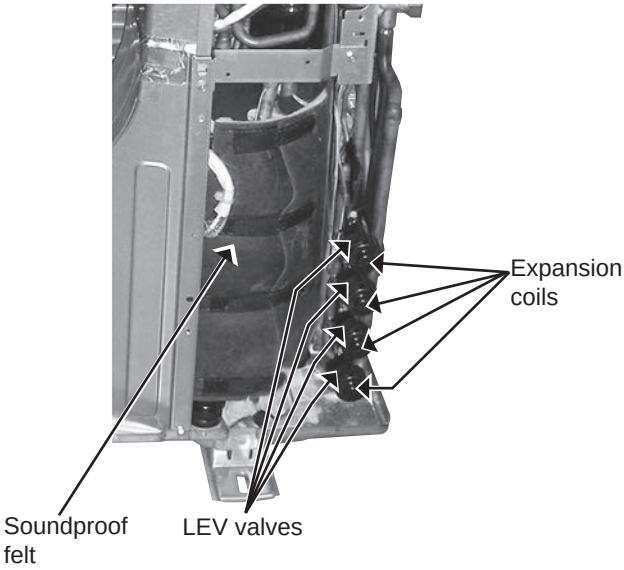



**Photo 6**



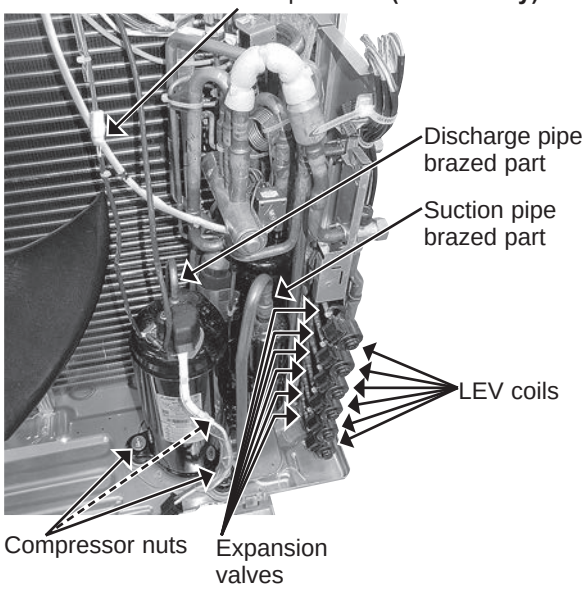
| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **3. Removing the fan motor**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the connector CNF1 on the outdoor control P.C. board.<br>(4) Remove the propeller fan.<br>(5) Remove the fan motor. | **Photo 9**<br>  <br> |
| **4. Removing the expansion valve**<br>(1) Remove the service panel and the top panel (Refer to section 1).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(Gas recovery is not required if the unit is pumped down.)<br>(3) Remove the LEV coils.<br>(4) Detach the brazed parts of expansion valves and pipes. | **Photo 10**<br>  <br> |
| **5. Removing the defrost heater**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1.).<br>(2) Disconnect the power supply and indoor/outdoor connecting wire.<br>(3) Disconnect the defrost heater lead wires from CN714 on the outdoor control P.C. board.<br>(4) Remove the defrost heater lead wires from the lead clamp.<br>(5) Remove the screws of the defrost heater.<br>(6) Remove the heater protector and the defrost heater. | |

## OPERATING PROCEDURE

**6. Removing the compressor and 4-way valve**

(1) Remove the service panel, the top panel, the back panel and the front panel (Refer to section 1).
(2) Disconnect the power supply and indoor/outdoor connecting wire, and remove the back panel.
(3) Recover gas from the refrigerant circuit.
**NOTE:** Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).
(4) Remove the terminal cover, the thermal protector (TRS) and the discharge temperature thermistor. (Photo 12)
(5) Disconnect the compressor lead wire from the terminal of the compressor (U, V, W).
(6) Disconnect the outdoor control P.C. board connectors: CNF1, CNTH1, CNTH2, CN63H, CN712, CN713, CN714, CN791, CN792, CN793, CN794
(7) Remove the screws fixing the electrical parts, and remove the electrical parts (Photo 4).
(8) Remove the propeller fan.
(9) Remove the screws fixing the VB fixture, and remove the VB fixture.
(10) Remove the screws fixing the separator, and remove the separator.
**NOTE:** When installing the separator, insert the tabs of the heat exchanger into the separator.
(11) Remove the soundproof felt.
(12) Detach the brazed parts of the suction pipe and discharge pipe.
(13) Remove the nuts of the compressor, and remove the compressor.
(14) Detach the brazed parts of 4-way valve and pipes.

**Photo 12**




## PHOTOS/FIGURES

**Photo 11**

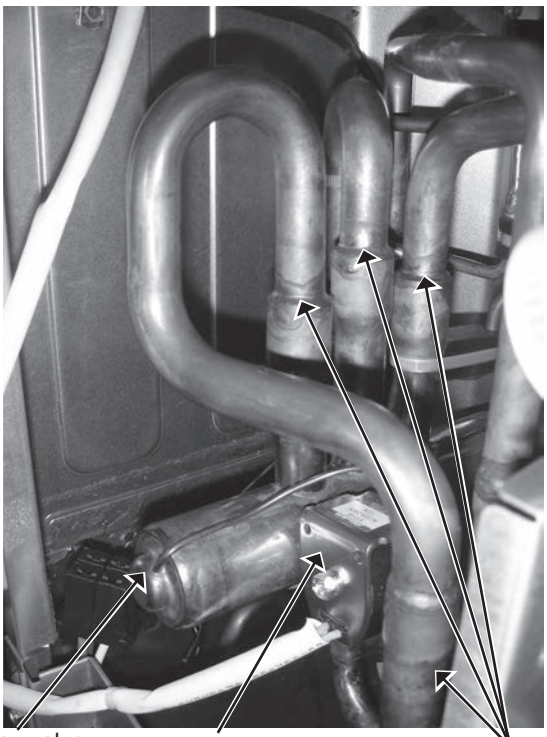
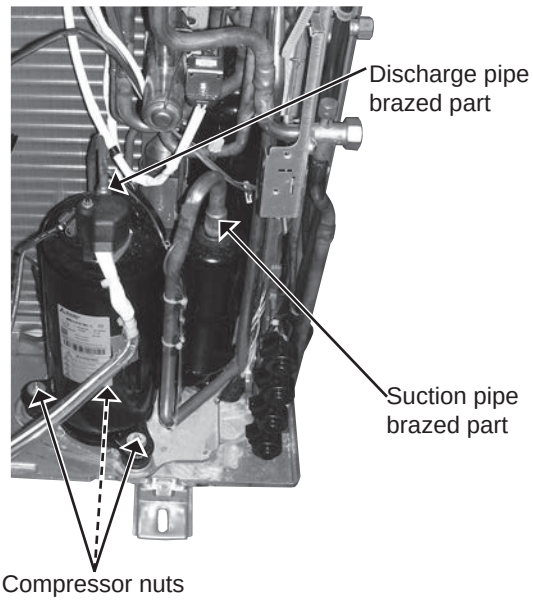
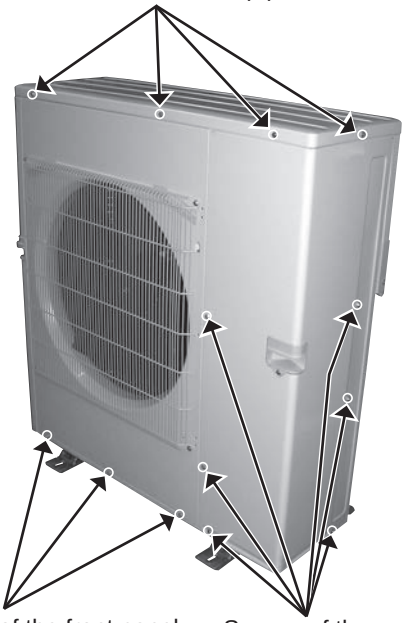
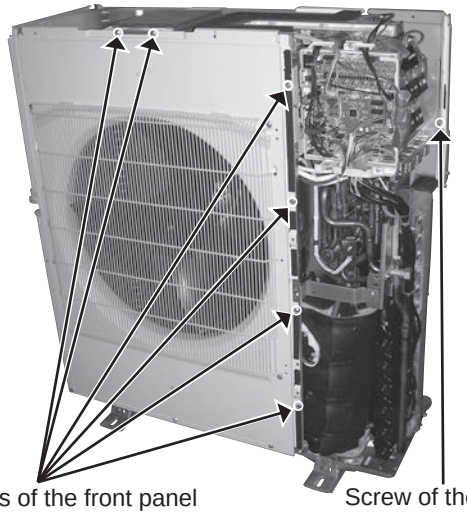
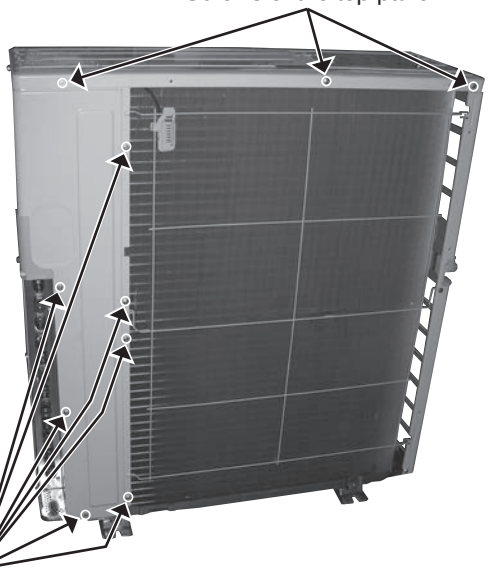



**Photo 13**



## 13-6. MXZ-6F122VF MXZ-6F120VF2

**NOTE**: Turn OFF the power supply before disassembly.

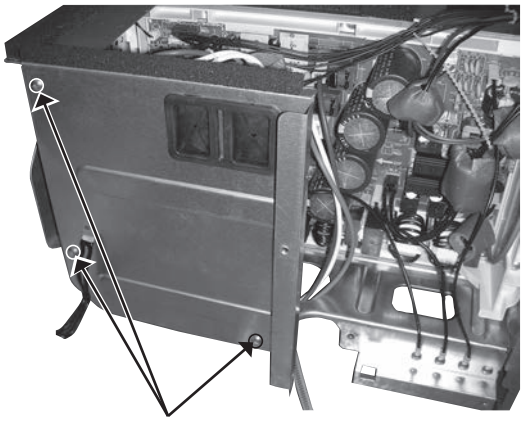
| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **1. Removing the panels**<br>(1) Remove the screws fixing the service panel, and remove the service panel.<br>(2) Remove the screws fixing the top panel, remove the top panel.<br>(3) Disconnect the power supply cord and indoor/outdoor connecting wire.<br>(4) Remove the screws fixing the front panel, and remove the front panel.<br>(5) Remove the screws fixing the back panel, and remove the back panel. | **Photo 1**<br>Screws of the top panel<br>  <br>Screws of the front panel<br>Screws of the service panel |
| **Photo 3**<br>  <br>Screws of the front panel<br>Screw of the back panel | **Photo 2**<br>Screws of the top panel<br>  <br>Screws of the back panel |

## OPERATING PROCEDURE

**2. Removing the outdoor control P.C. board, the reactor and the outdoor power P.C. board**

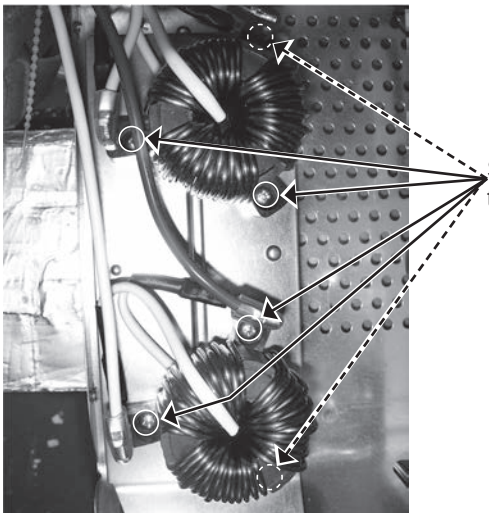
(1) Remove the service panel, the top panel and the front panel (Refer to section 1).
(2) Disconnect the power supply cord and indoor/outdoor connecting wire.
(3) Disconnect the connectors on the outdoor control P.C. board.
(4) Remove the screws fixing the outdoor control P.C. board, and remove the outdoor control P.C. board.
(5) Remove the screws fixing the electrical parts, and remove the electrical parts.
(6) Remove the screws fixing the TB support, and remove the TB support.
(7) Remove the screws fixing the control box separator, and remove the control box separator.
(8) Disconnect the lead wire of the outdoor power P.C. board.
(9) Remove the screws fixing the outdoor power P.C. board, and remove the outdoor power P.C. board with the outdoor P.C. board holder.
(10) Remove the screws fixing the control box F, and remove the control box F.
(11) Remove the screws fixing the reactors, and remove the reactors.

**Photo 7**



Screws of the control box F

**Photo 8**




## PHOTOS/FIGURES

**Photo 4**

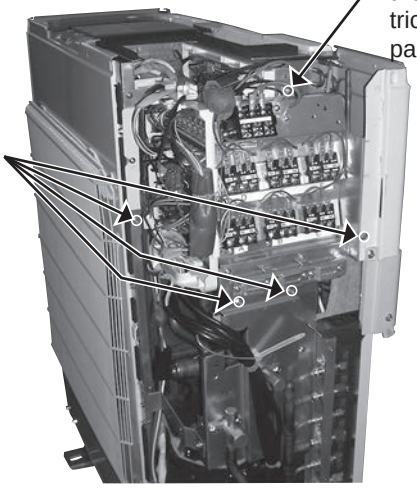
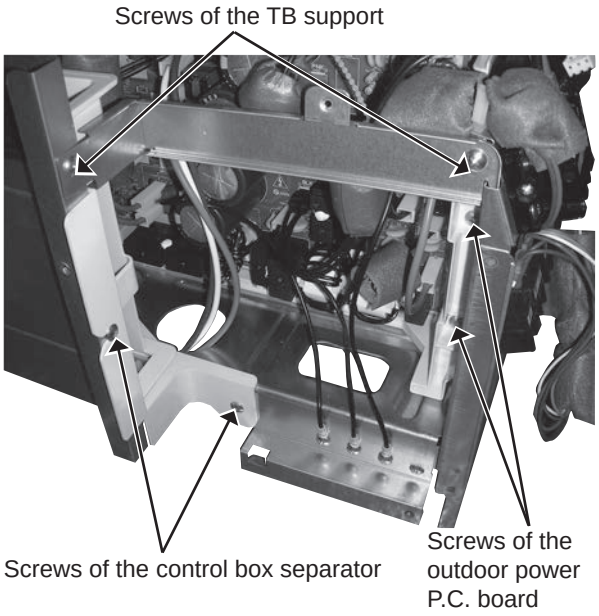
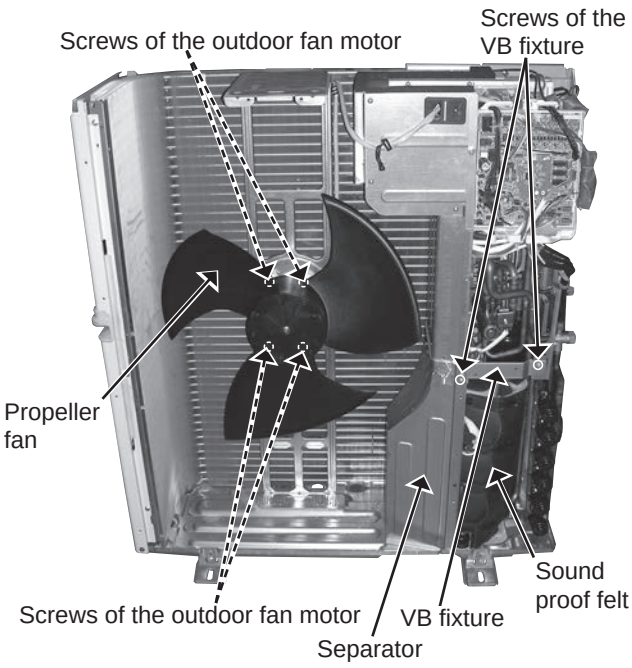
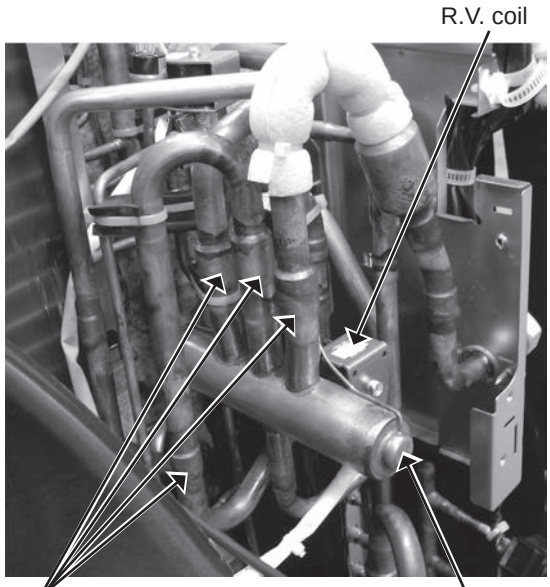
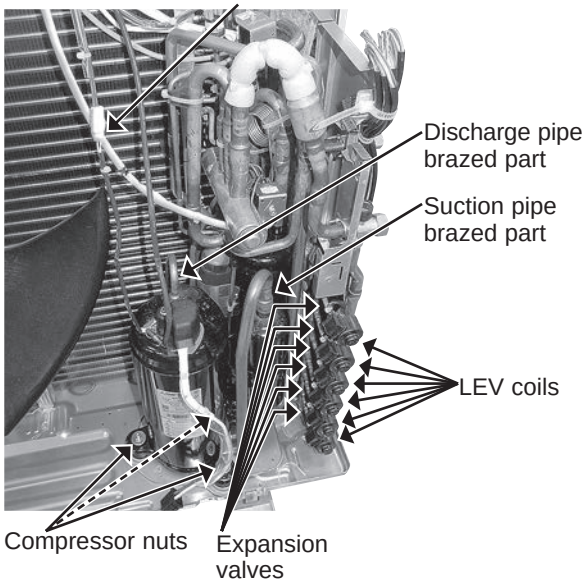



**Photo 5**


**Photo 6**



| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **3. Removing the fan motor**<br>(1) Remove the service panel, the top panel and the front panel (Refer to section 1).<br>(2) Disconnect the power supply cord and indoor/outdoor connecting wire.<br>(3) Disconnect the connector CNF1 on the outdoor control P.C. board.<br>(4) Remove the propeller fan.<br>(5) Remove the fan motor. | **Photo 9**<br>  <br> |
| **4. Removing the compressor and 4-way valve**<br>(1) Remove the service panel, the top panel, the back panel and the front panel (Refer to section 1).<br>(2) Disconnect the power supply cord and indoor/outdoor connecting wire, and remove the back panel.<br>(3) Recover gas from the refrigerant circuit.<br>**NOTE:** Recover gas from the pipes until the pressure gauge shows 0 kg/cm$^2$ (0 MPa).<br>(4) Remove the terminal cover, the thermal protector (TRS) and the discharge temperature thermistor. (Photo 11)<br>(5) Disconnect the compressor lead wire from the terminal of the compressor (U, V, W).<br>(6) Disconnect the outdoor control P.C. board connectors: CNF1, CNTH1, CNTH2, CN63H, CN712, CN713, CN714, CN791, CN792, CN793, CN794, CN795<br>(7) Remove the screws fixing the electrical parts, and remove the electrical parts (Photo 4).<br>(8) Remove the propeller fan.<br>(9) Remove the screws fixing the VB fixture, and remove the VB fixture.<br>(10) Remove the screws fixing the separator, and remove the separator.<br>**NOTE:** When installing the separator, insert the tabs of the heat exchanger into the separator.<br>(11) Remove the sound proof felt.<br>(12) Detach the brazed parts of the suction and discharge pipes (Photo 11).<br>(13) Remove the nuts of the compressor, and remove the compressor (Photo 11).<br>(14) Detach the brazed parts of 4-way valve and pipes. | **Photo 10**<br>  <br> |

| OPERATING PROCEDURE | PHOTOS/FIGURES |
|---|---|
| **5. Removing the expansion valve**<br>(1) Remove the service panel and the top panel (Refer to section 1).<br>(2) Disconnect the power supply cord and indoor/outdoor connecting wire.<br>(Gas recovery is not required if the unit is pumped down.)<br>(3) Remove the LEV coils.<br>(4) Detach the brazed parts of expansion valves and pipes. | **Photo 11** Terminal cover and the thermal protector **(VF2 only)**<br>  <br> |


# MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN





**Issued: Dec. 2022. No.OBH790 REVISED EDITION-L**
**Issued: Jun. 2022. No.OBH790 REVISED EDITION-K**
**Issued: Jun. 2021. No.OBH790 REVISED EDITION-J**
**Issued: Mar. 2021. No.OBH790 REVISED EDITION-H**
**Issued: Feb. 2021. No.OBH790 REVISED EDITION-G**
**Issued: Jul. 2020. No.OBH790 REVISED EDITION-F**
**Issued: Mar. 2020. No.OBH790 REVISED EDITION-E**
**Issued: Nov. 2019. No.OBH790 REVISED EDITION-D**
**Issued: May 2019. No.OBH790 REVISED EDITION-C**
**Issued: Feb. 2019. No.OBH790 REVISED EDITION-B**
**Issued: Sep. 2018. No.OBH790 REVISED EDITION-A**
**Published: Mar. 2018. No.OBH790**
**Made in Japan**