The Renewable Solutions Provider

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Accredited Ecodan Installer:

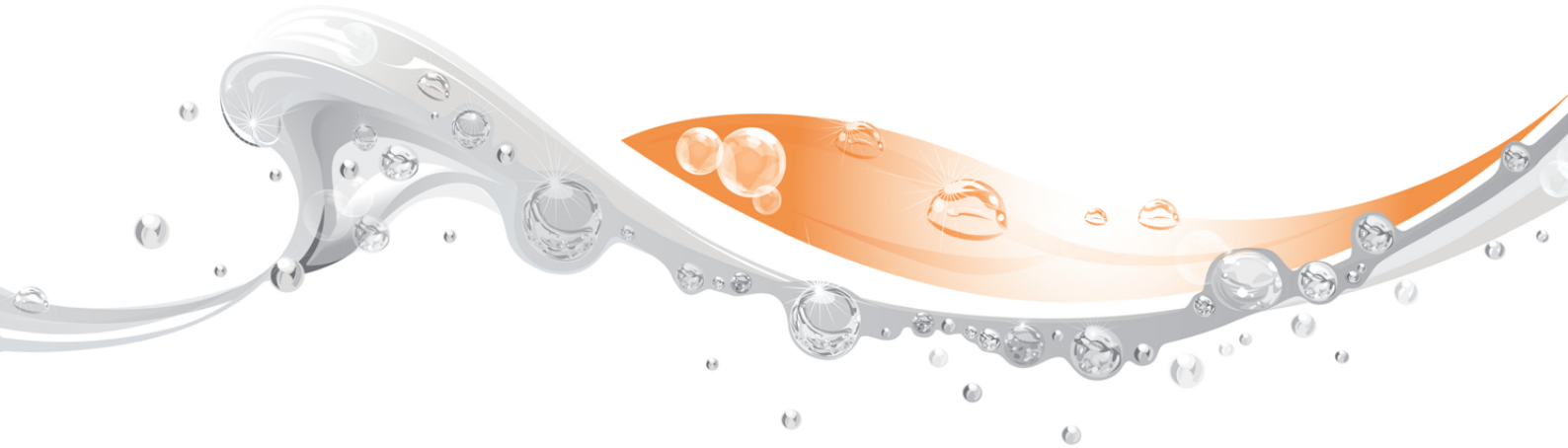
Telephone:

Email:

Address:

Commissioning Document

Ecodan Heating and Hot Water Heat Pumps



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Air Conditioning | Heating
Ventilation | Controls

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IMPORTANT DOCUMENTS
To Be Kept At All Times With Equipment

IMPORTANT
This Sheet Must Be Kept With Equipment

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Notes

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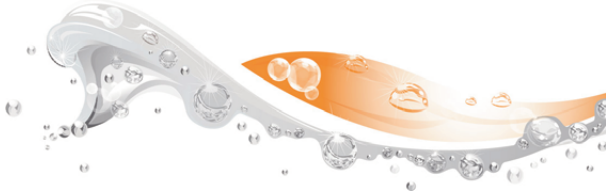

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Service Record

Making a World of Difference

Ecodan Service Record

It is recommended that your Ecodan is serviced regularly and that the appropriate Service Interval Record is completed.

Service Provider

Before completing the appropriate Services Interval Record below, please ensure you have carried out the service as described in the manufacturer's instructions.

Always use the manufacturer's specified spare part when replacing components.

SERVICE 1	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 2	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 3	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 4	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 5	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 6	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 7	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 8	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 9	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 10	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

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Service Record

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Mains Pressure Hot Water Storage System Service Record

It is recommended that your Ecodan is serviced regularly and that the appropriate Service Interval Record is completed.

Service Provider

Before completing the appropriate Services Interval Record below, please ensure you have carried out the service as described in the manufacturer's instructions.

Always use the manufacturer's specified spare part when replacing components.

SERVICE 1	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 2	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 3	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 4	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 5	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 6	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 7	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 8	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 9	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

SERVICE 10	
AEI Engineer Name:	
AEI Company Name:	
AEI Telephone No.	AEI No.
Comments:	
Sig.	Date:

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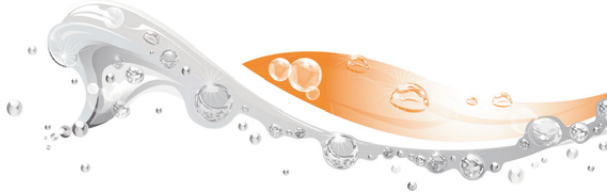

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Annual Service Tasks

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Ecodan Model No.		Ecodan Serial No.	

MECHANICAL TASKS	
1	Inspect and clean evaporator fins. Repair damaged fins using a fin comb if required
2	Check visually for signs of oil leaks which may indicate a refrigerant leak (check for leaks if necessary)
3	Check integrity of refrigerant / water pipe work and lagging, repair lagging if required
4	Check system operation
5	Check the antifreeze and if necessary top up the concentration as per manufacturer's recommendations
6	Check and clean the magnetic particle filter
7	Check system pressure
8	Release any air from the primary/heating systems

CONTROLLER TASKS	
9	Check for the correct operation and temperature setting of the thermostats
10	Check the operation of the zone valves
11	Check the operation and the timing of the immersion heater

On completion check that the whole system is working satisfactorily

- Mitsubishi Electric recommends that the frequency of maintenance visits to be a maximum of 12 months between inspections.
- Frequency of maintenance may increase dependent upon the equipment and local water conditions e.g. hard water, scale forming, water containing a high proportion of solids.
- Failure to maintain the system to the above minimum recommendations could result in the warranty becoming null and void.
- Please fill in the Service Record sheet to confirm the above tasks have been carried out on the Ecodan outdoor unit.

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Commissioning Checklist
Ecodan

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This Commissioning Checklist is to be completed in full by the AEI who commissioned the Ecodan and associated equipment as a means of demonstrating compliance with the appropriate Building Regulations and then handed to the customer to keep for future reference. For further information, please refer to Mitsubishi Electric training literature and installation manual. Failure to install and commission this equipment to the manufacturer's instructions may invalidate the warranty but does not affect statutory rights.

Customer Name
Tel No.
Ecodan Model
Address
Ecodan No.
Commissioned By (print name)
Commissioning Date
AEI Company Name & Address
AEI No.
Tel No.
Building Regulations Notification No. (if applicable)

CONTROLS - SYSTEM AND HEAT PUMP

Tick the appropriate boxes if applicable

1	Time & Temperature Control To Heating	☐ Room Thermostat & Programmer/Timer	☐ Programmable Room state	☐ Weather Compensation	☐ Optimum Start Control	
2	Time & Temperature Control To Hot Water	☐ Cylinder Thermostat & Programme Timer	☐ Combined with heat pump main controls			
3	Heating Zone Valves (including underfloor loops)	☐ Fitted	☐ Not Required			
4	Hot Water Zone Valves or 3 way-valve	☐ Fitted	☐ Not Required			
5	Thermostatic Radiator Valves	☐ Fitted	☐ Not Required			
6	Heat Pump Safety Interlock	☐ Built in	☐ Provided			
7	Flow & Cylinder temperature sensors correctly positioned?	☐ Yes	☐ No			
8	Automatic Bypass System	Fitted ☐ Yes ☐ No	☐ Not Required			
9	Weather Compensation Settings (if applicable)	°C flow at °C outdoor & °C flow at °C outdoor				
10	Control System	FTC2 FTC3 FTC4 FTC5				
11	Third Party Controls?	☐ Yes ☐ No	Manufacturer Name & Model			
12	Are the third party controls correctly interlocked?	☐ Yes	☐ No			

ALL SYSTEMS

Tick the appropriate boxes if applicable

1	The heating system has been filled and pressure tested	☐ Yes		
2	Expansion vessel for heating is sized, fitted & charged in accordance with manufacturer's instructions	☐ Yes		
3	The heat pump is fitted on a solid/stable surface capable of taking its weight	☐ Yes		
4	The system has been flushed and cleaned in accordance with BS7593 and heat pump manufacturer's instructions	☐ Yes		
5	What system cleaner was used?			
6	Outdoor fuse rating	A Type		
7	Cylinder coil surface area or Plate heat exchanger	M^2 Plate heat exchanger fitted	Not available heating only	
8	What antifreeze was used			
9	What is the concentration level?	% or down to °C		
10	Legionella protection	°C every days		
11	Circulating pump(s) speed settings?			
12	Measured flowrate	Domestic hot water Litres/min	Heating Litres/min	
13	Measured steady state delta T (Flow and Return)	°C Flow Temperature °C	Return Temperature °C	

OUTDOOR UNIT

Tick the appropriate boxes if applicable

1	Is all external pipework insulated?	☐ Yes	☐ No
2	Is the fan free from obstacles and operational? Adequate airflow?	☐ Yes	☐ No
3	Has suitable consideration been made for condensate discharge?	☐ Yes	☐ No
4	Flow and return isolation valves fitted?	☐ Yes	☐ No
5	Anti-Vibration mounting pads fitted?	☐ Yes	☐ No

HEATING MODE

Tick the appropriate boxes if applicable

1	Heating Temperatures	Heating Flow Temperature °C	Heating Return Temperature °C		
2	Emitter type	underfloor heating ☐ Yes	radiators ☐ Yes	towel rail ☐ Yes	
3	Emitters balanced?	☐ Yes			
4	Air removed from system?	☐ Yes			

DOMESTIC HOT WATER MODE Measure and Record

Tick the appropriate boxes if applicable

1	Is the heat pump connected to a hot water cylinder?	☐ Unvented	☐ Vented	☐ Not Connected	
2	Domestic hot water target temperature	°C	Cylinder heat up minutes		
3	Hot water has been checked at all outlets	☐ Yes			
4	Have Thermostatic blending valves been fitted?	☐ Yes	☐ Not required		

ADDITIONAL SYSTEM INFORMATION

Tick the appropriate boxes if applicable

1	Additional heat sources connected	☐ Gas Boiler	☐ Oil Boiler	☐ Electric Heater	☐ Solar Thermal Other
2	Remove & clean line strainer if present	☐ Yes	☐ No	☐ Not Applicable	
3	The operation of the heat pump and system controls have been demonstrated to the end-user	☐ Yes	☐ No	☐ Not Applicable	

Commissioning Engineer's Signature

Customer's Signature (to confirm demonstration of equipment and receipt of appliance instructions)

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Commissioning Checklist

Mains Pressure Hot Water Storage System

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This Commissioning Checklist is to be completed in full by the competent person who commissioned the storage system as a means of demonstrating compliance with the appropriate Building Regulations and then handed to the customer to keep for future reference. Failure to install and commission this equipment to the manufacturer's instructions may invalidate the warranty but does not affect statutory rights.

Customer Name		Address	
Tel No.			
Cylinder Make & Model			
Cylinder Serial No.			
Commissioned By (print name)		Company Address	
Reg Operative ID No.			
Customer Name			
Commissioning Date			

To be completed by the customer on receipt of a Building Regulations Compliance Certificate*

Building Regulations Notification No. *(if applicable)*

ALL SYSTEMS PRIMARY SETTINGS (indirect heating only)

Tick the appropriate boxes if applicable

1	Is the primary circuit a sealed or open vented system?	☐ Sealed	☐ Open
2	What is the maximum primary flow temperature?	°C	

ALL SYSTEMS

Tick the appropriate boxes if applicable

1	What is the incoming static cold water pressure at the inlet to the system?	bar		
2	Has a strainer been cleaned on installation debris (if fitted)?	☐ Yes	☐ No	
3	Is the installation in a hard water area (above 200ppm)?	☐ Yes	☐ No	
4	If Yes, has a water scale reducer or scale trap been fitted?	☐ Yes	☐ No	
5	What type of scale reducer has been fitted?			
6	What is the hot water thermostat set temperature?	°C		
7	What is the maximum hot water flow rate at set thermostat temperature (measured at high flow outlet)?		l/min	
8	Time and temperature controls have been fitted in compliance with Part L of the Building Regulations?		☐ Yes	
9	Type of control system (if applicable)	☐ Y Plan	☐ S Plan	☐ Other
10	Is the cylinder solar (or other renewable) compatible?	☐ Yes	☐ No	
11	What is the hot water temperature at the nearest outlet?		°C	
12	All appropriate pipes have been insulated up to 1 metre or the point where they become concealed		☐ Yes	

UNVENTED SYSTEMS ONLY

Tick the appropriate boxes if applicable

1	Where is the pressure reducing valve situated (if fitted)?			
2	What is the pressure reducing valve setting?		bar	
3	Has a combined temperature and pressure relief valve and expansion valve been fitted and discharge tested?		☐ Yes	☐ No
4	The tundish and discharge pipework have been connected and terminated to Part G of the Building Regulations		☐ Yes	
5	Are all energy sources fitted with a cut out device?		☐ Yes	☐ No
6	Has the expansion vessel or internal air space been checked?		☐ Yes	☐ No

THERMAL STORES ONLY

Tick the appropriate boxes if applicable

1	What store temperature is achievable?	°C
2	What is the maximum hot water temperature?	°C

ALL INSTALLATIONS

Tick the appropriate boxes if applicable

1	The hot water system complies with the appropriate Building Regulations	☐ Yes
2	The system has been installed and commissioned in accordance with the manufacturer's instructions	☐ Yes
3	The system controls have been demonstrated to and understood by the customer	☐ Yes
4	The manufacturer's literature, including Benchmark Checklist and Service Record, has been explained and left with the customer	☐ Yes

Commissioning Engineer's Signature	Customer's Signature (to confirm satisfactory demonstration and receipt of manufacturer's literature)

* All installations in England and Wales must be notified to Local Authority Building Control (LABC) either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will the be issued to the customer.

benchmark
COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

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Changes for the Better

Telephone: 01707 282880

MELSmart Technical Services: 0161 866 6089
Option 1 - Air Conditioning Technical
Option 2 - Spares
Option 3 - Warranty
Option 4 - Heating Technical
Option 5 - Returns
Option 6 - Product Training and Site Services

Technical Support email: lestechhelpdesk@meuk.mee.com
Spares Support email: les.spares@meuk.mee.com
Warranty Support email: leswarranty@meuk.mee.com
Returns Support email: lesreturns@meuk.mee.com

web: heating.mitsubishielectric.co.uk

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General Enquiries Telephone: 01707 282880 Fax: 01707 278881

IRELAND Mitsubishi Electric Europe Westgate Business Park, Ballymount, Dublin 24, Ireland
Telephone: Dublin (01) 419 8800 Fax: Dublin (01) 419 8890 International code: (003531)

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Green Gateway
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