

1. EXPANSION VESSEL

● x1 per Master HBC

▼ Contact **Pre-sales team** to size this expansion vessel

Please note these are indicative figures. Please also contact a specialist.

Project Details	
Quote Reference	
Project Name	
System Reference	

System Water Volume	
Master-HBC	CME-WP1018VCGA1
Sub-HBC	
Indoor Type	
PEF-WP15VMS1	10
PEF-WP30VMA	6
PEF-WP32VMA	
PEF-WP40VMA	
PEF-WP50VLRMA-E	
PEF-WP32VLRMA-E	
PEF-WP30VMA	
PEF-WP32VMA	
PEF-WP40VMA	
PEF-WP15VMS1	
PEF-WP40VMS1	
PEF-WP15VMS1	
PEF-WP50VMS1	
Total System Water Volume (l)	35.0

Expansion Vessel Size	
Total System Layout Water Volume (l)	136.6
Expansion Vessel Size (l)	27.5

Calculation Parameters	
System Operating Pressure (bar)	1.6
Max. Height from HBC to Indoor (m)	1.5
Maximum Pressure at Expansion Vessel (bar)	1.9
Maximum Temperature (°C)	60
Minimum Temperature (°C)	5

2. WATER PIPE AUTOMATIC AIR VENTS

- 6 port HBC = 16 x vents
- 8 port HBC = 8 x vents

3. INDOOR UNIT PIPE SIZE

- 22mm Copper (Up to Size 50)
- 25mm Barrier Plastic (Up to Size 50)
- 35mm Copper (For Size 63 and 80)
- 40mm Barrier Plastic (For Size 63 and 80)
- Brand examples: Uponor, Valsir-Pexal, Multitubo (or similar pipes)

4. WATER PIPE INSULATION

- 13mm Insulation

5. WATER PIPE ISOLATION VALVES

- 16 port HBC = 32 valves minimum
- 8 port HBC = 16 valves minimum

6. WATER PIPE DRAIN COCKS

- 16 port HBC = 16 x drain cocks
- 8 port HBC = 8 x drain cocks



Main HBC
8 or 16 ports

Water Filling Loop

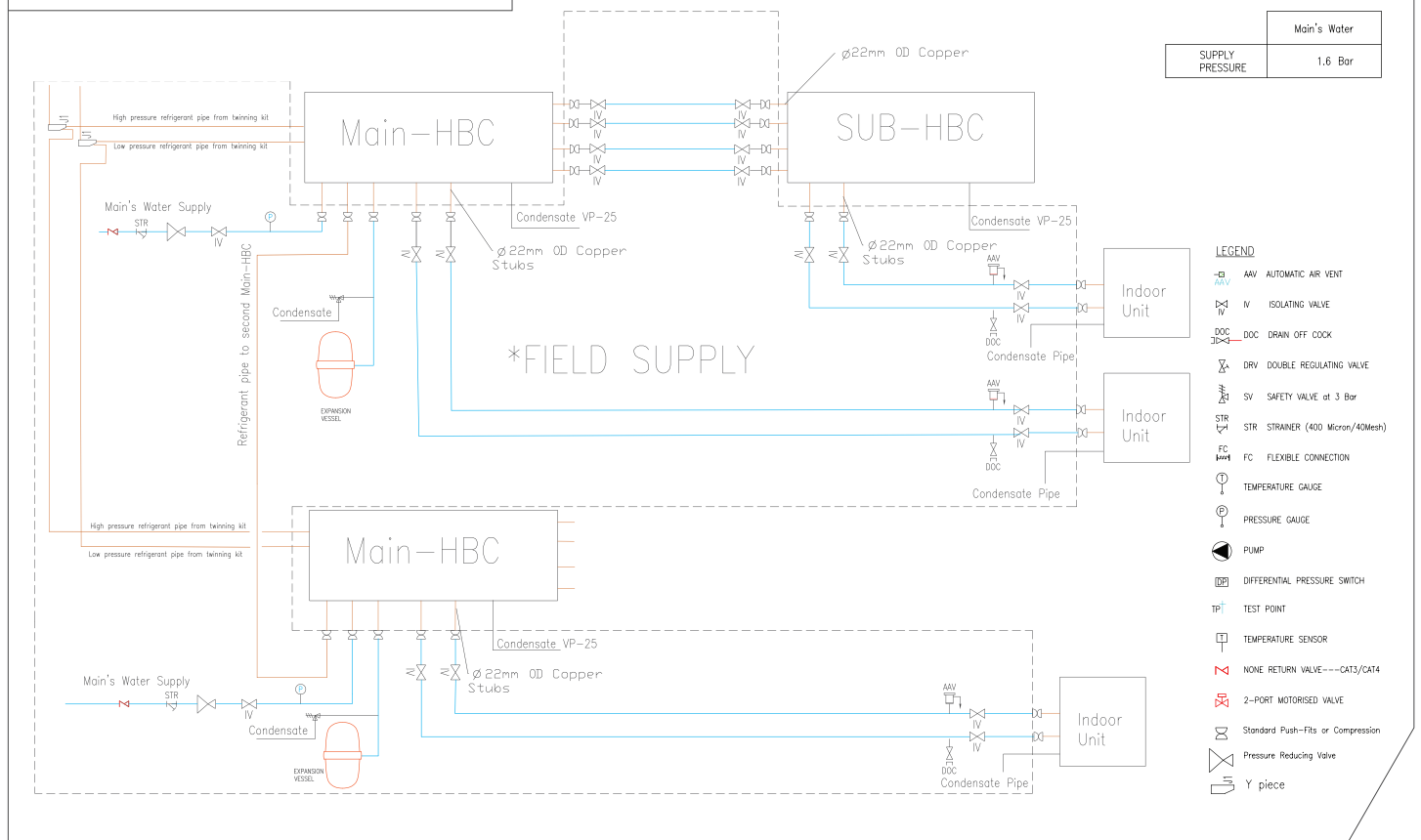
- 1 Pressure gauge (1.6 bar)
- 2 Isolation valve
- 3 Pressure reducing valve
- 4 Strainer
- 5 Non-return valve for CAT3/CAT4 requirement

7. WATER QUALITY CHECK

- **CHECK** water supply content with regards to pH, water hardness, Sulphate, Chloride etc
- **CHECK** HVRF water treatment guidelines



8. WATER PIPE SCHEMATIC



9. SUPPORT

Free Training Course

- 1 Day course that covers the design, install and commissioning aspect of a Hybrid VRF system
- The Purchasing Contractor and the Installing Contractor should attend this course prior to any installation on-site
- Book this course via our website or contact: LESTechTraining@meuk.mee.com
- Prior to attending this course, the Purchasing Contractor should have passed the City Multi's VRF training course ; **CMPT1 and CMPT2**

Free 3 Day Assisted Commissioning

- The HVRF assisted commissioning is a one time **free of charge** service available to customers on completion of their first HVRF installation project
- This will include Pre/Mid install Visit (Day 1) and commissioning of 1 x Hybrid system which normally takes 2 days
- For more details contact: AirCon.SiteVisits@meuk.mee.com and ask for the document; 'HVRF Assisted Commissioning -Product Information Sheet'
- This on-site training session will guide customers through the HVRF commissioning process