STIEBEL ELTRON

Commercial Hot Water Installation Guide



AU

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Applicable models

CMT packages using the following R290 Heat Pumps

- WPL-A 10.2 Trend HK 230
- WPL-A 13.2 Trend HK 400
- WPL-A 17.2 Trend HK 400

Note that installation, commissioning, and servicing must always comply with the following:

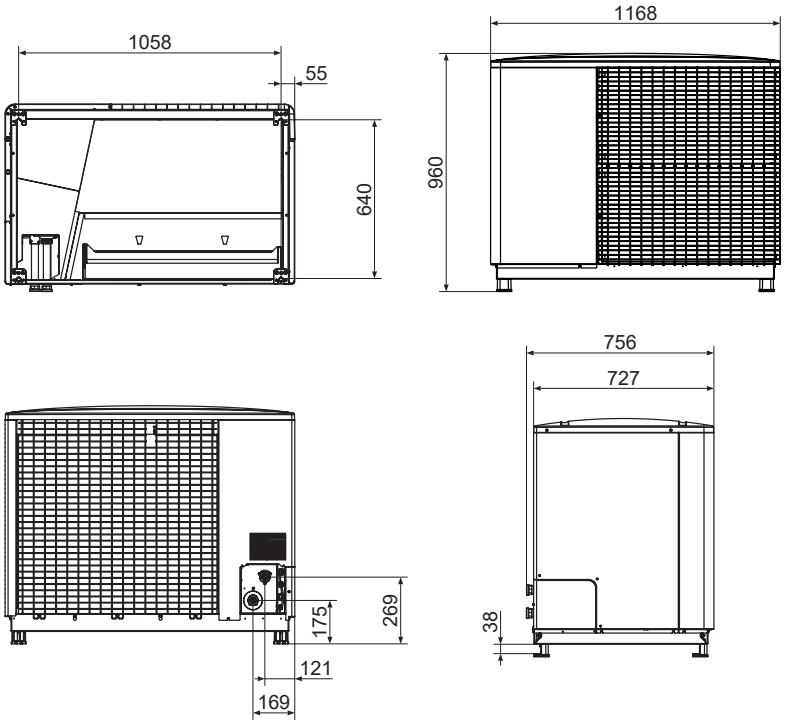
- National Plumbing Code of Australia (PCA), Volume Three of the NCC
- AS/NZS 3500.4 Plumbing and Drainage: Heated Water Services
- AS3498:2020 - Safety and Public Health Requirements for Water Heaters and Storage Tanks
- AS/NZS 3000 Wiring Rules and AS/NZS Electrical Installations

WARNING
This appliance may deliver water at high temperature. Refer to the plumbing code of Australia (PCA), local requirements and installation instructions to determine if additional delivery temperature control is required.

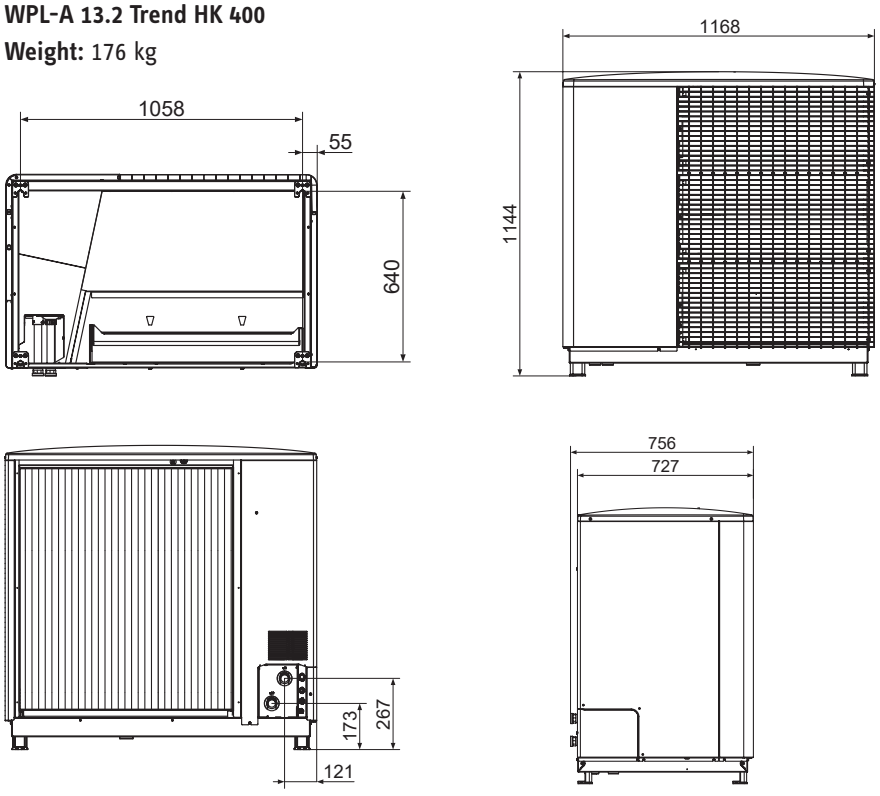
The information in this installation and commissioning guide is provided to aid the successful and correct installation of the Stiebel Eltron CMT commercial hot water packages. Sole reliance on this guide is not advised, and it should always be read in concert with all other relevant product manuals, safety guidelines and the national plumbing code (PCA 2022) detailed in part 3 of the NCC 2022.

Planning and Installation
Equipment Dimensions

WPL-A 10.2 Trend HK 230
Weight: 150 kg



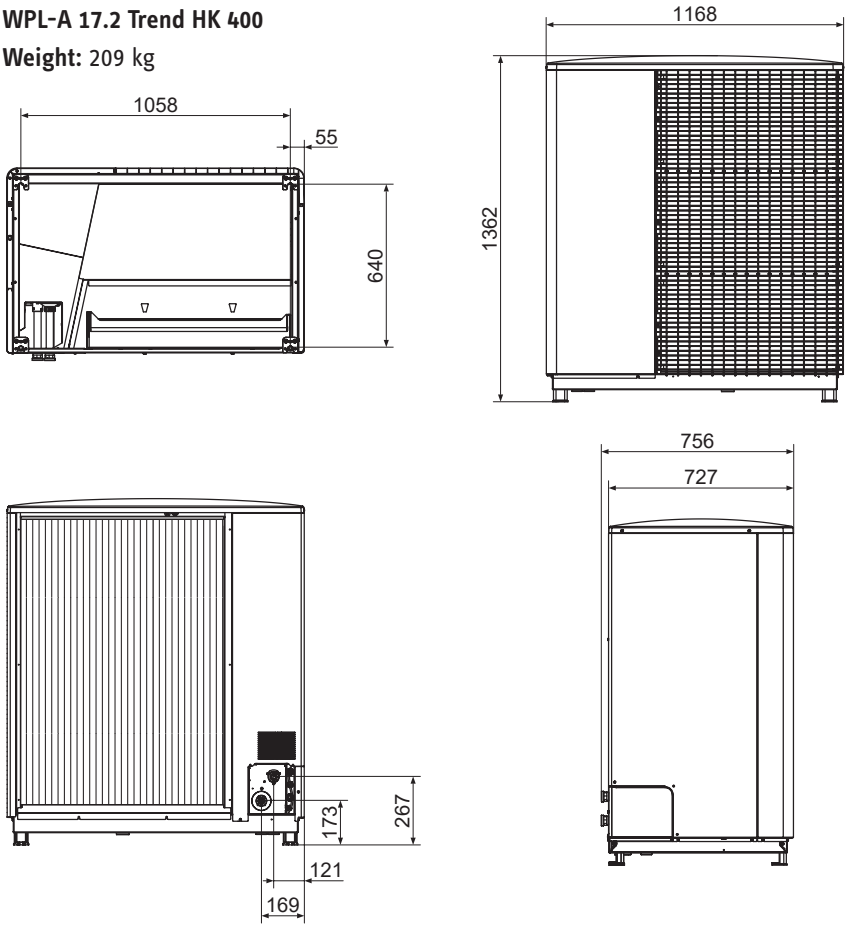
WPL-A 13.2 Trend HK 400
Weight: 176 kg



Planning and Installation
Equipment Dimensions

WPL-A 17.2 Trend HK 400

Weight: 209 kg



The CMT packages come in a variety of variations featuring cascaded WPL A Trend air-water heat pumps with SCE-800-WP closed-loop storage tanks. The combination of heat pump and tanks is configurable for various installation scenarios and can be supplied in either a prefabricated engineered solution or individual components for a flexible installation.

System Model Numbers

Example

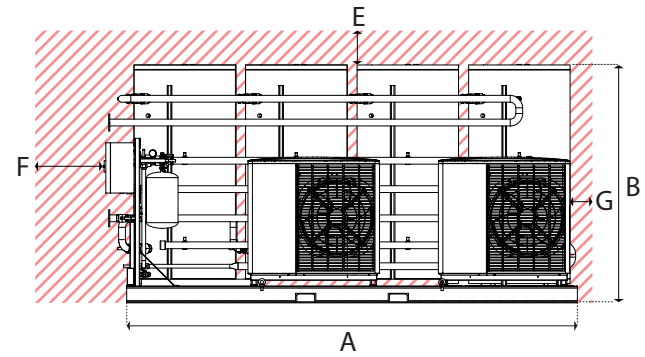
C	M	T	–	2	2	–	1	3	–	8	0	0	
Commercial	Modular	Trend		Number of Heat Pumps	Number of Tanks		Each Heat Pump capacity in kW			Each Storage Tank Capacity in Litres			

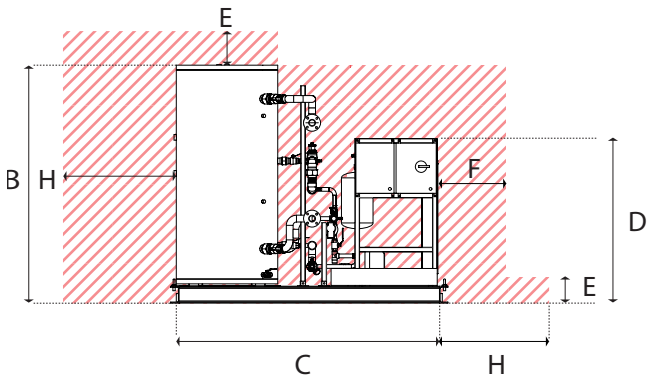
Prefabricted Packages

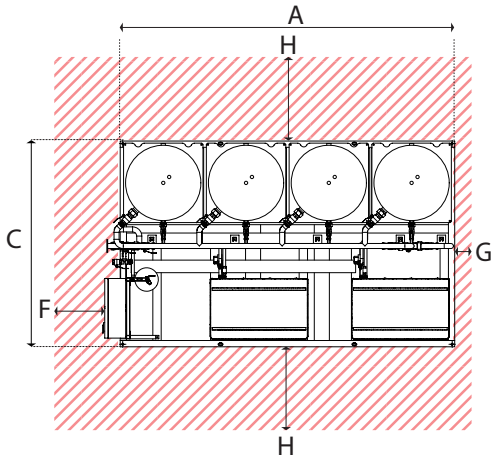
Prefabricated Skid Pack:	CMT-11-10-800	CMT-22-10-800	CMT-33-10-800	CMT-44-10-800	CMT-55-10-800	CMT-66-10-800	CMT-23-13-800	CMT-35-13-800	CMT-12-17-800	CMT-24-17-800	CMT-36-17-800
Width (mm)	2100	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
Length (mm)	1500	2100	4250	4250	6250	6250	4250	6250	2100	4250	6250
Height (mm)	2120	2350	2350	2350	2350	2350	2120	2120	2120	2120	2120
Dry Weight approx (kg)	525	1050	1835	2230	2945	3335	1660	2605	905	1950	2925
Wet Weight approx (kg)	1460	2945	4715	6050	7720	9045	4530	5165	2790	5740	8585

Planning and Installation
Clearances

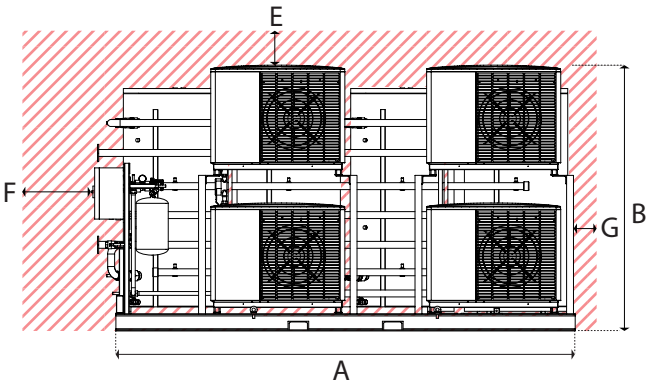
Typical Skid Package w/ Non-Stacked Heat Pumps

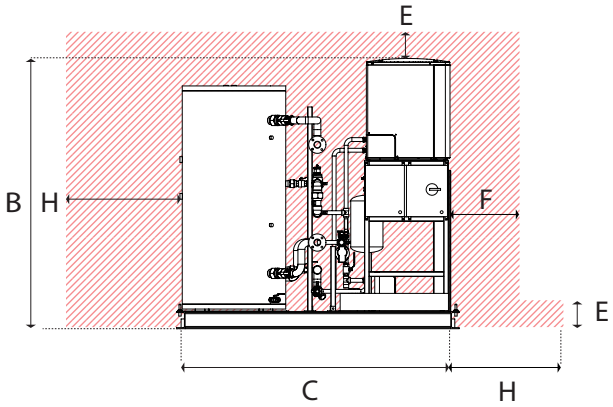






Typical Skid Package w/ Vertically Stacked Heat Pumps



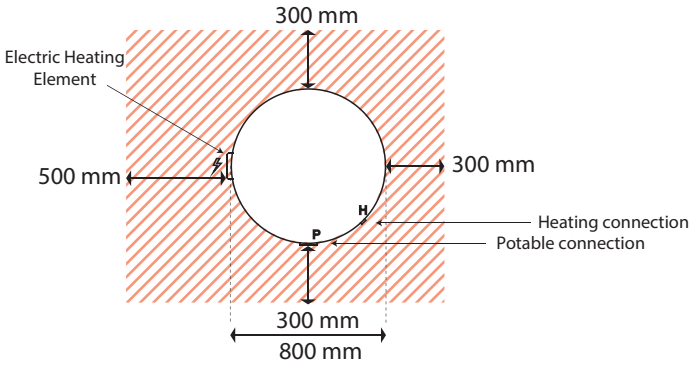


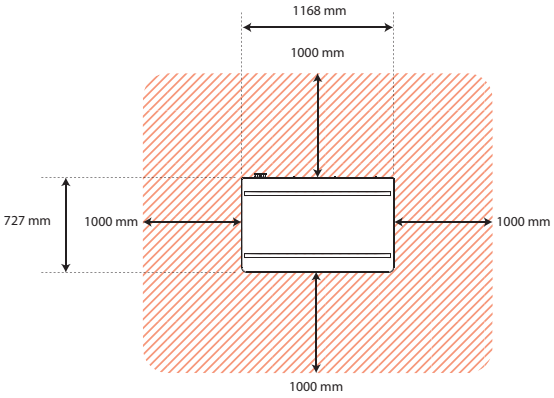
› Clearances shown incorporate the space required for serviceability, system performance and the floor level safety zone associated with R290 refrigerant.
› If these clearances can not be adhered to contact Stiebel Eltron for more detailed information.

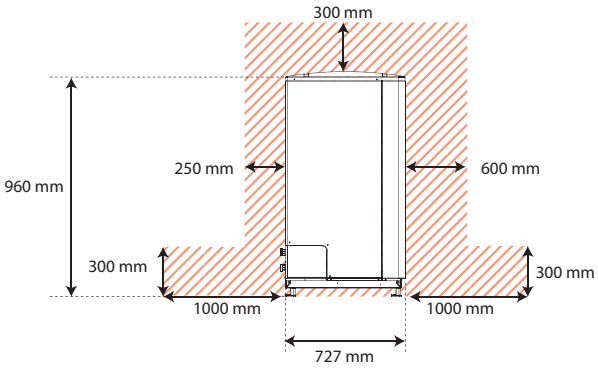
	Skid Package Dimensions (mm)				Skid Package Clearances (mm)			
Skid Package	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**
CMT-12-17-800	2300	2111	2460	1460	300	600	200	1000
CMT-22-10-800		2350						
CMT-23-13-800	4000							
CMT-24-17-800		2111						
CMT-33-10-802		2350						
CMT-35-13-800	6000	2111						
CMT-36-17-800								
CMT-44-10-803	4000	2350						
CMT-55-10-804	6000	2408						
CMT-66-10-805		2350						

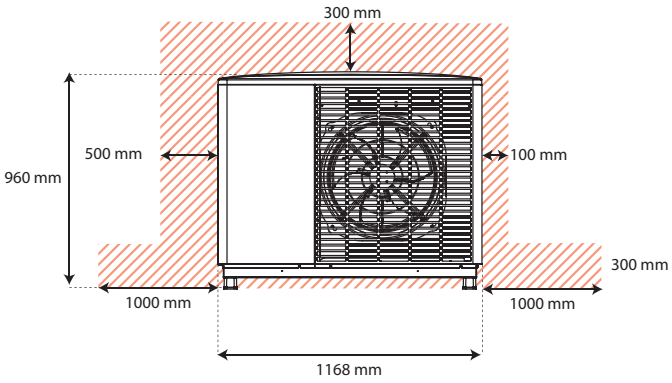
Planning and Installation
Clearances

Flex Package









› This is representation of the floor level safety zone clearance when sited in an open space. Other considerations need to be made. Refer to the heat pump installation manual provided separately.

WPL-A 10.2 Trend HK 230 System Typical Installation

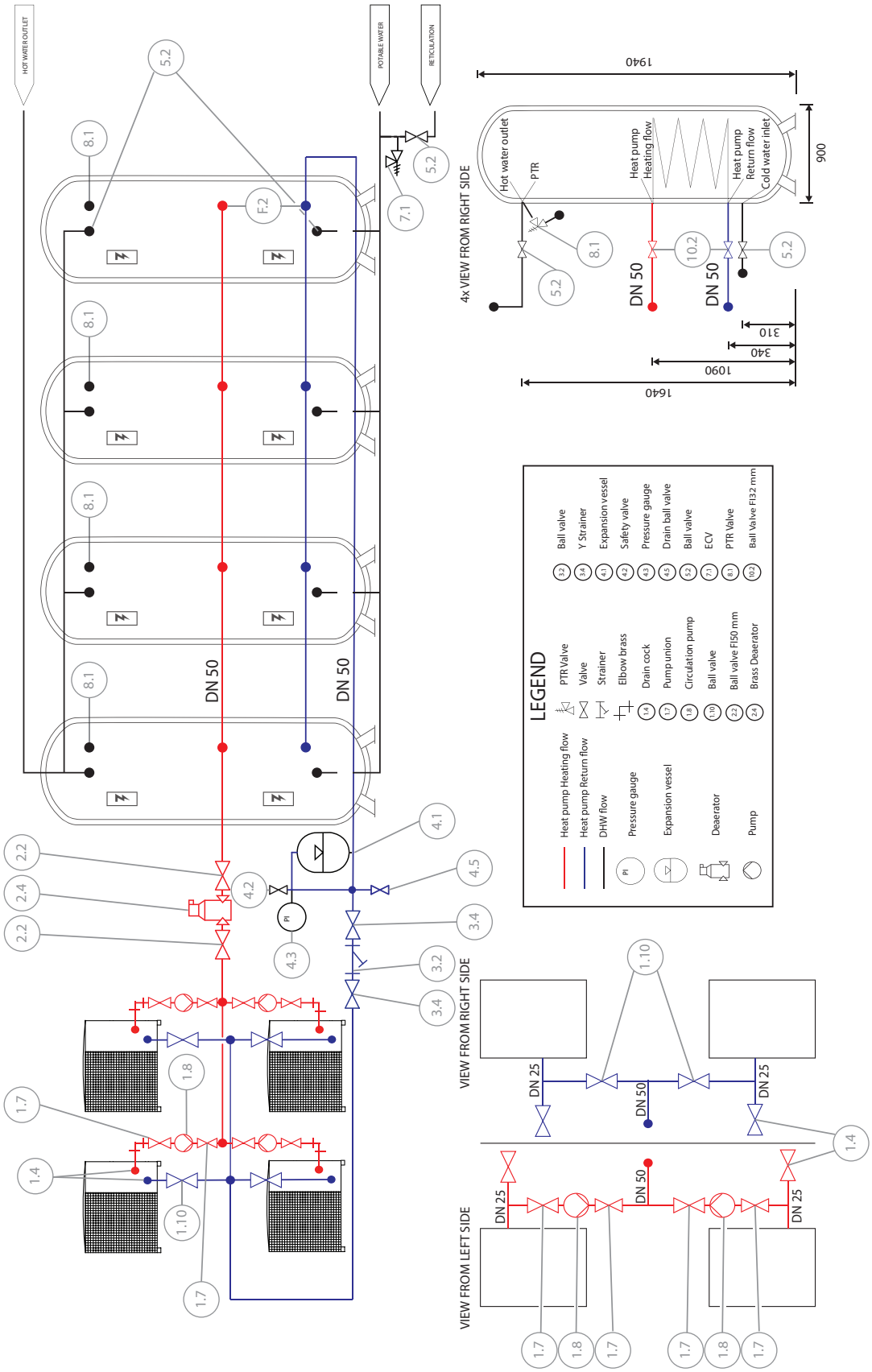


Figure 1. Hydraulic installation layout using 4 heat pumps and 4 tanks. Note the same plumbing principle applies regardless of the number of heat pumps and tanks (one heat pump to one tank relationship will always be maintained).

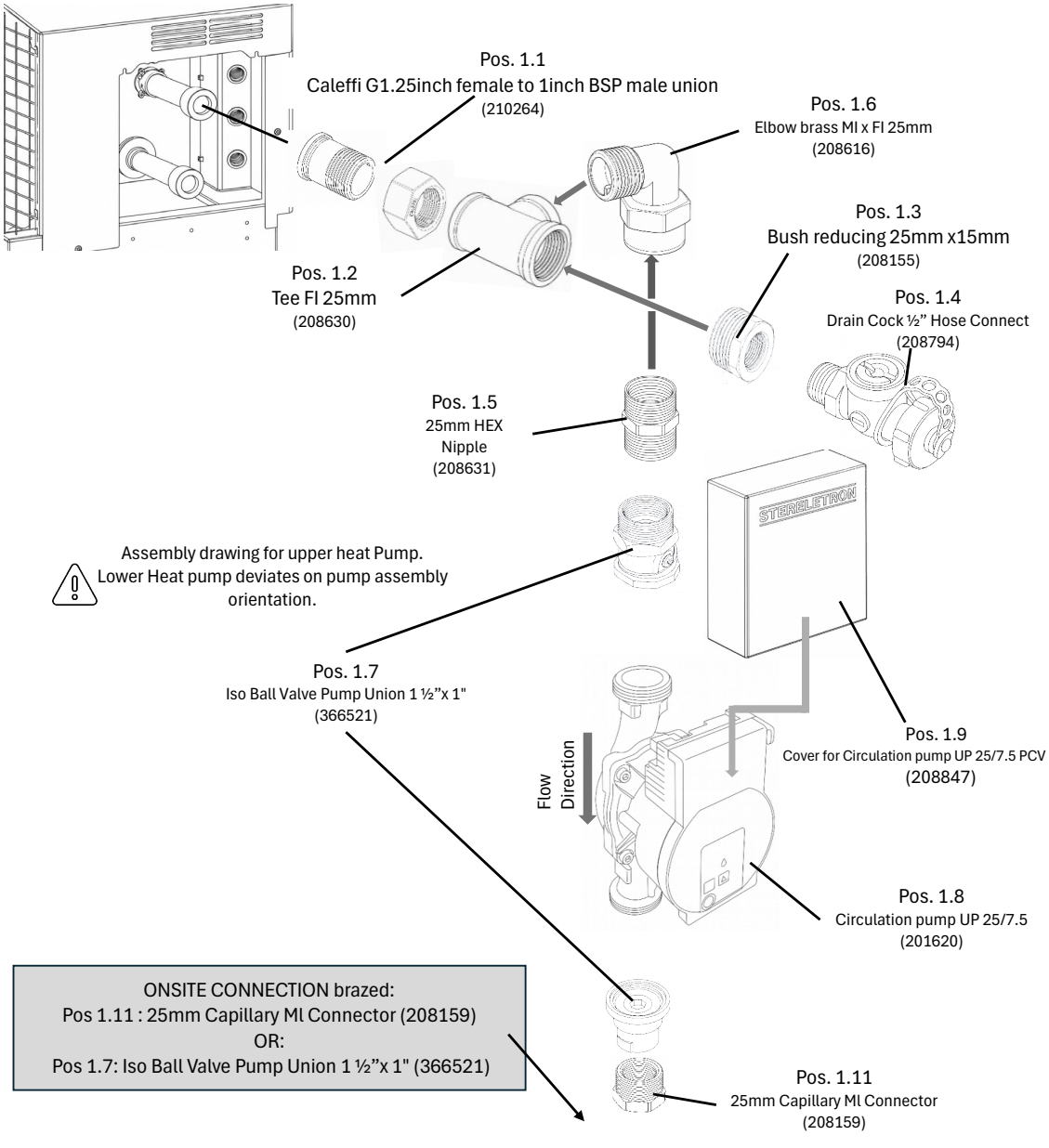
WPL-A 10.2 Trend HK 230 Systems

Heat Pump Connection Assemply Package - Flow

Flow for each Heat Pump

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity					
			CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
1.1	Caleffi G1.25inch female to 1inch BSP male union	210264	2	4	6	8	10	12
1.2	Tee Fl 25mm	208630	2	4	6	8	10	12
1.3	Bush reducing 25mm x15mm	208155	2	4	6	8	10	12
1.4	Drain Cock ½" Hose Connect	208794	2	4	6	8	10	12
1.5	25mm HEX Nipple	208631	2	4	6	8	10	12
1.6	Elbow brass MI x Fl 25mm	210125	1	2	3	4	5	6
1.7	Iso Ball Valve Pump Union 1 ½"x 1"	366521	2	4	6	8	10	12
1.8	Circulation pump UP 25/7.5 PCV	201620	1	2	3	4	5	6
1.9	Cover for Circulation pump UP 25/7.5 PCV	208847	1	2	3	4	5	6
1.11	25mm Capillary Ml Connector	208159	2	4	6	8	10	12



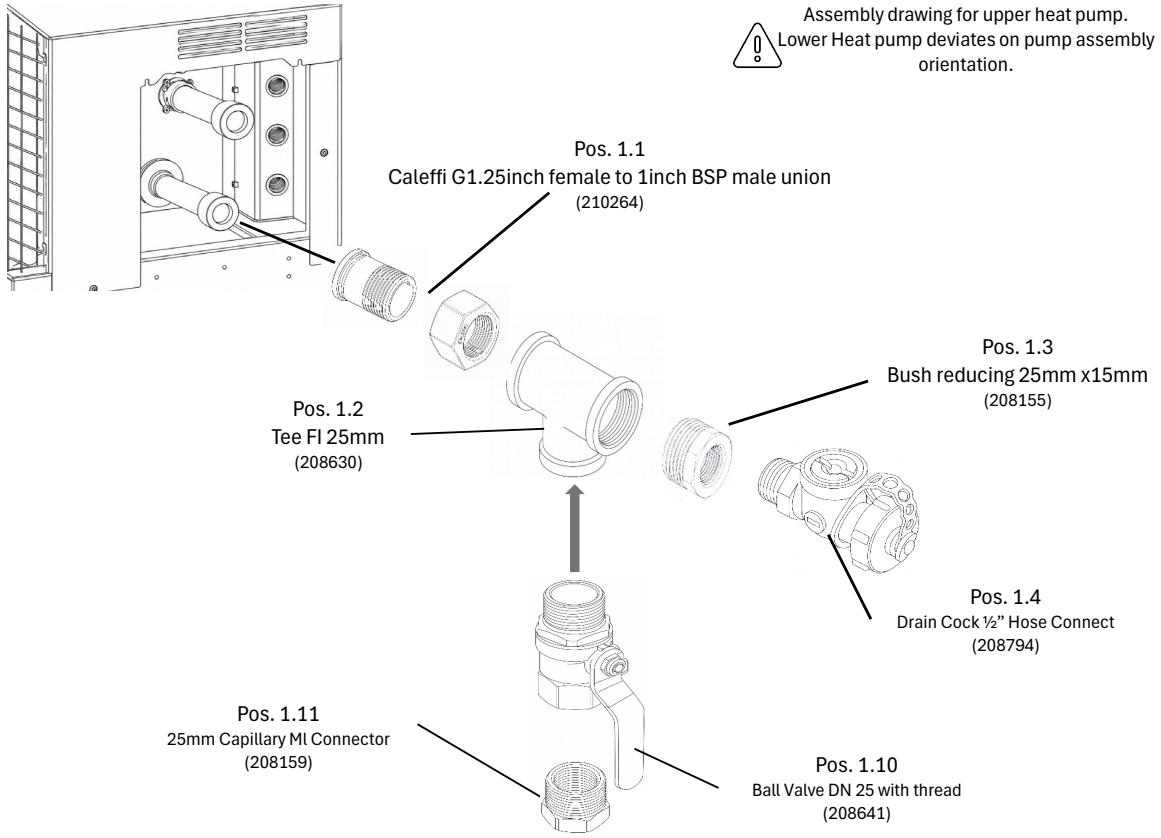
WPL-A 10.2 Trend HK 230 Systems

Heat Pump Connection Assembly Package - Return

Return for each Heat Pump

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity					
			CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
1.1	Caleffi G1.25inch female to 1inch BSP male union	210264	2	4	6	8	10	12
1.2	Tee FI 25mm	208630	2	4	6	8	10	12
1.3	Bush reducing 25mm x15mm	208155	2	4	6	8	10	12
1.4	Drain Cock ½" Hose Connect	208794	2	4	6	8	10	12
1.11	25mm Capillary Ml Connector	208159	2	4	6	8	10	12
1.10	Ball Valve DN 25 with thread	208641	2	4	6	8	10	12



ONSITE CONNECTION brazed:
Pos 1.11 : 25mm Capillary Ml Connector (208159)
OR:
Pos 1.10: Ball Valve DN 25 with thread (208641)

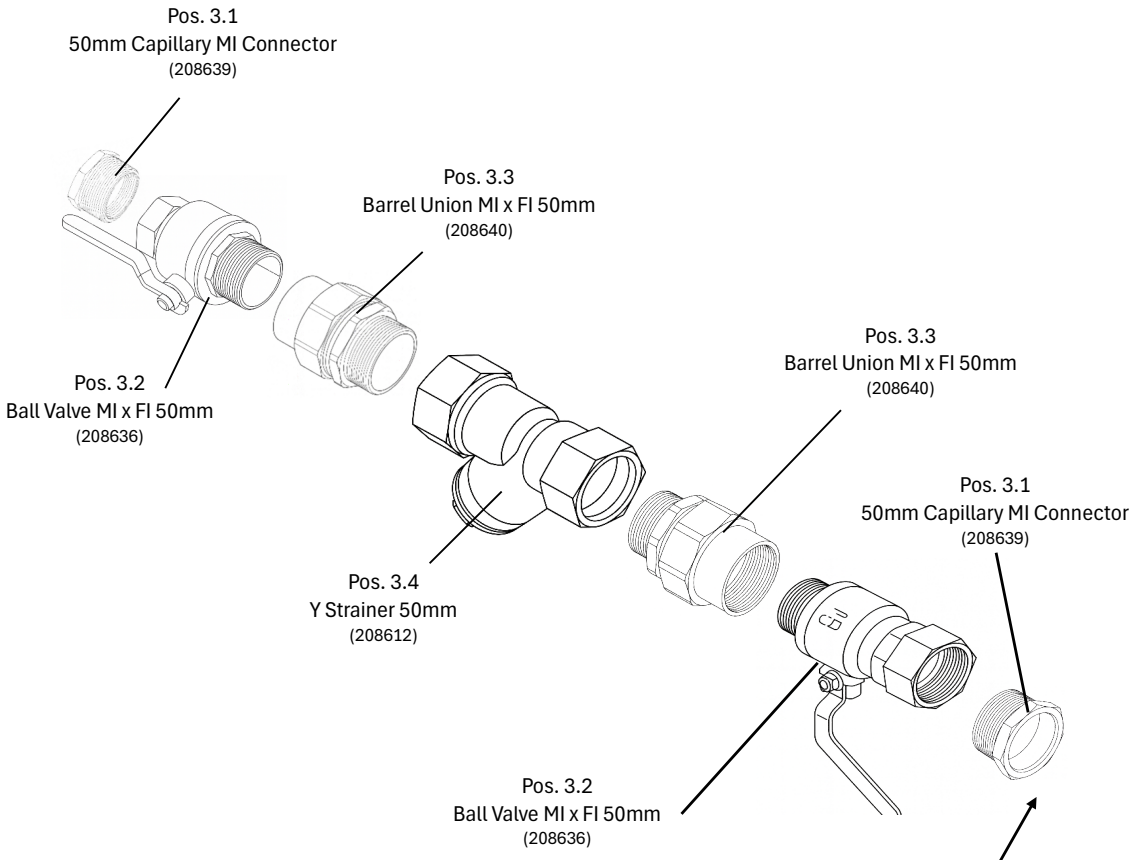
WPL-A 10.2 Trend HK 230 Systems

Hydraulic Assembly of Strainer Package

Hydraulic closed circuit return line

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity					
			CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
3.1	50mm Capillary MI Connector	208639		2	2	2	2	2
3.2	Ball Valve MI x FI 50mm	208636		2	2	2	2	2
3.3	Barrel Union MI x FI 50mm	208640		2	2	2	2	2
3.4	Y Strainer 50mm	208612		1	1	1	1	1



ONSITE CONNECTION brazed:
Pos 3.1 : 50mm Capillary MI Connector (208639)
OR:
Pos 3.2: Ball Valve MI x FI 50mm (208636)

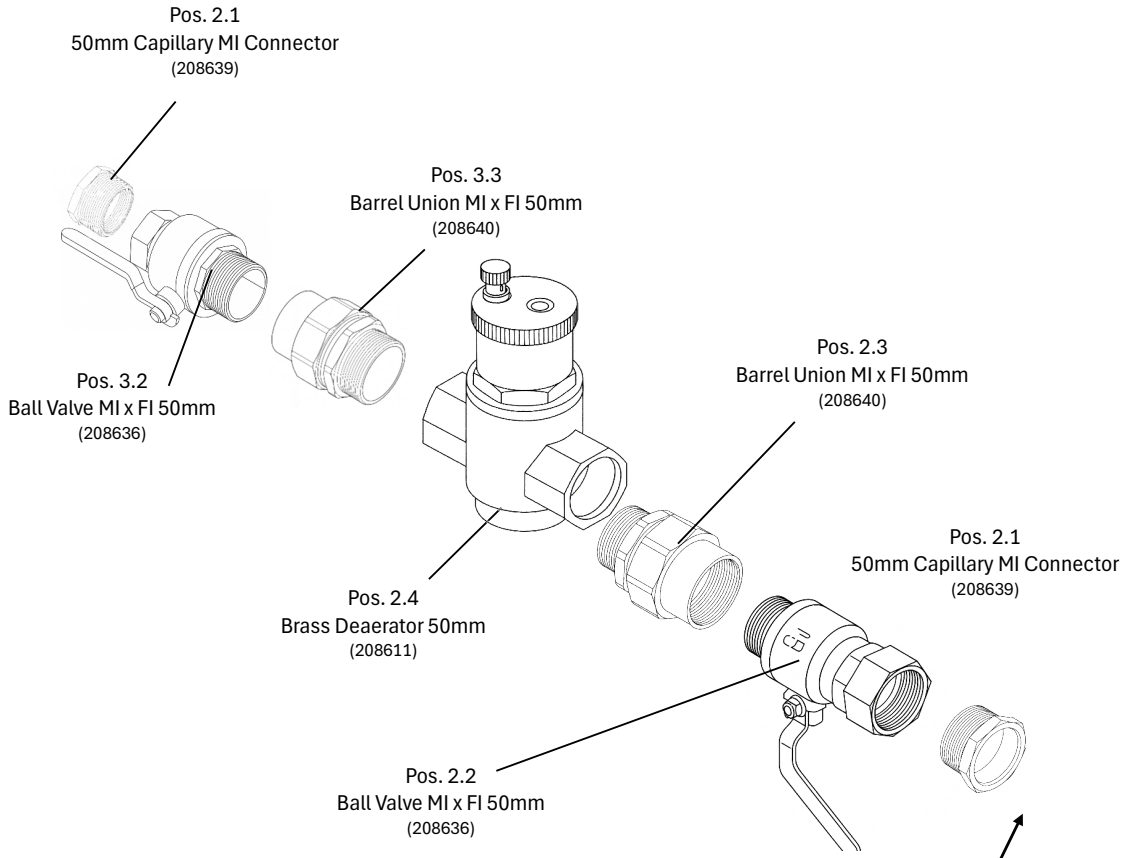
WPL-A 10.2 Trend HK 230 Systems

Hydraulic Assembly of Dearator Package

Hydraulic closed circuit flow line

STIEBEL ELTRON

			Quantity					
Pos.	Description	Art. Nr.	CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
2.1	50mm Capillary MI Connector	208639		2	2	2	2	2
2.2	Ball Valve MI x FI 50mm	208636		2	2	2	2	2
2.3	Barrel Union MI x FI 50mm	208640		2	2	2	2	2
2.4	Brass Deaerator 50mm	208611		1	1	1	1	1



ONSITE CONNECTION brazed:
Pos 3.1 : 50mm Capillary MI Connector (208639)
OR:
Pos 3.2: Ball Valve MI x FI 50mm (208636)

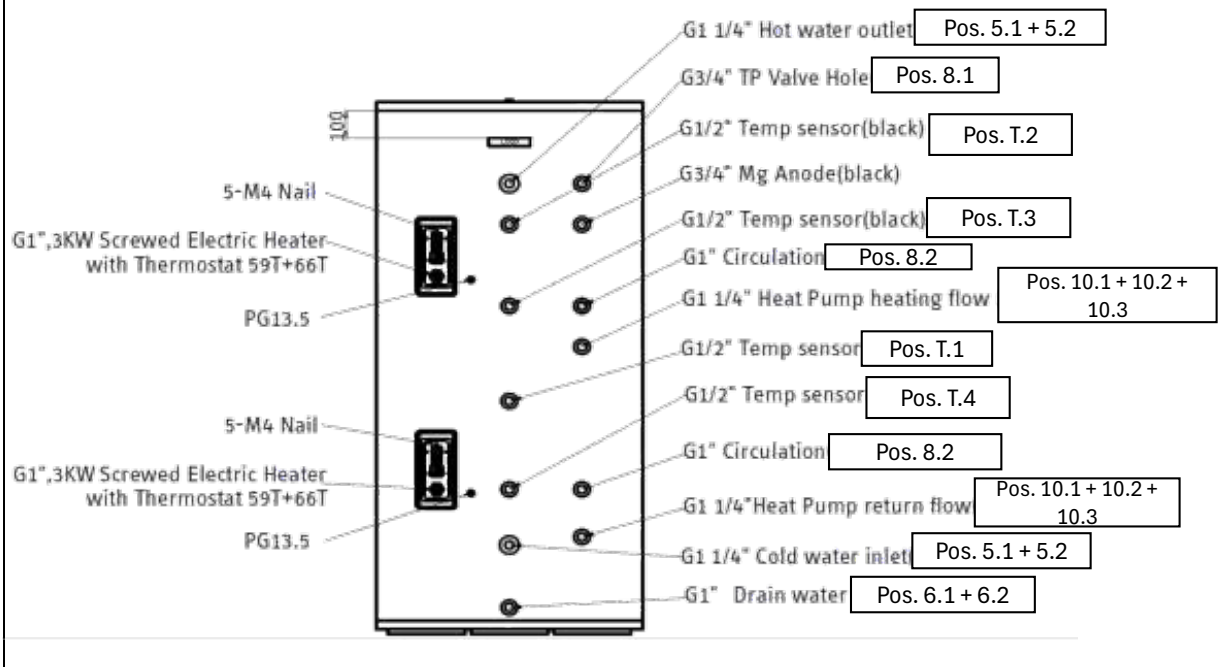
WPL-A 10.2 Trend HK 230 Systems

Tank Connections Packages

Hydraulic and Potable side

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity					
			CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
Hydraulic connections - Heat Pump Heating and Return								
10.1	Barrel Union MI x FI 32mm	208625	2	4	6	8	10	12
10.2	Ball Valve MI x FI 32mm	208635	2	4	6	8	10	12
10.3	32mm Capillary Ml Connector	208637	2	4	6	8	10	12
Cold Water inlet and Hot water outlet (Potable)								
5.1	Barrel Union MI x FI 50mm	208640	2	4	6	8	10	12
5.2	Ball Valve MI x FI 50mm	208636	2	4	6	8	10	12
Tank Drainage								
6.1	Ball Valve DN 25 with thread	208641	1	2	3	4	5	6
6.2	Hexagon Plug male 25mm	208158	1	2	3	4	5	6
TP Valve Socket								
8.1	20mm PTR Valve - 700kPa	208848	1	2	3	4	5	6
Circulation Inlet Plug								
8.2	Hexagon Plug male 25mm	208158	2	4	6	8	10	12
Temperature Sensor								
T.1	Contact imersion sensor TAF 5m	235995	3	3	3	3	3	3
T.2	Contact imersion sensor TAF 5m	235995	3	3	3	3	3	3
T.3	Contact imersion sensor TAF 5m	235995	3	3	3	3	3	3
T.4	Contact imersion sensor TAF 5m	235995	3	3	3	3	3	3



WPL-A 10.2 Trend HK 230 Systems

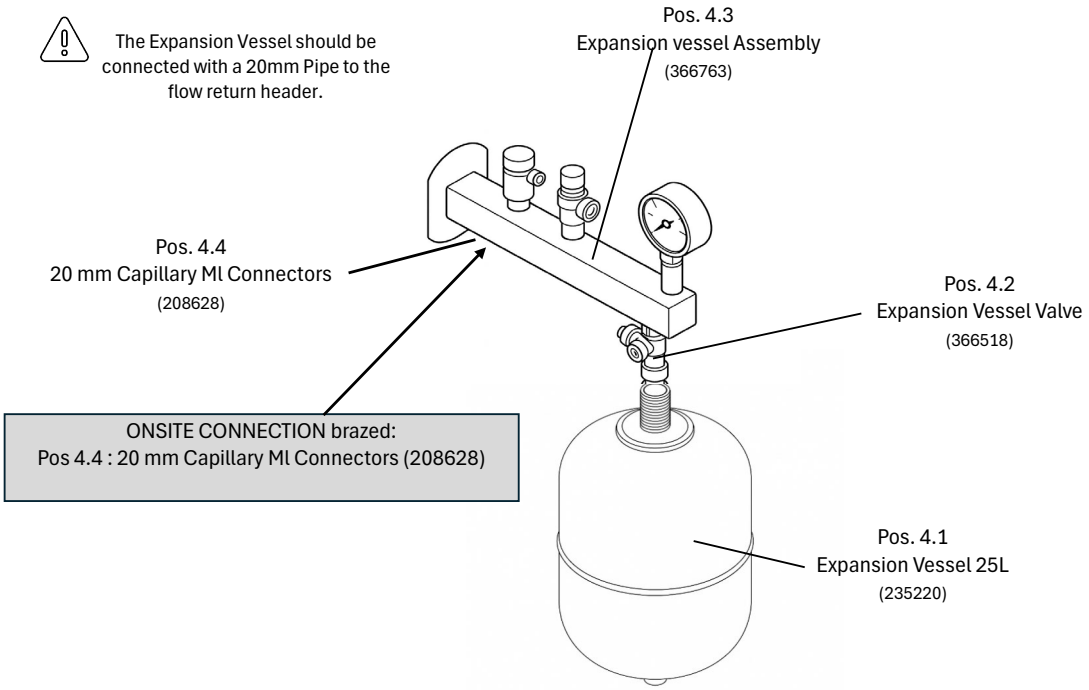
Safety Group Assembly and System Drain/Filling Point

Hydraulic circuit

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
4.1	Expansion Vessel 25 L	235220	1	1	1	1	1	1
4.2	Expansion Vessel Valve	366518	1	1	1	1	1	1
4.3	Expansion vessel Assembly	366763	1	1	1	1	1	1
4.4	20 mm Capillary Ml Connectors	208628	2	2	2	2	2	2

The Expansion Vessel should be connected with a 20mm Pipe to the flow return header.



System Drain and Filling Point

Pos.	Description	Art. Nr.	CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
4.5	Drain Ball Valve ¾”	208799	1	1	1	1	1	1
4.6	Drain Valve Cap DN20	208643	1	1	1	1	1	1
4.4	20 mm Capillary Ml Connectors	208628	2	2	2	2	2	2

The system drain and filling point should be connected to the lowest point of the system, the flow return header.

ONSITE CONNECTION Brazed:
Pos 4.4 : 20 mm Capillary Ml Connectors (208628)
OR:
Pos 4.5: Drain Ball Valve ¾” (208799)

ECV Valve

Pos.	Description	Art. Nr.	CMT 11 -10-800	CMT 22 -10-800	CMT 33 -10-800	CMT 44 -10-800	CMT 55 -10-800	CMT 66 -10-800
7.1	20mm Cold Water Expansion Control Valve - 550kPa	208633	1	1	1	1	2	2
7.2	32mm Brass Tee	208622	1	1	1	1	2	2
7.3	Screwed Bush Reducing Brass 32MM X 20MM	208615	1	1	1	1	2	2
7.4	Hex Nipple Brass 32mm	208624					1	1

WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems Typical Installation

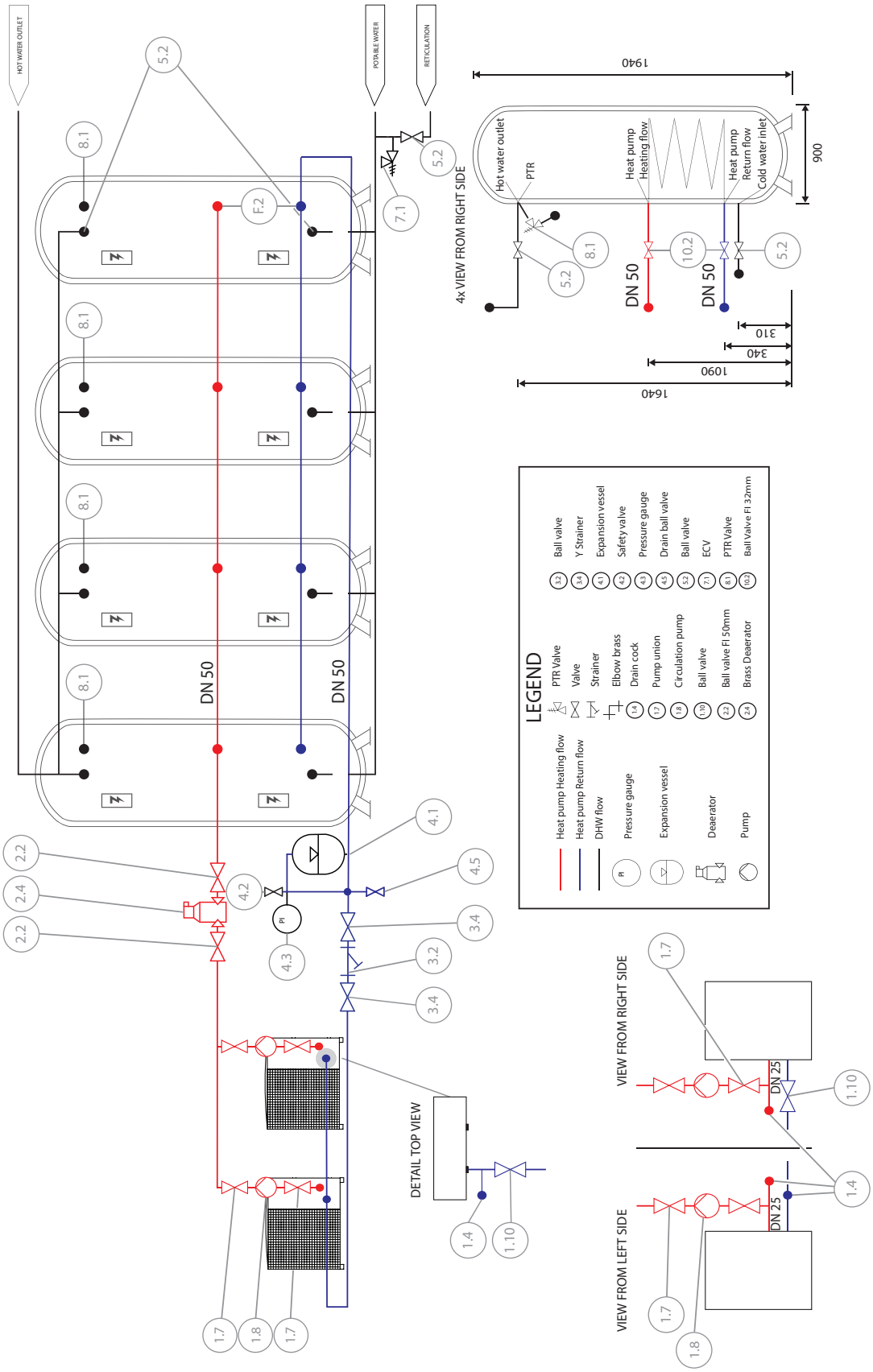


Figure 2. Hydraulic installation layout using 2 heat pumps and 4 tanks. Note the same plumbing principle applies regardless of the number of heat pumps and tanks.

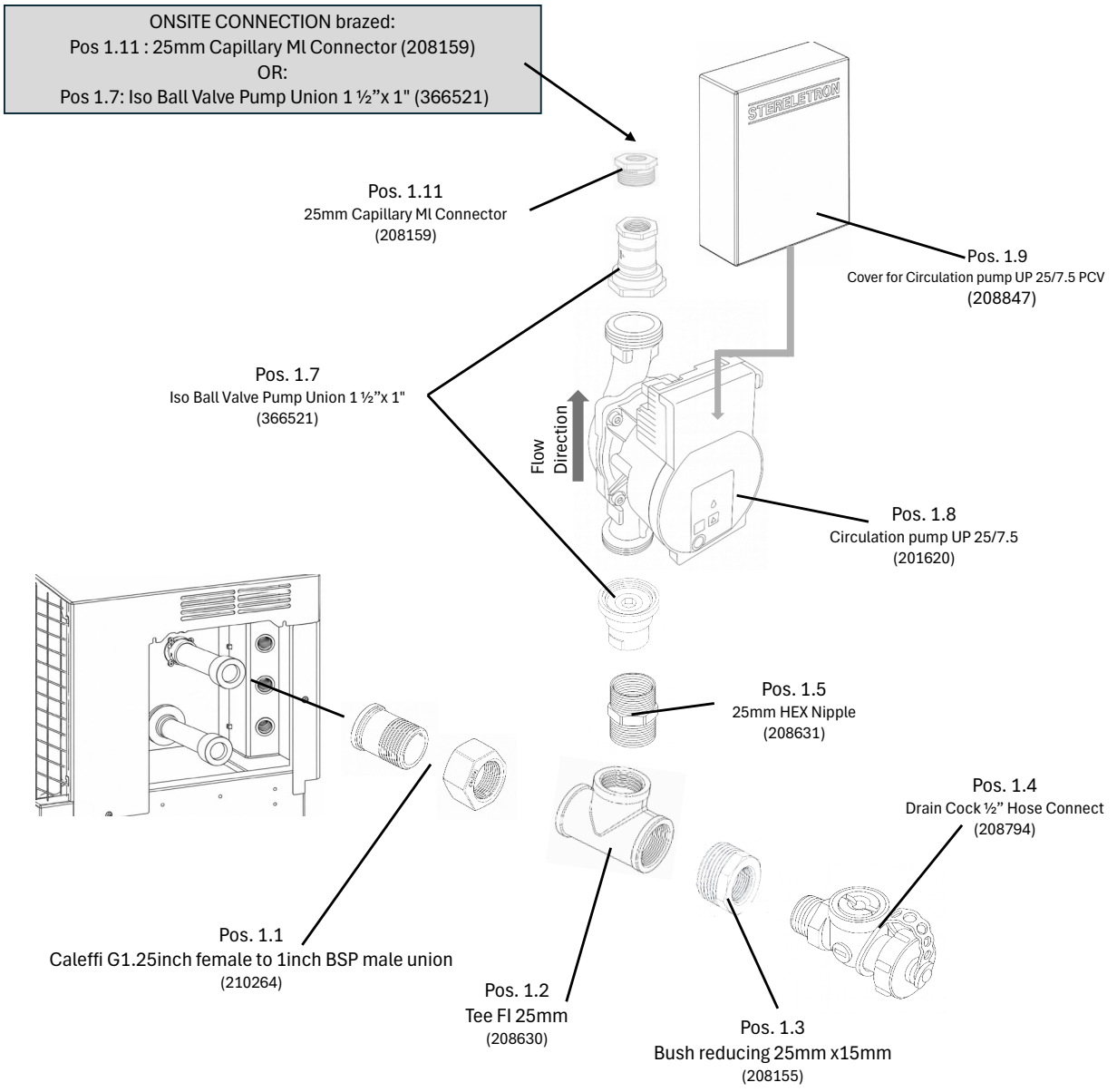
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Heat Pump Connection Assemply Package - Flow

Flow for each Heat Pump

STIEBEL ELTRON

			Quantity				
Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
1.1	Caleffi G1.25inch female to 1inch BSP male union	210264	4	6	2	4	6
1.2	Tee FI 25mm	208630	6	10	2	4	6
1.3	Bush reducing 25mm x15mm	208155	6	10	2	4	6
1.4	Drain Cock ½" Hose Connect	208794	4	6	2	4	6
1.5	25mm HEX Nipple	208631	6	10	2	4	6
1.7	Iso Ball Valve Pump Union 1 ½"x 1"	366521	6	10	2	4	6
1.8	Circulation pump UP 25/7.5 PCV	201620	2	3	1	2	3
1.9	Cover for Circulation pump UP 25/7.5 PCV	208847	2	3	1	2	3
1.11	25mm Capillary Ml Connector	208159	4	6		8	12



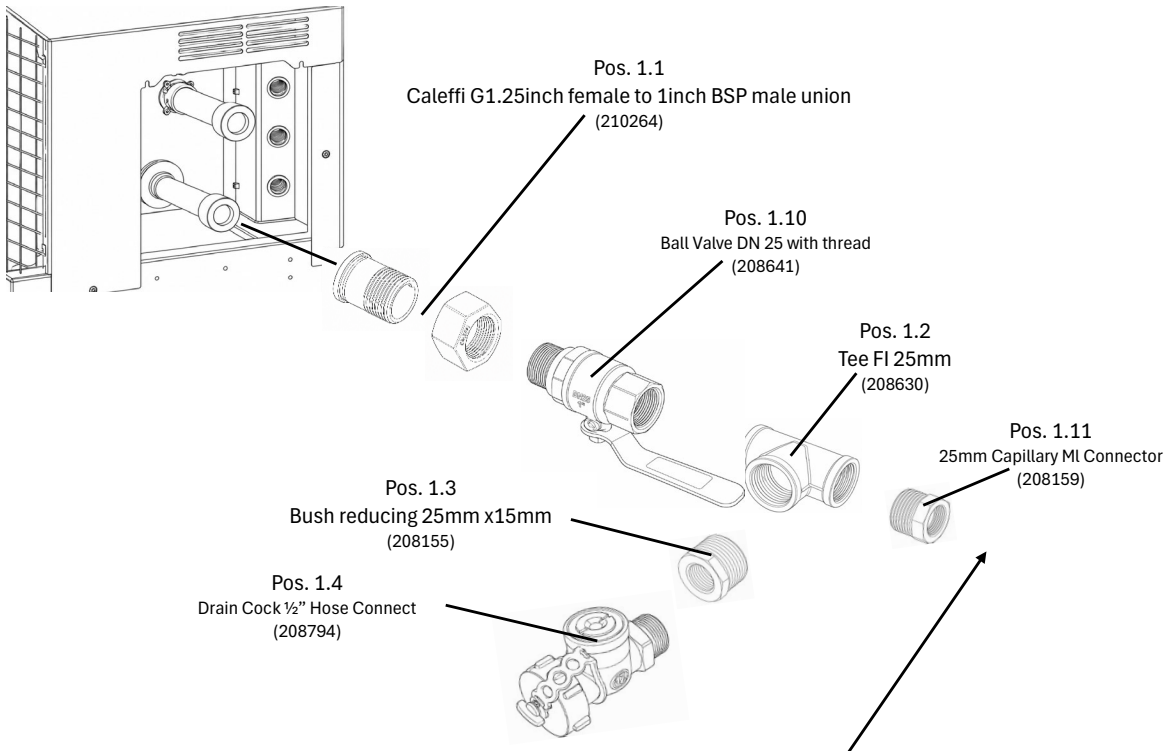
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Heat Pump Connection Assembly Package - Return

Return for each Heat Pump

STIEBEL ELTRON

			Quantity				
Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
1.1	Caleffi G1.25inch female to 1inch BSP male union	210264	4	6	2	4	6
1.2	Tee FI 25mm	208630	6	10	2	4	6
1.3	Bush reducing 25mm x15mm	208155	6	10	2	4	6
1.4	Drain Cock ½" Hose Connect	208794	4	6	2	4	6
1.11	25mm Capillary MI Connector	208159	4	6		8	12
1.10	Ball Valve DN 25 with thread	208641	2	3	1	2	3



ONSITE CONNECTION brazed:
Pos 1.11 : 25mm Capillary MI Connector (208159)
OR:
Pos 1.10: Ball Valve DN 25 with thread (208641)

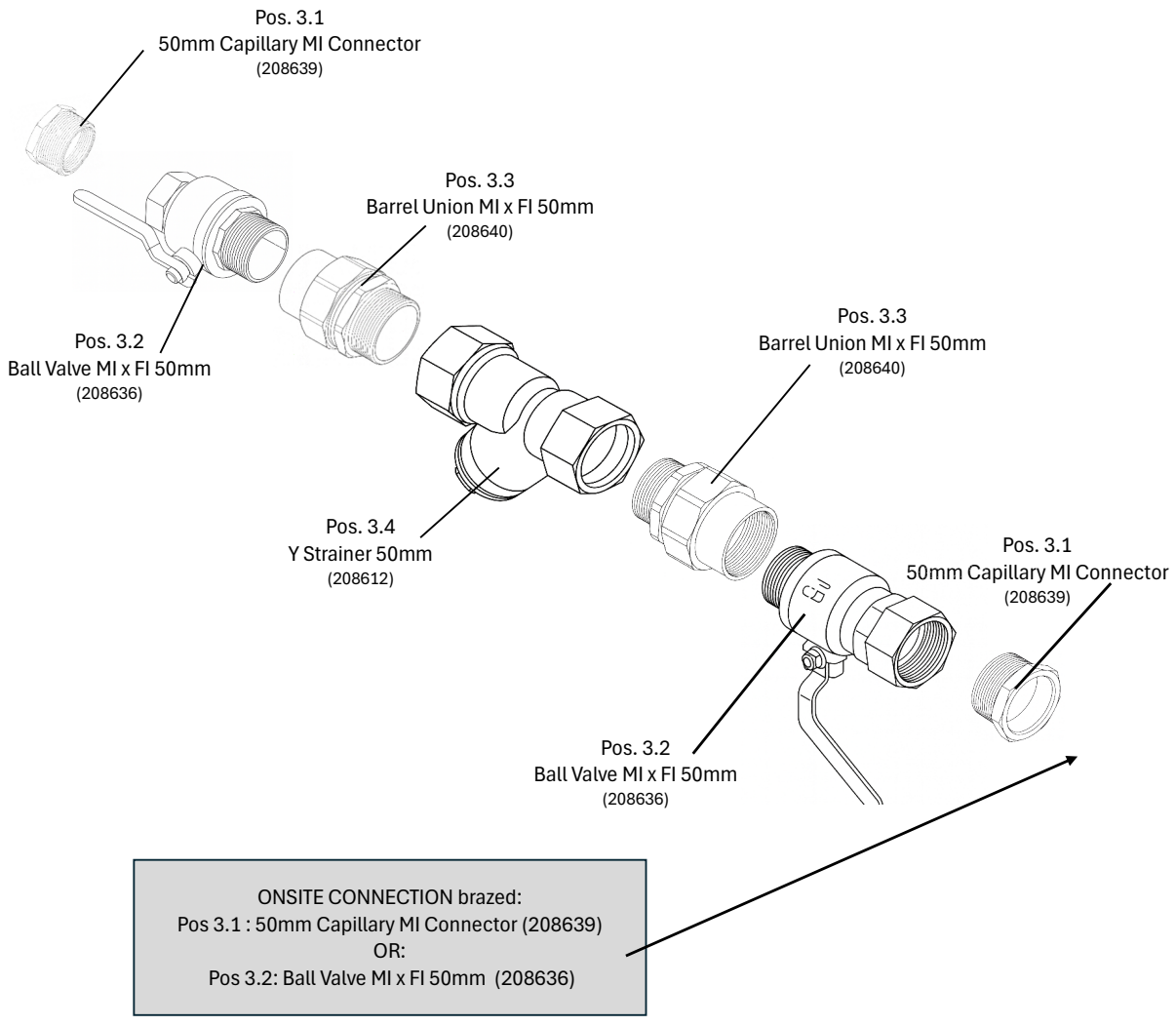
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Hydraulic Assembly of Strainer Package

Hydraulic closed circuit return line

STIEBEL ELTRON

			Quantity				
Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
3.1	50mm Capillary MI Connector	208639	2	2	2	2	2
3.2	Ball Valve MI x FI 50mm	208636	2	2	2	2	2
3.3	Barrel Union MI x FI 50mm	208640	2	2	2	2	2
3.4	Y Strainer 50mm	208612	1	1	1	1	1



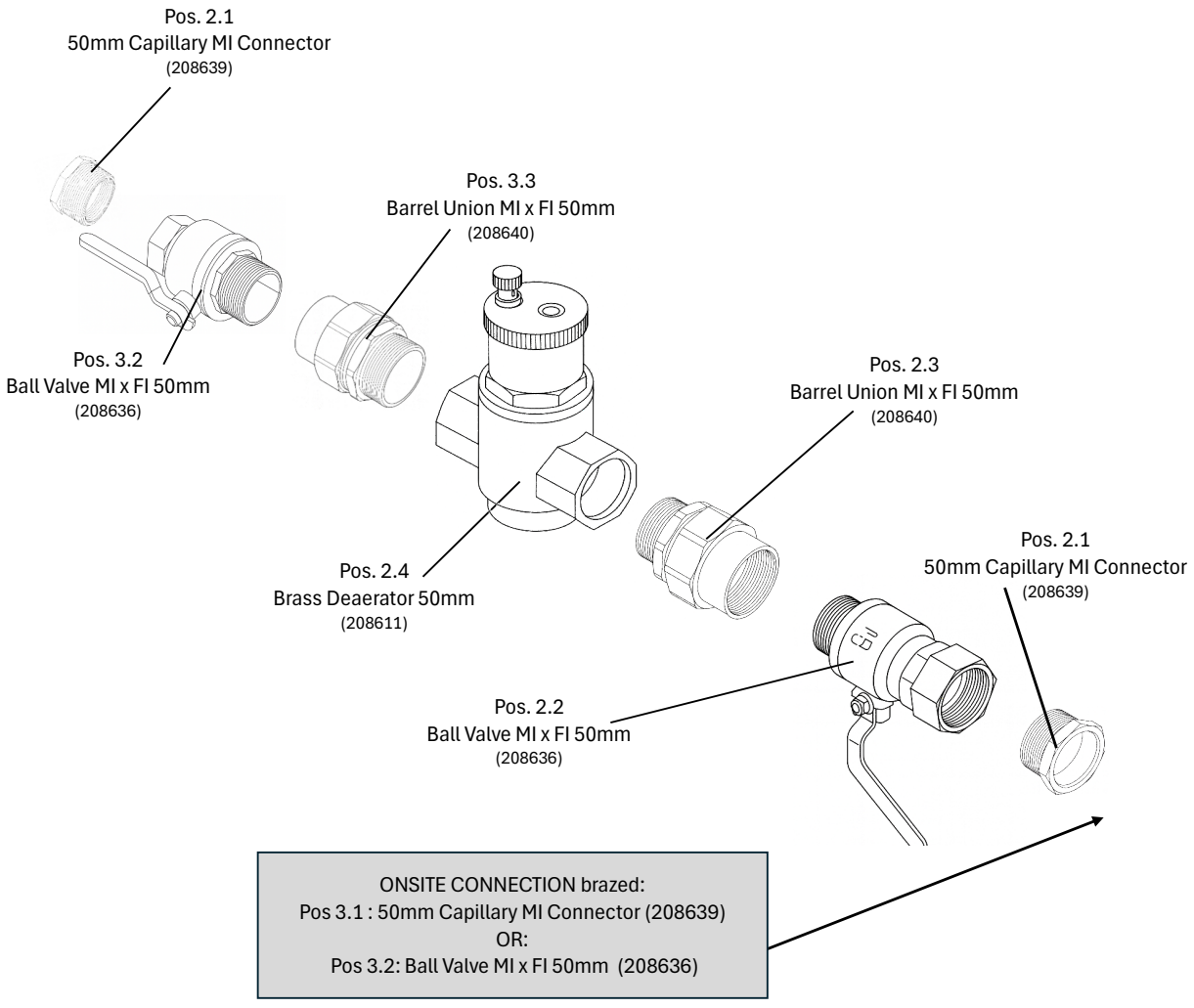
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Hydraulic Assembly of Dearator Package

Hydraulic closed circuit flow line

STIEBEL ELTRON

			Quantity				
Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
2.1	50mm Capillary MI Connector	208639	2	2	2	2	2
2.2	Ball Valve MI x FI 50mm	208636	2	2	2	2	2
2.3	Barrel Union MI x FI 50mm	208640	2	2	2	2	2
2.4	Brass Deaerator 50mm	208611	1	1	1	1	1



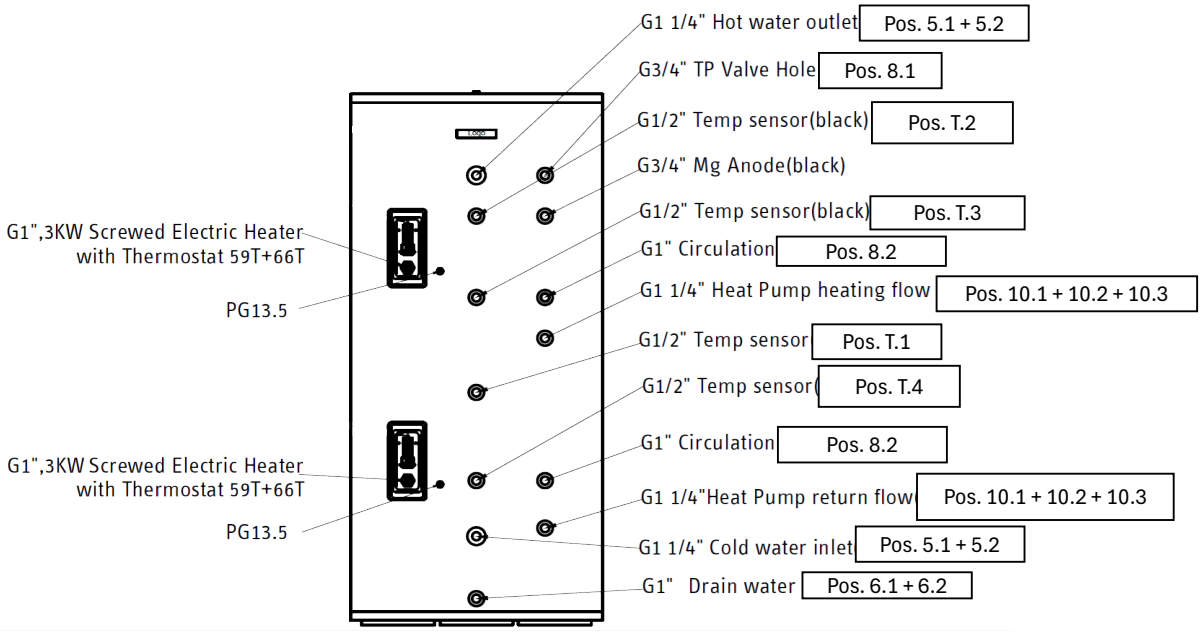
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Tank Connections Packages

Hydraulic and Potable side

STIEBEL ELTRON

Pos.	Description	Art. Nr.	Quantity				
			CMT 23-13-800	CMT 35-13-800	CMT 12-17-800	CMT 24-17-800	CMT 36-17-800
Hydraulic connections - Heat Pump Heating and Return							
10.1	Barrel Union MI x FI 32mm	208625	6	10	2	4	6
10.2	Ball Valve MI x FI 32mm	208635	6	10	2	4	6
10.3	32mm Capillary MI Connector	208637	6	10	2	4	6
Cold Water inlet and Hot water outlet (Potable)							
5.1	Barrel Union MI x FI 50mm	208640	6	10	4	8	12
5.2	Ball Valve MI x FI 50mm	208636	6	10	4	8	12
Tank Drainage							
6.1	Ball Valve DN 25 with thread	208641	3	5	2	4	6
6.2	Hexagon Plug male 25mm	208158	3	5	2	4	6
TP Valve Socket							
8.1	20mm PTR Valve - 700kPa	208848	3	5	4	8	12
Circulation Inlet Plug							
8.2	Hexagon Plug male 25mm	208158	6	10	4	8	12
Temperature Sensor							
T.1	Contact imersion sensor TAF 5m	235995	3	3	3	3	3
T.2	Contact imersion sensor TAF 5m	235995	3	3	3	3	3
T.3	Contact imersion sensor TAF 5m	235995	3	3	3	3	3
T.4	Contact imersion sensor TAF 5m	235995	3	3	3	3	3



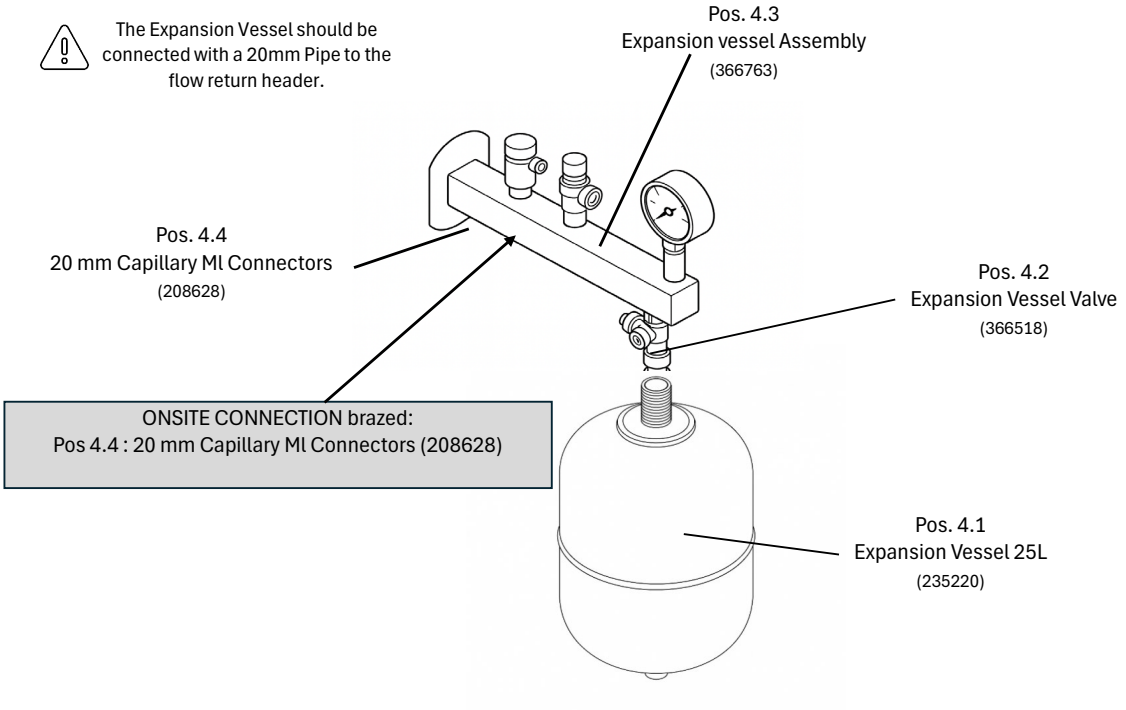
WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems

Safety Group Assembly and System Drain/Filling Point

Hydraulic circuit

STIEBEL ELTRON

			Quantity				
Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
4.1	Expansion Vessel 25 L	235220	1	1	1	1	1
4.2	Expansion Vessel Valve	366518	1	1	1	1	1
4.3	Expansion vessel Assembly	366763	1	1	1	1	1
4.4	20 mm Capillary Ml Connectors	208628	2	2	2	2	2



System Drain and Filling Point

Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
4.5	Drain Ball Valve ¾”	208799	1	1	1	1	1
4.6	Drain Valve Cap DN20	208643	1	1	1	1	1
4.4	20 mm Capillary Ml Connectors	208628	2	2	2	2	2

The system drain and filling point should be connected to the lowest point of the system, the flow return header.

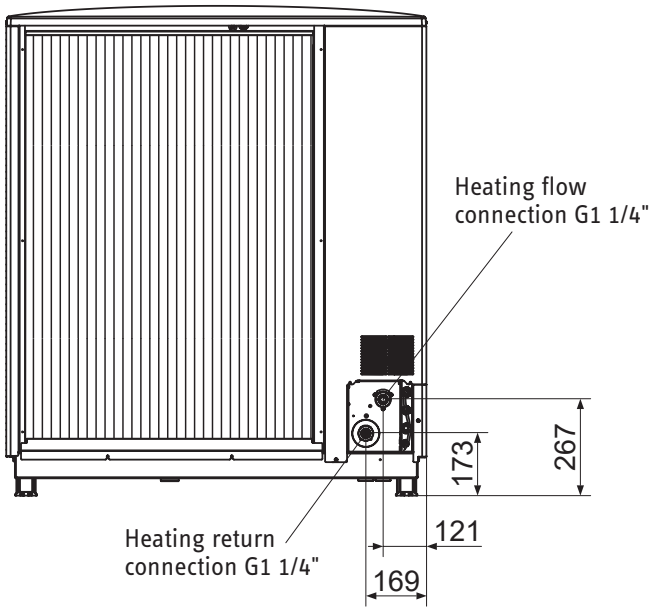
ONSITE CONNECTION Brazed:
Pos 4.4 : 20 mm Capillary Ml Connectors (208628)
OR:
Pos 4.5: Drain Ball Valve ¾” (208799)

ECV Valve

Pos.	**Description**	**Art. Nr.**	**CMT 23-13-800**	**CMT 35-13-800**	**CMT 12-17-800**	**CMT 24-17-800**	**CMT 36-17-800**
7.1	20mm Cold Water Expansion Control Valve - 550kPa	208633	1	2	1	1	1
7.2	32mm Brass Tee	208622	1	2	1	1	1
7.3	Screwed Bush Reducing Brass 32MM X 20MM	208615	1	2	1	1	1
7.4	Hex Nipple Brass 32mm	208624		1			

Hydraulic Installation
Connecting the Heat Pumps

Heating Circuit Connections

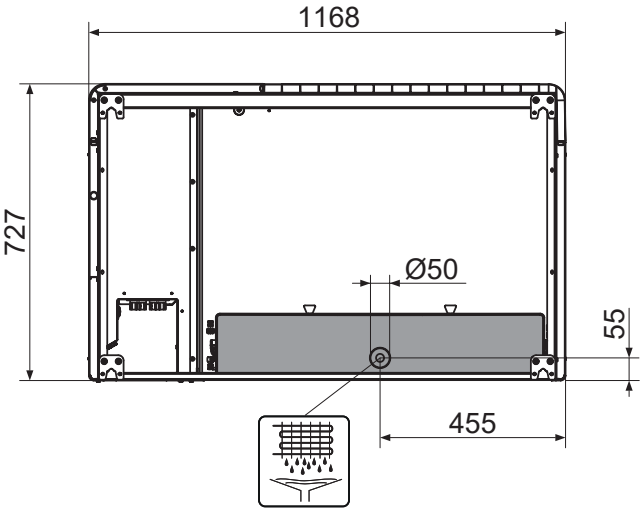






Ensure the correct type of brass fitting, with a female G1 1/4" thread and suitably rated gasket for water temperatures up to 75°C, is used for the heating circuit connections. This is generally supplied in the fitting kit if you purchase a CMT package. All hydraulic plumbing materials used such as pipework and fittings must be rated for a maximum operating temperature of 75°C. Refer to the operation and installation manual supplied with the heat pump for full details.

Condensate Connection



All heat pumps produce condensate which can either drip into a suitable drain or freely into a gravel bed. A condensate pan with a 50mm diameter male connection point is provided with every CMT package. One pan is required for each heat pump and it must be carefully installed underneath each heat pump. Where necessary a suitable drain must be provided to direct the condensate away from any other equipment to a drain point, PVC non pressure pipe is suitable.

For pan installation details, refer to the installation manual provided separately.

Electric Installation
Electrical Overview

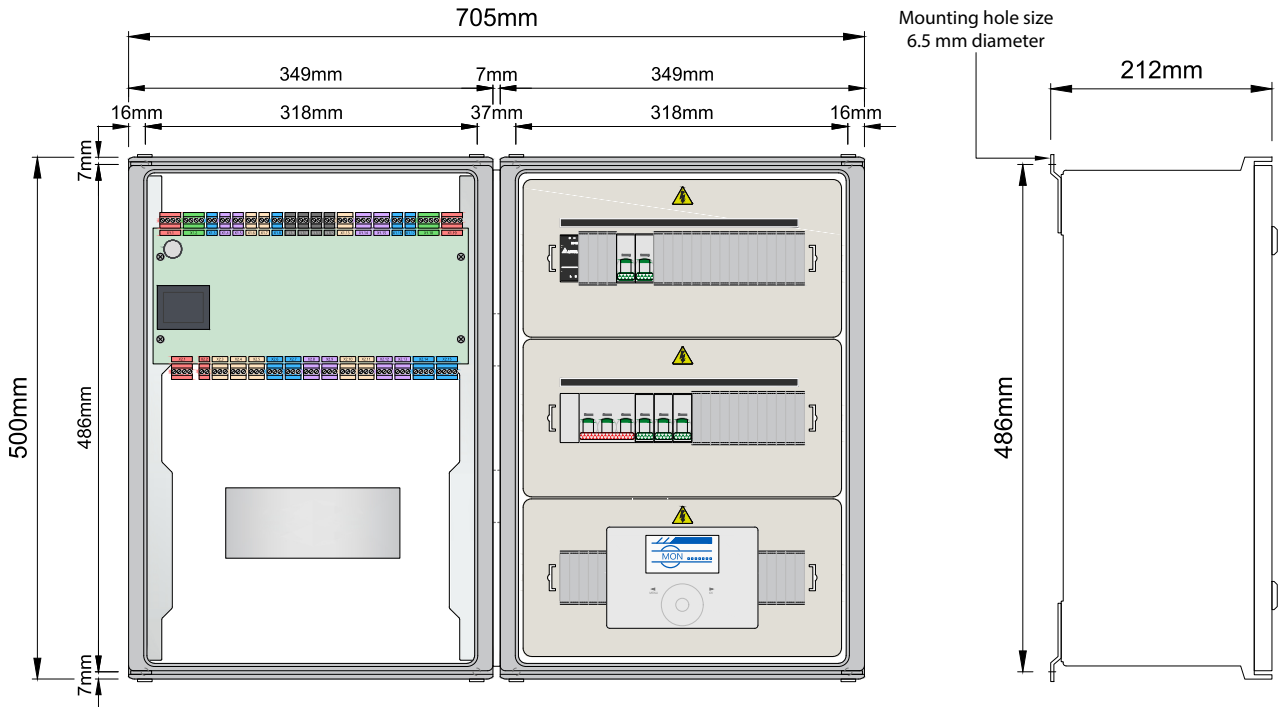
All wiring must comply with AS/NZS 3000. The drawings provided are intended as general guidance only and may not show every safety component required for full compliance.

Only licensed electricians must perform work on the electrical connections to and from the commercial hot water installation. Both sides of the electrical box have high voltage connections that must be handled with extreme care by qualified contractors only.

The enclosure provided is fully sealed to the environment with an IP65 rating. All electrical connections made MUST be at the base of the enclosure and use suitably rated glands.

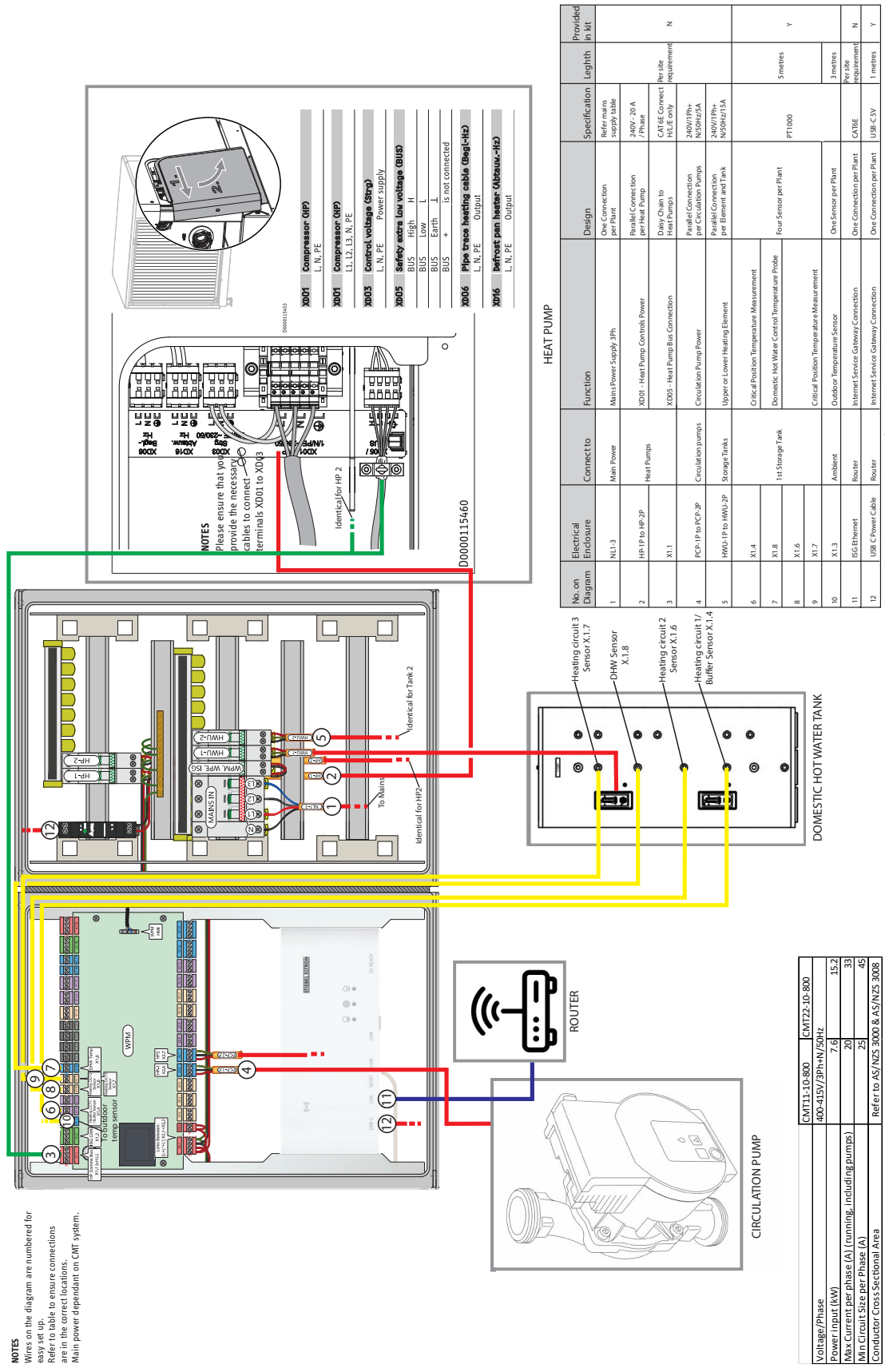
- To fully isolate an individual heat pump from power, note that both the isolators for the respective HP and HP controls have to be switched off. Do not under any circumstances perform work on a heat pump without switching both isolators off.
- Mains in isolation can be deactivated to sever the entire installation from power. This will also deactivate the heating elements HWU in each tank. If emergency operation of only the elements is required, Mains in must remain active.
- In a flexible installation set up where the electrical enclosure box is distant from the heat pumps, separate isolators for easy isolation of the heat pumps need to be installed close to the heat pump. The installation must comply to AS/NZS 3000 and relevant local legislation is mandatory.

Electrical Requirements	CMT-11-10-800	CMT-22-10-800	CMT-33-10-800	CMT-44-10-800	CMT-55-10-800	CMT-66-10-800	CMT-23-13-800	CMT-35-13-800	CMT-12-17-800	CMT-24-17-800	CMT-36-17-800
Voltage/Phase	400-415V/3Ph+N/50Hz										
Power input (kW)	7.6	15.2	22.8	30.4	38.0	45.6	24.3	38.0	16.2	32.4	48.6
Max Current per Phase (A) (running, incl pumps)	20	33	33	52	65	65	61	61	26	52	65
Peak Draw (kW)	7.6	15.2	22.8	30.4	38	45.6	24.3	38	16.2	32.4	48.6
Min Circuit Size per Phase (A)	25	45	45	70	85	85	50	80	35	70	85
Conductor Cross Sectional Area	Refer to AS/NZS 3000 & AS/NZS 3008										



The electrical enclosure MUST be mounted in the orientation shown above and at a suitable height for access to the control interface and on going service.

WPL-A 10.2 Trend HK 230 System



No. on Diagram	Electrical Enclosure	Connect to	Function	Design	Specification	Legnth	Provided in kit
1	NL1-3	Main Power	Mains Power Supply 3Ph	One Connection per Plant	Refer mains supply table		N
2	HP-1P to HP-2P	Heat Pumps	XD01 - Heat Pump Controls Power	Parallel Connection per Heat Pump	240V - 20 A / Phase	Per site requirement	
3	X1.1		XD05 - Heat Pump Bus Connection	Daisy Chain to Heat Pumps	CAT 6E Connect H/L/E only		
4	PCP-1P to PCP-2P	Circulation pumps	Circulation Pump Power	Parallel Connection pre circulation Pumps	240V/1Ph+ N/50Hz/5A		
5	HWU-1P to HWU-2P	Storage Tanks	Upper or Lower Heating Element	Parallel Connection per Element and Tank	240V/1Ph+ N/50Hz/15A		
6	X1.4	1st Storage Tank	Critical Position Temperature Measurement	Four Sensor per Plant	PT1000	5 metres	Y
7	X1.8		Domestic Hot Water Control Temperature Probe				
8	X1.6						
9	X1.7		Critical Position Temperature Measurement				
10	X1.3	Ambient	Outdoor Temperature Sensor	One Sensor per Plant		3 metres	
11	ISG Ethernet	Router	Internet Service Gateway Connection	One Connection per Plant	CAT6E	Per site requirement	N
12	USB C Power Cable	Router	Internet Service Gateway Connection	One Connection per Plant	USB-C 5V	1 metres	Y

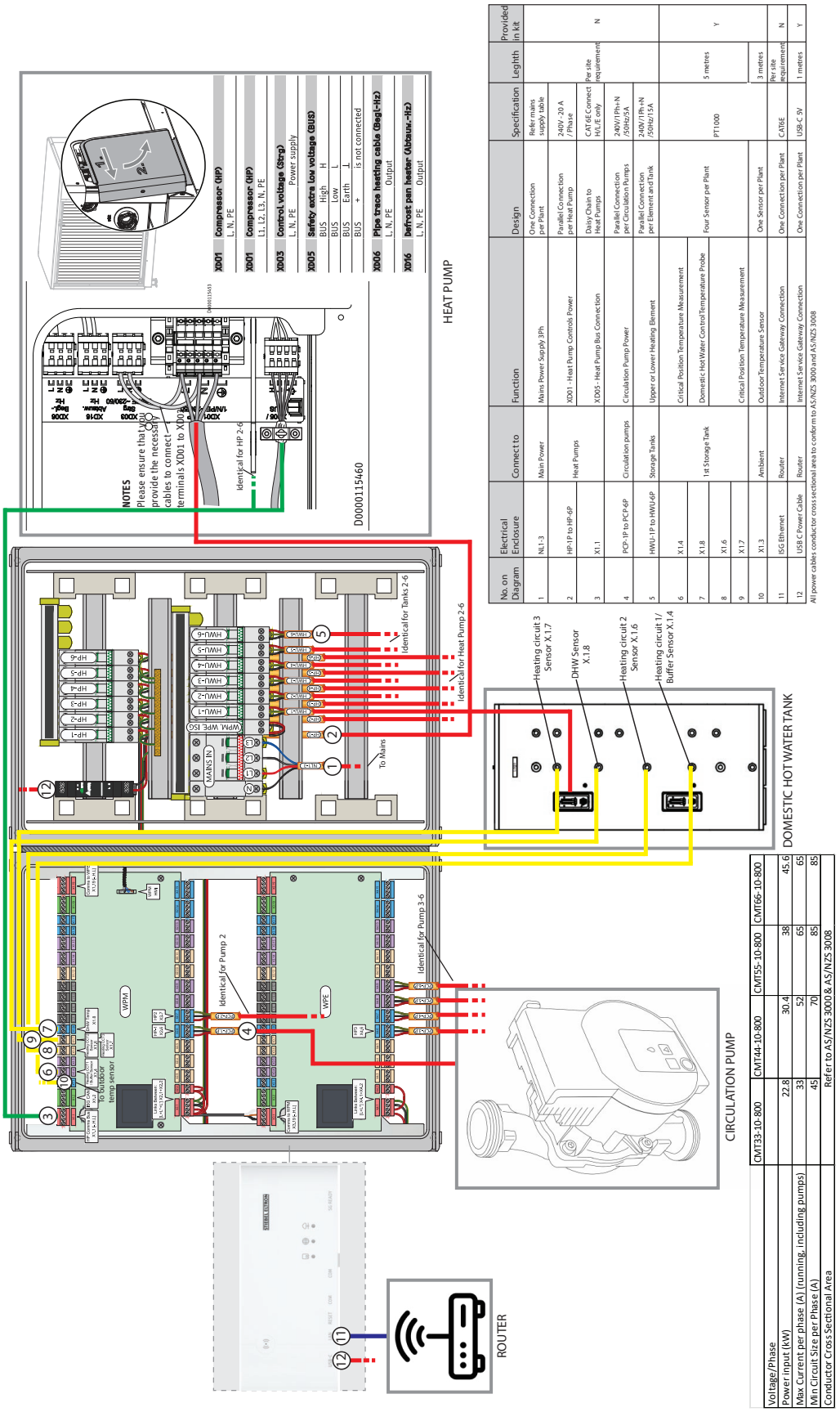
All power cables conductor cross sectional area to conform to AS/NZS 3000 and AS/NZS 3008

	CMT11-10-800	CMT22-10-800	
Voltage/Phase	400-415V/3Ph+N/50Hz		
Power input (kW)	7.6		15.2
Max Current per phase (A) (running, including pumps)	20		33
Min Circuit Size per Phase (A)	25		45
Conductor Cross Sectional Area	Refer to AS/NZS 3000 & AS/NZS 3008		

Figure 3. Electrical installation for a CMT11 and CMT22 system using WPL-A 10.2 Trend HK 230 heat pumps.

Electrical Installation
Electric Wiring

WPL-A 10.2 Trend HK 230 System



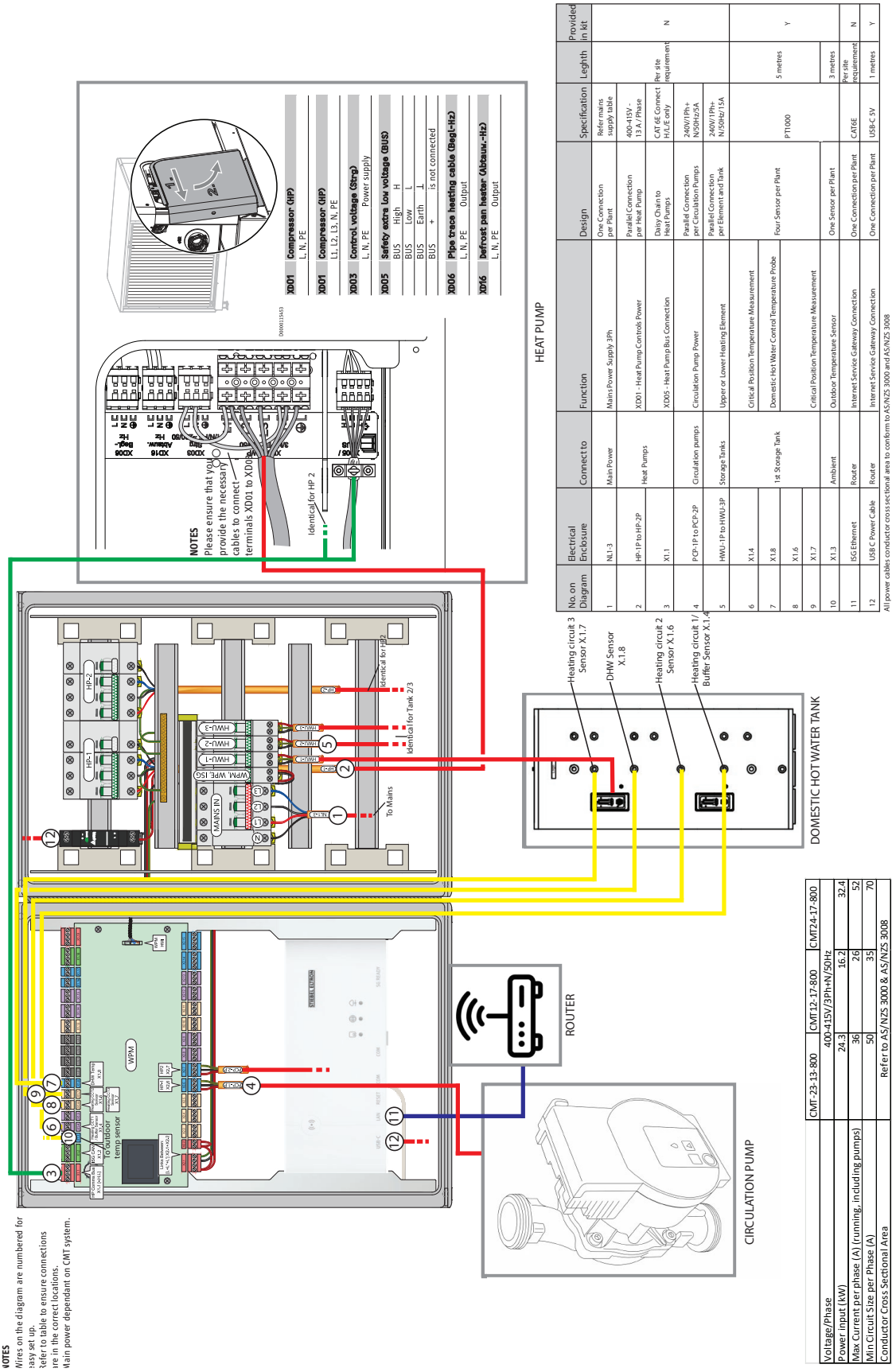
No. on Diagram	Electrical Enclosure	Connect to	Function	Design	Specification	Leghth	Provided in kit
1	NL1-3	Mains Power	Mains Power Supply 3Ph	One Connection per Plant	Refer mains supply table		N
2	HP-1P to HP-6P	Heat Pumps	XD01 - Heat Pump Controls Power	Parallel Connection per Heat Pump	240V - 20 A / Phase	Per site requirement	
3	X1.1		XD05 - Heat Pump Bus Connection	Daisy Chain to Heat Pumps	CAT 6E Connect H/L/E only		
4	PCP-1P to PCP-6P	Circulation pumps	Circulation Pump Power	Parallel Connection per Circulation Pumps	240V / 1Ph-N /50Hz/5A		
5	HWU-1P to HWU-6P	Storage Tanks	Upper or Lower Heating Element	Parallel Connection per Element and Tank	240V / 1Ph-N /50Hz/ 15A		
6	X1.4	1st Storage Tank	Critical Position Temperature Measurement	Four Sensor per Plant	PT1000	5 metres	Y
7	X1.8		Domestic Hot Water Control Temperature Probe				
8	X1.6		Critical Position Temperature Measurement				
9	X1.7	Ambient	Outdoor Temperature Sensor	One Sensor per Plant		3 metres	
10	X1.3	Router	Internet Service Gateway Connection	One Connection per Plant	CAT6E	Per site requirement	N
11	ISG Ethernet	Router	Internet Service Gateway Connection	One Connection per Plant	USB-C 5V	1 metres	Y
12	USB-C Power Cable						

All power cables conductor cross sectional area to conform to AS/NZS 3000 and AS/NZS 3008

	CMT33-10-800	CMT44-10-800	CMT55-10-800	CMT66-10-800
Voltage/Phase				
Power input (kW)	22.8	30.4	38	45.6
Max Current per phase (A) (running, including pumps)	33	52	65	65
Min Circuit Size per Phase (A)	45	70	85	85
Conductor Cross Sectional Area	Refer to AS/NZS 3000 & AS/NZS 3008			

Figure 4. Electrical installation for a CMT33 and CMT66 system using WPL-A 10.2 Trend HK 230 heat pumps.

WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems



No. on Diagram	Electrical Enclosure	Connect to	Function	Design	Specification	Leghth	Provided in kit
1	NL1-3	Main Power	Mains Power Supply 3Ph	One Connection per Plant	Refer mains supply table		
2	HP-1P to HP-2P	Heat Pumps	XD01 - Heat Pump Controls Power	Parallel Connection per Heat Pump	400-415V - 13 A / Phase		
3	X1.1		XD05 - Heat Pump Bus Connection	Daisy Chain to Heat Pumps	CAT 6E Connect H/L/E only	Per site requirement	N
4	PCP-1P to PCP-2P	Circulation pumps	Circulation Pump Power	Parallel Connection per Circulation Pumps	240V/1Ph+ N/50Hz/5A		
5	HWU-1P to HWU-3P	Storage Tanks	Upper or Lower Heating Element	Parallel Connection per Element and Tank	240V/1Ph+ N/50Hz/15A		
6	X1.4	1st Storage Tank	Critical Position Temperature Measurement	Four Sensor per Plant	PT1000	5 metres	Y
7	X1.8		Domestic Hot Water Control Temperature Probe				
8	X1.6						
9	X1.7		Critical Position Temperature Measurement				
10	X1.3	Ambient	Outdoor Temperature Sensor	One Sensor per Plant		3 metres	
11	ISG Ethernet	Router	Internet Service Gateway Connection	One Connection per Plant	CAT6E	Per site requirement	N
12	USB-C Power Cable	Router	Internet Service Gateway Connection	One Connection per Plant	USB-C 5V	1 metres	Y

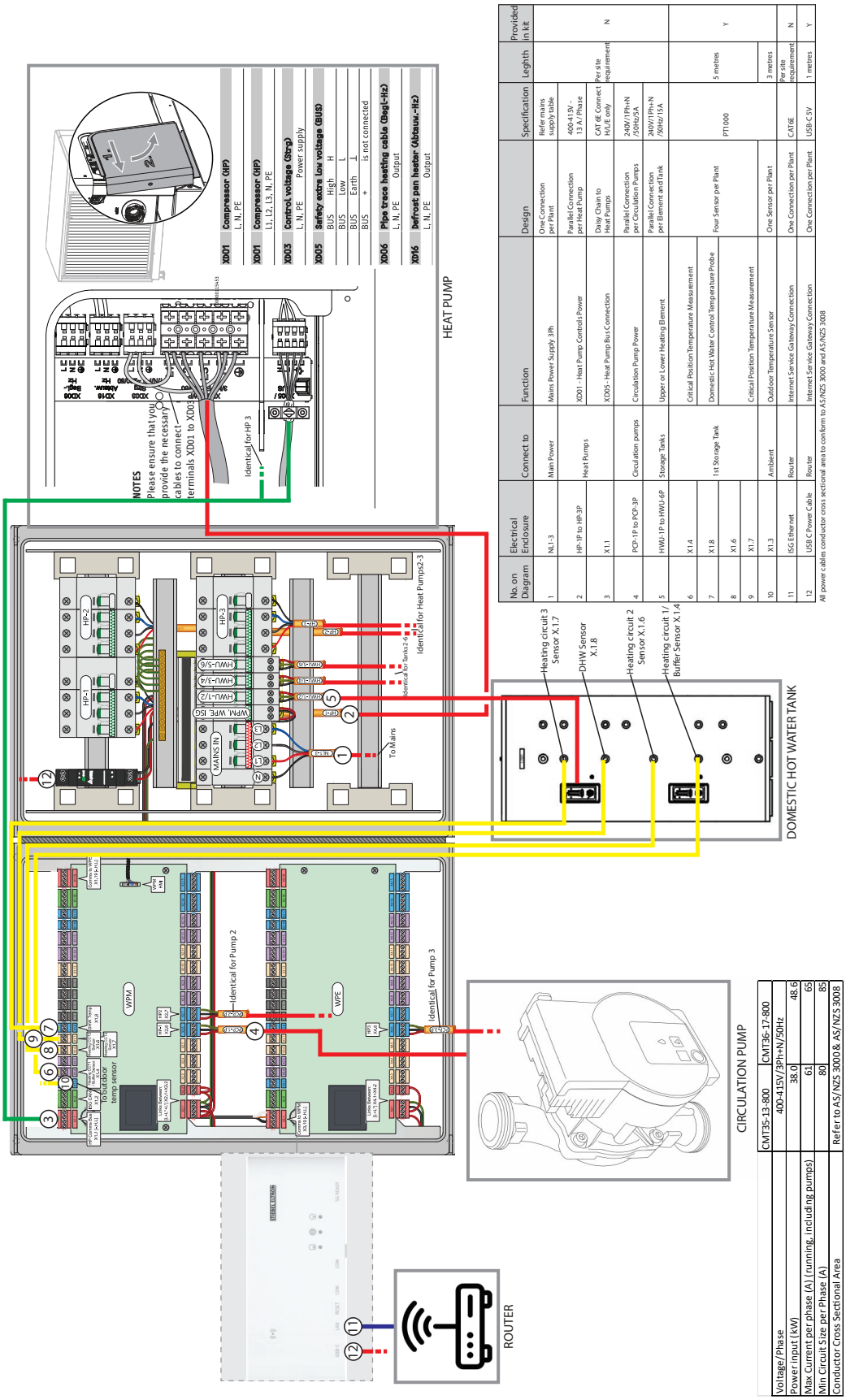
All power cables conductor cross-sectional area to conform to AS/NZS 3000 and AS/NZS 3008

	CMT-23-13-800	CMT12-17-800	CMT24-17-800
Voltage/Phase	400-415V/3Ph+N/50Hz		
Power input (kW)	24.3	16.2	32.4
Max Current per phase (A) (running, including pumps)	36	26	52
Min Circuit Size per Phase (A)	50	35	70
Conductor Cross Sectional Area	Refer to AS/NZS 3000 & AS/NZS 3008		

NOTES
Wires on the diagram are numbered for easy set up.
Refer to table to ensure connections are in the correct locations.
Main power dependant on CMT system.

Figure 5. Electrical installation for a CMT system using 1 or 2 x WPL-A 13.2 Trend HK 400 or WPL-A 17.2 Trend HK 400 heat pumps.

WPL-A 13.2 Trend HK 400 & WPL-A 17.2 Trend HK 400 Systems



No.on Diagram	Electrical Enclosure	Connect to	Function	Design	Specification	Leghth	Provided in kit
1	NL1.3	Main Power	Mains Power Supply 3Ph	One Connection per Plant	Refer mains supply table		N
2	HP-1P to HP-3P	Heat Pumps	XD01 - Heat Pump Control+Power	Parallel Connection per Heat Pump	400-415V - 13 A / Phase	Per site requirement	
3	X1.1		XD05 - Heat Pump Bus Connection	Daisy Chain to Heat Pumps	CAT 6E Connect H/L/E only		
4	PCP-1P to PCP-3P	Circulation pumps	Circulation Pump Power	Parallel Connection per Circulation Pumps	240V/1Ph+N /50Hz/5A		
5	HWU-1P to HWU-6P	Storage Tanks	Upper or Lower Heating Element	Parallel Connection per Element and Tank	240V/1Ph+N /50Hz/15A		
6	X1.4	1st Storage Tank	Critical Position Temperature Measurement	Four Sensor per Plant	PT1000	5 metres	Y
7	X1.8		Domestic Hot Water Control Temperature Probe				
8	X1.6						
9	X1.7		Critical Position Temperature Measurement				
10	X1.3	Ambient	Outdoor Temperature Sensor	One Sensor per Plant		3 metres	
11	5G Ethernet	Router	Internet Service Gateway Connection	One Connection per Plant	CAT6E	Per site requirement	N
12	USB-C Power Cable	Router	Internet Service Gateway Connection	One Connection per Plant	USB-C 5V	1 metres	Y

All power cables conductor cross sectional area to conform to AS/NZS 3000 and AS/NZS 3008

	CMT35-13-800	CMT36-17-800
Voltage/Phase	400-415V/3Ph+N/50Hz	
Power input (kW)	38.0	48.6
Max Current per phase (A) (running, including pumps)	61	65
Min Circuit Size per Phase (A)	80	85
Conductor Cross Sectional Area	Refer to AS/NZS 3000 & AS/NZS 3008	

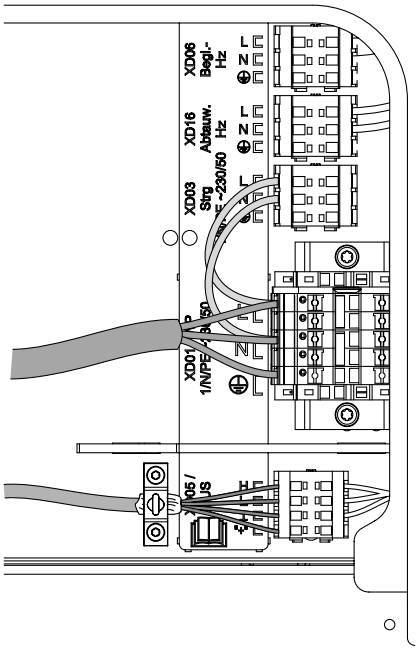
Figure 6. Electrical installation for a CMT system using 3 x WPL-A 13.2 Trend HK 400 or WPL-A 17.2 Trend HK 400 heat pumps.

Electric Installation
Heat Pump Connection

Each heat pump requires two electrical connections.

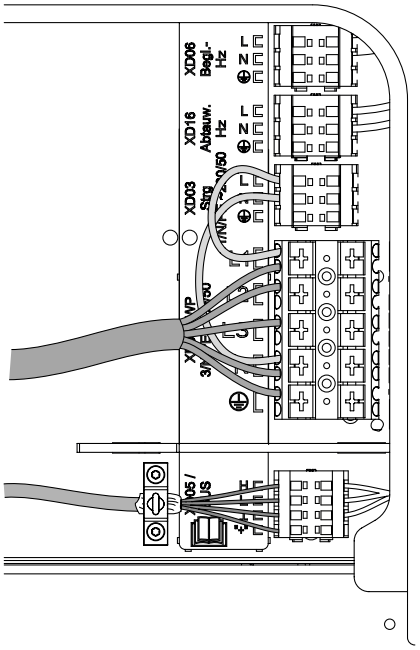
1 Power from the electrical enclosure to terminals XD01 and XD03, each heat pump must be wired back to the enclosure, per the electrical wiring diagram above, and the conductor cross sectional area must comply to AS/NZS 3000 and NZS 3008.
2 Communication from the electrical enclosure to terminal XD05 on the first heat pump, the remaining heat pumps to be daisy chained. Only connect to terminals H/L/E.

WPL-A 10.2 Trend HK 230 Single Phase Heat Pump



XD01	Compressor (HP)
	L, N, PE
XD01	Compressor (HP)
	L1, L2, L3, N, PE
XD03	Control Voltage (Strg)
	L, N, PE Power Supply
XD05	Safety extra low voltage (BUS)
	BUS High H
	BUS Low L
	BUS Earth ⊥
	BUS + is not connected
XD06	Pipe trace heating cable (Begl-Hz)
	L, N, PE Output
XD16	Defrost pan heater (Abtauw.-Hz)
	L, N, PE Output

WPL-A 13.2 Trend HK 400 three phase heat pump
WPL-A 17.2 Trend HK 400 three phase heat pump

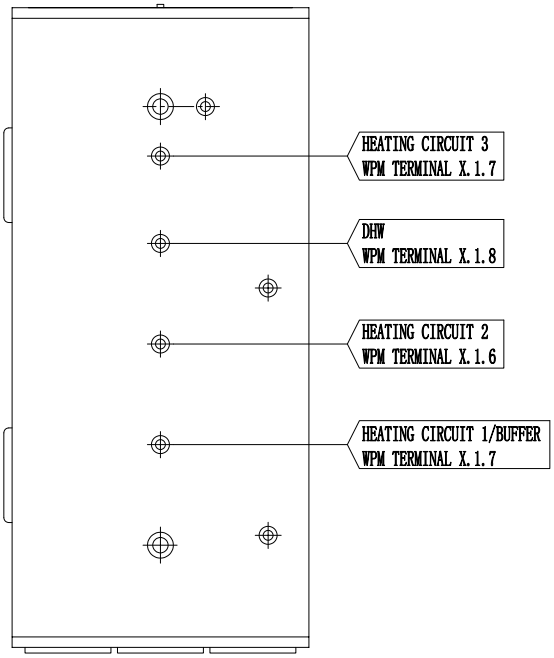


XD01	Compressor (HP)
	L, N, PE
XD01	Compressor (HP)
	L1, L2, L3, N, PE
XD03	Control Voltage (Strg)
	L, N, PE Power Supply
XD05	Safety extra low voltage (BUS)
	BUS High H
	BUS Low L
	BUS Earth ⊥
	BUS + is not connected
XD06	Pipe trace heating cable (Begl-Hz)
	L, N, PE Output
XD16	Defrost pan heater (Abtauw.-Hz)
	L, N, PE Output

Refer to the operation and installation manual supplied with the heat pump for full details.

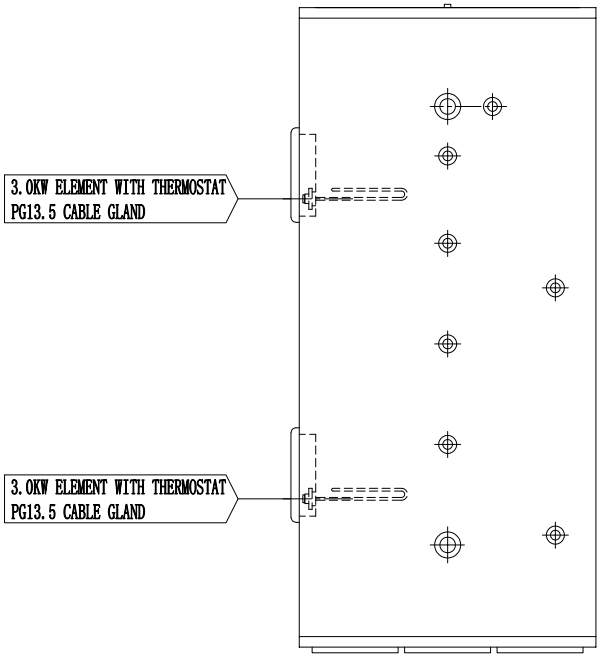
Electric Installation
Tank Connection

Temperature Sensors
The domestic hot water sensor is the critical control sensor within the system and care MUST be taken to ensure it is positioned correctly in the storage tank. The storage tank has four temperature sensor positions for optimisation purposes, refer diagram below.



Sensors MUST be installed appropriately to ensure correct operation.

Electrical Elements
There are 2 electric immersion heating elements in each storage tank designed for heating support purposes only. The top element is to be connected to the electrical enclosure (per the wiring instructions prior) provided as part of the CMT package. The bottom element is intended for emergency use only and can be connected to a manual activation switch by a suitably authorised electrician, if deemed necessary. Both elements are fitted with a thermostat controller with an adjustable temperature range of 49°C-82°C and an over temperature safety feature. The top element MUST be set to 60°C on commissioning as part of the operating parameters of the system. This is a critical step to ensure suitable heating support without compromising the seasonal COP of the system.



Heating Circuit Filling Instructions

Pre Process Checks

WARNING
Before commencing with commissioning it is important to ensure all conditions are within the set parameters and the instructions are followed. The parameters are critical to optimal operation and safety requirements.



- Check expansion vessel for pre charge pressure (SET to 0.8 - 1.2 bar).
- Fill the heat pump heating circuit with water at a pressure of between 1 - 1.5 bar. Ensure 1.5 bar is **NOT** exceeded.
- Safety valves are **NOT** for bleeding air.
- Fill the heating circuit carefully per the following instructions. **DO NOT** turn on the pumps and controller until the circuit is completely full of water and all air is eliminated.
- The water used **MUST** adhere to the characteristics in the table below. The mains water supply provided by the water utilities company generally complies to these characteristics. Warranty will be void if the characteristics are not within the limits.
- Flush the heat pump heating circuit, to remove any debris, prior to final connection to the heat pumps.

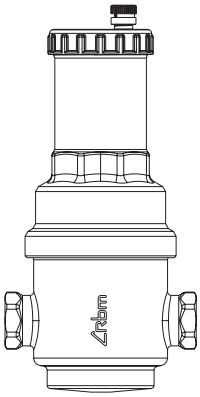
Acceptable Water Characteristics within Warranty

pH	5.5 - 9.5
Hardness	Not greater than 200 mg/L
Chlorides	Not greater than 200 mg/L
Saturation Index	Between -1.0 to +0.4 @ 65°C
Total Dissolved Solids	Not greater than 500 mg/L

Heating Circuit Filling Instructions
Procedure

Filling

1 Open the valve at the top of the deaerator to allow trapped air to expel to atmosphere during the filling process.
Refer to item 2.4 on Figures 1 & 2 (Page 07 & 14).



The deaerator MUST be installed at the highest point within the heating circuit plumbing.

2 Fill the system with water at the lowest point within the heating circuit. A suitable drain/fill point **MUST** be included in the plumbing circuit (at the lowest point) and a suitable 3/4inch drain ball valve and cap is provided.
Refer to item 4.5 on Figures 1 & 2 (Page 07 & 14).

Water pressure within the closed heating circuit MUST not exceed 1.5 bar. The pressure can be easily read and monitored via the gauge. Refer item 4.3 on figures 1 & 2.



Venting

3 Close the ball valve on the return side of the heating circuit in **ALL** relevant location at each heat pump (for example if there are 4 heat pumps there will be 4 valves).
Refer to item 1.10 on Figures 1 & 2 (Page 07 & 14).

4 Connect up a suitable drain hose to the 1st heat pump at the provided drain valve point with a 1/2inch threaded connection. There should be one at the return connection at the back of each heat pump in the system.
Refer to item 1.4 on Figures 1 & 2 (Page 07 & 14).

Ensure the discharge end of the hose is placed in an appropriate tundish or drain to accept water.

Open the valve at the hose connection point and turn on the water supply to flush the 1st heat pump thoroughly with fresh water.
Repeat the same process for each heat pump within the system.

5 Once the flushing procedure is complete it is essential to remove all air from the heating circuit.

Close all the drain valves on all heat pumps.
Refer item 1.4 on Figures 1 & 2 (Page 07 & 14).

Open all ball valves on all heat pumps.
Refer item 1.10 on Figures 1 & 2 (Page 07 & 14).

Proceed to completely fill the heating loop and coils within the system with the deaerator remaining open during this process.

6 Once all air has been eliminated the deaerator valve can be closed. It is imperative to ensure all the air is removed from the circuit for efficient uninterrupted operation of the system. make sure the pressure within the closed loop heating circuit is **1 - 1.5 bar.**

The commissioning process with the potable water supply and return from the building can now commence per the instructions below.

Commissioning
Disclaimer

The information in this installation and commissioning guide is provided to aid the successful and correct installation of the Stiebel Eltron CMT commercial hot water packages. Sole reliance on this guide is not advised, and it should always be read in concert with all other relevant product manuals, safety guidelines and the national plumbing code (PCA 2022) detailed in part 3 of the NCC 2022.

WARNING
This appliance may deliver water at high temperature. Refer to the plumbing code of Australia (PCA), local requirements and installation instructions to determine if additional delivery temperature control is required.

WARNING
For repair work on the heat pump, both circuit breakers always have to be switched off, HP Controls and HP Inverter Supply!

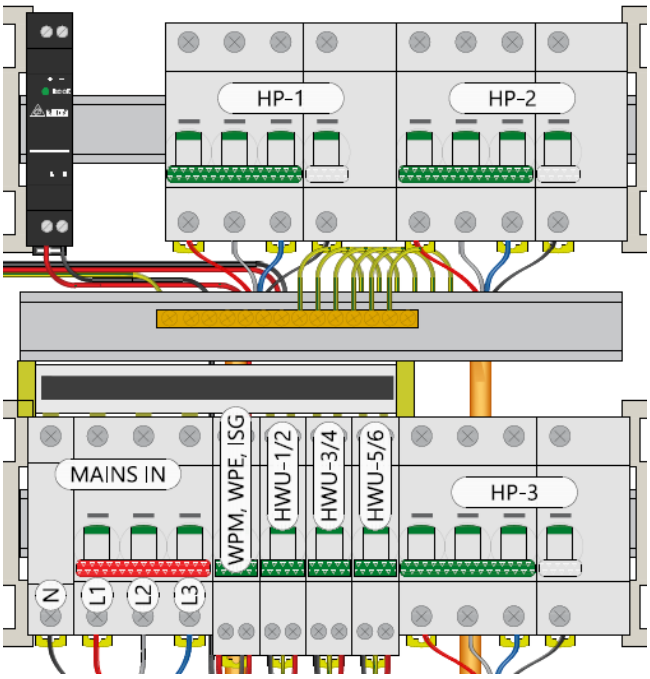
WARNING
For continued safety of this appliance, it must be installed, operated and maintained in accordance with the manufacturer's instructions.

Before a system commissioning can be booked with STIEBEL ELTRON, the following steps must be completed:
› Ensure all required pre-installation and setup tasks are finalised.
› Complete the Commissioning Job Form for commercial hot water projects via our website: https://www.stiebel-eltron.com.au/commissioning

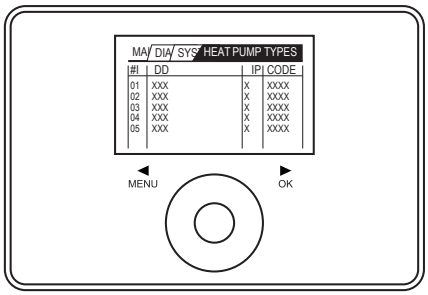
Prior to commencing commissioning, ensure the following is correct:
› The safety zone around the heat pump(s) has been observed
› The heating circuit is suitably filled to the correct water pressure
› All the air is vented from the heating circuit and all air valves are in the operating position
› The temperature sensors are correctly connected to the WPM and positioned in the storage tank.
› The electrical supply and conductor cross sectional area complies to Australian standard as mentioned previously
› Suitable condensate drain(s) have been provided
› Drain(s) are provided for the PTR valve(s) that comply to Australian standard

Commissioning
Heat Pump Settings

1 Activate the circuit breaker switch for heat pump number 1 (HP-1) and confirm that it communicates with the WPM Controller.



On the WPM Controller, navigate to
Main Menu > Diagnosis > System > Heat Pump Types.
This will confirm whether the Heat Pumps are communicating.

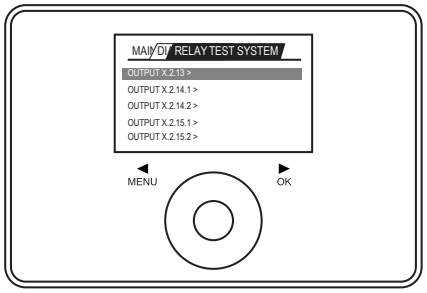


To activate the Main Menu, hold the menu button for three seconds.

2 Repeat this step for all remaining heat pumps one by one until all heat pumps are communicating with the WPM controller.

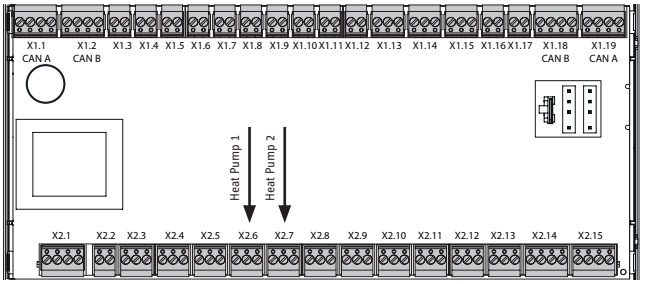
WARNING
If a heat pump initialisation was not successful, refer to the trouble shooting section at the end of this document.

3 Start a Relay Test on the WPM Controller by navigating to **Main Menu > Diagnosis > Relay Test System.**
Are the circulation pumps assigned to the correct heat pump?

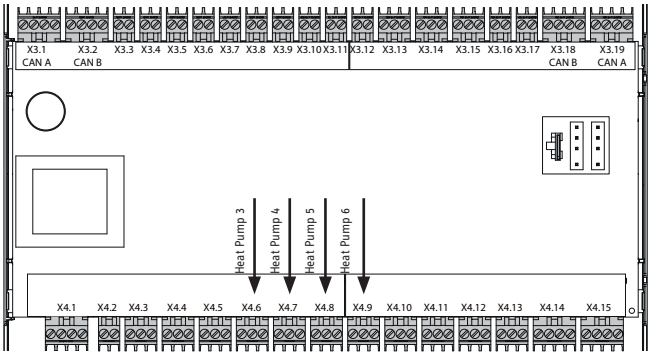


4 Check outputs of assigned heat pump/s to the following.

WPM Terminal Positions



WPE Terminal Positions



Commissioning
WPM Controller Settings

Before full operation of the CHW system commences, the below parameters need to be entered on-site into the WPM heat pump manager.

Use code **1000** to unlock advanced settings.

Required Settings WPM

Parameter	Parameter Path	System	Setting
Comfort Temperature	Settings - DHW - DHW Temperatures (°C)		60
Eco Temperature	Settings - DHW - DHW Temperatures (°C)		60
DHW Mode	Settings - DWW - Standard Setting		Parallel Operation
DHW Hysteresis	Settings - DHW - Standard Setting (K)		5
DHW Stages	Settings - DHW - Standard Setting		Amount of HPs
DHW Learning Function	Settings - DHW - Standard Setting		Off
External Heat Source	Settings - DHW - External Heat Source		Supported
DHW Output Summer	Settings - DHW-Standard Setting - DHW Output HP (kW)	CMT11-10-800	10
		CMT22-10-800	20
		CMT33-10-800	30
		CMT44-10-800	40
		CMT55-10-800	50
		CMT66-10-800	60
		CMT23-13-800	26
		CMT35-13-800	39
		CMT12-17-800	17
		CMT24-17-800	34
		CMT36-17-800	51
DHW Output Winter	Settings - DHW-Standard Setting - DHW Output HP (kW)	CMT11-10-800	10
		CMT22-10-800	20
		CMT33-10-800	30
		CMT44-10-800	40
		CMT55-10-800	50
		CMT66-10-800	60
		CMT23-13-800	26
		CMT35-13-800	39
		CMT12-17-800	17
		CMT24-17-800	34
		CMT36-17-800	51

These parameters are critical to set the default operation of the system.
The system operates with a set point of 60°C and a 5°C deadband.

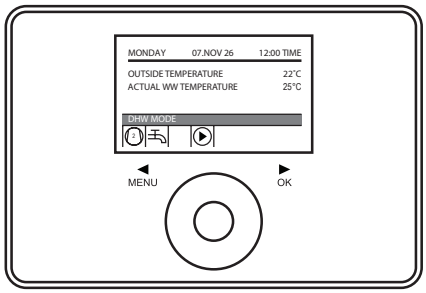
Legionella control
This water heater controls legionella through normal heating operation. The heat pump maintains stored water at a thermostat setting of 60°C or higher, satisfying the legionella control requirements of AS/NZS 3498 and NZ Building Code Clause G12. The electric elements are not required to achieve this.

After a long shutdown:
While off, the stored water cools below the range in which legionella grows, so there is no growth risk during the shutdown.

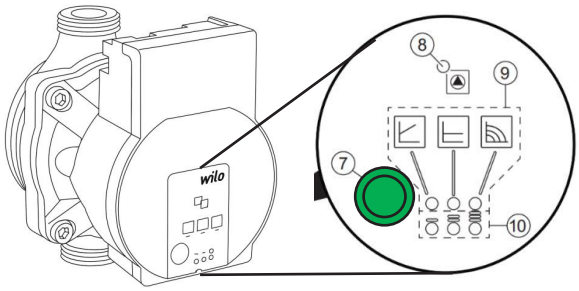
On restart, let the unit complete a full heating cycle so the tank returns to 60°C before use. This restores protection.

Commissioning
Circulation Flow Settings

To start the heating process, program in **DHW Mode** on the start page of the controller.

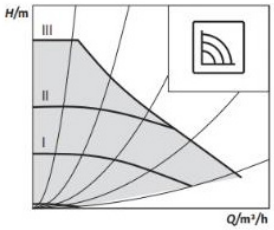


1 Volume flow settings are made on each primary circulation pump using the green button (7) on the front control interface.
Always ensure the pump controller cover is replaced to protect it from the weather.



2 Each primary circulation pump must be set to constant speed and then either stage I, II, III.
The flow rates in the table below should be targetted as close as possible, noting that the exact flow rate may not be achievable due to variations in the heating loop plumbing system relative to the installation site.

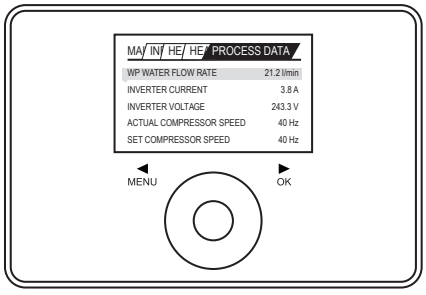
Constant speed (I, II, III)



The volume flow should be equal on all heat pumps.

System	Flow Rate (L/min)
CMT11-10-800	22
CMT22-10-800	22
CMT33-10-800	22
CMT44-10-800	22
CMT55-10-800	22
CMT66-10-800	22
CMT23-13-800	29
CMT35-13-800	29
CMT12-17-800	38
CMT24-17-800	38
CMT36-17-800	38

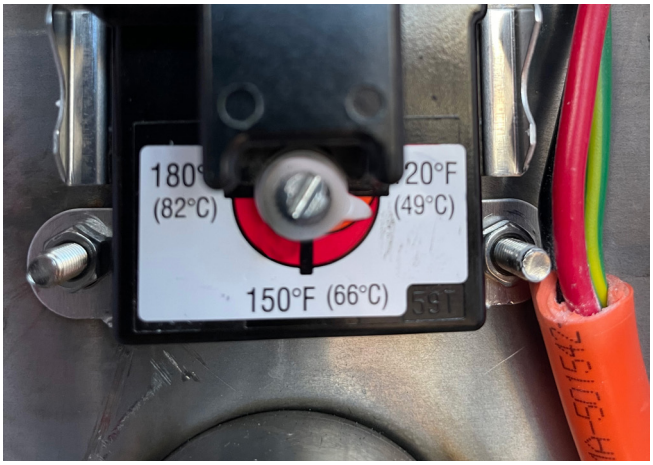
The flow rate per pump can be found on the controller via
Main Menu > Info > Heat Pump > Heat Pump 1 > Process Data > WP Water Flow Rate.
Flow rates must be set as close as possible to the values in the table above to ensure optimal operation of the system.



Commissioning
Storage Tank Element Setting & Test

1 Start by setting the thermostat of the top element to the lowest temperature setting (49°C) and check the operation of the element with a suitable amp meter.

The temperature setting dial can be found on each thermostat on each tank. The element cover will need to be removed to access the thermostat.



2 Wait until the thermostat de-energises the element which will happen when the set temperature (49°C) is exceeded. Confirm there is no current draw.

This MUST be carried out on the top element on every tank that is connected to power via the electrical enclosure.

3 Set the thermostat to the required system operating temperature to finalise the settings. the setting is 60°C default and MUST be set correctly to avoid unnecessary use of the element during the water heating process.

Commissioning

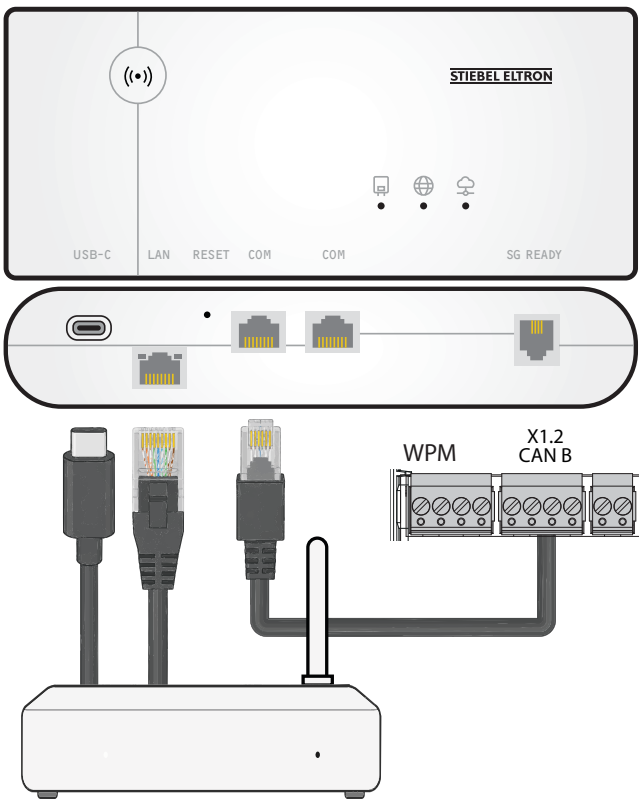
Internet Service Gate Commissioning & Servicewelt

1 Locate the Internet Service Gate (ISG) behind the electrical enclosure to connect the hot water service to the internet portal.

This will enable local and remote access, monitoring of the system, and provide the interface for any BMS integration.
Remote access is facilitated via the SERVICEWELT platform.

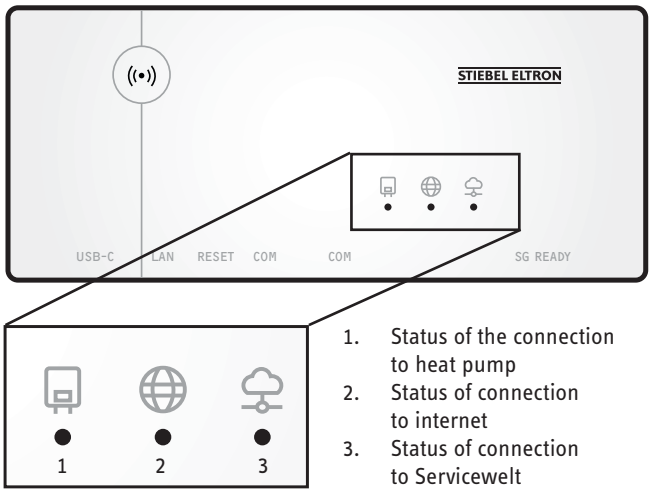
2 Check that the three required connections are in place and are in the correct position.

Remote monitoring (connection to Servicewelt) is not available if there is no LAN connection to a network with available internet or a suitable router with an active SIM card.



Connection	Description
USB-C	Power Supply (pre installed)
LAN	Connection to the local network
COM	Connection to Terminal X1.2 on WPM (pre installed)

3 Ensure LED lights are indicating the correct status, per the seperate manual provided with the ISG.



1. Status of the connection to heat pump
2. Status of connection to internet
3. Status of connection to Servicewelt

LED	Status	Meaning
	Green	Connection to heat pump
1	Green (flashing slowly)	Connection being established or no connection
	Green	Connection to internet
	Red	No connection to internet
2	Blue	Service button pressed
	Green	Connection to Servicewelt
	Red (flashing slowly)	Pairing attempt
3	Red	Pairing failed

4 There are two options to complete the registration process.

A. Download the MyStiebel App

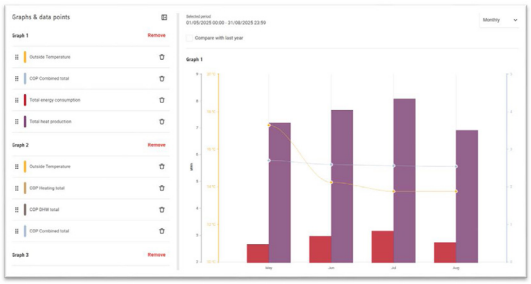
Follow the steps to connect a new hydronic heat pump in the interface, and the ISG will show up. Complete registration.

Once connected, contact the STIEBEL ELTRON service department and provide the details used during sign up. STIEBEL ELTRON will provide a login for desktop access.

B. Detect the I.P. of the ISG connected to the network. Open a browser window and enter the IP address or use http://servicewelt.

Click establish connection in the right hand Portal Status window and complete registration.

Once connected, contact the STIEBEL ELTRON service department and provide the details used during sign up. STIEBEL ELTRON will provide a login for desktop access through the SERVICEWELT portal.



Troubleshooting

If heat pump initialisation was not successful, a RESET WPM must be performed.

Carry out this reset if commissioning or initialisation of the system has failed (not all bus subscribers or connected heat pumps were displayed).

WARNING
For repair work on the heat pump, both circuit breakers always have to be switched off, HP Controls and HP Inverter Supply.

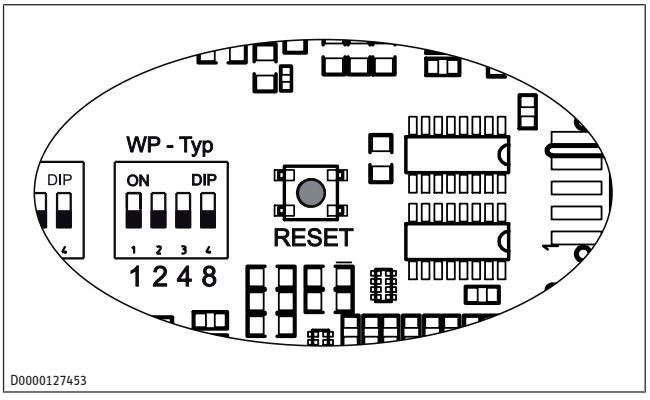
1 Switch off the mains power supply to the WPM.
Switch off the mains power supply to the WPE (if installed).
Switch off the mains power supply to the heat pump.

2 Disconnect the BUS connections.

3 Switch on the mains power supply to the heat pump.

4 Hold the reset key until the two outer LEDs are constantly illuminated.

5 Release the reset key.
The IWS has now been reset and is ready for renewed initialisation.



6 Switch off the mains power supply to the heat pump.

7 Disconnect the bus connections.

8 Switch the mains power supply (to the heat pump, WPM, WPE) back on.

9 Carry out a bus initialisation.

10 Reset the system-specific parameters for the WPM and WPE.

WARRANTY | AUSTRALIA
WPL Air Source Hydronic Heat Pumps

Who gives the warranty

1. The warranty is given by Stiebel Eltron (Aust) Pty Ltd (A.B.N. 82 066 271 083) of 294 Salmon Street, Port Melbourne, Victoria, 3207 ("we", "us" or "our").

The warranty

2. This warranty applies to STIEBEL ELTRON Commercial Hot Water CMT systems using the following heat pump models - WPL-A 10.2, WPL-A 13.2 and WPL-A 17.2.
3. Subject to the warranty exclusions we will repair or replace, at our absolute discretion, a faulty component in your unit free of charge if it fails to operate in accordance with its specifications during the warranty period.
4. If we repair or replace a faulty component to your unit under this warranty, the warranty period is not extended from the time of the repair or replacement.
5. The warranty period commences on the date of completion of the installation of the unit. Where the date of completion of installation is not known, then the warranty period will commence 2 months after the date of manufacture. This is to be determined by the serial number on the data plate of the relevant component.
6. The warranty period applies only to components supplied by Stiebel Eltron. It does not apply to components supplied by others, such as, but not limited to, plumbing system components (examples - pressure limiting valves, isolating valves, non return valves) and electrical system components (examples - electrical switches, solenoid valves, electrical cables and fuses).
7. The warranty period for a unit used for commercial purposes is shown in the table below. Commercial purposes means that the unit is used for a non-domestic purpose and includes but is not limited to being used in a multi-residential apartment building, motel, hotel, mining camp or nursing home.
8. A Pressure Limiting Device MUST be installed in cold water supply to the hot water system and be set to a maximum water pressure of 550kPa. The warranty period for a unit used for commercial applications in hot water mode is shown in the table below.

Component	Parts (yrs)	Labour (yrs)
Heat pump	2	2
Tanks	3	2

All other components such as controllers, valves, pumps, sensors, frames, insulation, electric heating elements and electric wiring connecting systems attract a 1 year parts and labour warranty and are not included in the above warranty table.

Extended warranty periods are available on request, refer to details and conditions below in relevant section.

9. You are entitled to make a warranty claim if:
9.1 You own the unit or if you have the owner's consent to represent the owner of the unit;
9.2 You contact us within a reasonable time of discovering the problem with the unit;

How you make a warranty claim

10. To make a warranty claim you must provide us with the following information:
10.1 The model number of the component in question and whether it is part of a Stiebel Eltron Commercial Hot Water package;
10.2 A description of the problem with the unit;
10.3 The name, address and contact details (such as phone number and e-mail address) of the owner;
10.4 The address where the unit is installed and the location (e.g. in laundry);
10.5 The serial number of the component in question and whether it is part of a Stiebel Eltron Commercial Hot Water package;
10.6 The date of purchase of the unit and the name of the seller of the unit;
10.7 The date of installation of the unit;
10.8 A copy of the certificate of compliance when the unit was installed.
11. The contact details for you to make your warranty claim are:

Name:	Stiebel Eltron (Aust) Pty Ltd
Address:	294 Salmon Street, Port Melbourne, Victoria,3207
Telephone:	1800 153 351
	(8.00 am to 5.00 pm AEST Monday to Friday)
Contact person:	Customer Service Representative
E-mail:	service@stiebel-eltron.com.au

12. We will arrange a suitable time with you to inspect and test the unit.

Warranty exclusions

13. We may reject your warranty claim if:
13.1 The unit was not installed by registered and qualified tradespeople.
13.2 The unit was not installed and commissioned:
a. in Australia or New Zealand;
b. in accordance with the Operating and Installation Guide; and
c. in accordance with the relevant statutory and local requirements of the State or Territory in which the unit is installed.
d. in accordance with the site parameters in the Operating and Installation guide such that safe assessment and/or access requiring machinery or is difficult, a service charge will apply. If at the discretion of the attending service person, access is deemed dangerous, service will be refused. Any work required to gain reasonable or safe access to the appliance will be chargeable by the attending service person and the hire of elevated working equipment or cranes to remove or replace components is the sole responsibility of the asset owner.
13.3 The unit has not been operated or maintained in accordance with the Operating and Installation Guide.
13.4 The unit does not bear its original Serial Number or Rating Label.
13.5 The unit was damaged by any or any combination of the following:
a. normal fair wear and tear;
b. connection to an incorrect water supply. Refer to the water quality parameter table 1
c. connection to water from a bore, dam or swimming pool;
d. connection to an incorrect power supply;
e. connection to faulty equipment, such as damaged valves;
f. foreign matter in the water supply, such as sludge or sediment;
g. corrosive elements in the water supply;
h. accidental damage;
i. act of God, including damage by flood, storm, fire, lightning strike and the like;
j. excessive water pressure, negative water pressure (partial vacuum) or water pressure pulsation;
k. ingress of vermin.
13.6 The unit was damaged before it was installed e.g. it was damaged in transit.
13.7 An unauthorised person has modified, serviced, repaired or attempted to repair the unit without our consent.
13.8 Non genuine parts other than those manufactured or approved by us have been used on the unit.
13.9 This warranty does not apply to colour degradation/damage caused by direct UV exposure.
14. We may charge you:
14.1 for any additional transport costs if the unit is installed more than 30 kilometres from our closest authorised service technician.
14.2 for the extra time it takes our authorised service technician to access the unit for inspection and testing if it is not sited in accordance with the Operating and Installation Guide and not readily accessible for inspection.
14.3 for any extra costs of our authorised service technician to make the unit safe for inspection.
15. You must ensure that access to the unit by our authorised service technician is safe and free from obstruction.
16. Our authorised service technician may refuse to inspect and test the unit until you provide safe and free access to it, at your cost.
17. If we reject your warranty claim in accordance with clause 13, we may charge you for our authorised service technician's labour costs to inspect and test the unit.
18. In order to properly test the unit we may remove it to another location for testing.

	Min	Max
Chlorides	N/A	250 mg/L
pH	6	9.5
Total Dissolved Solids (TDS)	N/A	600 mg/L
Hardness	N/A	200 mg/L
Langlier saturation Index	-1.00	+0.4

The Langlier saturation index must be calculated at 80°C water temperature

Australian Consumer Law

19. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

19.1 The Stiebel Eltron warranty for the unit is in addition to any rights and remedies you may have under the Australian Consumer Law

20. Expect Warranty options and conditions.

Option 1

Stiebel Eltron offer a comprehensive commissioning service via our highly trained personnel and skilled technicians. This service ensures the system is operating at its optimum with all parameters checked and verified from start up. If this option is chosen the warranty period indicated in the table below, full terms and conditions are per the agreed commisionning documentation between both parties and not this document.

Component	Parts (yrs)	Labour (yrs)
Heat Pump	3	3
Tanks	5	3

All other components such as controllers, valves, pumps, frames, insulation, electric heating elements attract a 2 year parts and labour warranty and are not included in the above warranty table.

Option 2

Stiebel Eltron offer a comprehensive preventative maintenance service via our highly trained personnel and skilled technicians. This service spans over a period of 10 years ensuring worry free operation. Note commissioning by Stiebel Eltron (Option 1 above) is a pre-requisite.

If this option is chosen the warranty period is indicated in the table below and th terms and conditions are per the agreement between the two parties, and not this document. Refer to Commercial Hot Water Preventative Maintenance and Extended Warranty Agreement.

Component	Parts (yrs)	Labour (yrs)
Heat Pump	10	10
Tanks	10	10

Please contact Stiebel Eltron to discuss the requirements of the extended warranties mentioned above. Refer to the back page of this document for contact details or email our technical department on technical@stiebel-eltron.com.au.

Australia
STIEBEL ELTRON Australia Pty. Ltd.
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www.stiebel-eltron.com.au

STIEBEL ELTRON