

WATERSTAGETM

OPTIONAL PARTS

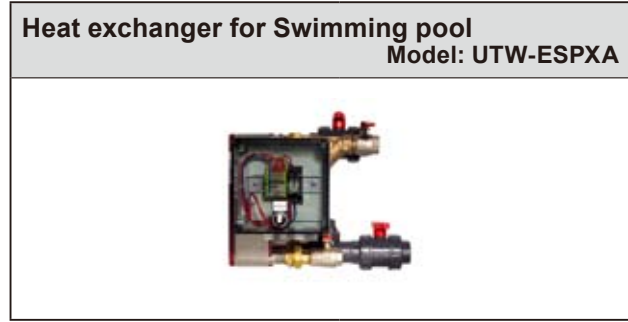
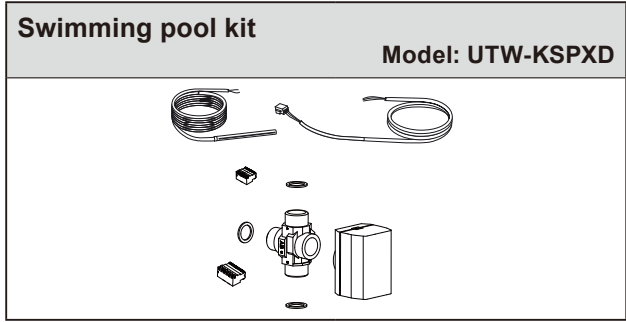
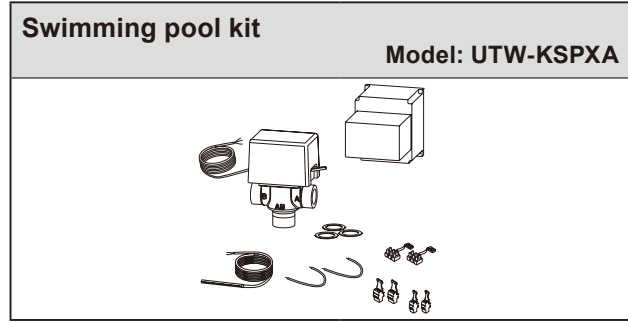
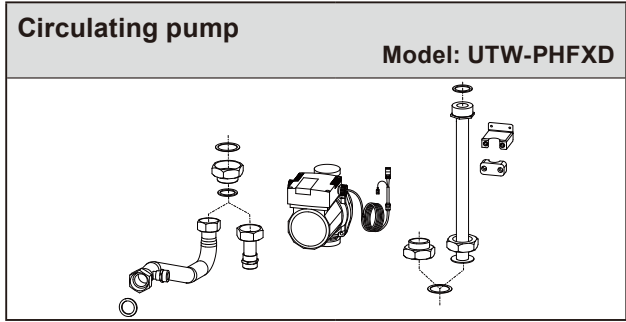
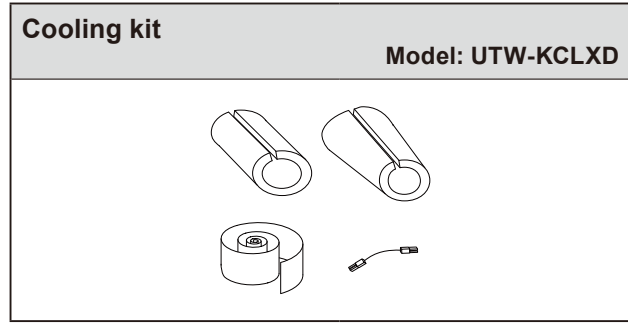
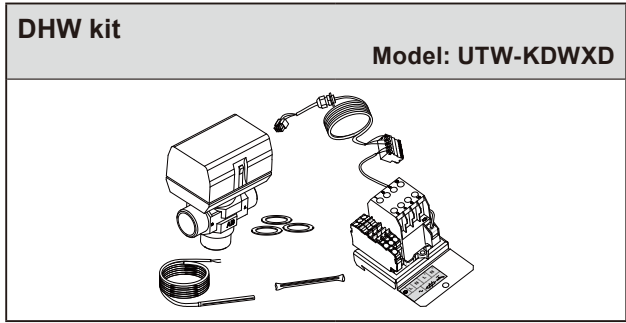
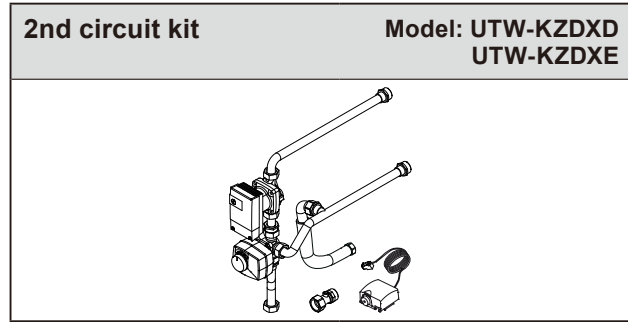
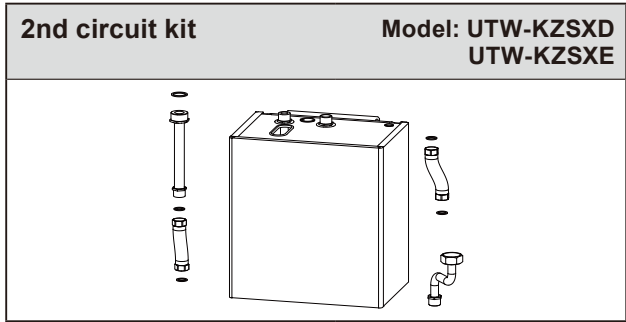
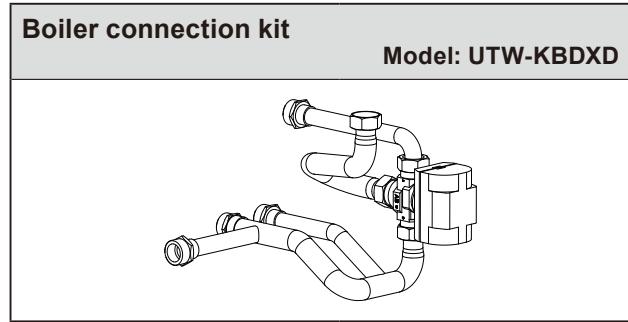
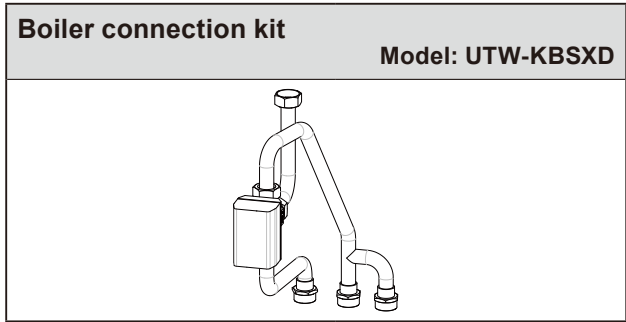
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1. OPTIONAL PARTS LIST

1-1. LIST



OPTIONAL
PARTS

OPTIONAL
PARTS

Room thermostat

Model: UTW-C55XA



Room thermostat (Wireless)

Model: UTW-C58XD



Wireless



Remote control

Model: UTW-C75XA, UTW-C75XA-E



Remote control (Wireless)

Model: UTW-C78XD, UTW-C78XD-E



Wireless



Graphical remote control

Model: UTW-C74TXF, UTW-C74HXF



DHW Tank

Model: UTW-T20XA, UTW-T30XA

200L model



300L model



DHW Tank

Model: UTW-T30XD



Outdoor sensor transmitter

Model: UTW-MOSXD



Wireless



RF module

Model: UTW-M60XD, UTW-MRCXD



UTW-M60XD



for X60-Port



UTW-MRCXD



for X86 or X150-Port

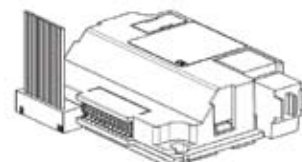
Balancing vessel

Model: UTW-TEVXA



LPB clip

Model: UTW-KL1XD

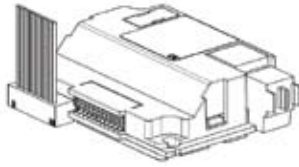


OPTIONAL PARTS

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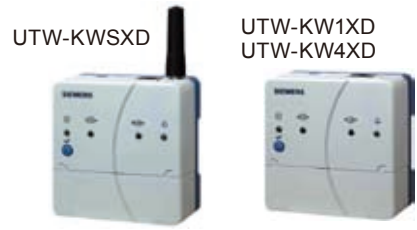
Modbus clip

Model: UTW-KMBXE



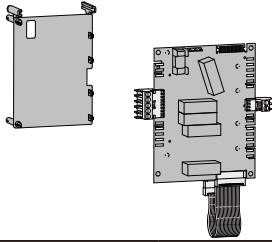
Web server

Model: UTW-KWSXD, UTW-KW1XD, UTW-KW4XD



Regulation extension kit

Model: UTW-KREXD



Mode exchange kit

Model: UTW-KMEXE



Service tool (incl. OC1700 adaptor)

Model: UTW-KSTXD



Service tool software

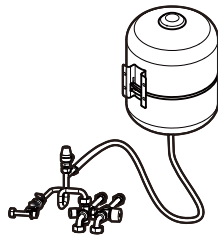
Model: UTW-KPSXD



CD-ROM
(Software)

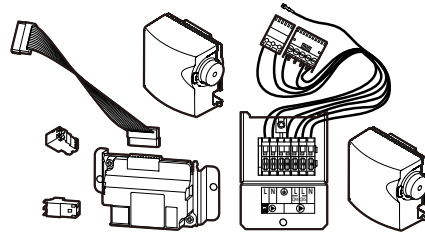
DHW expansion vessel kit

Model: UTW-KDEXE



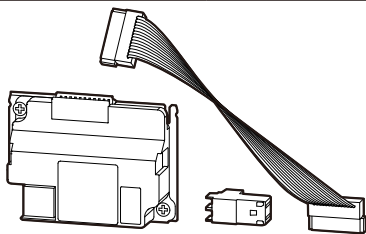
Cascade master kit (incl. LPB clip)

Model: UTW-KCMXE



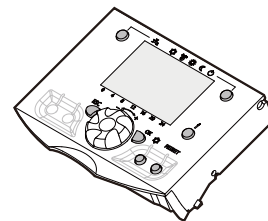
Cascade slave kit (incl. LPB clip)

Model: UTW-KCSXE



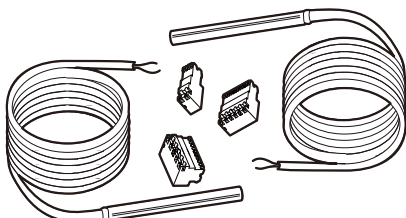
HMI kit

Model: UTW-KHMXE



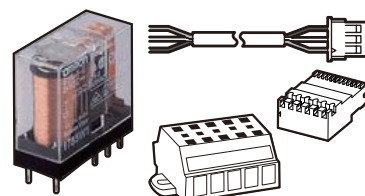
Solar regulation kit

Model: UTW-KSRXE



Low noise kit

Model: UTW-KLNXE

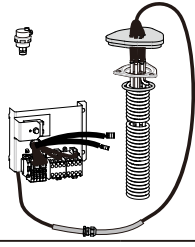


OPTIONAL PARTS

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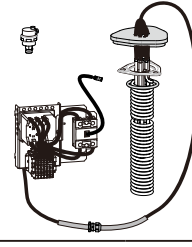
Back-up heater

Model: UTW-HS6XG



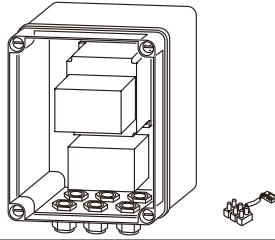
Back-up heater

Model: UTW-HT9XG



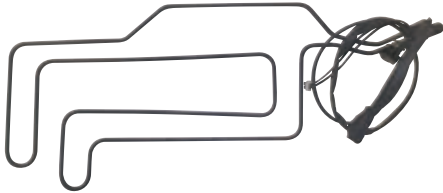
Zone control kit

Model: UTW-KZMXG



Base heater

Model: UTW-HAMXE



Base heater

Model: UTW-HAMXF



External connect kit

Model: UTY-XWZXZ2

INPUT
OUTPUT



Drain pan

Model: UTW-KDPXA



1-2. CONNECTION LIST

●: Available, —: Not available

Unit category	Optional parts		Split type			Monobloc type			Split integrated DHW type		
	Names	Model	Single phase type		3 phase type	Single phase			Single phase type		3 phase type
			Comfort series	High power series		Compact series			Comfort series	High power series	
			050DG 050DG6 050DD6	140DG 140DG6 140DC6	140DG 160DG 160DG9 160DC9	080LA 100LA	050LG 050LE	080LG 080LF 080LE 100LG 100LF 100LE	050DG 050DG6 050DD6	140DG 140DG6 140DC6	160DG 160DG9 160DC9
HYDRAULIC UNIT	Boiler connection kit	UTW-KBSXD	●	●	●	—	—	—	—	—	—
		UTW-KBDXD	—	—	—	—	—	—	●	●	●
	2nd circuit kit	UTW-KZSXD UTW-KZSXE	●	●	●	—	—	—	—	—	—
		UTW-KZDXD UTW-KZDXE	—	—	—	—	—	—	●	●	●
	DHW kit	UTW-KDWXF	—	—	—	● *1	● *1	● *1	—	—	—
		UTW-KDWXA	—	—	—	● *2	● *2	● *2	—	—	—
		UTW-KDWXD	●	●	●	—	—	—	—	—	—
	Cooling kit	UTW-KCLXD	●	●	●	—	—	—	●	●	●
	Circulating pump	UTW-PHFXD	—	●	●	—	—	—	—	●	●
	Swimming pool kit	UTW-KSPXA	—	—	—	● *2	● *2	● *2	—	—	—
		UTW-KSPXD	●	●	●	● *1	● *1	● *1	●	●	●
	Heat exchanger for Swimming pool	UTW-ESPXA	●	●	●	●	●	●	●	●	●
	Room thermostat	UTW-C55XA	●	●	●	●	●	●	●	●	●
		UTW-C58XD	●	●	●	●	●	●	●	●	●
	Remote control	UTW-C75XA UTW-C75XA-E	●	●	●	●	●	●	●	●	●
		UTW-C78XD UTW-C78XD-E	●	●	●	●	●	●	●	●	●
		Graphical remote control	UTW-C74TXF UTW-C74HXF	●	●	●	● *1	● *1	● *1	●	●
	DHW Tank	UTW-T20XA UTW-T30XA	●	●	●	●	●	●	—	—	—
		UTW-T30XD	●	●	●	●	●	●	—	—	—
	Outdoor sensor transmitter	UTW-MOSXD	●	●	●	●	●	●	●	●	●
RF module	UTW-M60XD	●	●	●	●	●	●	●	●	●	
	UTW-MRCXD	●	●	●	●	●	●	●	●	●	
Balancing vessel	UTW-TEVXA	●	●	●	●	●	●	●	●	●	
LPB clip	UTW-KL1XD	●	●	●	● *1	● *1	● *1	●	●	●	
Modbus clip	UTW-KMBXE	●	●	●	● *1	● *1	● *1	●	●	●	

*1 : Only connectable to Hydraulic Unit WSYP100DF6.

*2 : Only connectable to Control Box UTW-SCBYA

●: Available, —: Not available

Unit category	Optional parts		Split type			Monobloc type			Split integrated DHW type		
	Names	Model	Single phase type		3 phase type	Single phase			Single phase type	3 phase type	
			Comfort series	High power series		Compact series			Comfort series	High power series	
			050DG 050DG6 050DD6 100DG 100DG6 100DD6	140DG 140DG6 140DC6	140DG 160DG 160DG9 160DC9	080LA 100LA	050LE	080LE 080LF 100LE 100LF	050DG 050DG6 050DD6 100DG 100DG6 100DD6	140DG 140DG6 140DC6	160DG 160DG9 160DC9
HYDRAULIC UNIT	Web server	UTW-KWSXD	●	●	●	●	●	●	●	●	●
		UTW-KW1XD	●	●	●	●	●	●	●	●	●
		UTW-KW4XD	●	●	●	●	●	●	●	●	●
	Regulation extension kit	UTW-KREXD	●	●	●	● *1	● *1	● *1	●	●	●
	Mode exchange kit	UTW-KMEXE	●	●	●	●	●	●	●	●	●
	Service tool (incl. OCI700 adaptor)	UTW-KSTXD	●	●	●	●	●	●	●	●	●
	Service tool software	UTW-KPSXD	●	●	●	●	●	●	●	●	●
	DHW expansion vessel kit	UTW-KDEXE	—	—	—	—	—	—	●	●	●
	Cascade master kit (incl. LPB clip)	UTW-KCMXE	—	●	●	—	—	—	—	—	—
			●	—	—	—	—	—	—	—	—
	Cascade slave kit (incl. LPB clip)	UTW-KCSXE	—	●	●	—	—	—	—	—	—
			●	—	—	—	—	—	—	—	—
	HMI kit	UTW-KHMXE	●	●	●	● *1	● *1	● *1	●	●	●
	Solar regulation kit	UTW-KSRXE	●	●	●	● *1	● *1	● *1	—	—	—
	Back-up heater	UTW-HS6XG	● *3	● *3	—	—	—	—	● *3	● *3	—
UTW-HT9XG		—	—	● *4	—	—	—	—	—	● *4	
Zone control kit	UTW-KZMXG	—	—	—	● *2	● *2	● *2	—	—	—	

*1 : Only connectable to Hydraulic Unit WS*P100DF6.

*2 : Only connectable to Control Box UTW-SCBYA

*3 : Only connectable to Hydraulic Unit 050DG, 100DG, 140DG.

*4 : Only connectable to Hydraulic Unit 140DG, 160DG.

OPTIONAL PARTS

OPTIONAL PARTS

●: Available, —: Not available

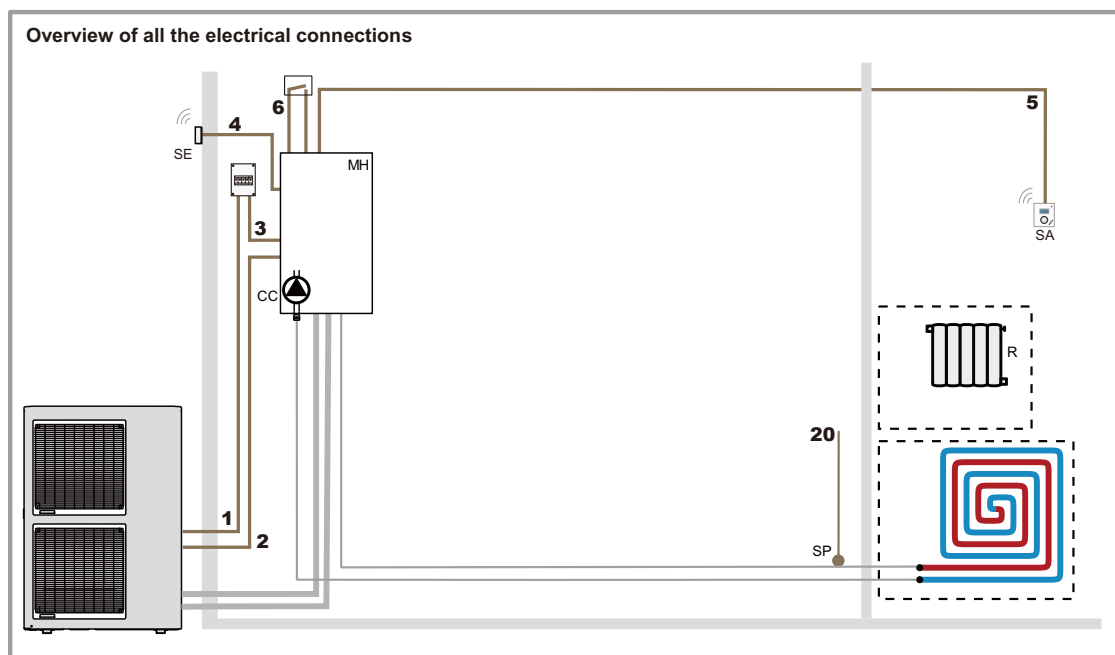
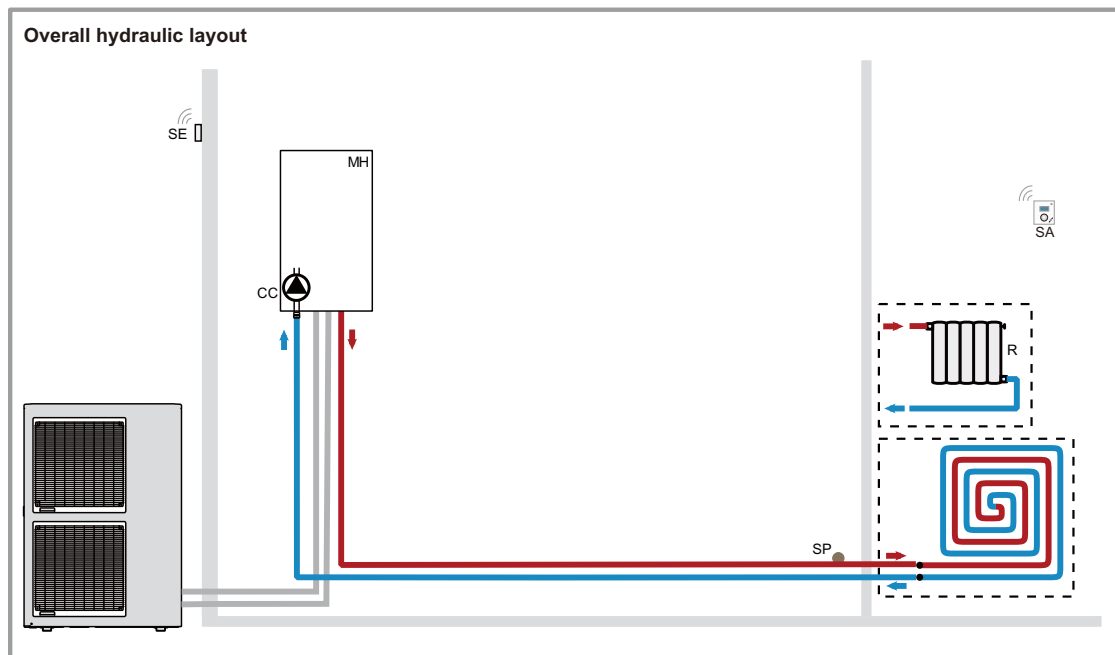
Unit category	Optional parts		Split type			Monobloc type			Split integrated DHW type		
	Names	Model	Single phase type		3 phase type	Single phase			Single phase type		3 phase type
			Comfort series	High power series		Compact series			Comfort series	High power series	
			060LFCA 060LDC	112LCTA 112LCT	112LCTA 112LCT	080LA	050LE	080LE 080LF	060LFCA 060LDC	112LCTA 112LCT	112LCTA 112LCT
			080LFCA 080LDC	140LCTA 140LCT	140LCTA 140LCT	100LA		100LE 100LF	080LFCA 080LDC	140LCTA 140LCT	140LCTA 140LCT
100LFTA 100LDT		160LCTA 160LCT				100LFTA 100LDT		160LCTA 160LCT			
OUTDOOR UNIT	Base heater	UTW-HAMXE	—	—	—	●	—	●	—	—	—
		UTW-HAMXF	—	—	—	—	●	—	—	—	—
	External connect kit	UTY-XWZXZ2	—	●	●	—	—	—	—	●	●
	Low noise kit	UTW-KLNXE	—	●	●	—	—	—	—	●	●
	Drain pan	UTW-KDPXA	● *	—	—	—	—	—	—	—	—

* : For 060LFCA, 060LDC, 080LFCA, 080LDC.

2. CONNECTION CONFIGURATION EXAMPLE

2-1. 1-HEATING CIRCUIT

■ SPLIT TYPE



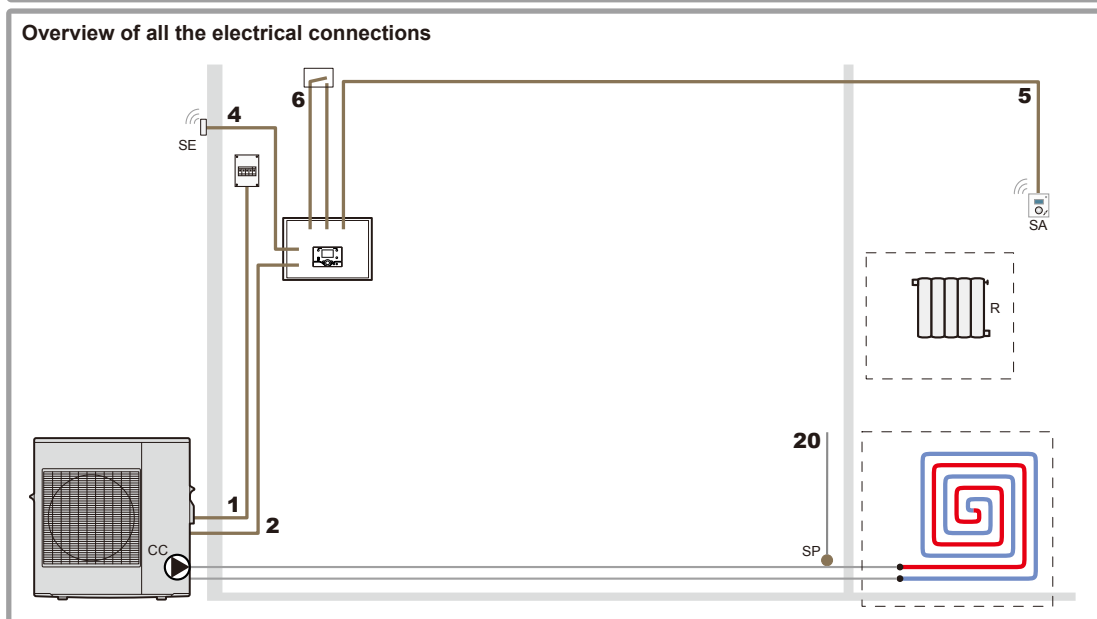
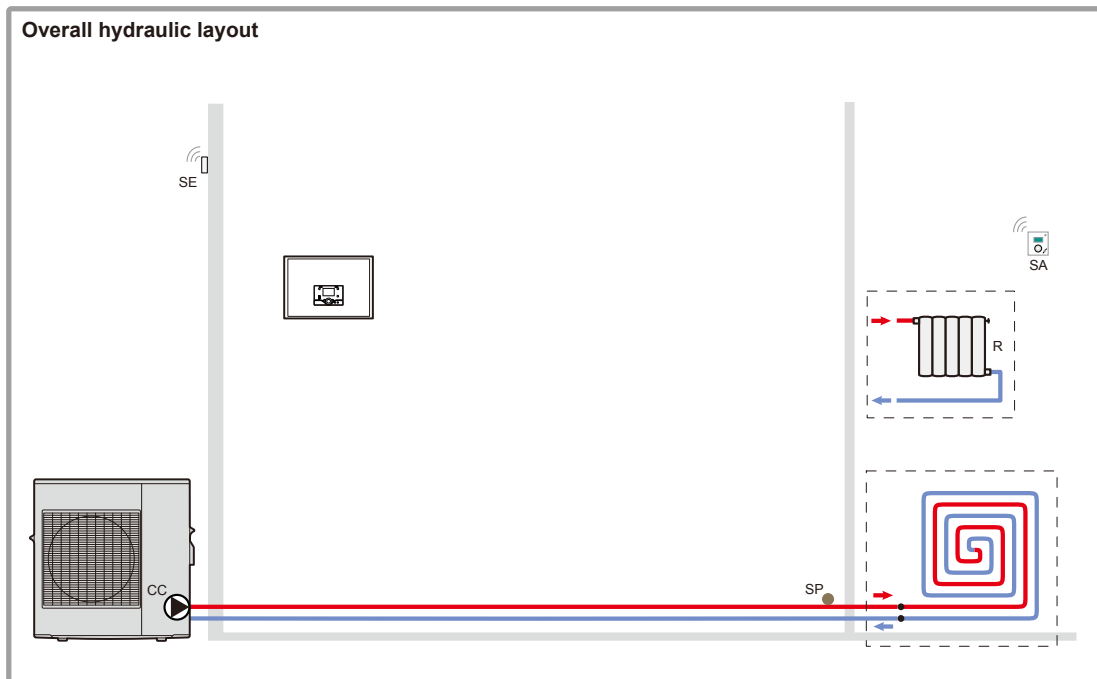
Legend

- | | | |
|--------------------------------------|---|--|
| CC - Heating circulation pump | R - Radiators | SE - Outdoor sensor |
| MH - Indoor unit | SA - Room thermostat or Room control unit (option) | SP - Heated floor thermal safety fuse |
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
 - 2- Inter-connection between the outdoor unit and the indoor unit.
 - 3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.
 - 4- Outdoor sensor.
 - 5- Room thermostat and/or remote controller.
 - 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 - 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

OPTIONAL PARTS

OPTIONAL PARTS

■ MONOBLOC TYPE



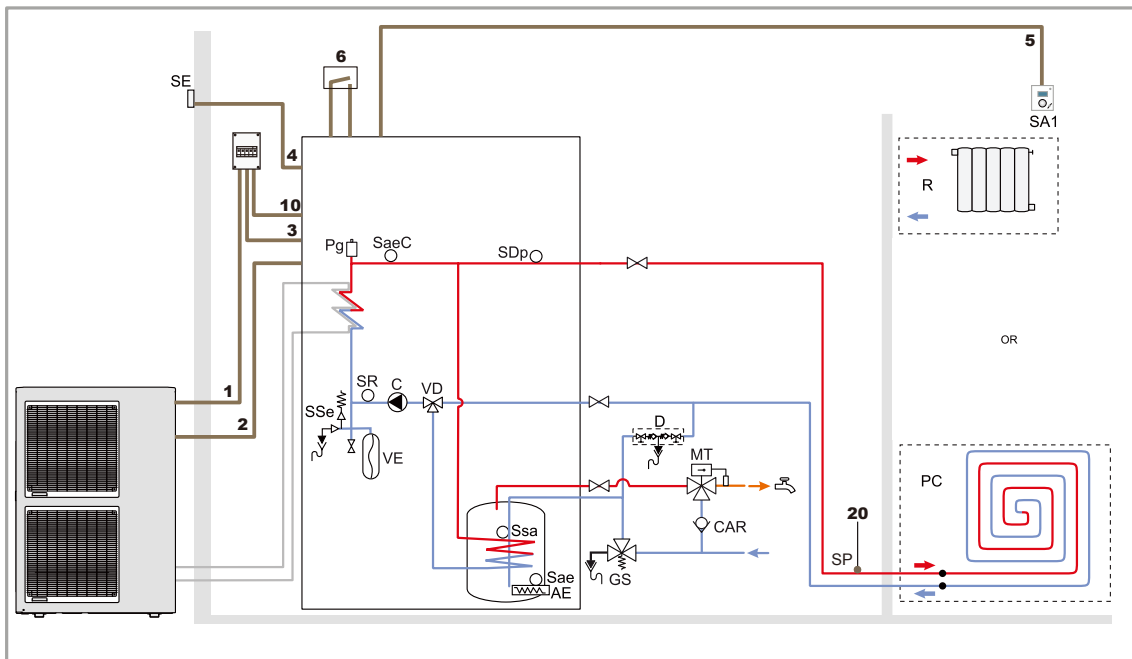
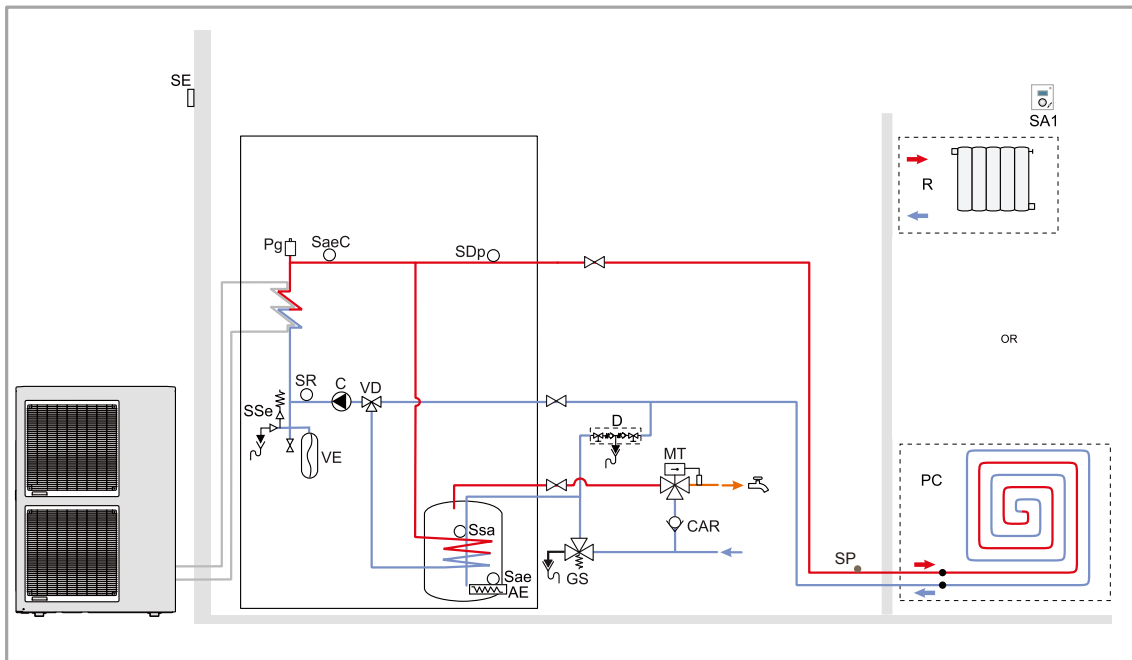
Legend

- | | | |
|---|--------------------------------------|--|
| CC - Heating circulation pump | SA - Room thermostat (option) | SP - Heated floor thermal safety fuse |
| R - Radiators (or fan convectors) | SE - Outdoor sensor | |
| 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side) | | |
| 2- Inter-connection between the outdoor unit and the indoor unit. | | |
| 4- Outdoor sensor. | | |
| 5- Room thermostat and/or remote controller. | | |
| 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator. | | |
| 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high. | | |

OPTIONAL PARTS

OPTIONAL PARTS

■ SPLIT INTEGRATED DHW TYPE



Legend

AE - Back-up DHW	PC - Floor heating system	SaeC - Temperature safety (option heating back-up option)	SSe - Safety valve
CAR - Non-return valve	PG - Bleeder valve	SDp - Flow sensor	VD - Distribution valve
C - Heating circulation pump	R - Radiators	SR - Return sensor	VE - Expansion vessel
D - Shut-off	SA1 - Room thermostat circuit 1 (Option)	Ssa - DHW sensor	
GS - Safety unit	Sae - Temperature safety of domestic electrical back-up		
MT - Thermostatic mixer valve			

1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)

2- Inter connection between the outdoor unit and the indoor unit.

3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.

4- Outdoor sensor.

5- Room thermostat and/or remote controller.

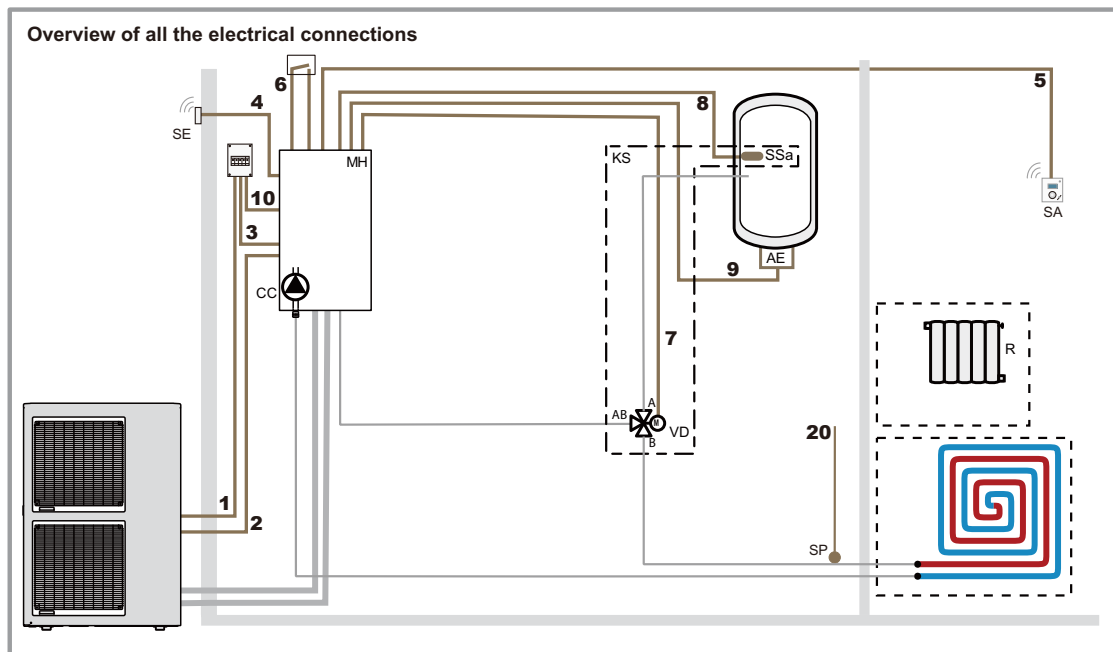
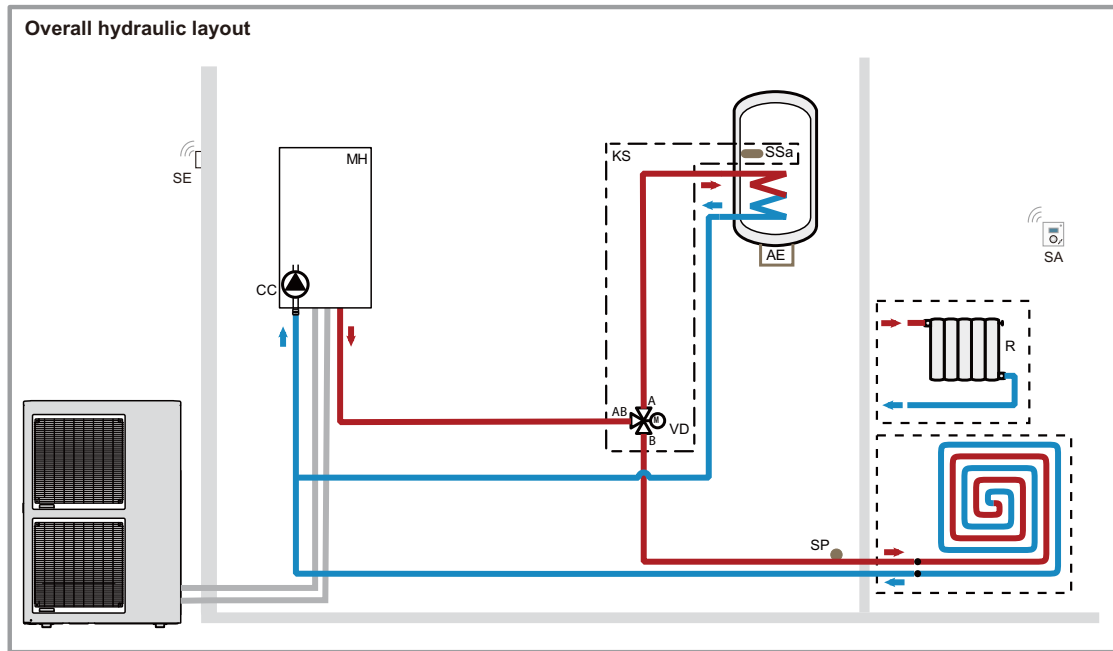
6- Contract with power provider: Connect the "Power Provider" contact to the heat pump's regulator.

10- Connect the electrical power supply for the domestic water back-up to the electric panel.

20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-2. 1-HEATING CIRCUIT AND DHW TANK

■ SPLIT TYPE



Legend

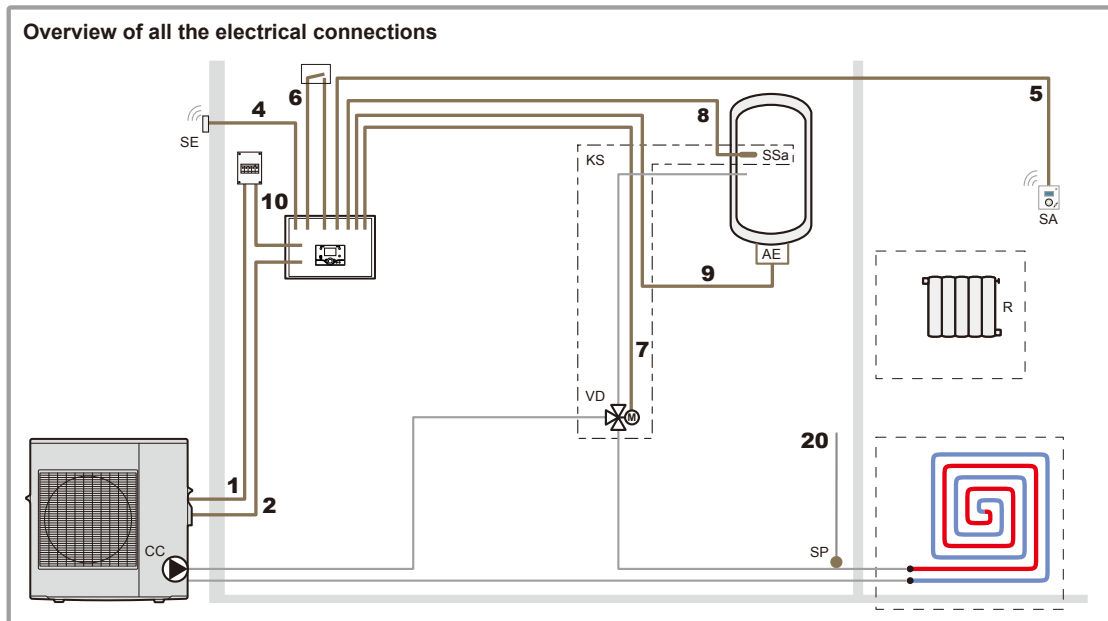
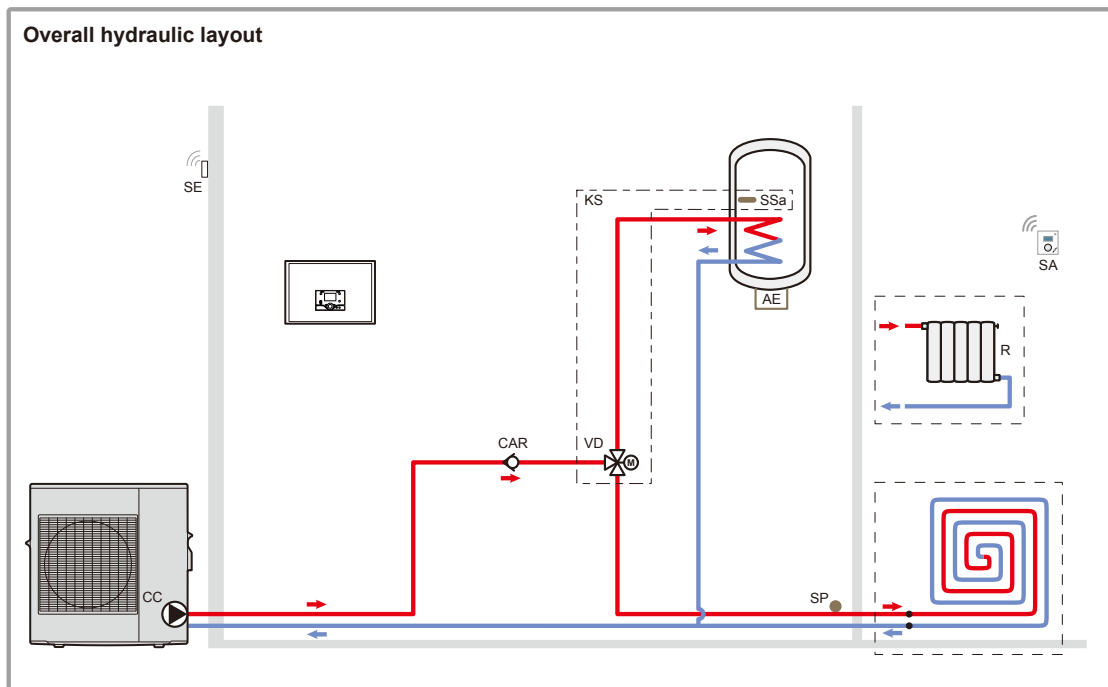
AE - Electric back-up
CC - Heating circulation pump
KS - DHW kit
MH - Indoor unit

R - Radiators
SA - Room thermostat or Room control unit (option)
SE - Outdoor sensor
SP - Heated floor thermal safety fuse

SSa - DHW sensor
VD - Distribution valve

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 7- Connect the directional valve to the heat pump's regulator.
- 8- Connect the domestic water sensor to the heat pump's regulator.
- 9- Connect the back-up resistance to the electric panel.
- 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
- 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

MONOBLOC TYPE



Legend

CAR - Non-return valve
AE - Electric back-up
CC - Heating circulation pump
KS - DHW kit

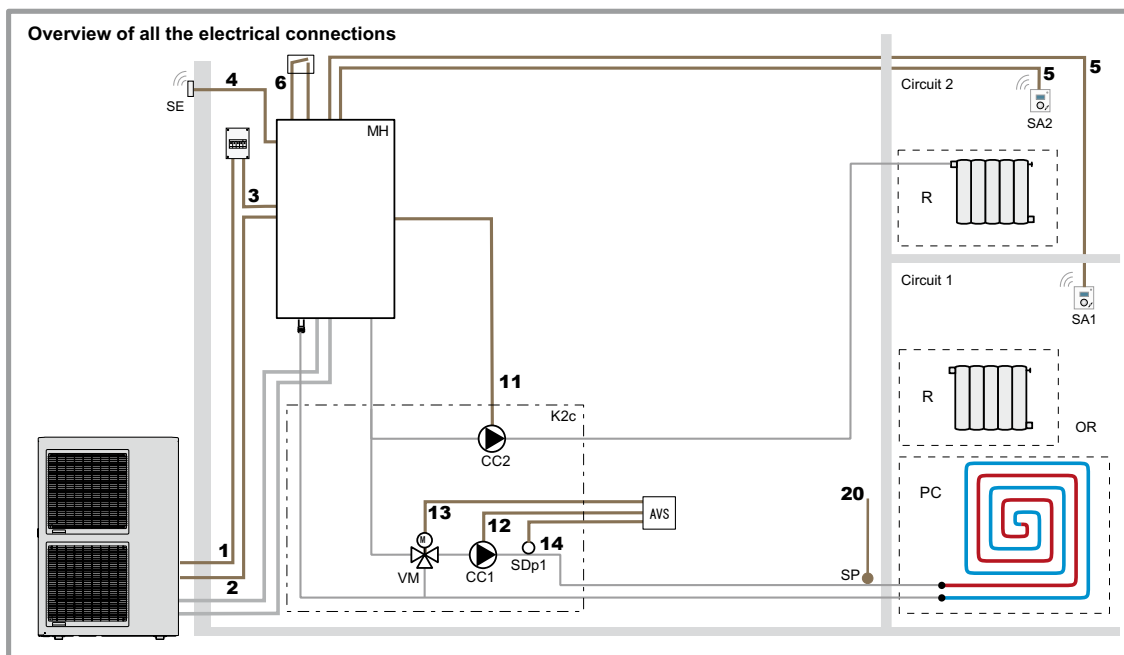
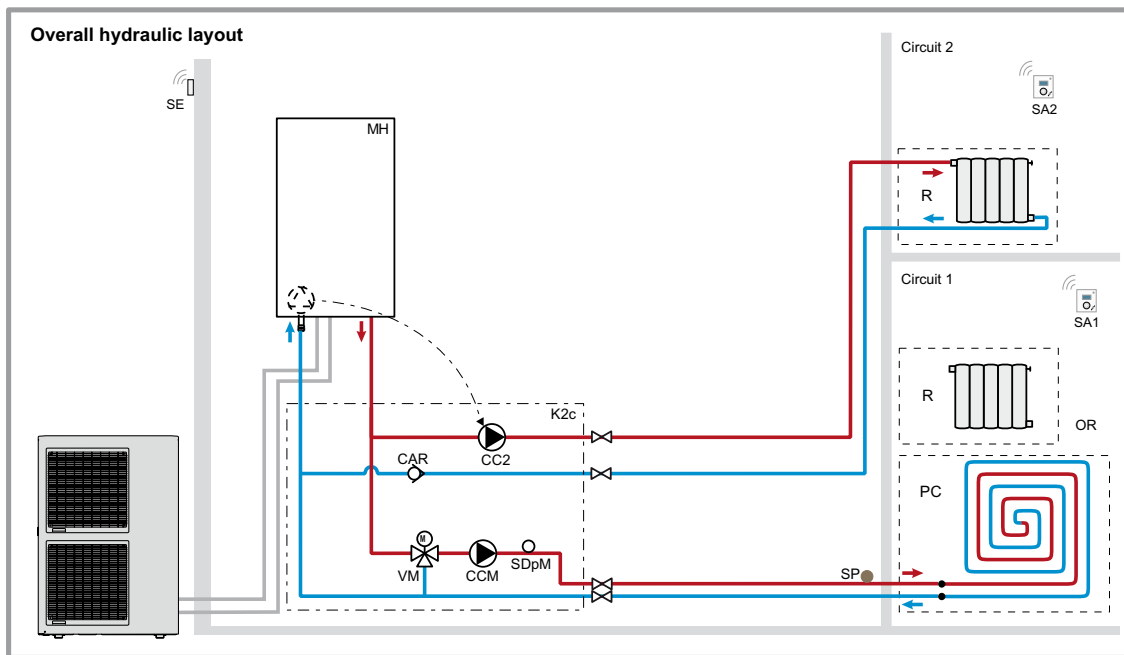
R - Radiators (or fan convectors)
SA - Room thermostat (option)
SE - Outdoor sensor
SP - Heated floor thermal safety fuse

SSa - DHW sensor
VD - Distribution valve

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 7- Connect the directional valve to the heat pump's regulator.
- 8- Connect the domestic water sensor to the heat pump's regulator.
- 9- Connect the back-up resistance to the electric panel.
- 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
- 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-3. 2-HEATING CIRCUITS

■ SPLIT TYPE



Legend

AVS - Regulation extension kit

CAR - Non-return valve

CC1 - Heating circulation pump, Circuit 1

CC2 - Heating circulation pump, Circuit 2

K2c - 2nd circuit kit

1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)

2- Inter-connection between the outdoor unit and the indoor unit.

3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.

4- Outdoor sensor.

5- Room thermostat and/or remote controller.

6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.

11- Circulation pump HC2

12- Connect the circulation pump HC1 to the regulation extension kit.

13- Connect the mixer valve to the regulation extension kit.

14- Connect the flow sensor circuit1 to the regulation extension kit.

20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

PC - Floor heating system

R - Radiators

SA1 - Room thermostat, Circuit CC1 (option)

SA2 - Room thermostat, Circuit CC2 (option)

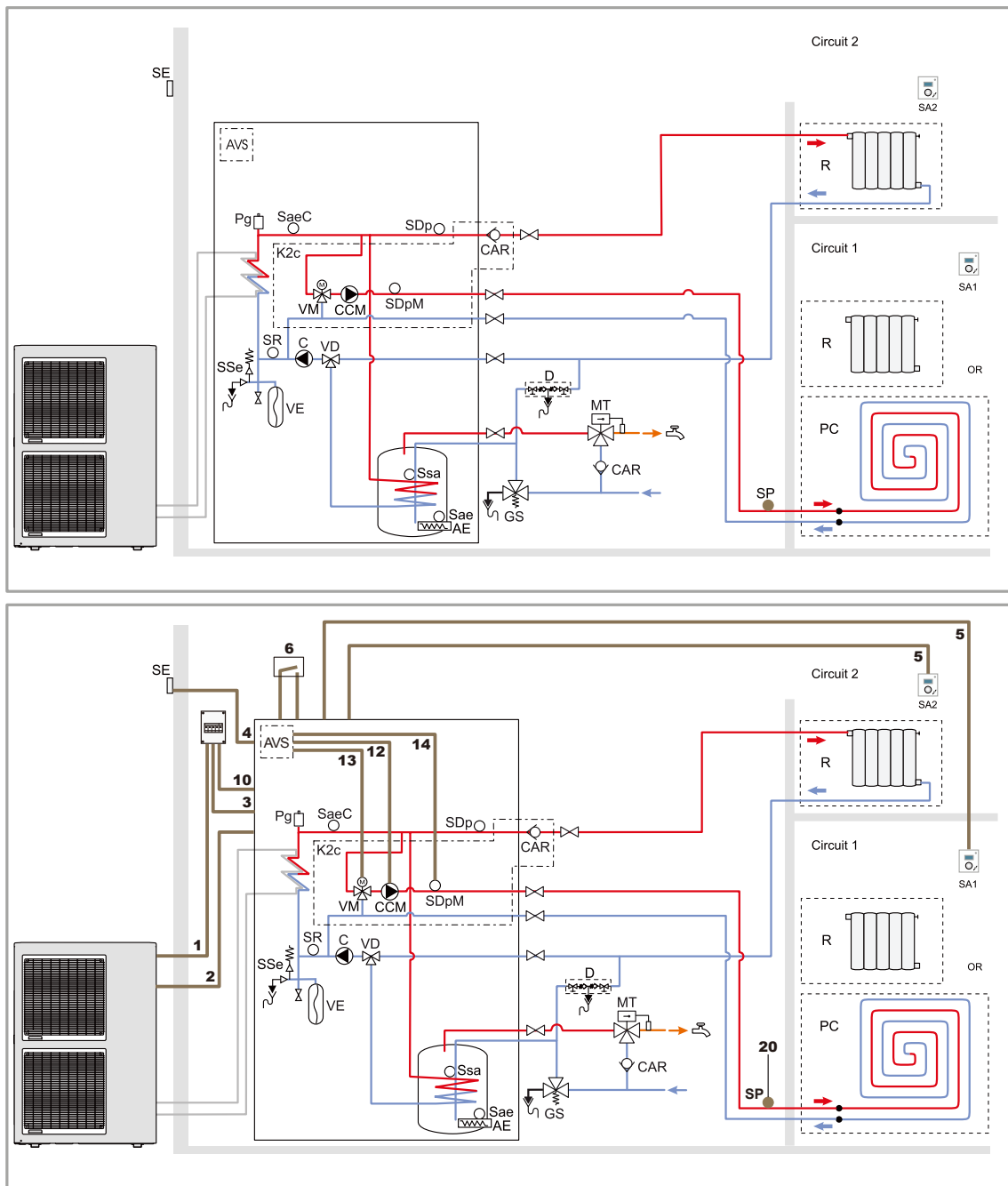
SDp1 - Flow sensor, Circuit 1

SE - Outdoor sensor

SP - Heated floor thermal safety fuse

VM - Mixer valve

■ SPLIT INTEGRATED DHW TYPE



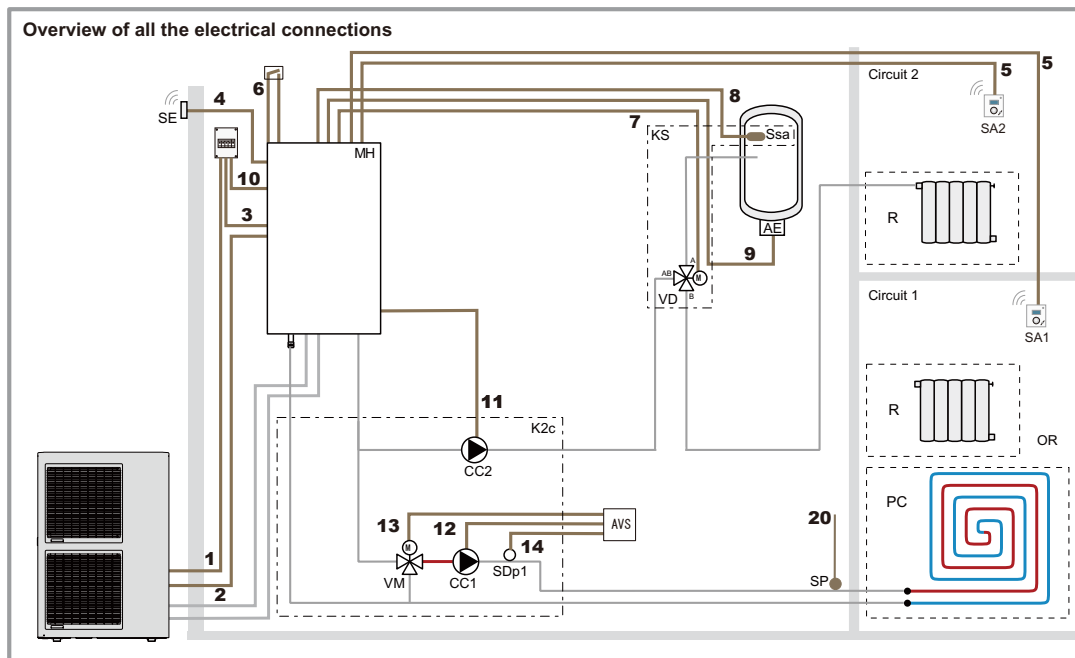
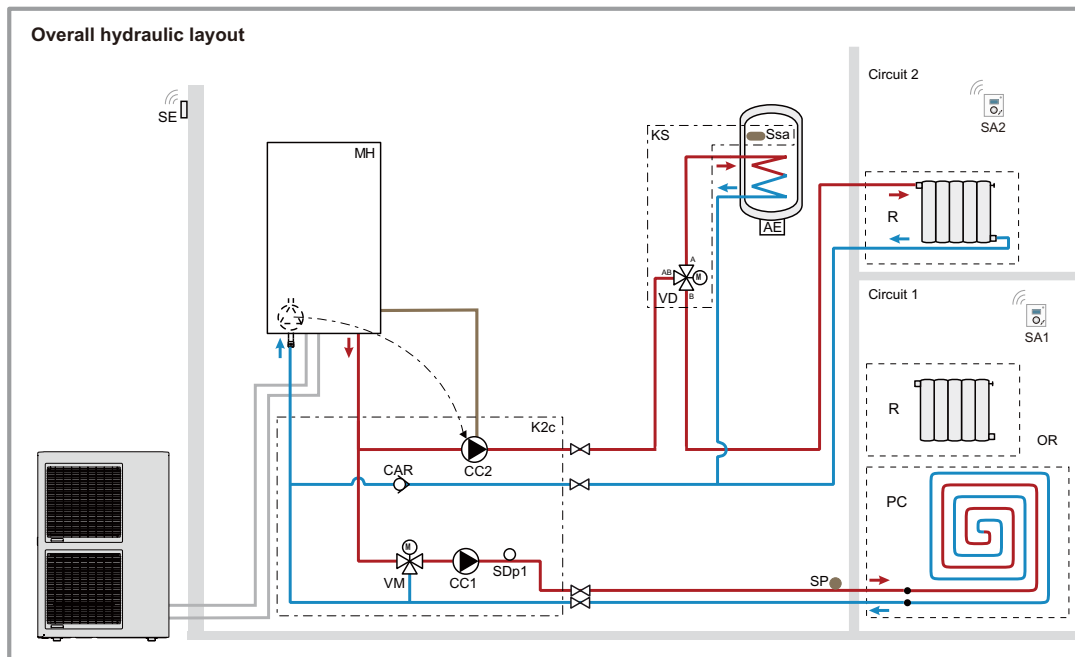
Legend

AE - Back-up DHW	K2c - 2nd circuit kit	Sae - Temperature safety of domestic electrical back-up	SR - Return sensor
AVS - Extension card, 2 circuits	MT - Thermostatic mixer valve	SaeC - Temperature safety (option heating back-up option)	Ssa - DHW sensor
CAR - Non-return valve	PC - Floor heating system	SDp - Flow sensor	Sse - Safety valve
C - Heating circulation pump	PG - Bleeder valve	SDpM - Mixed circuit output sensor	VD - Distribution valve
D - Shut-off	R - Radiators	SE - Outdoor sensor	VE - Expansion vessel
CCM - Mixed-circuit heat pump	SA1 - Room thermostat circuit 1 (Option)	SP - Heated floor thermal safety fuse	VM - Mixer valve
GS - Safety unit	SA2 - Room thermostat circuit 2 (Option)		

1- Power supply to the outdoor unit.(Electrical connections on the outdoor unit side)
 2- Inter connection between the outdoor unit and the indoor unit.
 3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.
 4- Outdoor sensor.
 5- Room thermostat and/or remote controller.
 6- Contract with power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 10-Connect the electrical power supply for the domestic water back-up to the electric panel.
 12-Connect the circulation pump CCM to the regulation extension kit.
 13-Connect the mixer valve to the regulation extension kit.
 14-Connect the flow sensor circuit1 to the regulation extension kit.
 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-4. 2-HEATING CIRCUITS AND DHW TANK

■ SPLIT TYPE



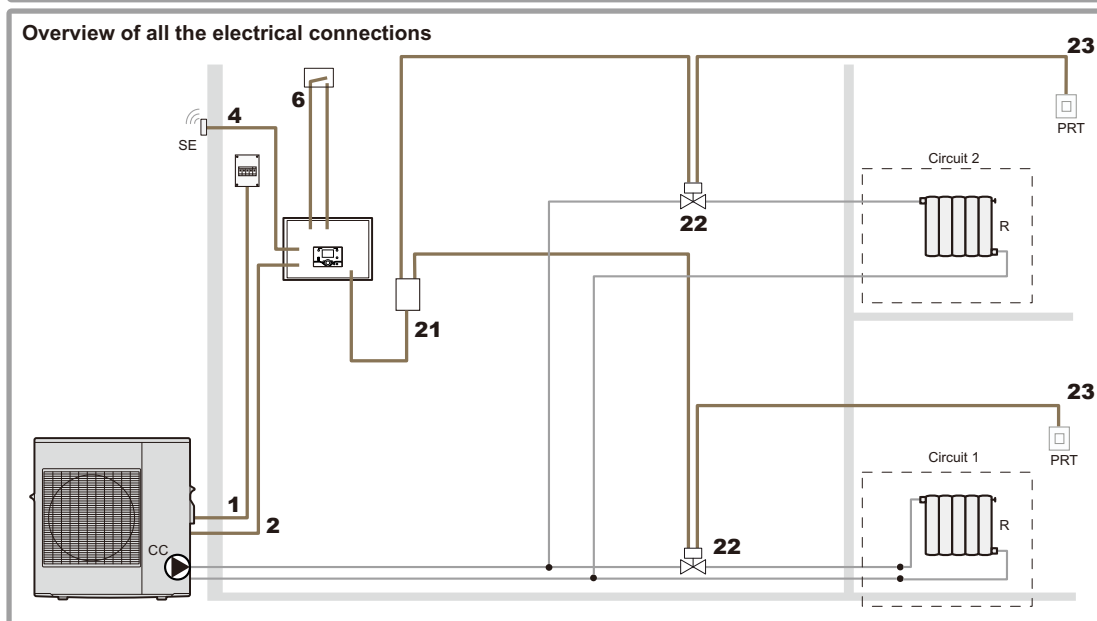
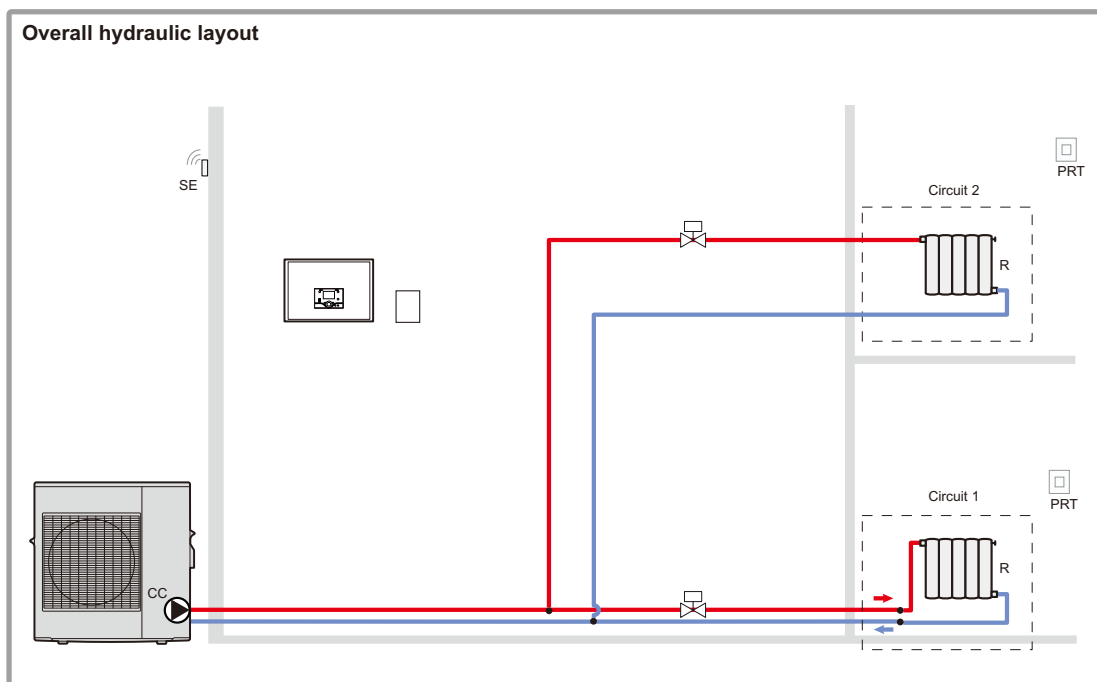
Legend

AE - Electric back-up	KS - DHW kit	SSa - DHW sensor
AVS - Regulation extension kit	MH - Indoor unit	SE - Outdoor sensor
CAR - Non-return valve	PC - Floor heating system	TA - Boiler thermostat
CC1 - Heating circulation pump, Circuit 1	R - Radiators	SP - Heated floor thermal safety fuse
CC2 - Heating circulation pump, Circuit 2	SA1 - Room thermostat, Circuit 1 (option)	VD - Distribution valve
K2c - 2nd circuit kit	SA2 - Room thermostat, Circuit 2 (option)	VM - Mixer valve
KR - Boiler connection kit	SDp1 - Flow sensor, Circuit 1	

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 7- Connect the directional valve to the heat pump's regulator.
- 8- Connect the domestic water sensor to the heat pump's regulator.
- 9- Connect the back-up resistance to the electric panel.
- 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
- 11- Circulation pump HC2
- 12- Connect the circulation pump HC1 to the regulation extension kit.
- 13- Connect the mixer valve to the regulation extension kit.
- 14- Connect the flow sensor circuit1 to the regulation extension kit.
- 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-5. 2-HEATING CIRCUITS WITH ZONE VALVE

■ MONOBLOC TYPE



Legend

CC - Heating circulation pump

SE - Outdoor sensor

1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)

2- Inter-connection between the outdoor unit and the indoor unit.

4- Outdoor sensor.

6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.

21- Zone control kit

22- Zone valve with auxiliary switch

23- Programable room thermostat

PRT - Programable room thermostat

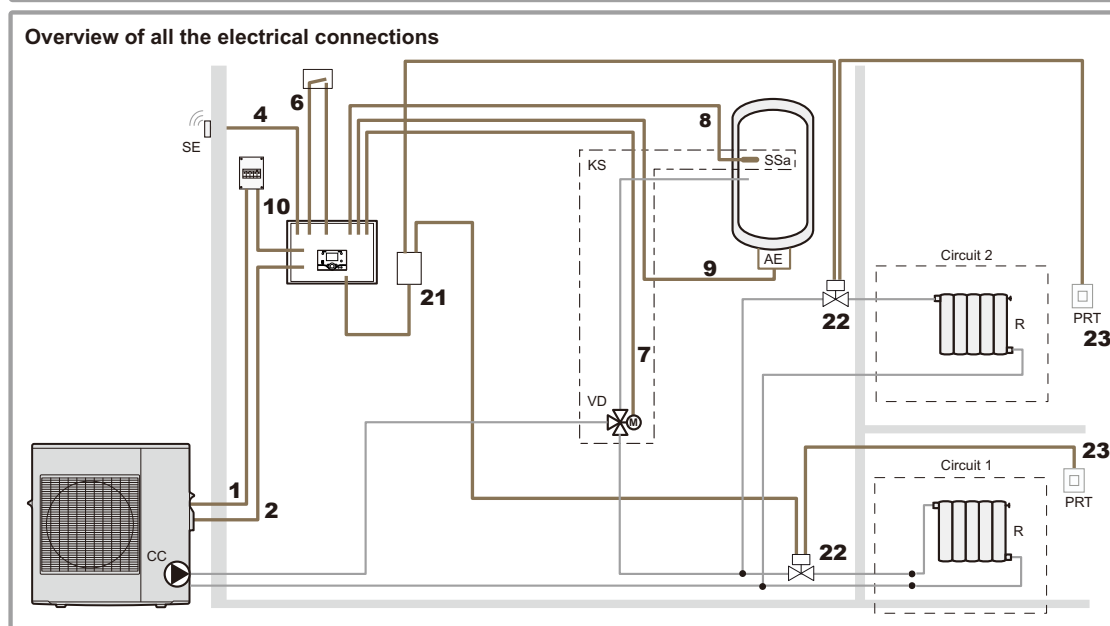
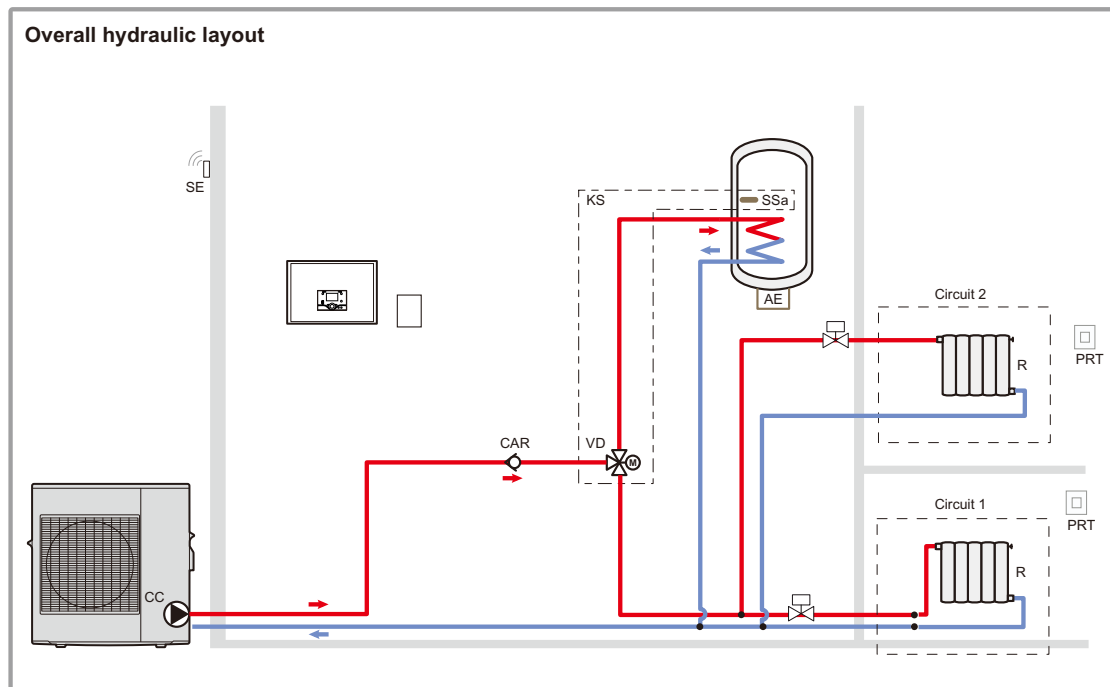
R - Radiators

OPTIONAL
PARTS

OPTIONAL
PARTS

2-6. 2-HEATING CIRCUITS WITH ZONE VALVE AND DHW TANK

■ MONOBLOC TYPE



Legend

CAR - Non-return valve
AE - Electric back-up
CC - Heating circulation pump
KS - DHW kit

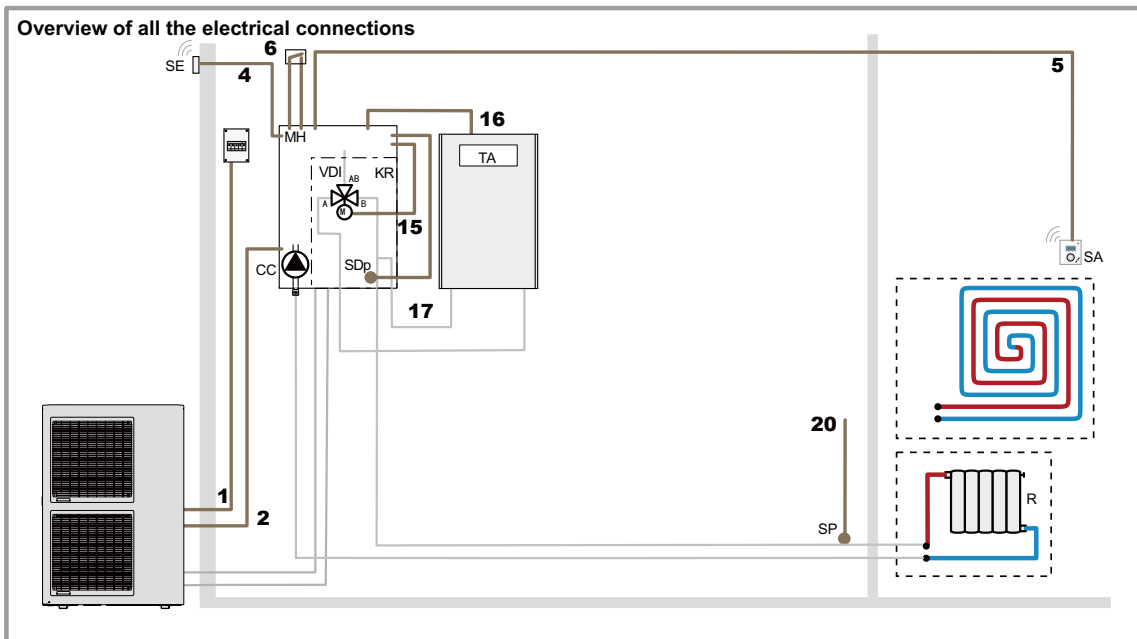
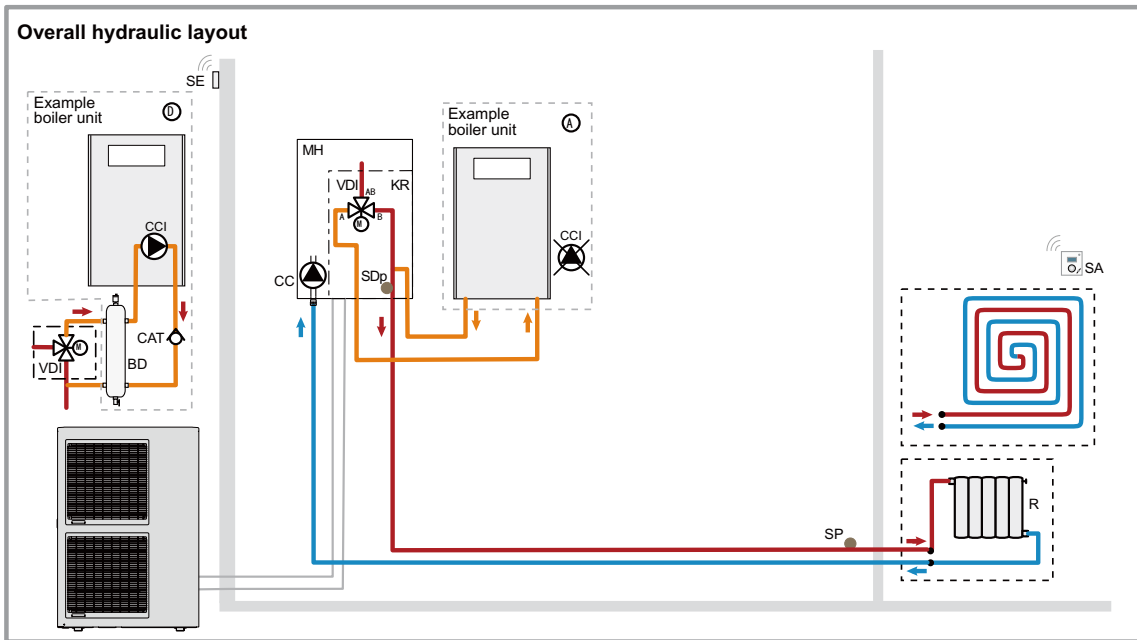
R - Radiators
PRT - Programable room thermostat
SE - Outdoor sensor

SSa - DHW sensor
VD - Distribution valve

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 7- Connect the directional valve to the heat pump's regulator.
- 8- Connect the domestic water sensor to the heat pump's regulator.
- 9- Connect the back-up resistance to the electric panel.
- 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
- 21- Zone control kit
- 22- Zone valve with auxiliary switch
- 23- Programable room thermostat

2-7. BOILER CONNECTION AND 1-HEATING CIRCUIT

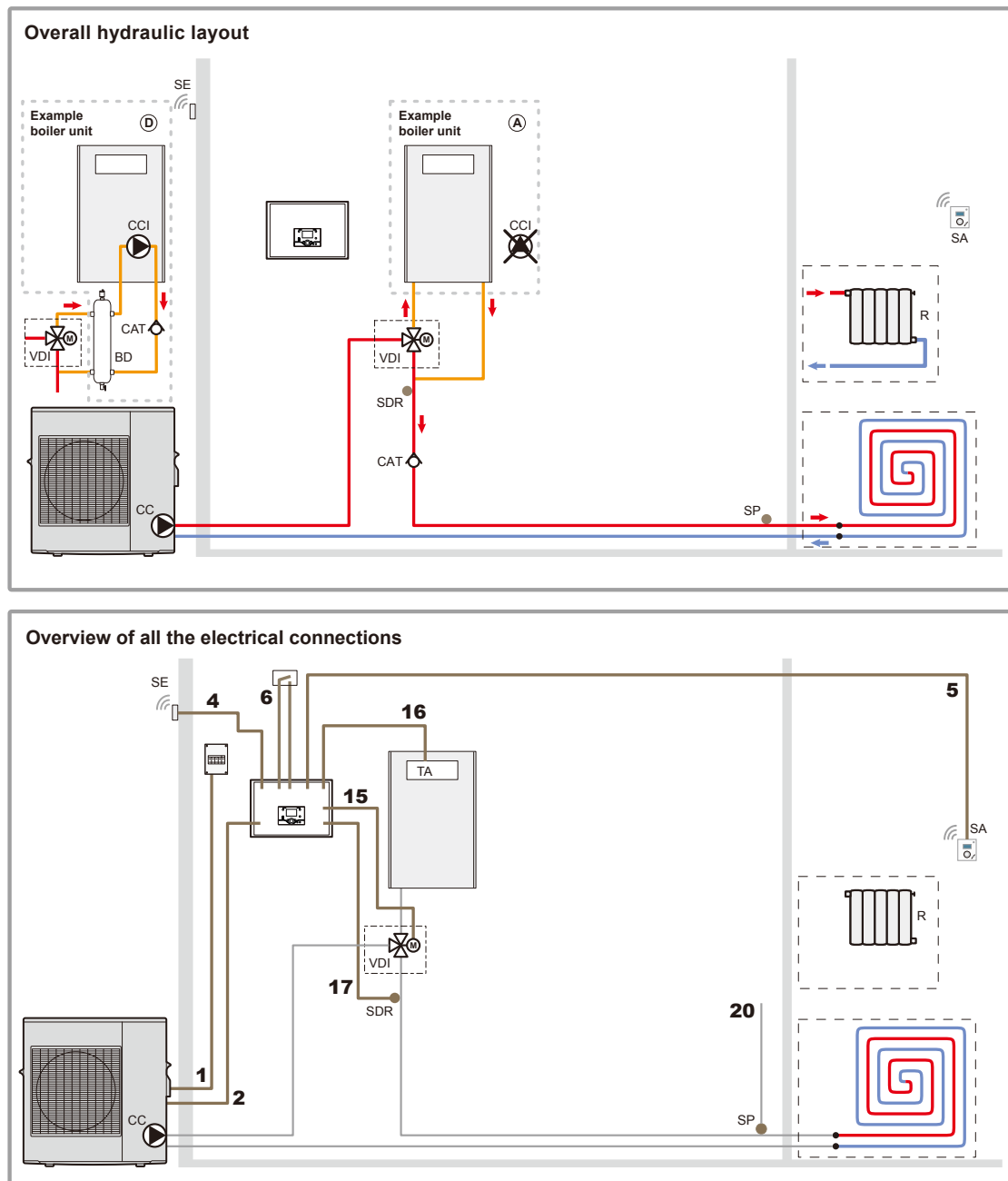
■ SPLIT TYPE



Legend

- | | | |
|--|--|--|
| BD - Disconnection bottle | MH - Indoor unit | SP - Heated floor thermal safety fuse |
| CAT - Anti-gravity feed valve | R - Radiators (or fan convectors) | TA - Boiler room thermostat terminals |
| CCI - Heating system circulation pump built into the boiler | SA - Room thermostat or Roomcontrol unit (option) | VDI - Distribution valve (deviation boiler) |
| CC - Heating circulation pump | SE - Outdoor sensor | |
| KR - Boiler connection kit | SDp - Flow sensor | |
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
 2- Inter-connection between the outdoor unit and the indoor unit.
 4- Outdoor sensor.
 5- Room thermostat and/or remote controller.
 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 15- Connect the distribution valve to the heat pump's regulator.
 16- Connect the boiler control to the heat pump's regulator.
 17- Flow sensor("connection"position).
 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

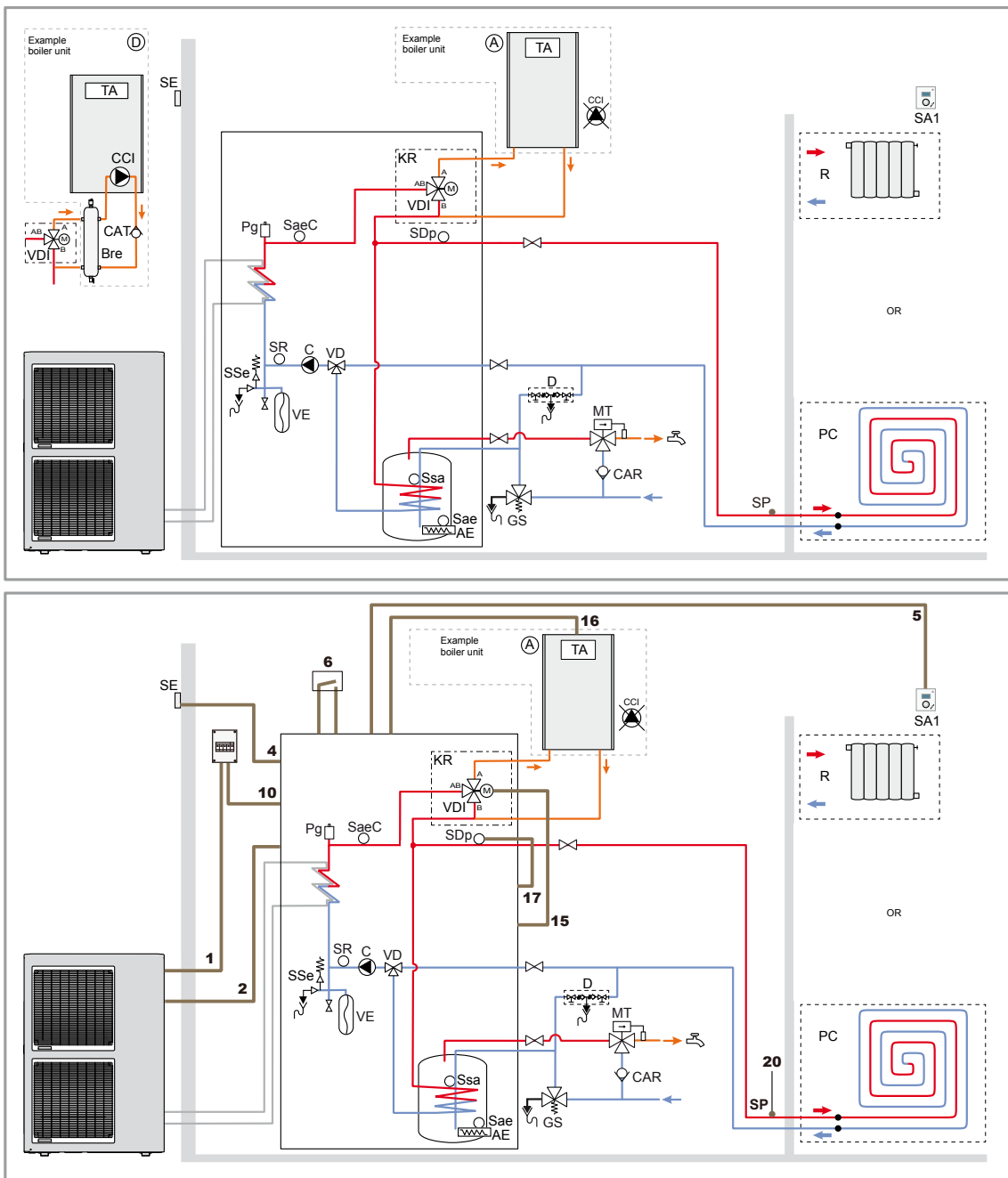
MONOBLOC TYPE



Legend

- | | | |
|--|--|--|
| BD - Disconnection bottle | SA - Room thermostat (option) | TA - Boiler room thermostat terminals |
| CAT - Anti-gravity feed valve | SE - Outdoor sensor | VDI - Distribution valve (deviation boiler) |
| CCI - Heating system circulation pump built into the boiler | SDR - Boiler connection valve flow sensor | CC - Heating circulation pump |
| CC - Heating circulation pump | SP - Heated floor thermal safety fuse | |
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
 - 2- Inter-connection between the outdoor unit and the indoor unit.
 - 4- Outdoor sensor.
 - 5- Room thermostat and/or remote controller.
 - 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 - 15- Connect the distribution valve to the electric panel.
 - 16- Connect the boiler control to the electric panel.
 - 17- Connect the boiler connection valve flow sensor to the heat pump's regulator.
 - 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

■ SPLIT INTEGRATED DHW TYPE



Legend

AE - Hot water electrical back-up	D - Shut-off	Sae - Temperature safety of domestic electrical back-up	Ssa - DHW sensor
BD - Disconnection bottle	GS - Safety unit	SaeC - Temperature safety (option heating back-up option)	TA - Boiler room thermostat terminals
C - Heating circulation pump	KR - Boiler connection kit	SDp - Flow sensor	VD - Distribution valve
CAR - Non-return valve	MT - Thermostatic mixer valve	SE - Outdoor sensor	VDI - Distribution valve (deviation boiler)
CAT - Anti-gravity feed valve	PC - Floor heating system	SP - Heated floor thermal safety fuse	VE - Expansion vessel
CCI - Heating system circulation pump built into the boiler	PG - Bleeder valve	SR - Return sensor	
CCM - Mixed-circuit heat pump	SA1 - Room thermostat circuit 1 (Option)		

1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)

2- Inter connection between the outdoor unit and the indoor unit.

4- Outdoor sensor.

5- Room thermostat and/or remote controller.

6- Contract with power provider: Connect the "Power Provider" contact to the heat pump's regulator.

10- Connect the electrical power supply for the domestic water back-up to the electric panel.

15- Connect the distribution valve to the heat pump's regulator.

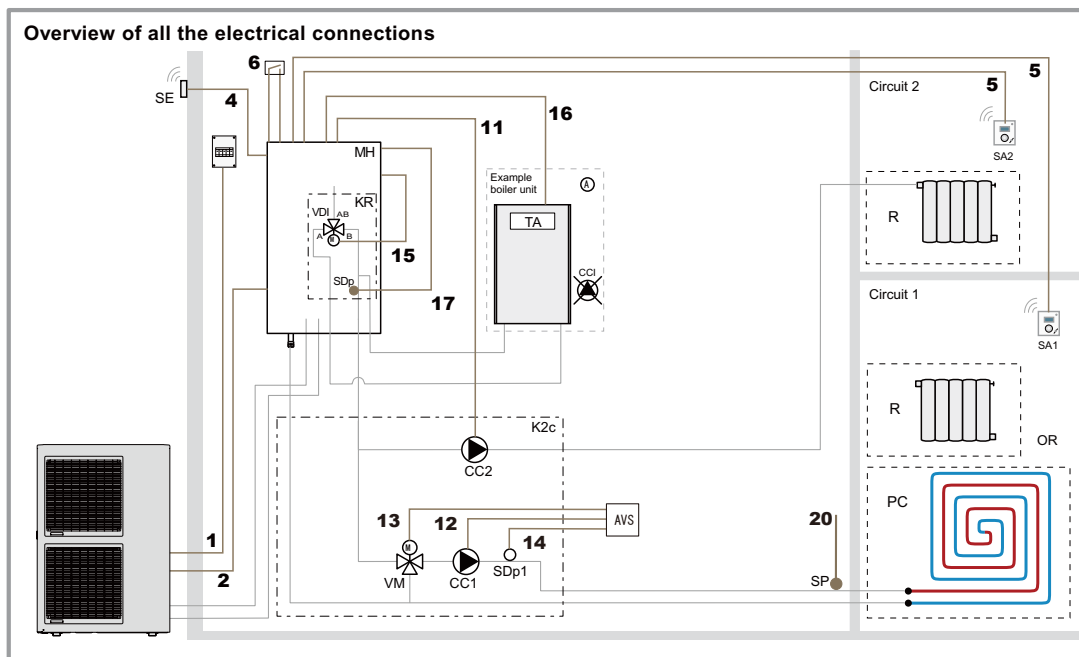
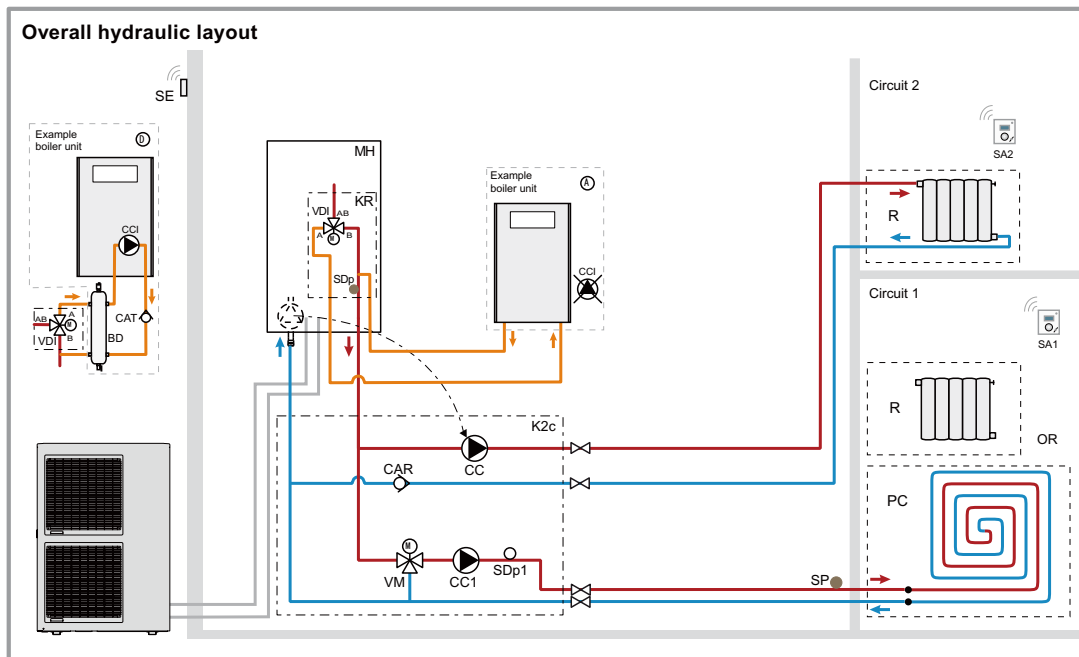
16- Connect the boiler control to the heat pump's regulator.

17- Flow sensor ("connection" position).

20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-8. BOILER CONNECTION AND 2-HEATING CIRCUITS

■ SPLIT TYPE



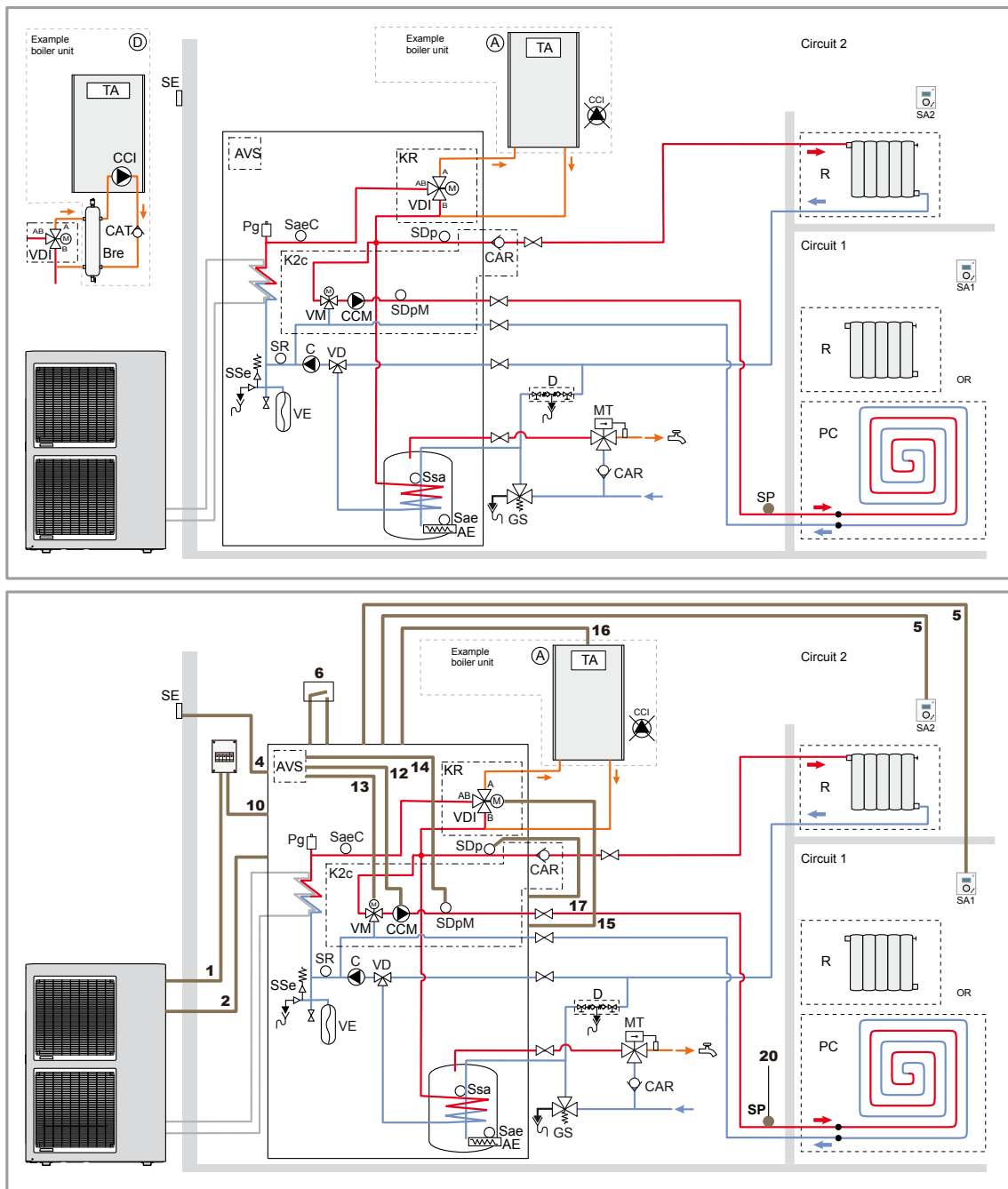
Legend

- | | | |
|--|---|--|
| AVS - Regulation extension kit | K2c - 2nd circuit kit | SDp1 - Flow sensor circuit 1 |
| BD - Disconnection bottle | KR - Boiler connection kit | SDp - Flow sensor |
| CAR - Non-return valve | MH - Indoor unit | SE - Outdoor sensor |
| CAT - Anti-gravity feed valve | PC - Floor heating system | TA - Boiler thermostat |
| CCI - Heating system circulation pump built into the boiler | R - Radiators | SP - Heated floor thermal safety fuse |
| CC1 - Heating circulation pump circuit 1 | SA1 - Room thermostat circuit 1 (option) | VDI - Distribution valve (deviation boiler) |
| CC2 - Heating circulation pump circuit 2 | SA2 - Room thermostat circuit 2 (option) | VM - Mixer valve |
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
 - 2- Inter-connection between the outdoor unit and the indoor unit.
 - 4- Outdoor sensor.
 - 5- Room thermostat and/or remote controller.
 - 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 - 11- Circulation pump HC2
 - 12- Connect the circulation pump HC1 to the regulation extension kit.
 - 13- Connect the mixer valve to the regulation extension kit.
 - 14- Connect the flow sensor circuit1 to the regulation extension kit.
 - 15- Connect the distribution valve to the heat pump's regulator.
 - 16- Connect the boiler control to the heat pump's regulator.
 - 17- Flow sensor("connection"position).
 - 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

OPTIONAL PARTS

OPTIONAL PARTS

■ SPLIT INTEGRATED DHW TYPE



Legend

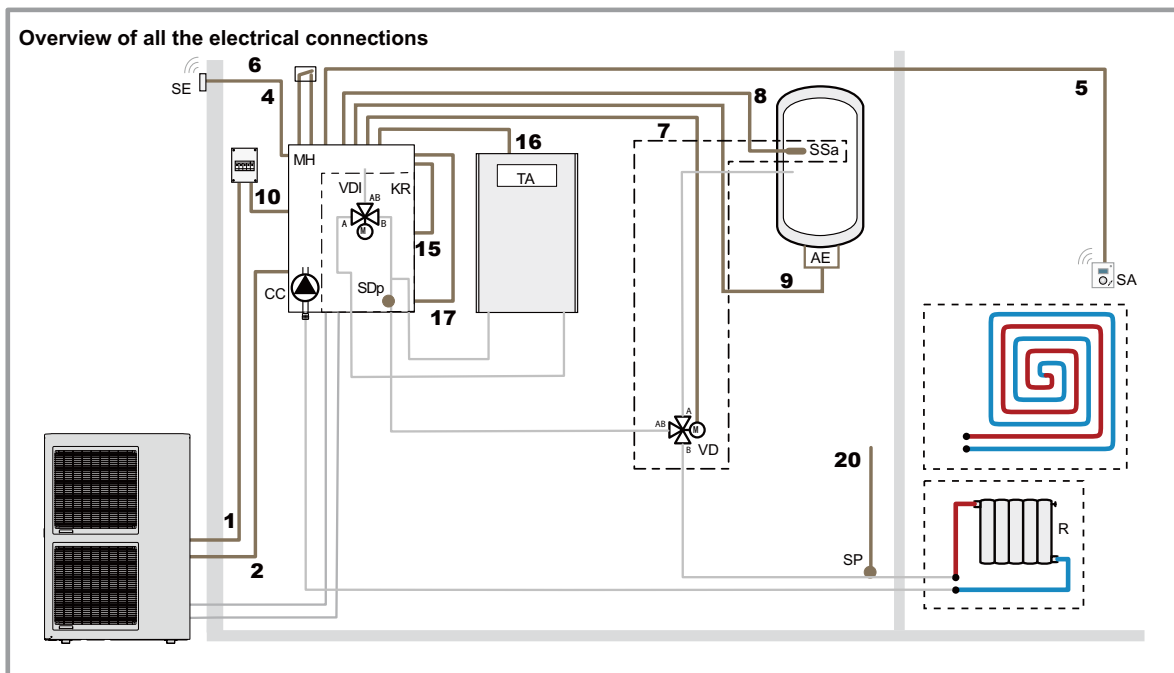
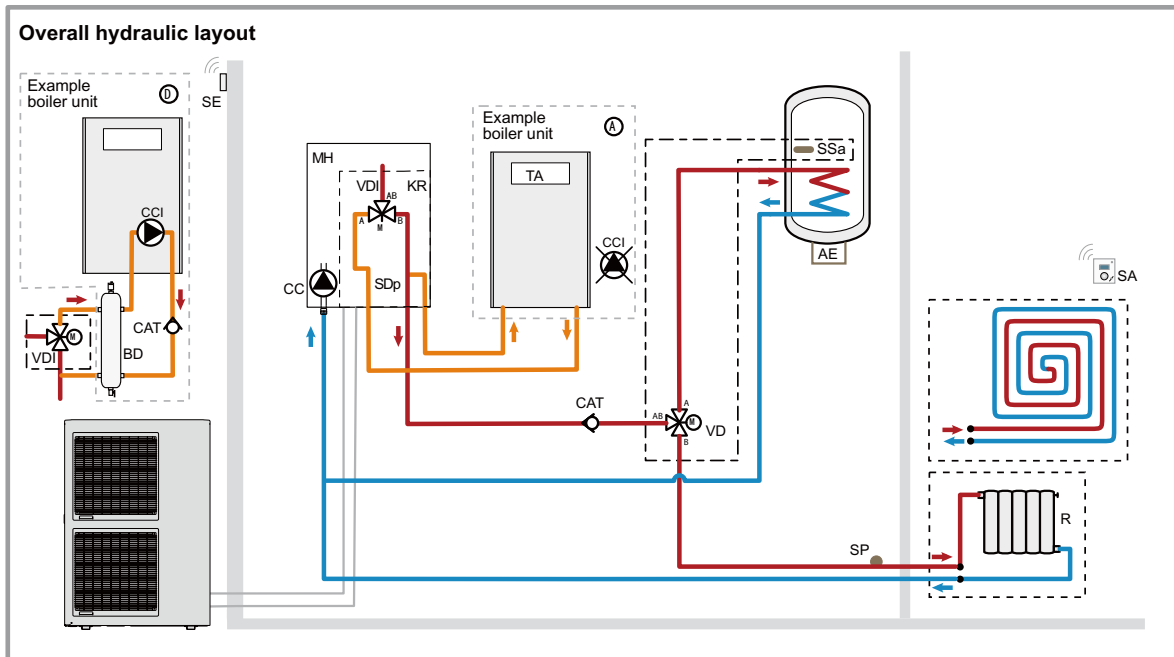
AE - Hot water electrical back-up	D - Shut-off	SA2 - Room thermostat circuit 2 (Option)	SR - Return sensor
AVS - Extension board, 2 circuits	GS - Safety unit	Sae - Temperature safety of domestic electrical back-up	Ssa - DHW sensor
BD - Disconnection bottle	K2c - 2nd circuit kit	SaeC - Temperature safety (option heating back-up option)	TA - Boiler room thermostat terminals
C - Heating circulation pump	KR - Boiler connection kit	SDp - Flow sensor	VD - Distribution valve
CAR - Non-return valve	MT - Thermostatic mixer valve	SDpM - Mixed-circuit initial sensor	VDI - Distribution valve (deviation boiler)
CAT - Anti-gravity feed valve	PC - Floor heating system	SE - Outdoor sensor	VE - Expansion vesse
CCI - Heating system circulation pump built into the boiler	R - Radiators	SP - Heated floor thermal safety fuse	VM - Mixer valve
CCM - Mixed-circuit heat pump	SA1 - Room thermostat circuit 1 (Option)		

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter connection between the outdoor unit and the indoor unit.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 10- Connect the electrical power supply for the domestic water back-up to the electric panel.

- 12- Connect the circulation pump CCM to the regulation extension kit.
- 13- Connect the mixer valve to the regulation extension kit.
- 14- Connect the flow sensor circuit1 to the regulation extension kit.
- 15- Connect the distribution valve to the heat pump's regulator.
- 16- Connect the boiler control to the heat pump's regulator.
- 17- Flow sensor ("connection" position).
- 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

2-9. BOILER CONNECTION, 1-HEATING CIRCUIT AND DHW TANK

■ SPLIT TYPE

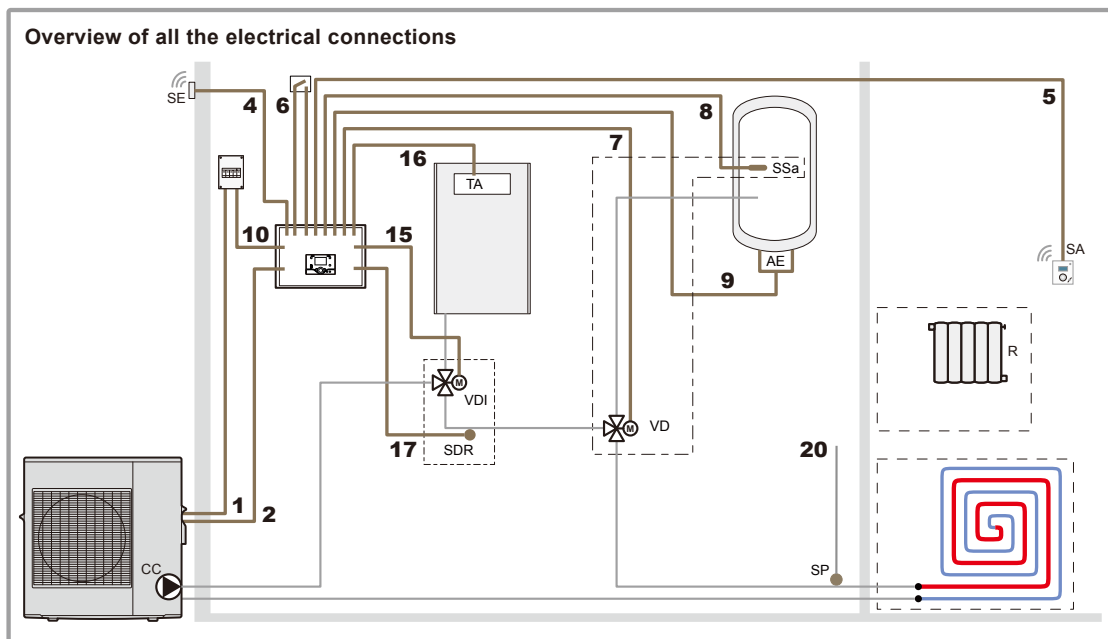
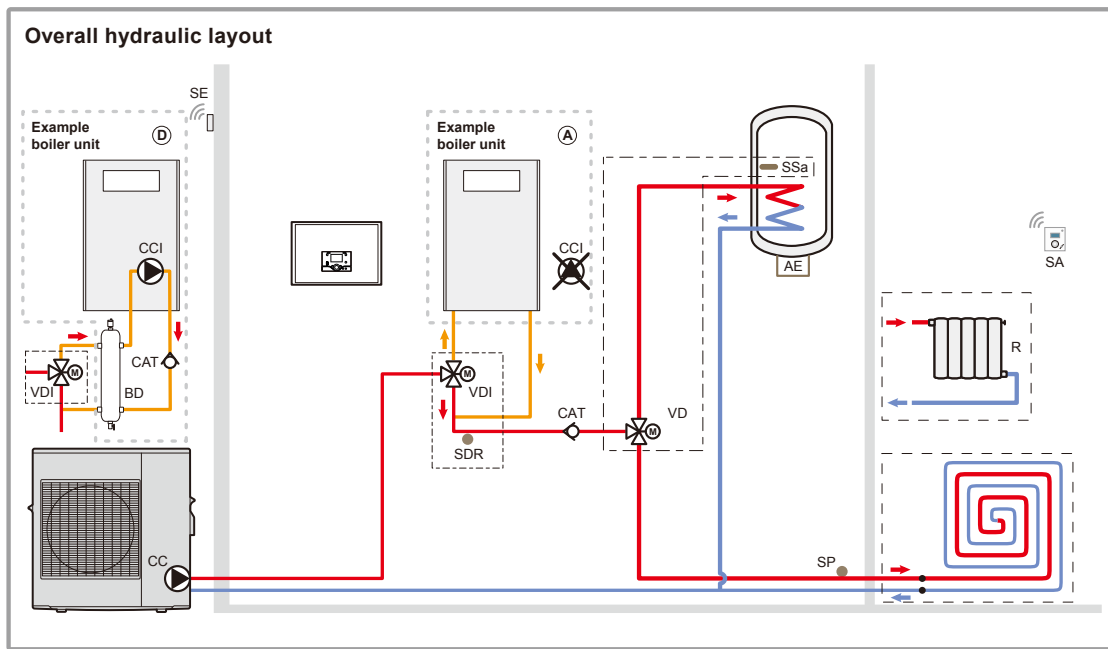


Legend

AE - Electric back-up	MH - Indoor unit	SSa - DHW sensor
BD - Disconnection bottle	R - Radiators (or fan convectors)	SP - Heated floor thermal safety fuse
CAT - Anti-gravity feed valve	SA - Room thermostat or Room control unit (option)	TA - Boiler room thermostat terminals
CCI - Heating system circulation pump built into the boiler	SE - Outdoor sensor	VD - Distribution valve
CC - Heating circulation pump	SDp - Flow sensor	VDI - Distribution valve (deviation boiler)
KR - Boiler connection kit		

- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 4- Outdoor sensor.
- 5- Room thermostat and/or remote controller.
- 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
- 7- Connect the directional valve to the heat pump's regulator.
- 8- Connect the domestic water sensor to the heat pump's regulator.
- 9- Connect the back-up resistance to the electric panel.
- 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
- 15- Connect the distribution valve to the heat pump's regulator.
- 16- Connect the boiler control to the heat pump's regulator.
- 17- Flow sensor ("connection" position).
- 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

MONOBLOC TYPE



Legend

- | | | |
|--|--|--|
| AE - Electric back-up | SA - Room thermostat (option) | TA - Boiler room thermostat terminals |
| BD - Disconnection bottle | SE - Outdoor sensor | VD - Distribution valve |
| CAT - Anti-gravity feed valve | SDR - Boiler connection valve flow sensor | VDI - Distribution valve (deviation boiler) |
| CCI - Heating system circulation pump built into the boiler | SSa - DHW sensor | |
| CC - Heating circulation pump | SP - Heated floor thermal safety fuse | |
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
 - 2- Inter-connection between the outdoor unit and the indoor unit.
 - 4- Outdoor sensor.
 - 5- Room thermostat and/or remote controller.
 - 6- Contract with the power provider: Connect the "Power Provider" contact to the heat pump's regulator.
 - 7- Connect the directional valve to the heat pump's regulator.
 - 8- Connect the domestic water sensor to the heat pump's regulator.
 - 9- Connect the back-up resistance to the electric panel.
 - 10- Connect the electrical power supply for the domestic water back-up to the electrical panel.
 - 15- Connect the distribution valve to the electric panel.
 - 16- Connect the boiler control to the electric panel.
 - 17- Connect the boiler connection valve flow sensor to the heat pump's regulator.
 - 20- The installer is responsible for connecting the heated floor's safety system. Thermal safety will stop the heat pump if the temperature in the floor is too high.

