

WATERSTAGE™

OPTIONAL PARTS

CONTENTS

OPTIONAL PARTS

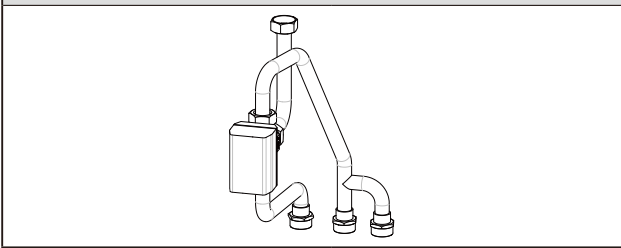
1. OPTIONAL PARTS LIST	OP01 - 01
1-1. LIST	OP01 - 01
1-2. CONNECTION LIST	OP01 - 04
2. CONNECTION CONFIGURATION EXAMPLE	OP01 - 07
2-1. 1-HEATING CIRCUIT	OP01 - 07
2-2. 1-HEATING CIRCUIT AND DHW TANK	OP01 - 10
2-3. 2-HEATING CIRCUITS	OP01 - 12
2-4. 2-HEATING CIRCUITS AND DHW TANK	OP01 - 14
2-5. BOILER CONNECTION AND 1-HEATING CIRCUIT	OP01 - 15
2-6. BOILER CONNECTION AND 2-HEATING CIRCUITS	OP01 - 18
2-7. BOILER CONNECTION, 1-HEATING CIRCUIT AND DHW TANK	OP01 - 20
2-8. BOILER CONNECTION, 2-HEATING CIRCUITS AND DHW TANK	OP01 - 22

1. OPTIONAL PARTS LIST

1-1. LIST

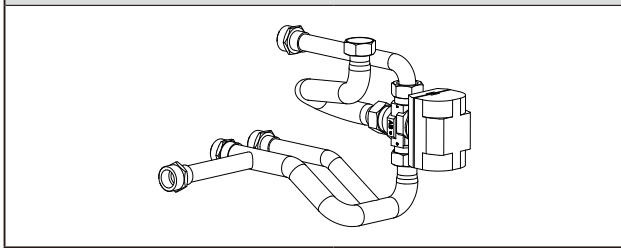
Boiler connection kit

Model: UTW-KBSXD



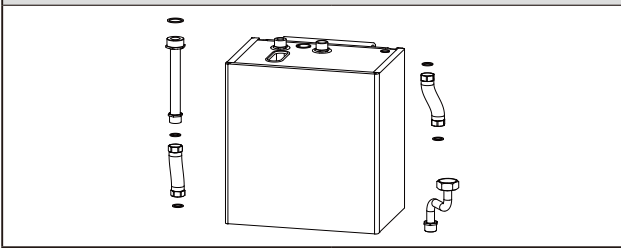
Boiler connection kit

Model: UTW-KBDXD



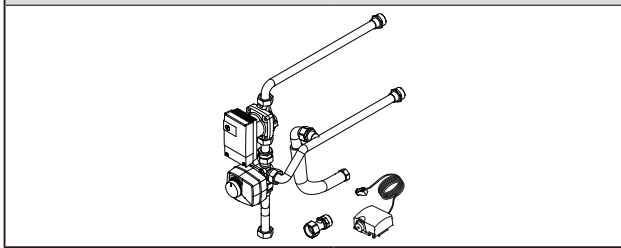
2nd circuit kit

Model: UTW-KZSXD
UTW-KZSXE



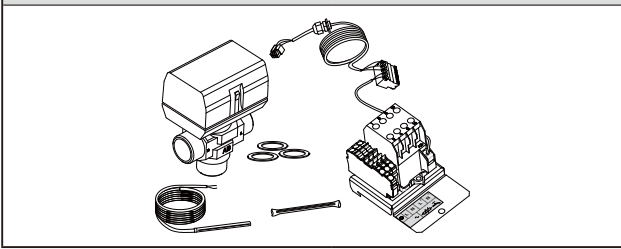
2nd circuit kit

Model: UTW-KZDXD
UTW-KZDXE



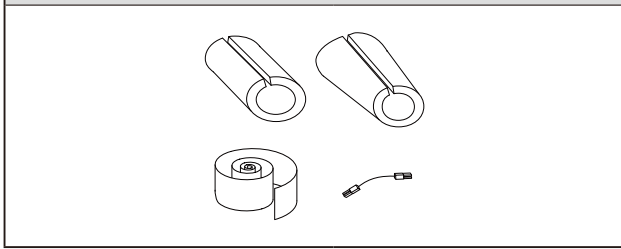
DHW kit

Model: UTW-KDWXD



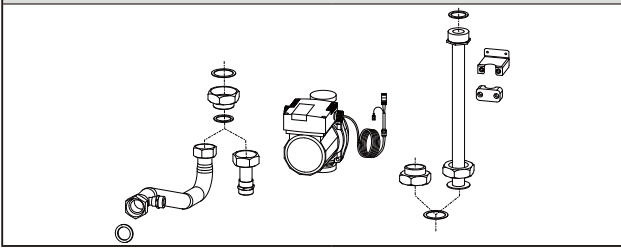
Cooling kit

Model: UTW-KCLXD



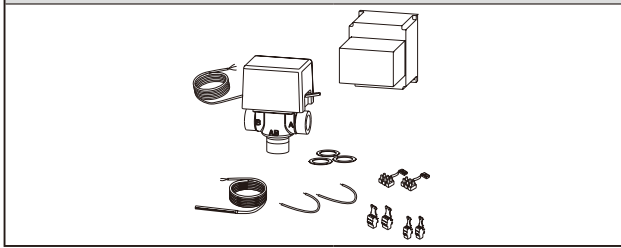
High flow rate circulating pump kit

Model: UTW-PHFXD



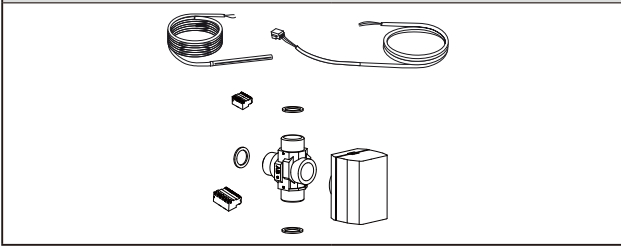
Swimming pool kit

Model: UTW-KSPXA




Swimming pool kit

Model: UTW-KSPXD



Heat exchanger for Swimming pool


Model: UTW-ES PXA




OPTIONAL
PARTS


OPTIONAL
PARTS

Room thermostat Model: UTW-C55XA



Room thermostat Model: UTW-C58XD


 Wireless



Remote control
Model: UTW-C75XA, UTW-C75XA-E





Remote control (Wireless)
Model: UTW-C78XD, UTW-C78XD-E



 Wireless




DHW Tank Model: UTW-T20XA, UTW-T30XA


200L model  300L model 

DHW Tank Model: UTW-T30XD







RF outdoor sensor kit Model: UTW-MOSXD


 Wireless




RF module Model: UTW-M60XD, UTW-MRCXD

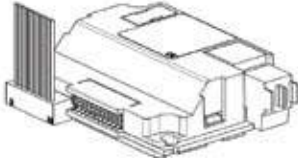
 UTW-M60XD  UTW-MRCXD
 for X60-Port for X86 or X150-Port

Balancing vessel Model: UTW-TEVXA



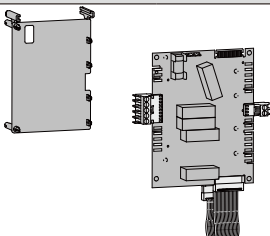
LPB clip Model: UTW-KL1XD



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

UTW-KWSXD  UTW-KW1XD
UTW-KW4XD 

Regulation extension kit Model: UTW-KREXD



Mode exchange kit
Model: UTY-MEKIT, UTW-KMEXE



Service tool kit
Model: UTW-KSTXD

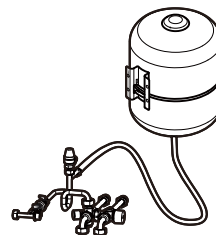


Service tool software
Model: UTW-KPSXD

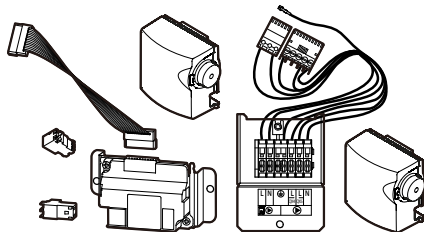


CD-ROM
(Software)

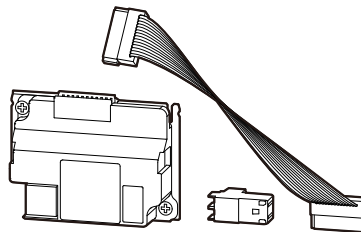
DHW expansion kit
Model: UTW-KDEXE



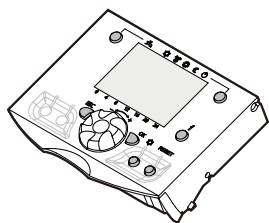
Cascade kit (V2 Master)
Model: UTW-KCMXE



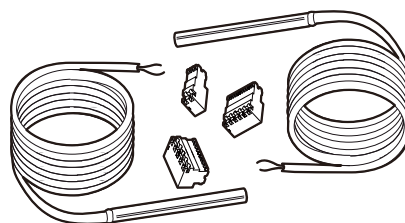
Cascade kit (V2 Slave)
Model: UTW-KCSXE



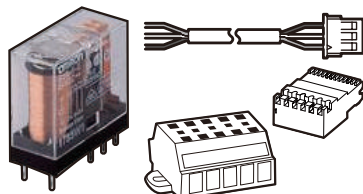
HMI kit
Model: UTW-KHMXE



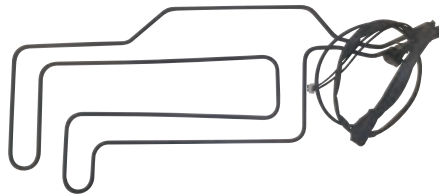
Solar regulation kit
Model: UTW-KSRXE



Low noise kit
Model: UTW-KLNXE



Defrost heater kit
Model: UTW-HAMXE



External connect kit
Model: UTY-XWZXZ2

INPUT
OUTPUT



for
OUTDOOR UNIT

1-2. CONNECTION LIST

●: Available, —: Not available, ○: Standard equipment

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		Comfort series		Comfort series	High power series	
			050DD6	140DC6	160DC9	080LA	080LE	050DD6	140DD6	160DD9
			100DD6			100LA	100LE	100DD6		
HYDRAULIC UNIT	Boiler connection kit	UTW-KBSXD	●	●	●	—	—	—	—	—
		UTW-KBDXD	—	—	—	—	—	●	●	●
	2nd circuit kit	UTW-KZSXD	●	●	●	—	—	—	—	—
		UTW-KZSXE	●	●	●	—	—	—	—	—
		UTW-KZDXD	—	—	—	—	—	●	●	●
		UTW-KZDXE	—	—	—	—	—	●	●	●
	DHW kit	UTW-KDWXA	—	—	—	●	●	○	○	○
		UTW-KDWXD	●	●	●	—	—	○	○	○
	Cooling kit	UTW-KCLXD	●	●	●	○	○	●	●	●
	High flow rate circulating pump kit	UTW-PHFXD	—	●	●	—	—	—	●	●
	Swimming pool kit	UTW-KSPXA	●	●	●	●	●	●	●	●
		UTW-KSPXD	●	●	●	—	—	●	●	●
	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	●	●	●	●	●	●	●	●
	DHW Tank	UTW-T20XA	●	●	●	●	●	○	○	○
		UTW-T30XA	●	●	●	●	●	○	○	○
		UTW-T30XD	●	●	●	●	●	○	○	○
		UTW-T30XD	●	●	●	●	●	○	○	○
	RF outdoor sensor kit	UTW-MOSXD	●	●	●	●	●	●	●	●
	RF module	UTW-M60XD	●	●	●	●	●	●	●	●
		UTW-MRCXD	●	●	●	●	●	●	●	●
	Balancing vessel	UTW-TEVXA	●	●	●	●	●	●	●	●
	LPB clip	UTW-KL1XD	●	●	●	—	—	●	●	●
	Web server	UTW-KWSXD	●	●	●	●	●	●	●	●
		UTW-KW1XD	●	●	●	●	●	●	●	●
		UTW-KW4XD	●	●	●	●	●	●	●	●
	Regulation extension kit	UTW-KREXD	●	●	●	—	—	●	●	●
	Mode exchange kit	UTY-MEKIT	—	—	—	●	●	—	—	—
		UTW-KMEXE	●	●	●	●	●	●	●	●

OPTIONAL PARTS

OPTIONAL PARTS

●: Available, —: Not available, O: Standard equipment

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		Comfort series		Comfort series	High power series	
			050DD6	140DC6	160DC9	080LA	080LE	050DD6	140DD6	160DD9
			100DD6			100LA	100LE	100DD6		
HYDRAULIC UNIT	Service tool kit	UTW-KSTXD	●	●	●	●	●	●	●	●
	Service tool software	UTW-KPSXD	●	●	●	●	●	●	●	●
	DHW expansion kit	UTW-KDEXE	—	—	—	—	—	●	●	●
	Cascade kit (V2 Master)	UTW-KCMXE	—	●	●	—	—	—	—	—
			●					—		
	Cascade kit (V2 Slave)	UTW-KCSXE	—	●	●	—	—	—	—	—
			●					—		
	HMI kit	UTW-KHMXE	●	●	●	—	—	●	●	●
	Solar regulation kit	UTW-KSRXE	●	●	●	—	—	—	—	—
	Low noise kit	UTW-KLNXE	—	●	●	—	—	—	●	●
	Defrost heater kit	UTZ-HAMXE	—	—	—	●	●	—	—	—

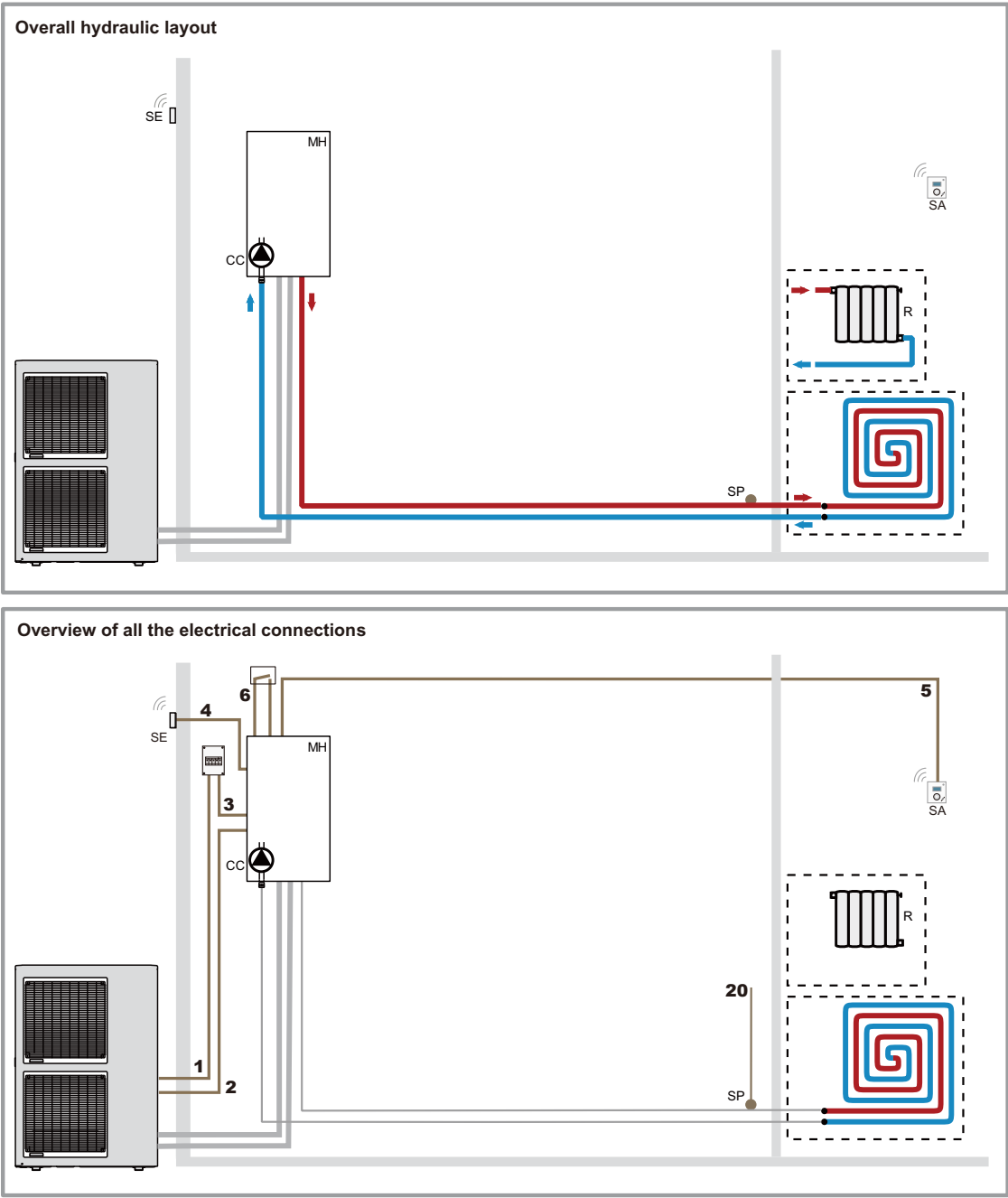
●: Available, —: Not available, O: Standard equipment

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		Comfort series		Comfort series	High power series	
			060LDC	112LCT	112LCT	080LA	080LE	060LDC	112LCT	112LCT
			080LDC	140LCT	140LCT	100LA	100LE	080LDC	140LCT	140LCT
			100LDT		160LCT			100LDT		160LCT
OUTDOOR UNIT	External connect kit	UTY-XWZXZ2	—	●	●	—	—	—	●	●

2. CONNECTION CONFIGURATION EXAMPLE

2-1. 1-HEATING CIRCUIT

■ SPLIT TYPE (WS*A***DD6, WS*G***DC6, WS*K***DC9)



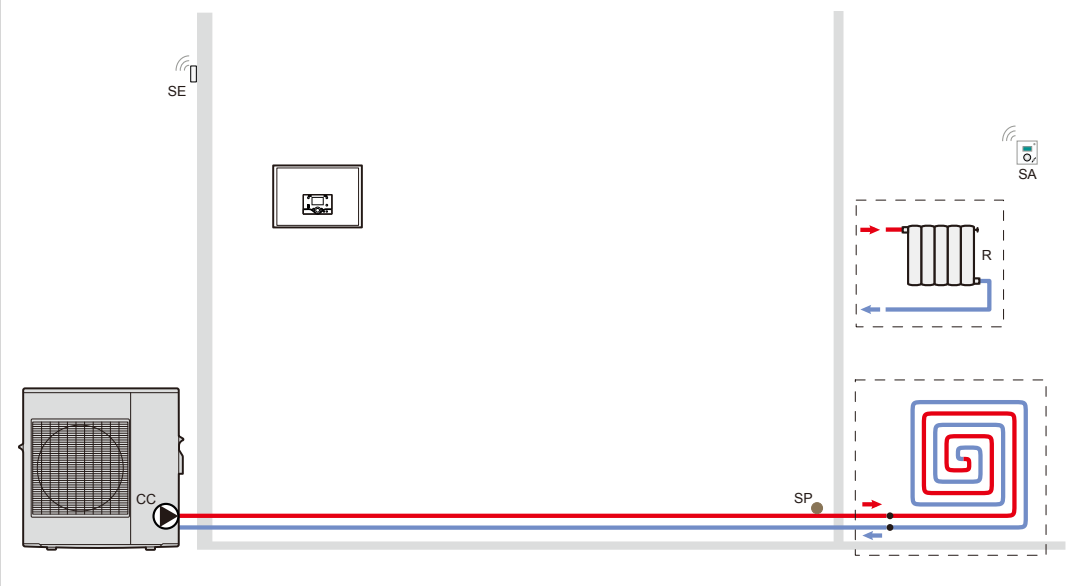
Legend		
CC - Heating circulation pump	R - Radiators	SE - Outdoor sensor
MH - Indoor unit	SA - Room thermostat or Room control unit (option)	SP - Heated floor thermal safety fuse
1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)		
2- Inter-connection between the outdoor 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

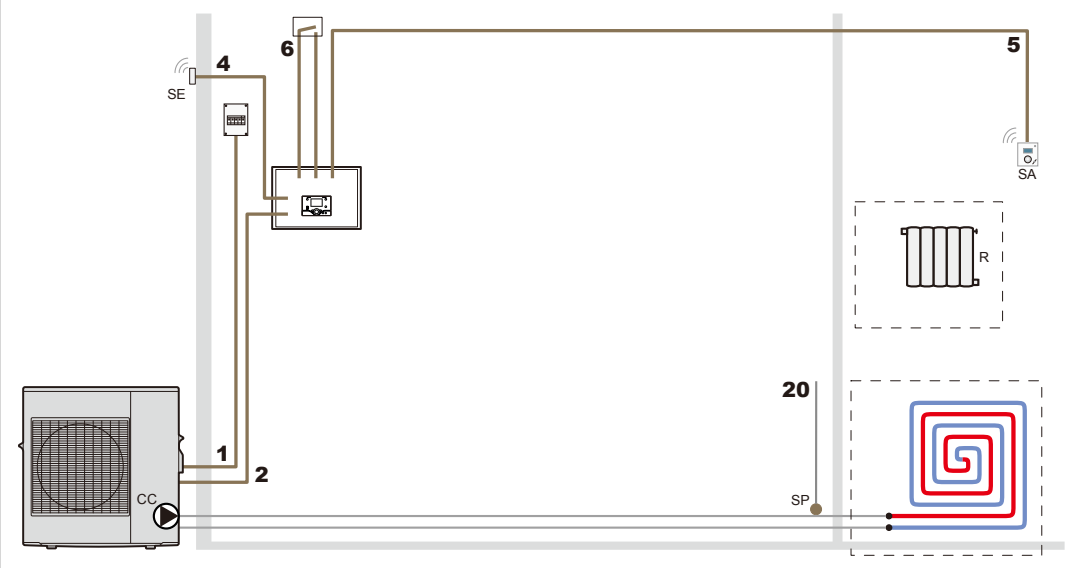
OPTIONAL
PARTS

■ MONOBLOC TYPE

Overall hydraulic layout



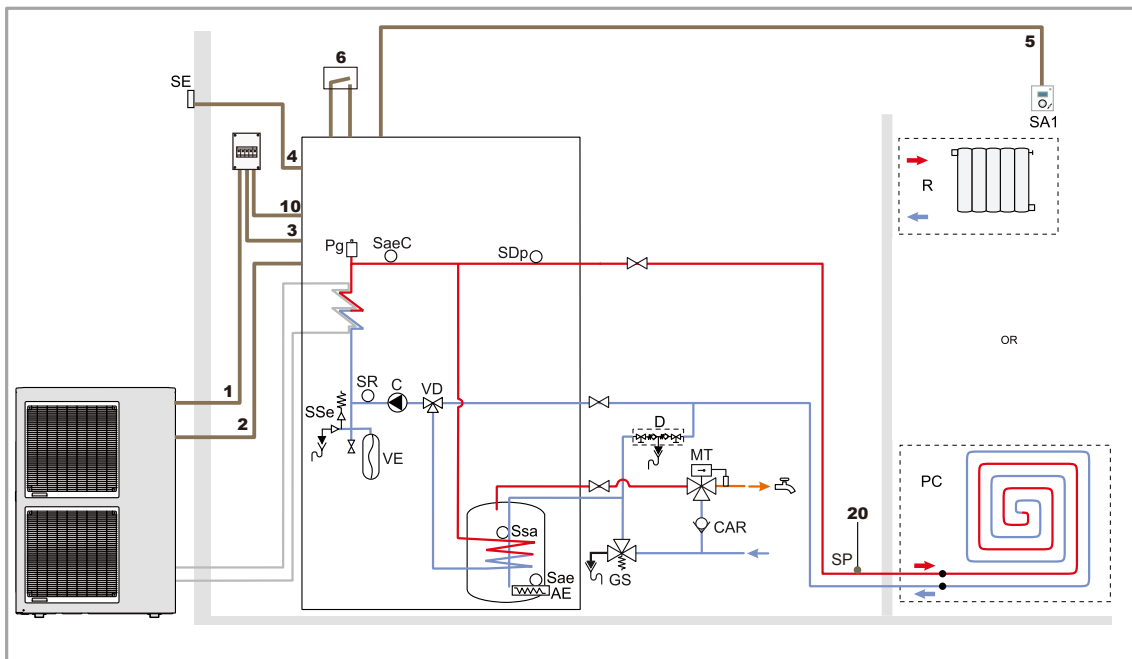
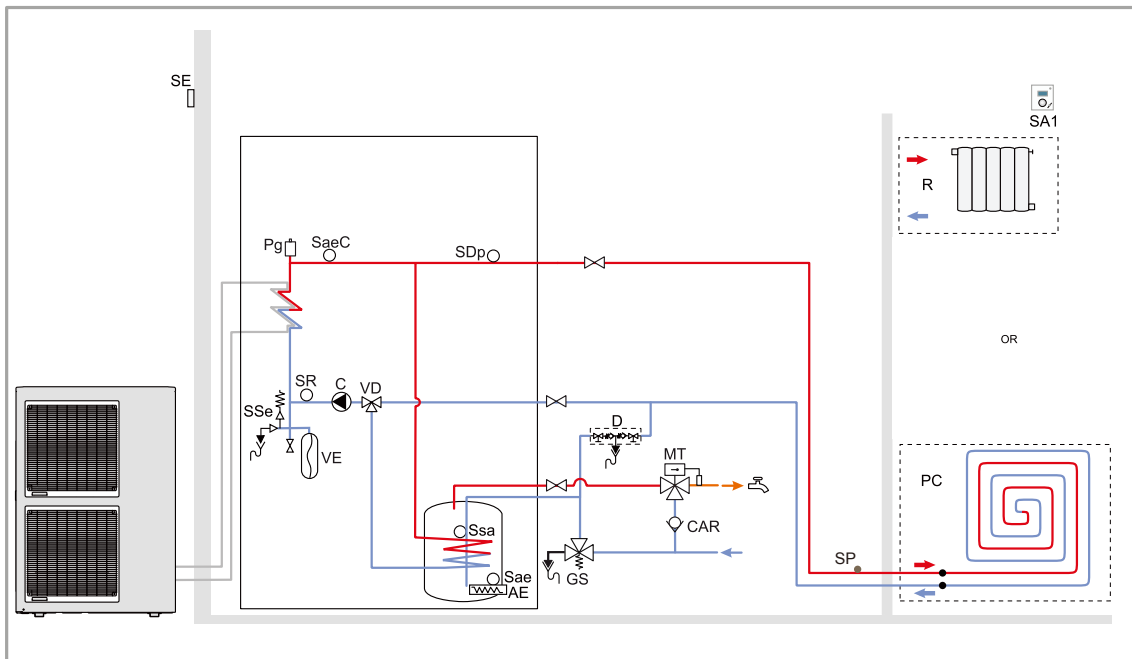
Overview of all the electrical connections



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. | | |

■ SPLIT INTEGRATED DHW TYPE (WG*A***DD6, WG*G***DD6, WG*K***DD9)

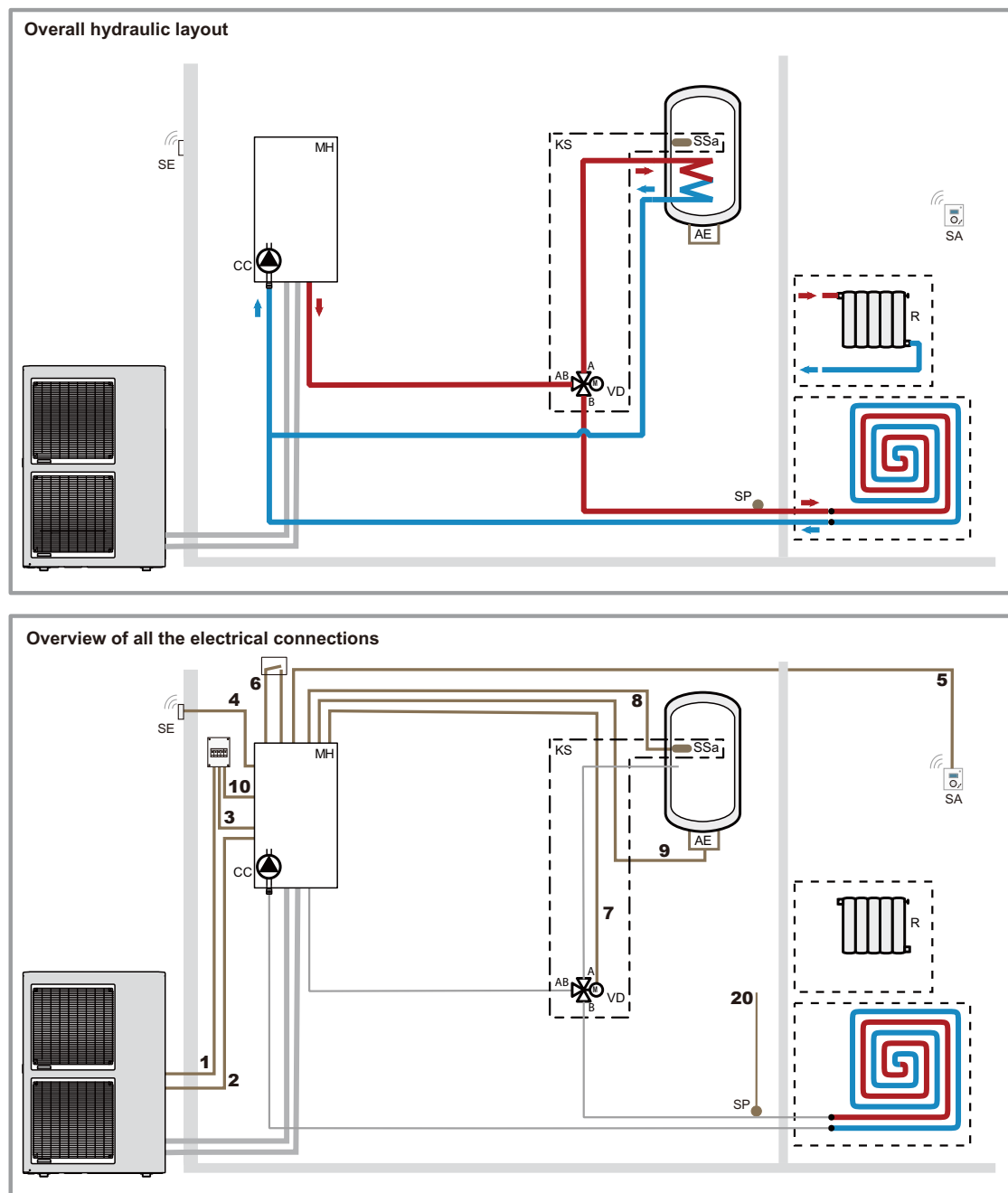


Legend

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	SP - Heated floor thermal safety fuse	VE - Expansion vessel
D - Shut-off	SA1 - Room thermostat circuit 1 (Option)	SR - Return sensor	
GS - Safety unit	Sae - Temperature safety of domestic electrical back-up	Ssa - DHW sensor	
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 (WS*A***DD6, WS*G***DC6, WS*K***DC9)



Legend

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

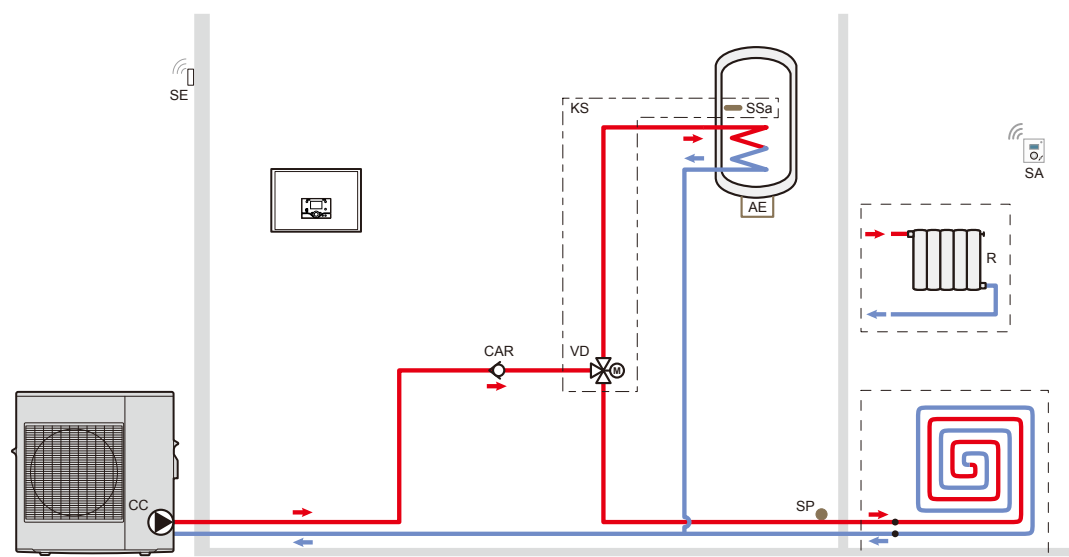
R - Radiators
SA - Room thermostat or Room control unit (option)
SE - Outdoor sensor
SP - Heated floor thermal safety fuse

SSa - DHW sensor
VD - Distribution valve

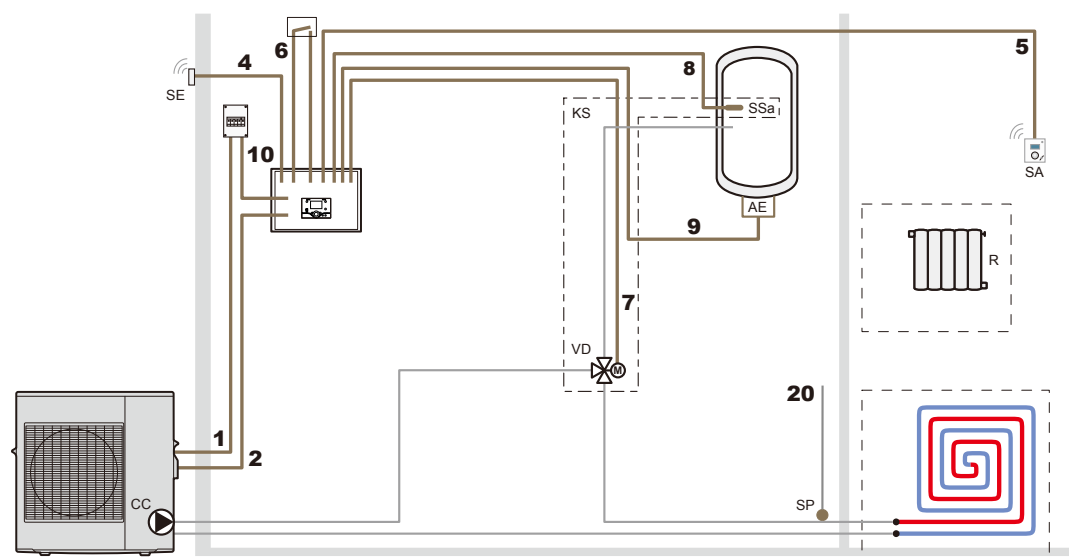
- 1- Power supply to the outdoor unit. (Electrical connections on the outdoor unit side)
- 2- Inter-connection between the outdoor unit and the indoor unit.
- 3- Power supply to the electrical back-ups: Connect the electrical supply for the back-ups to the electrical panel.
- 4- Outdoor sensor.
- 5- 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

Overall hydraulic layout



Overview of all the electrical connections



Legend

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

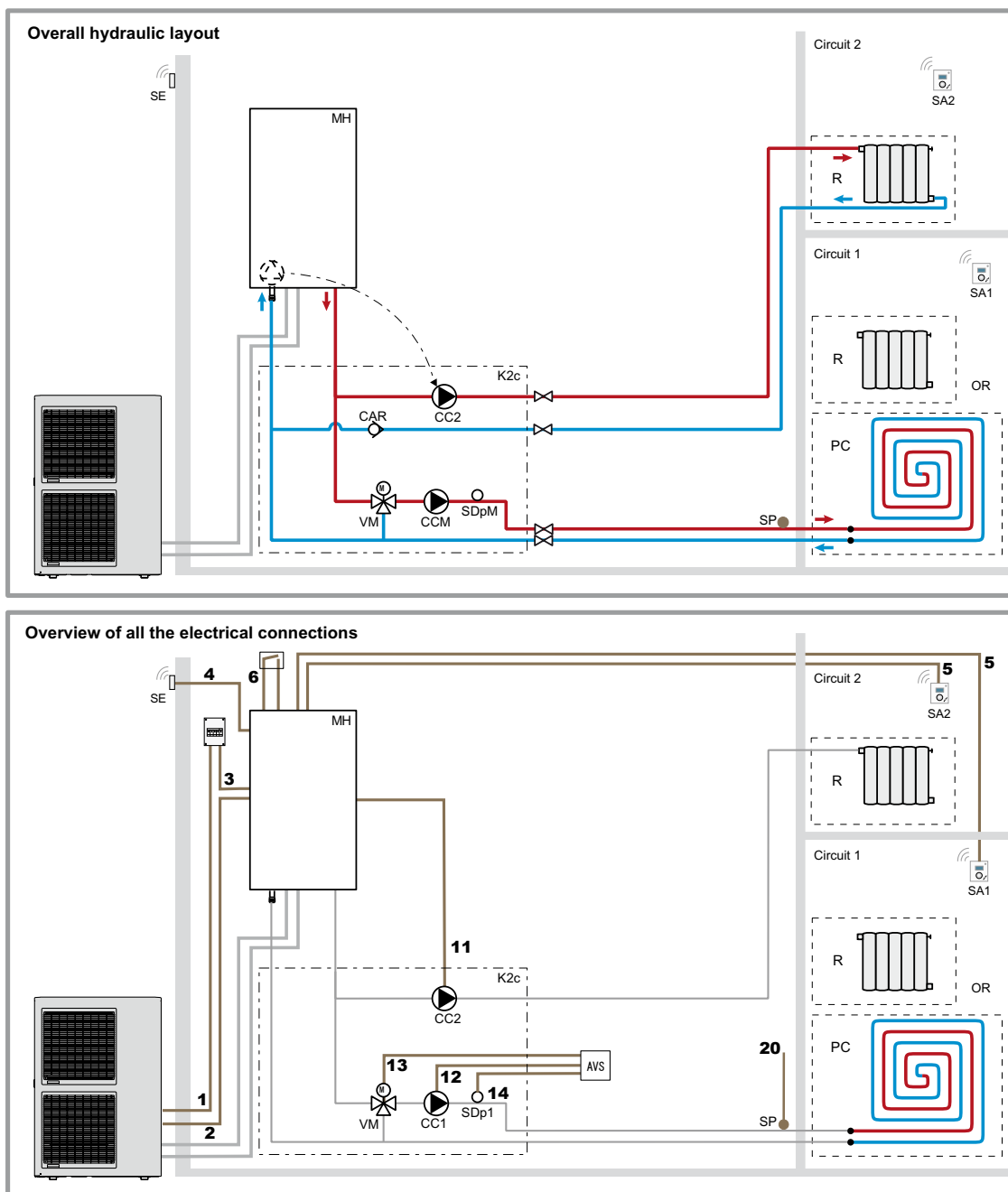
R - Radiators (or fan convectors)
SA - Room thermostat (option)
SE - Outdoor sensor
SP - Heated floor thermal safety fuse

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 (WS*A***DD6, WS*G***DC6, WS*K***DC9)



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)

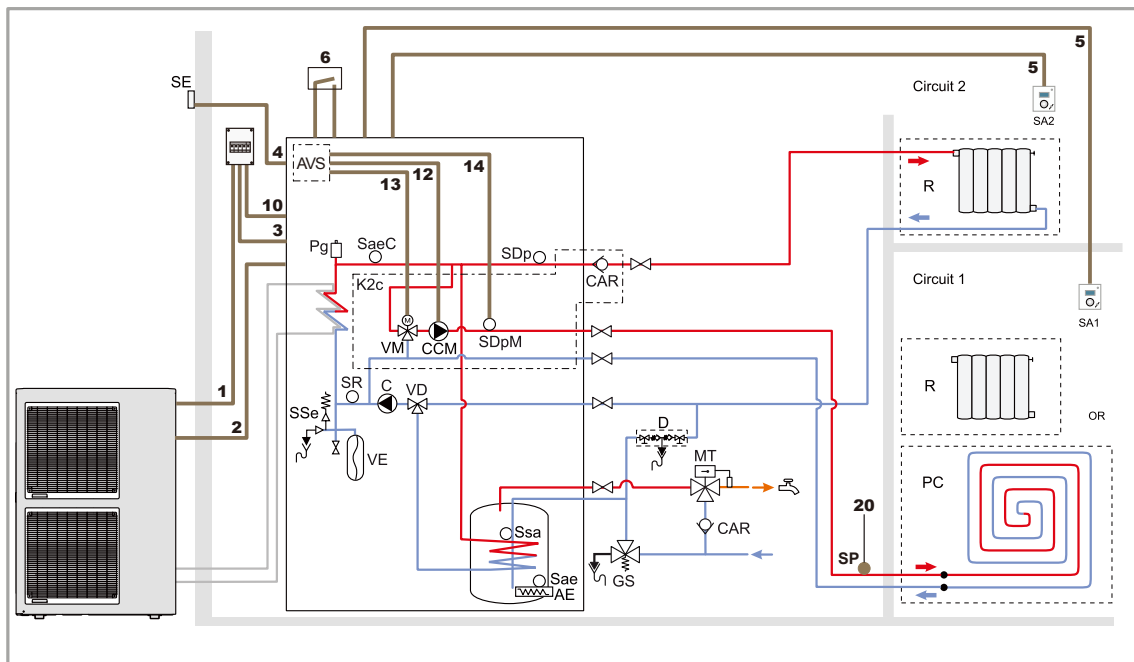
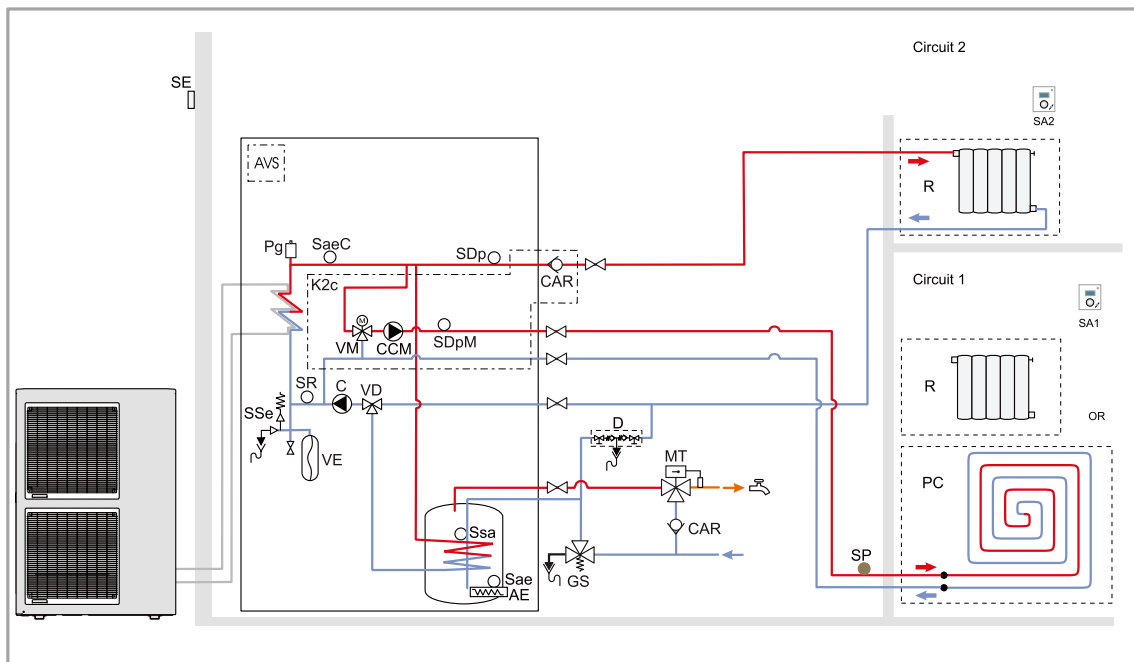
SDp1 - Flow sensor, Circuit 1

SE - Outdoor sensor

SP - Heated floor thermal safety fuse

VM - Mixer valve

■ SPLIT INTEGRATED DHW TYPE (WG*A***DD6, WG*G***DD6, WG*K***DD9)



Legend

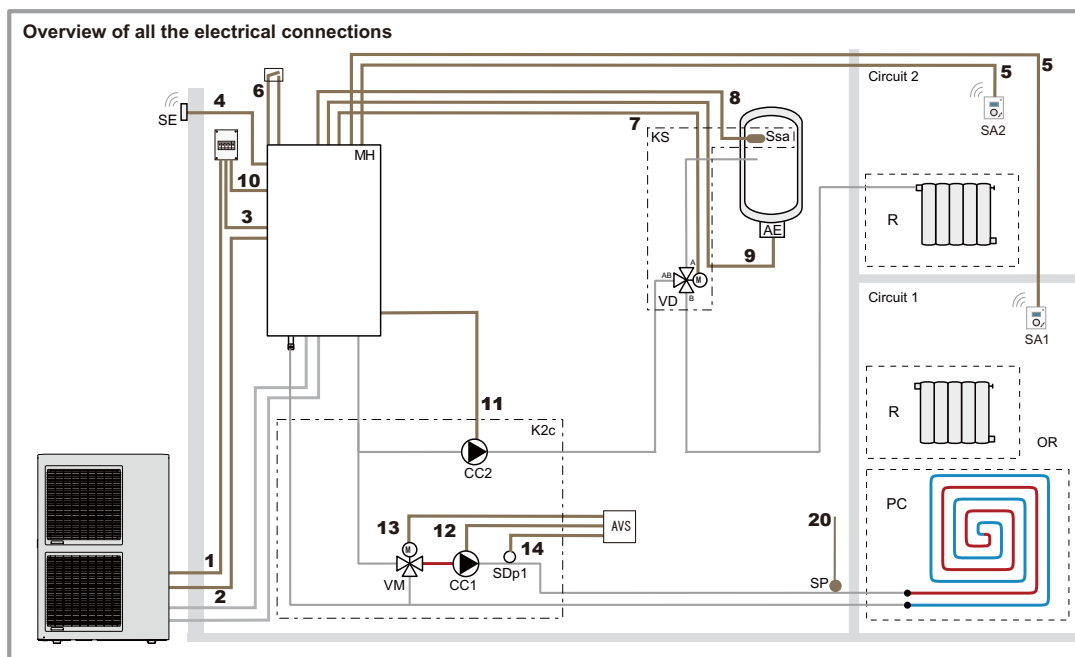
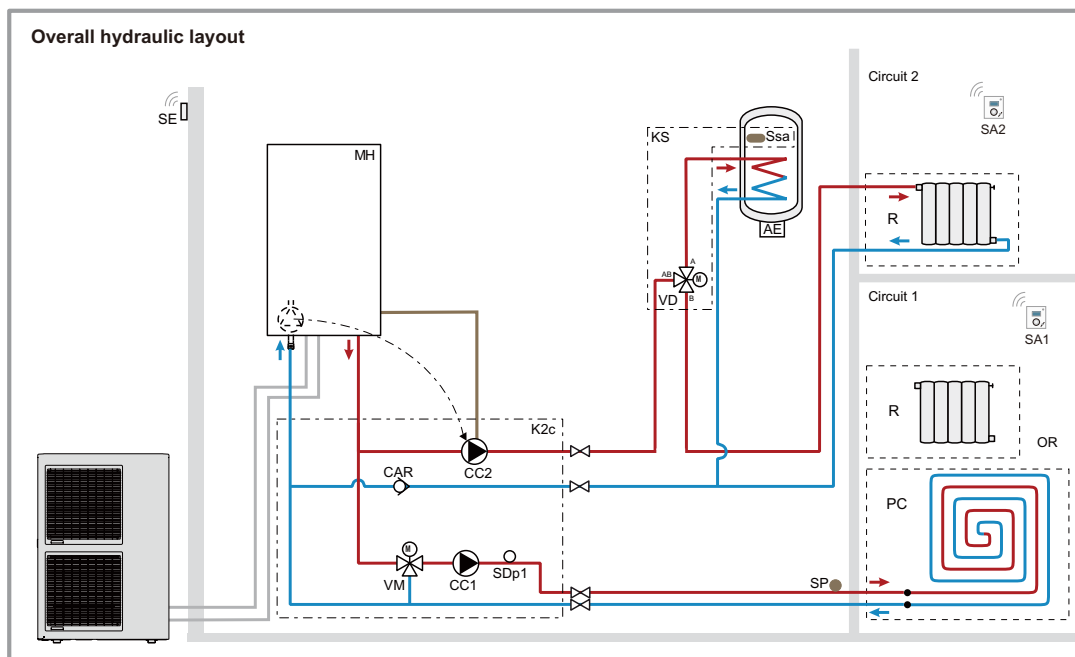
- | | | | |
|---|---|--|--------------------------------|
| AE - Back-up DHW | K2c - 2nd circuit kit | Sae - Temperature safety of domestic electrical back-up | SR - Return sensor |
| AVS - Extension card, 2 circuits | MT - Thermostatic mixer valve | SaeC - Temperature safety (option heating back-up 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.

OPTIONAL
PARTS

OPTIONAL
PARTS

2-4. 2-HEATING CIRCUITS AND DHW TANK

■ SPLIT TYPE (WS*G***DC6, WS*K***DC9)

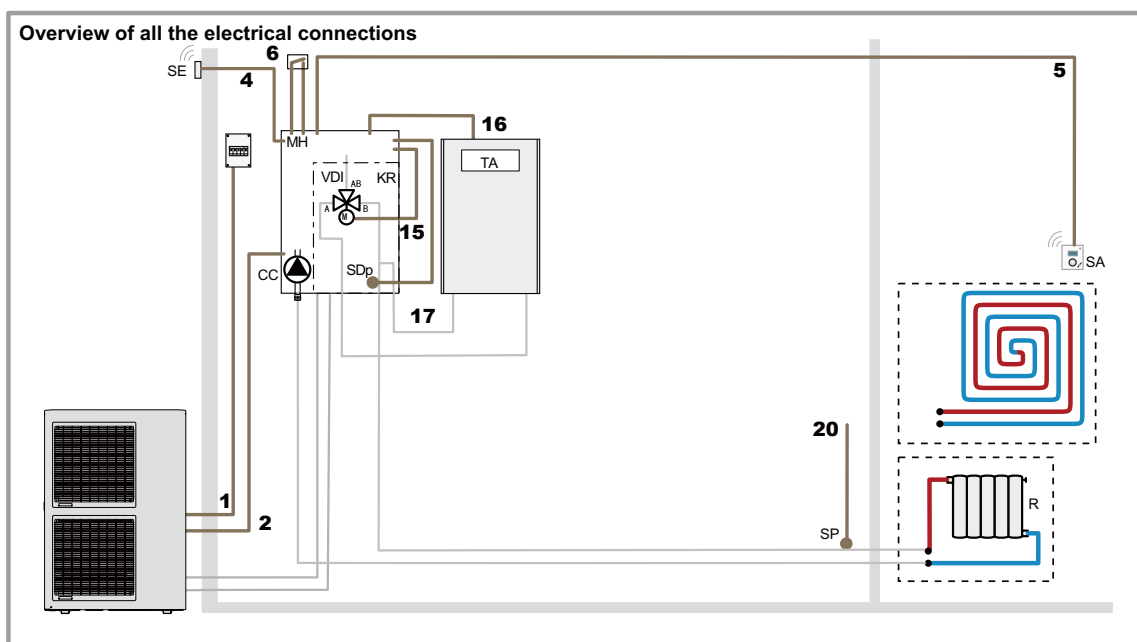
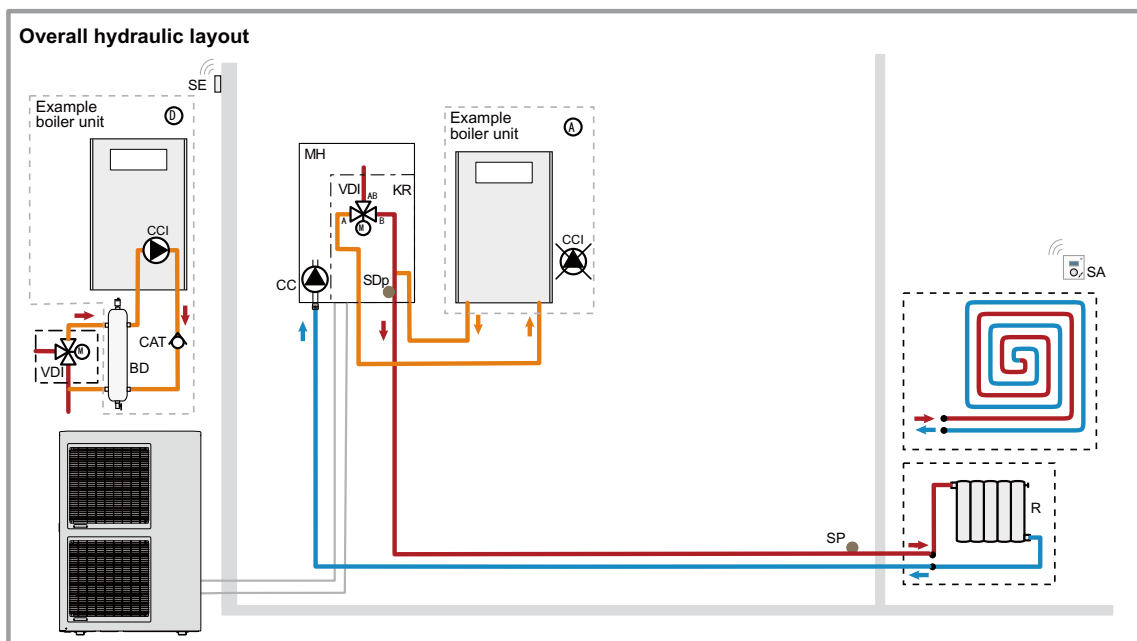


Legend

- | | | |
|--|--|--|
| 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. BOILER CONNECTION AND 1-HEATING CIRCUIT

■ SPLIT TYPE (WS*A***DD6, WS*G***DC6, WS*K***DC9)

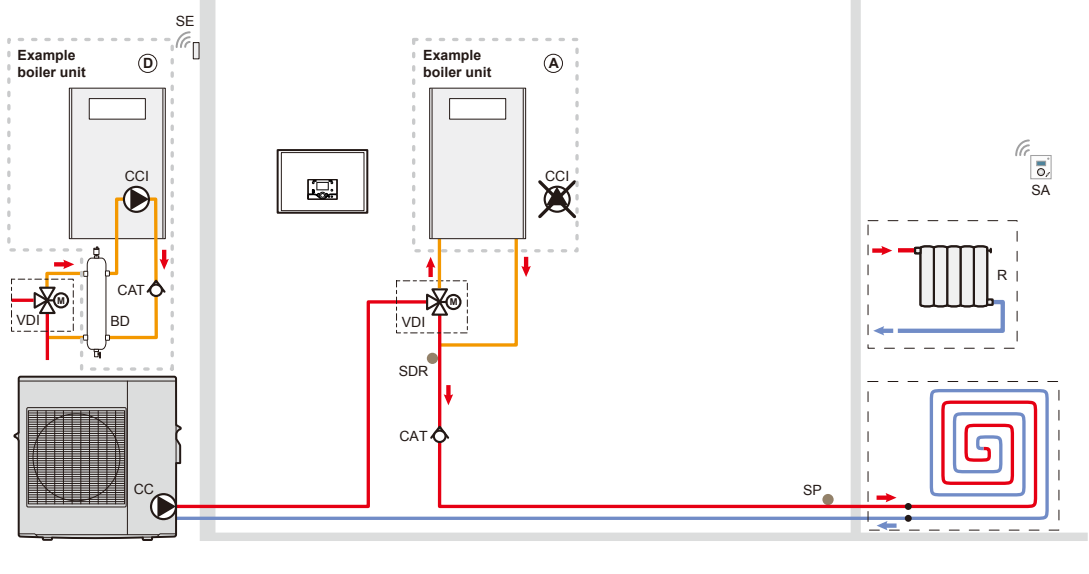


Legend

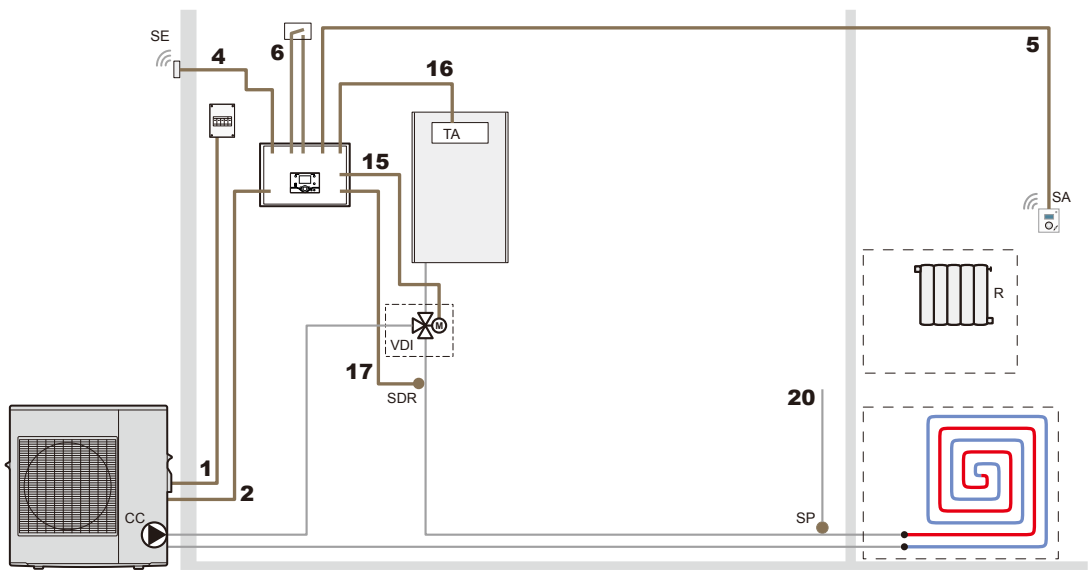
- | | | |
|---|--|--|
| BD - Disconnection bottle | MH - Indoor unit | SP - Heated floor thermal safety fuse |
| CAT - Anti-gravity feed valve | R - Radiators (or fan convectors) | TA - Boiler room thermostat terminals |
| CCI - Heating system circulation pump built into the boiler | SA - Room thermostat 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

Overall hydraulic layout



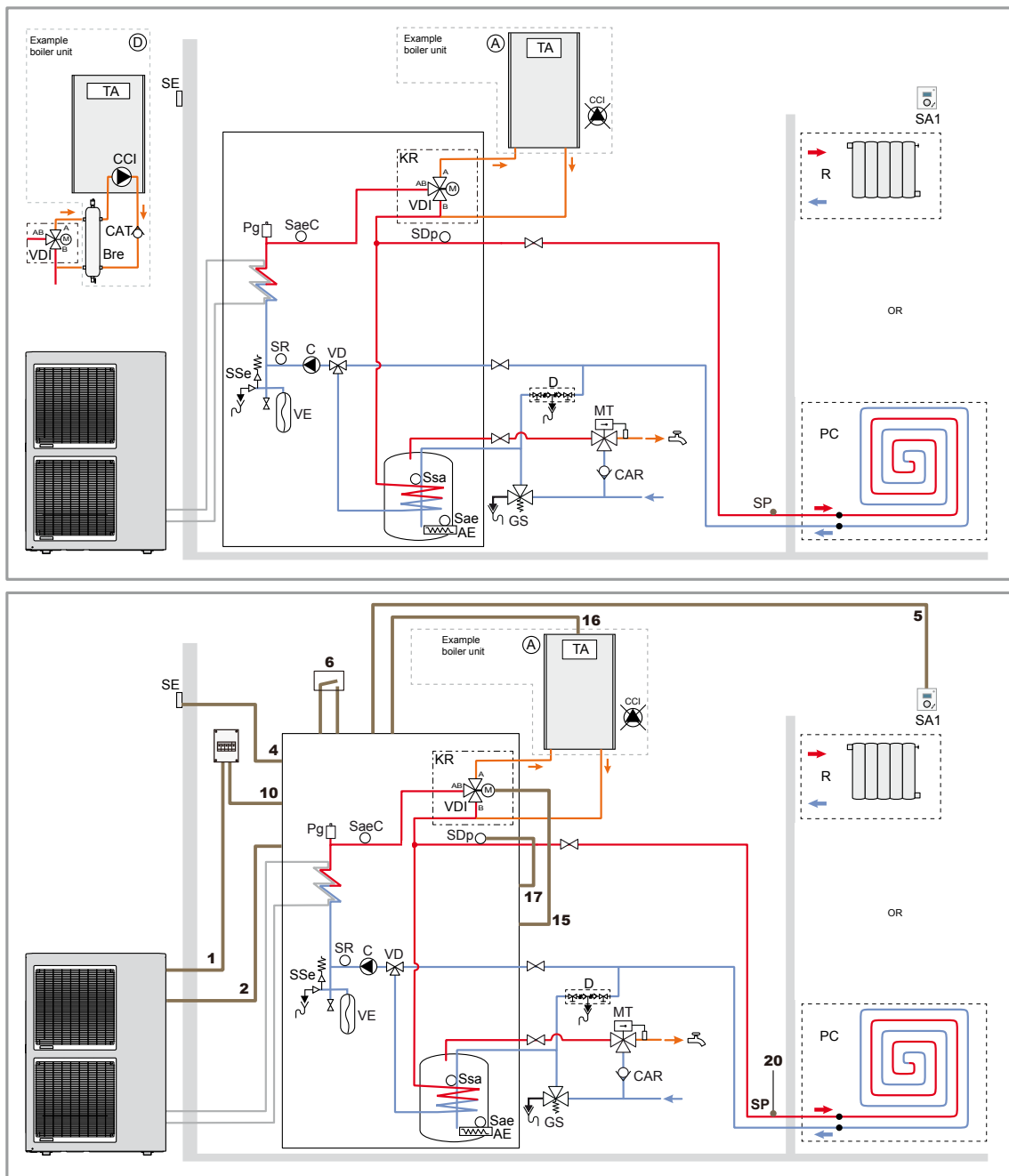
Overview of all the electrical connections



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 | 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 (WG*A***DD6, WG*G***DD6, WG*K***DD9)

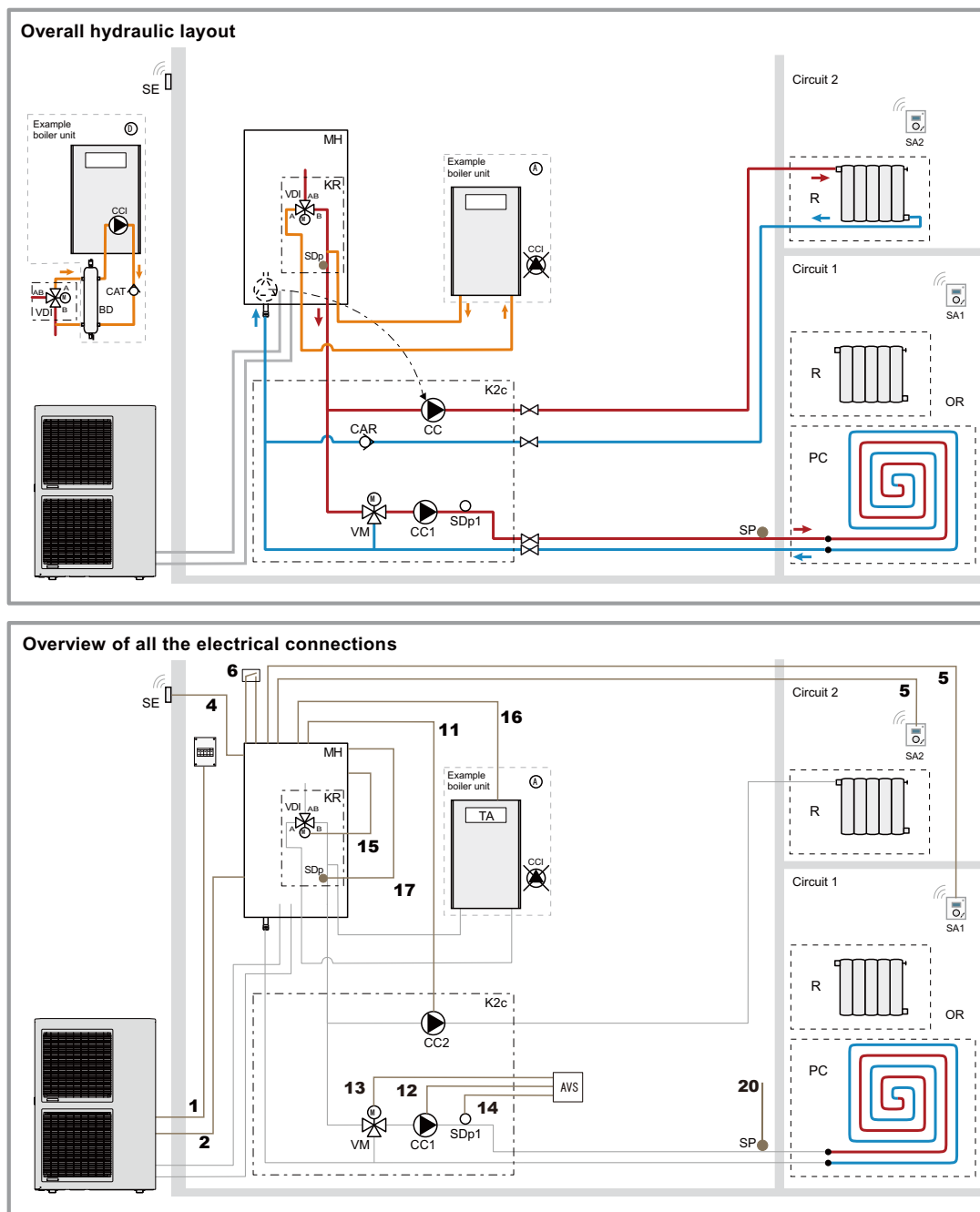


Legend

- | | | | |
|--|---|--|--|
| 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 |
| CCl - 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.

2-6. BOILER CONNECTION AND 2-HEATING CIRCUITS

■ SPLIT TYPE (WS*A***DD6, WS*G***DC6, WS*K***DC9)



Legend

AVS - Regulation extension kit

BD - Disconnection bottle

CAR - Non-return valve

CAT - Anti-gravity feed valve

CCI - Heating system circulation pump built into the boiler

CC1 - Heating circulation pump circuit 1

CC2 - Heating circulation pump circuit 2

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.

K2c - 2nd circuit kit

KR - Boiler connection kit

MH - Indoor unit

PC - Floor heating system

R - Radiators

SA1 - Room thermostat circuit 1 (option)

SA2 - Room thermostat circuit 2 (option)

SDp1 - Flow sensor circuit 1

SDp - Flow sensor

SE - Outdoor sensor

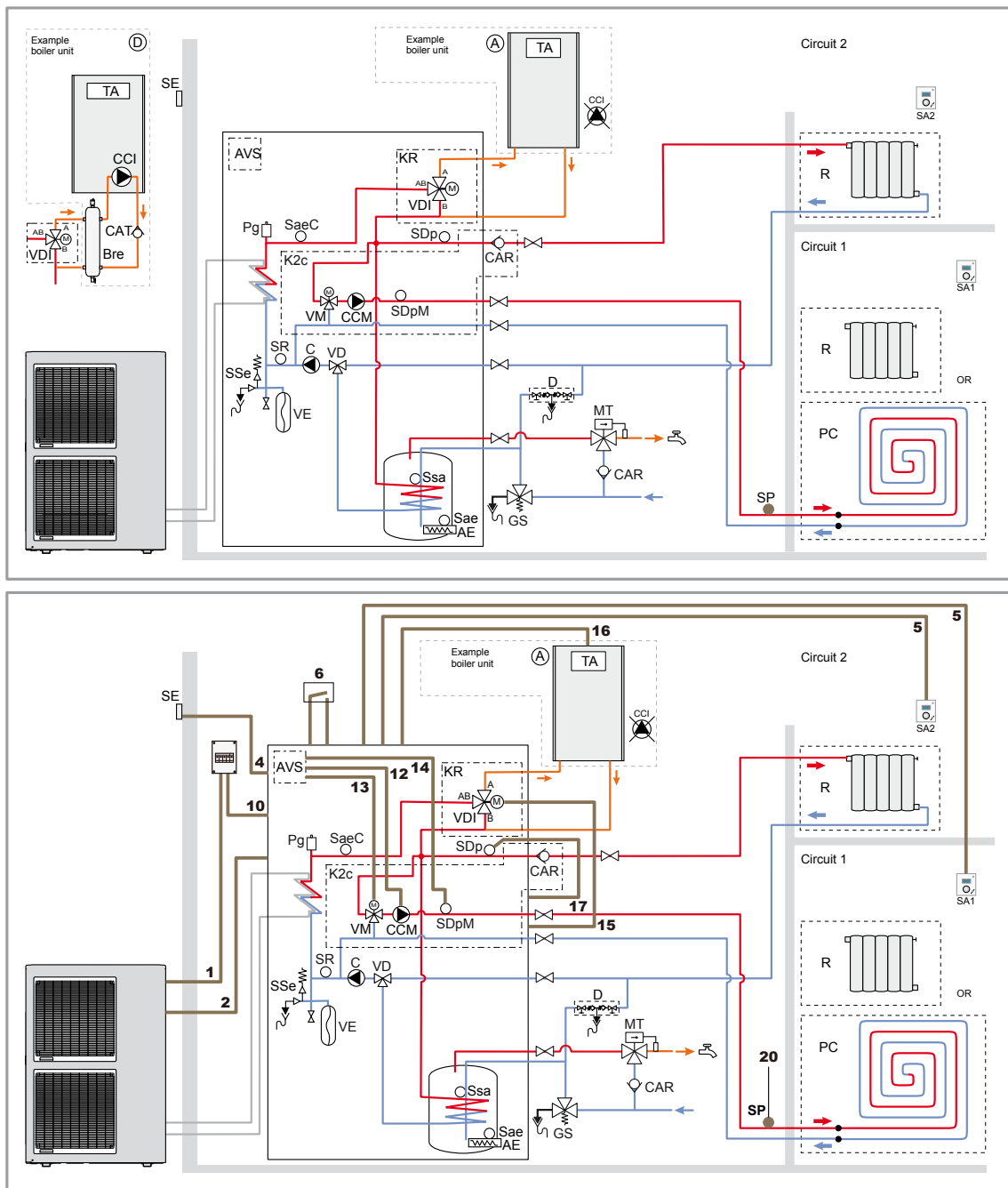
TA - Boiler thermostat

SP - Heated floor thermal safety fuse

VDI - Distribution valve (deviation boiler)

VM - Mixer valve

■ SPLIT INTEGRATED DHW TYPE (WG*A***DD6, WG*G***DD6, WG*K***DD9)

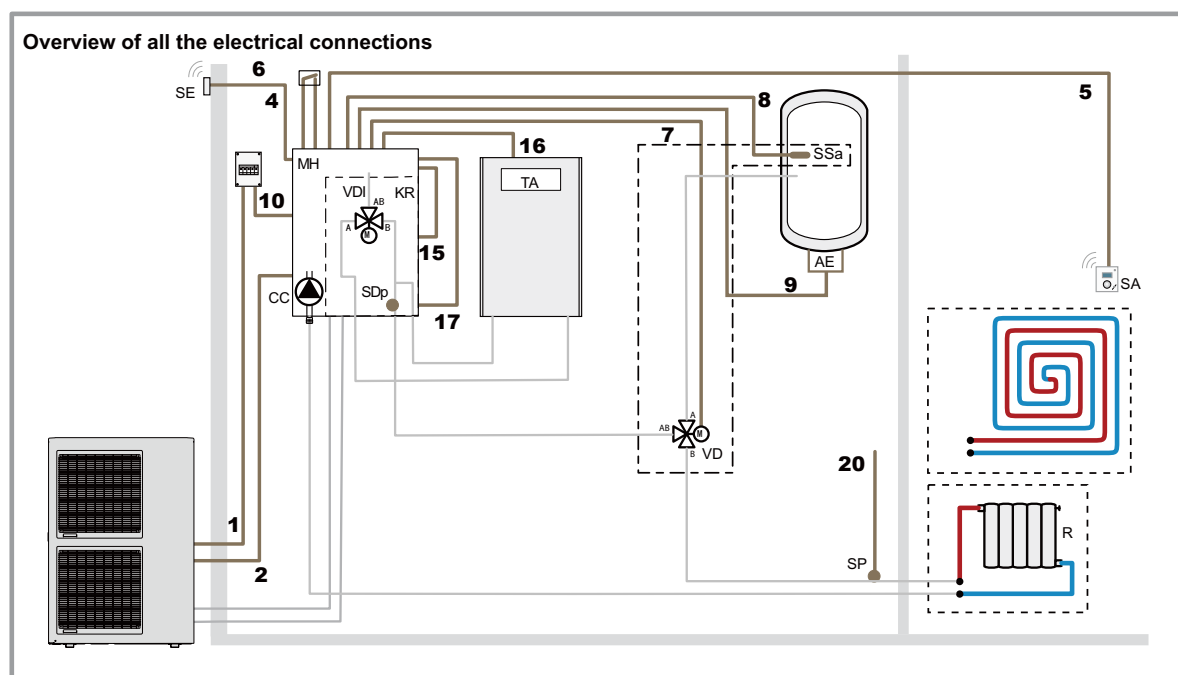
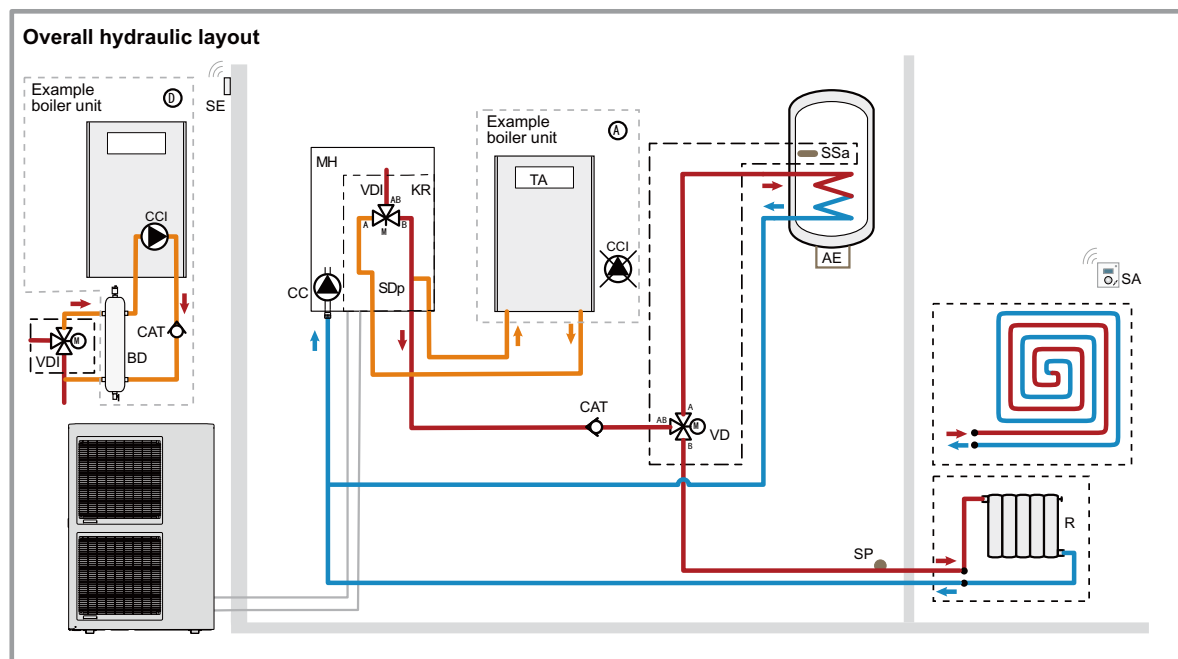


Legend

- | | | | |
|--|---|--|--|
| 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 | PG - Bleeder valve | 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.

2-7. BOILER CONNECTION, 1-HEATING CIRCUIT AND DHW TANK

■ SPLIT TYPE (WS*A***DD6, WS*G***DC6, WS*K***DC9)

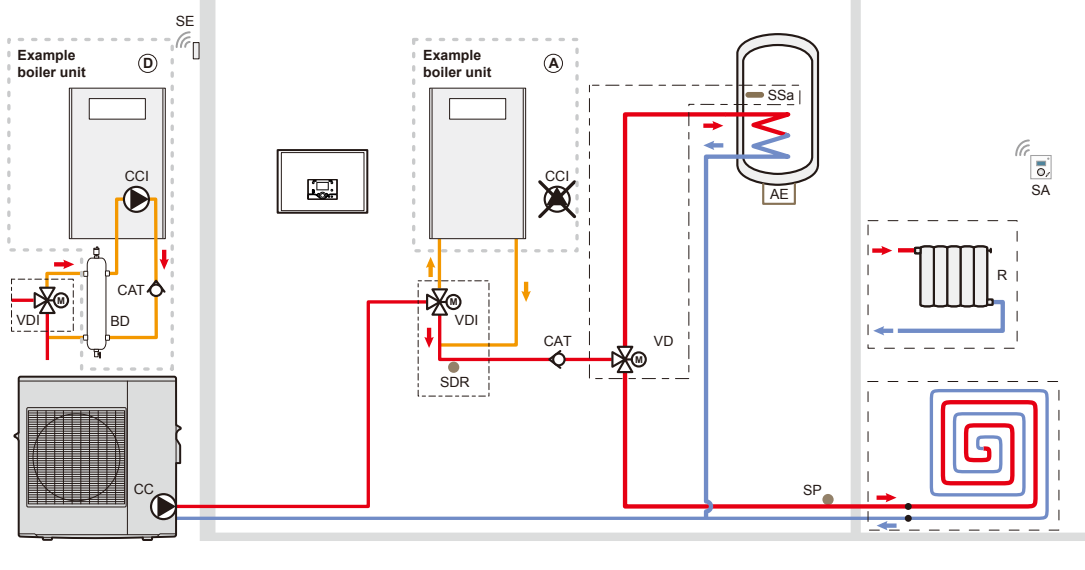


Legend

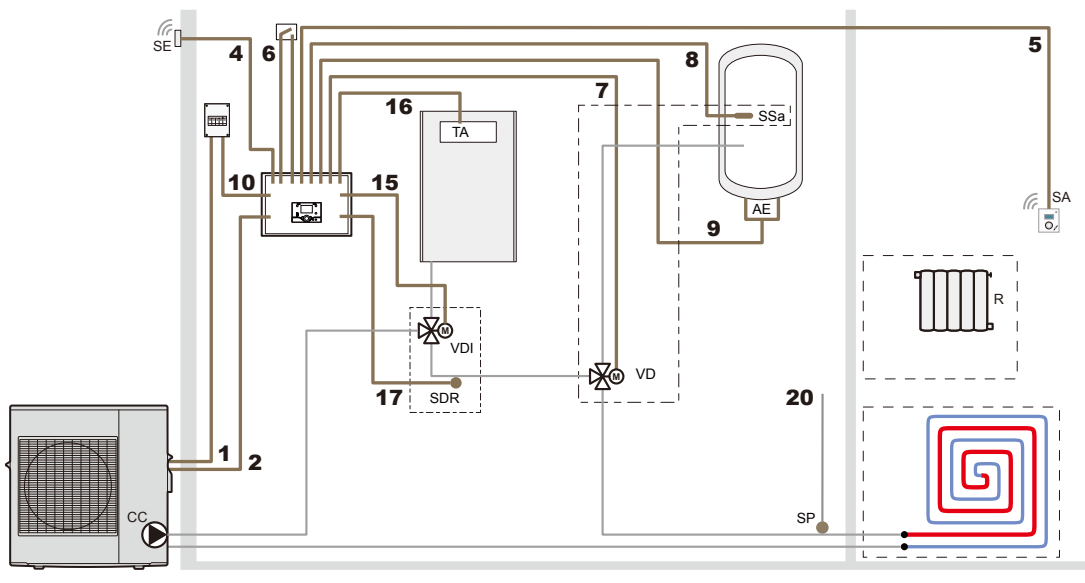
- | | | |
|--|---|--|
| AE - Electric back-up | MH - Indoor unit | SSa - DHW sensor |
| BD - Disconnection bottle | R - Radiators (or fan convectors) | SP - Heated floor thermal safety fuse |
| CAT - Anti-gravity feed valve | SA - Room thermostat or Room control unit (option) | TA - Boiler room thermostat 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

Overall hydraulic layout



Overview of all the electrical connections

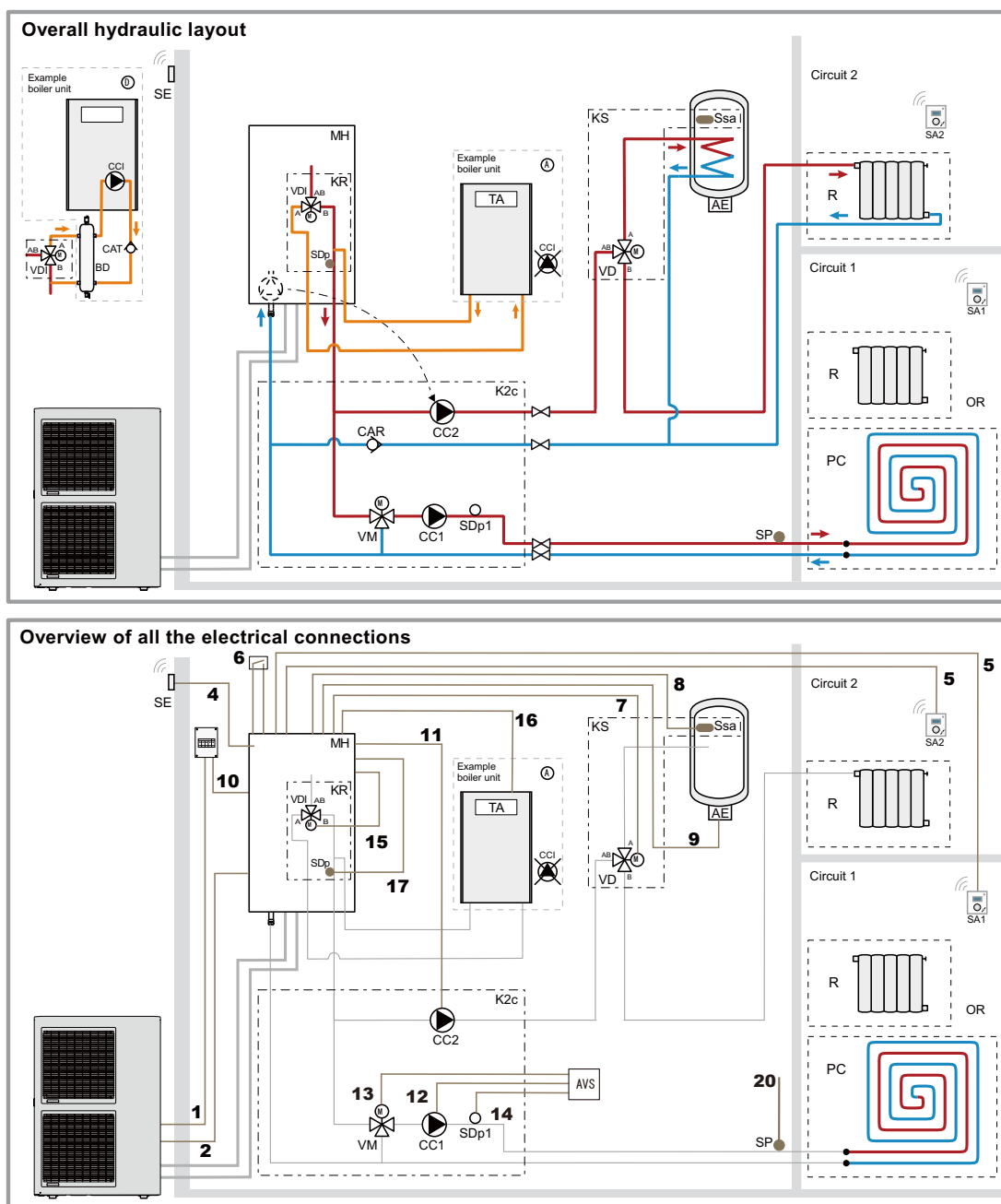


Legend

- | | | |
|---|--|--|
| 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. | | |

2-8. BOILER CONNECTION, 2-HEATING CIRCUITS AND DHW TANK

■ SPLIT TYPE (WS*A***DD6, WS*G***DC6, WS*K***DC9)



Legend

- | | | |
|---|---|--|
| AE - Electric back-up | MH - Indoor unit | SE - Outdoor sensor |
| AVS - Regulation extension kit | PC - Floor heating system | SP - Heated floor thermal safety fuse |
| CAR - Non-return valve | R - Radiators | TA - Boiler thermostat |
| CC1 - Heating circulation pump circuit 1 | SA1 - Room thermostat circuit 1 (option) | VD - Distribution valve |
| CC2 - Heating circulation pump circuit 2 | SA2 - Room thermostat circuit 2 (option) | VDI - Distribution valve (deviation boiler) |
| K2c - 2nd circuit kit | SDp1 - Flow circuit1 | VM - Mixer valve |
| KR - Boiler connection kit | SDp - Flow sensor | |
| KS - DHW kit | SSa - DHW 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. | | |
| 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. | |
| 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. | | |