Hydraulic scheme 001

Hydraulic scheme configuration

- [X] Buffertank
- [ ] Multibuffertank
- [ ] Duobuffertank
- [ ] DHW Buffertank
- [ ] Chilled buffer tank
- [ ] Two buffer tanks
- [ ] Cascade
- [X] Extrenal heating source
- [X] Solar thermal system
- [ ] Fresh water station
- [ ] Fresh water station with circulation
- [ ] Hot water outlet with circulation
- [ ] Mixed heating circuit
- [X] Direct heating circuit

- [X] Integrated electric immersion heater (activated at the bivalence point)
- [ ] External electric heater DHW
- [ ] Fixed setpoint temperature
- [X] Weather-compensated temperature
- [ ] DHW
- [X] Heating
- [ ] Heting an Cooling

Basic configuration

Parameter N02 = (Heating only)
Heat pump operating mode
(Heating/Heating & Cooling/Cooling)

Parameter N07 = (Enable)
Save configuration
(Enable/Disable)

Parameter N08 = (Enable)
Automatic restart after power failure
(Enable/Disable)

Parameter N11 = (Disable)
Domestic hot water
(Enable/Disable)

Parameter N22 = (Enable)
Solar thermal system
(Enable/Disable)

Parameter N26 = (0)
Selection of control zones
(0 = Single Zone 2 = Dual Zone)

Parameter N32 = (Enable)
Smart Grid – utilize PV surplus
(Enable/Disable)

Parameter N36 = (Enable)
Flow temperature sensor (underfloor heating)
(Enable/Disable)

Parameter N41 = (Enable)
Temperature sensor (solar thermal system)
(Enable/Disable)

Parameter N49 = (Under floor haeting)
Heating system selection – Zone A
(Radiator/Under floor heating/Fan Coil)

Parameter M11 = (Select the desired heating curve)
Selection of the weather-compensated
heating curve in Zone A

Parameter M39 = (Enable)
Auxiliary heating for peak load coverage
(Enable/Disable)

Parameter M40 = (Heating only)
Operating mode of the auxiliary heating for peak load coverage
(Heating/DHW/Heating & DHW)

Designation		Date	Name	Changes		
WM-001_Cover page	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						1

A	B	C	D	E	F

1

IMPORTANT:

· Relevant technical rules and local regulations must be observed.
· The heat pump system must be operated with properly treated water in accordance with recognised industry standards (e.g. VDI 2035).
· No automatic air vents and/or safety valves are to be installed in the building (the safety valve is integrated in the outdoor unit).
· The dew point must be taken into account during active cooling operation.

· The regulations and requirements of the local utility provider must be observed.
· The heat pump system must be operated with a type B residual current device (RCD).
· The heat pump system must be properly earthed in accordance with applicable regulations.
· The electrical protection is shown schematically in this document using a single-pole circuit breaker. The WM-L and WM-XL units must be protected with a three-phase (3~) supply.
The relevant current consumption must be taken from the respective technical documentation.
The sizing and selection of protective devices must be carried out in accordance with currently applicable standards, regulations, and recognised engineering practices.

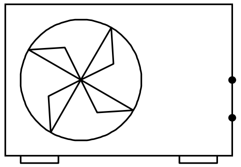
2

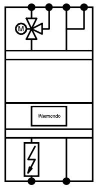
· A buffer volume of at least 10 litres per kW of heat pump output must be provided, with a minimum total volume of 100 litres.
· The temperature sensors for the heating buffer tank (AI2 and AI3) will be enabled by the manufacturer's service department via remote support. Please create a service ticket or contact them by phone for this purpose.
· The Smart Grid function for utilising PV surplus is configured by the manufacturer's service department via remote access. Please open a service ticket or contact them by phone to arrange configuration.
· The Smart Grid function for power limitation by the utility provider is configured by the manufacturer's service department via remote access. Please open a service ticket or contact them by phone to arrange configuration.

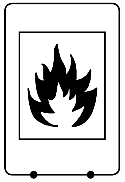
3

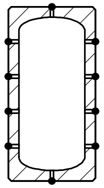
4

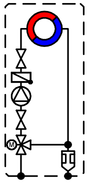
Designation		Date	Name	Changes		
WM-001_General information	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
Installation principle (not exhaustive) Reproduction only with written permission of MULTIBETON GmbH	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						2

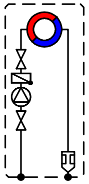

Warmondo Heatpump

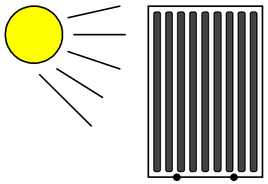

Warmondo hydraulic station

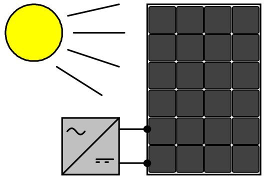

Auxiliary heater

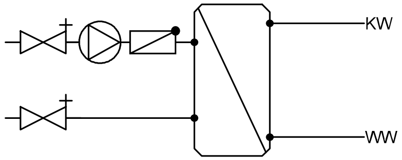

Buffer tank


Mixed heating circuit

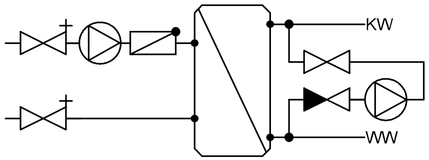

Unmixed heating circuit


Solar thermal system

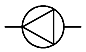

PV system
with inverter



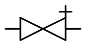
Fresh water station
without recirculation



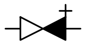
Fresh water station
with recirculation

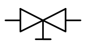

Pump

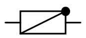

Shut-off valve

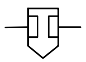

Shut-off valve with drain


Shut-off valve with non-return valve

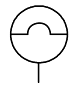

Shut-off valve with non-return valve and drain

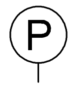

Drain valve


Non-return valve

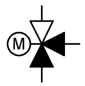

Magnetite and sludge separator


Air vent

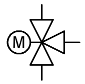

Diaphragm expansion vessel



Pressure gauge



Motorized 3-way diverter valve

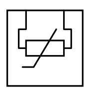


Motorized 3-way mixing valve

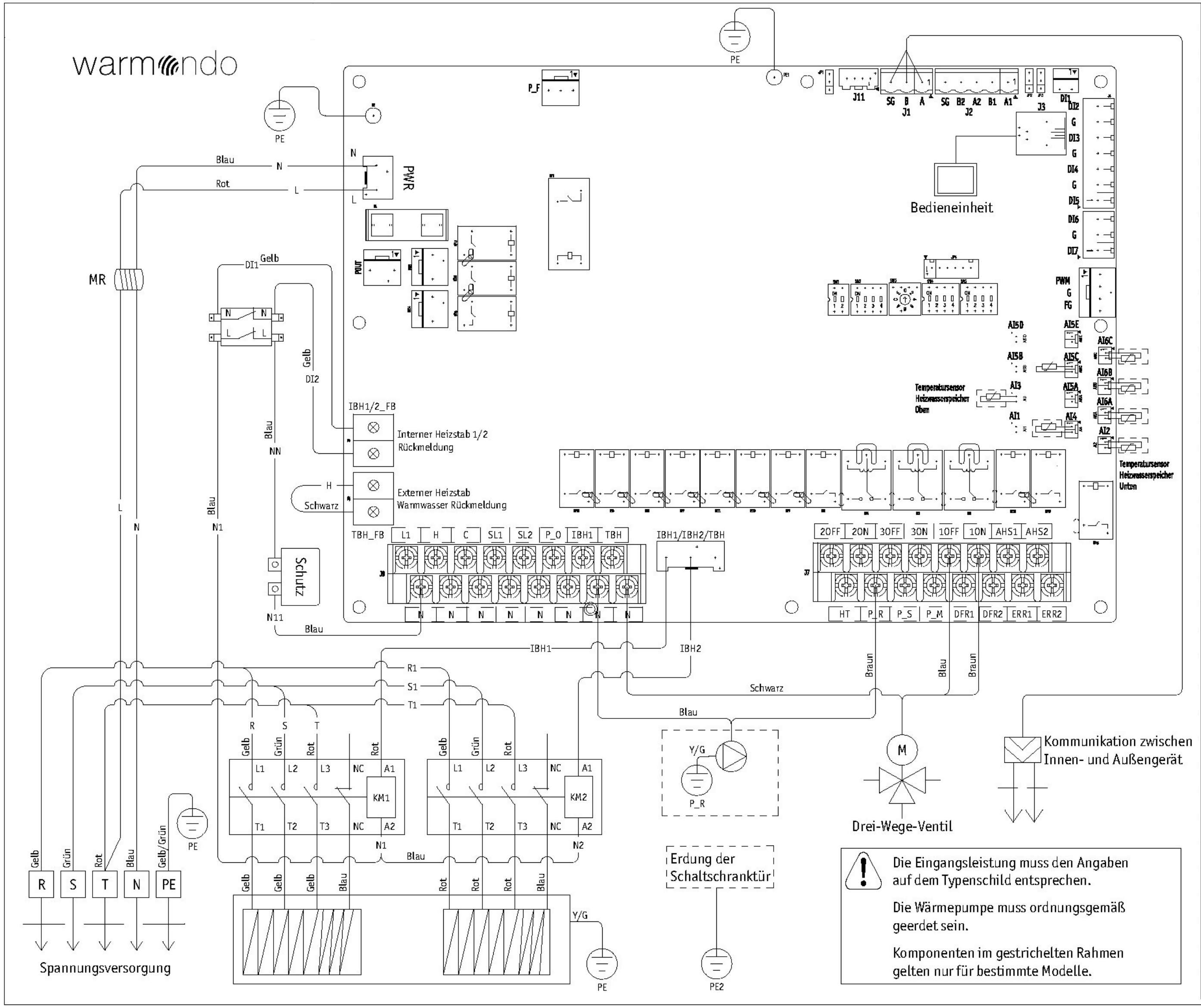

Heating system filter


Pressure relief valve


Connection terminal


NTC 10k temperature sensor

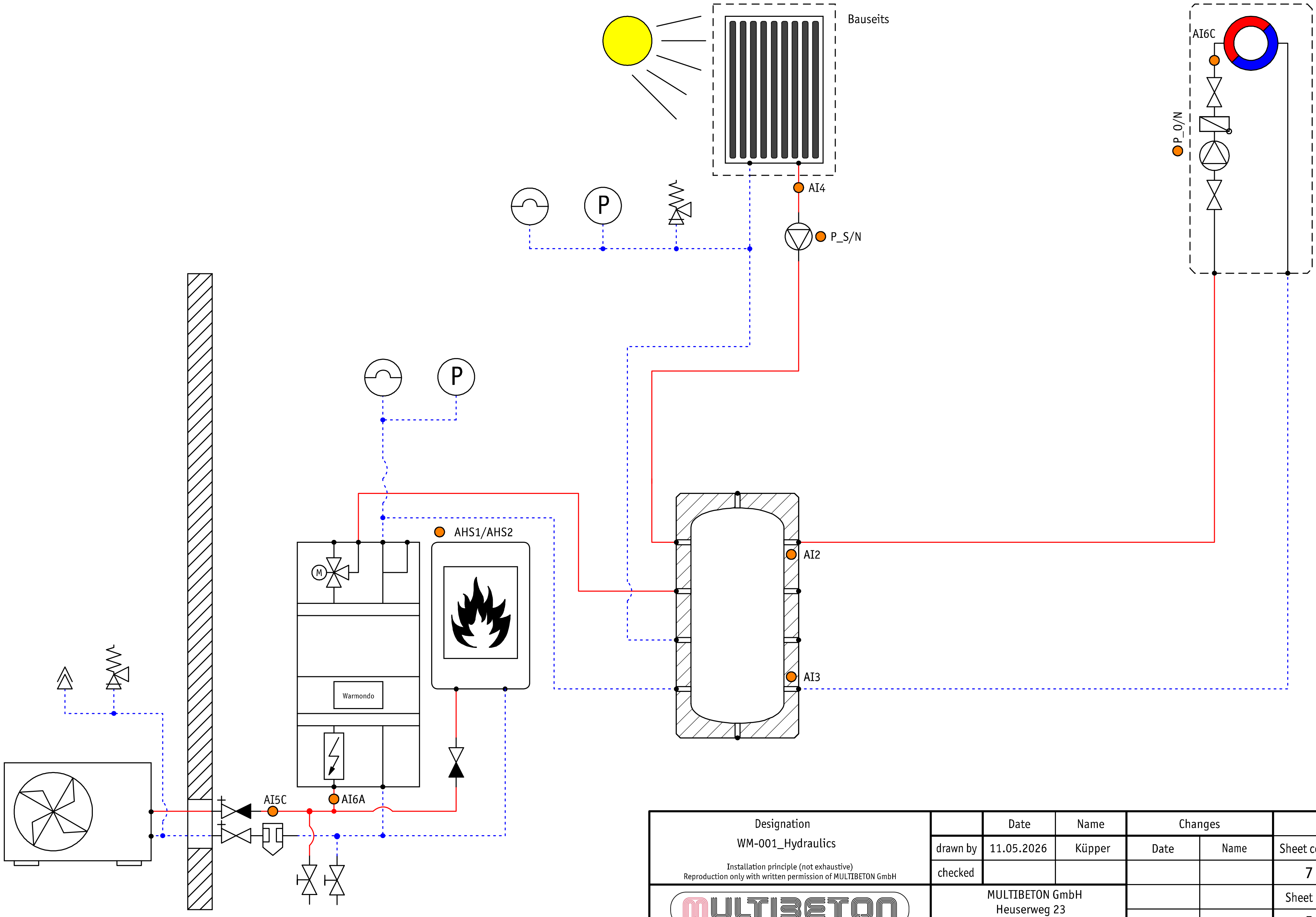
Designation Symbols for hydraulic schematics Installation principle (not exhaustive) Reproduction only with written permission of MULTIBETON GmbH		Date	Name	Changes		
	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						3



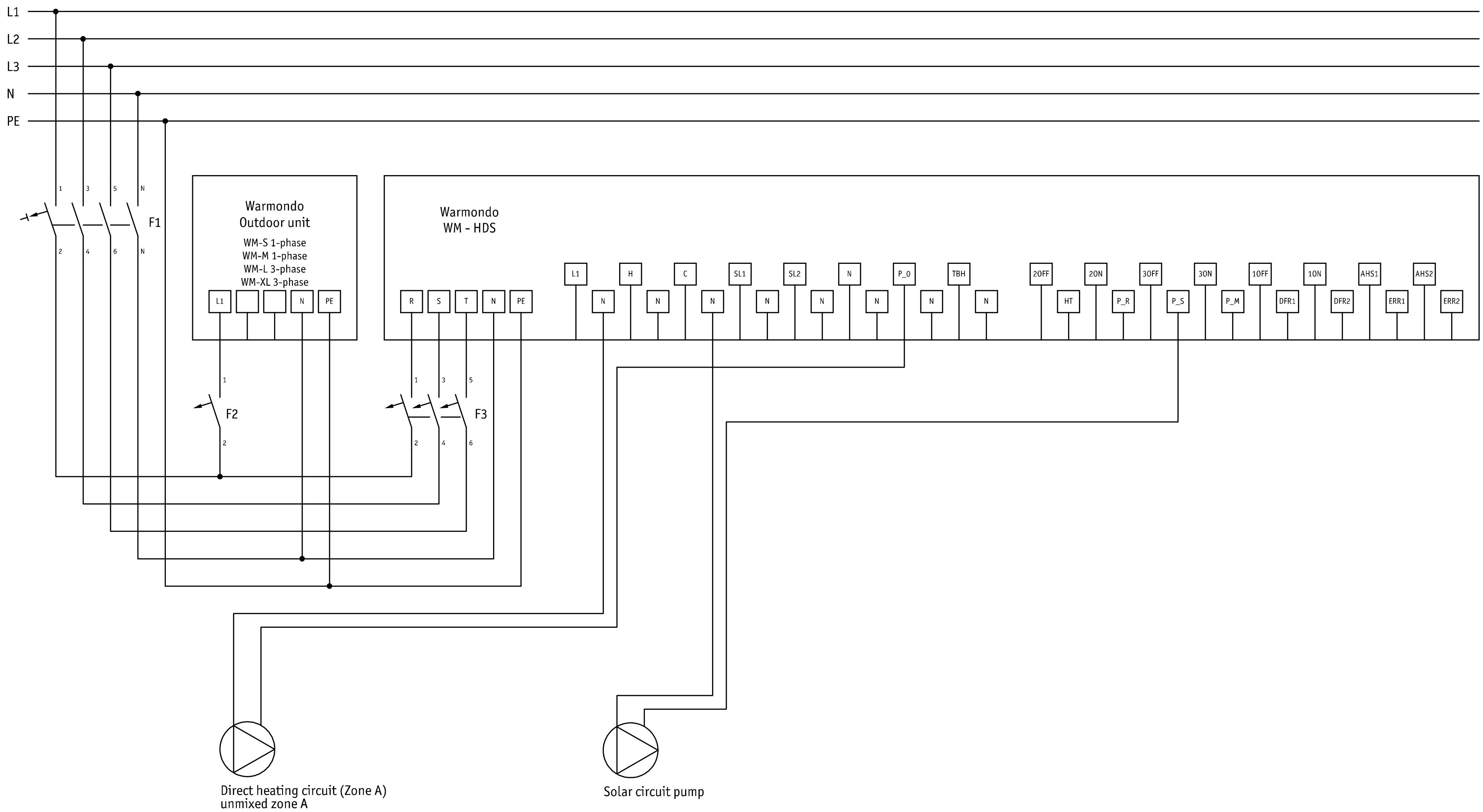
	Legende
AI6C	Temperatursensor gemischter Heizkreis Vorlauf
AI6B	Temperatursensor Pufferspeicher Trinkwasser
AI6A	Temperatursensor Gesamt Vorlauf Luft/Wasser Wärmepumpe und AHS
AI5C	Temperatursensor Vorlauf Luft/Wasser Wärmepumpe
AI4	Temperatursensor Solar Vorlauf
2OFF	2# Dreiwegeventil Heizen/Kühlen (Heizen)
2ON	2# Dreiwegeventil Heizen/Kühlen (Kühlen)
3OFF	3# Mischer geregelter Heizkreis
3ON	3# Mischer geregelter Heizkreis
1OFF	1# Dreiwegeventil Heizen/Warmwasser (Warmwasser)
1ON	1# Dreiwegeventil Heizen/Warmwasser (Warmwasser)
AHS1	Potentialfreier Schaltkontakt externe Wärmequelle
AHS2	
HT	Heizband Abtropfwanne
P_R	Pumpe Zirkulation
P_S	Pumpe Solar
P_M	Pumpe gemischter Heizkreis
DFR1	Potentialfreier Schaltkontakt Abtauen Aktiv
DFR2	
ERR1	Potentialfreier Schaltkontakt Fehlermeldung Luft/Wasser Wärmepumpe
ERR2	
L1	Relais Umschaltung Heizen/Kühlen
H	Relais Umschaltung Heizen/Kühlen
C	Relais Umschaltung Heizen/Kühlen
SL1	Externer Eingang Solaranlage
SL2	Externer Eingang Solaranlage
P_O	Pumpe ungemischter Heizkreis
IBH1	Interner Heizstab Stufe 1
IBH2	Interner Heizstab Stufe 2
TBH	Externer Heizstab Warmwasser
DI2	Externer Eingang
G	
DI6	Smart Grid (SG)
DI7	EVU Kontakt
G	
MR	Entstörfilter
Y/G	Erdung

Designation		Date	Name	Changes		
Hydraulic station schematic diagram	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
Installation principle (not exhaustive)	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						4

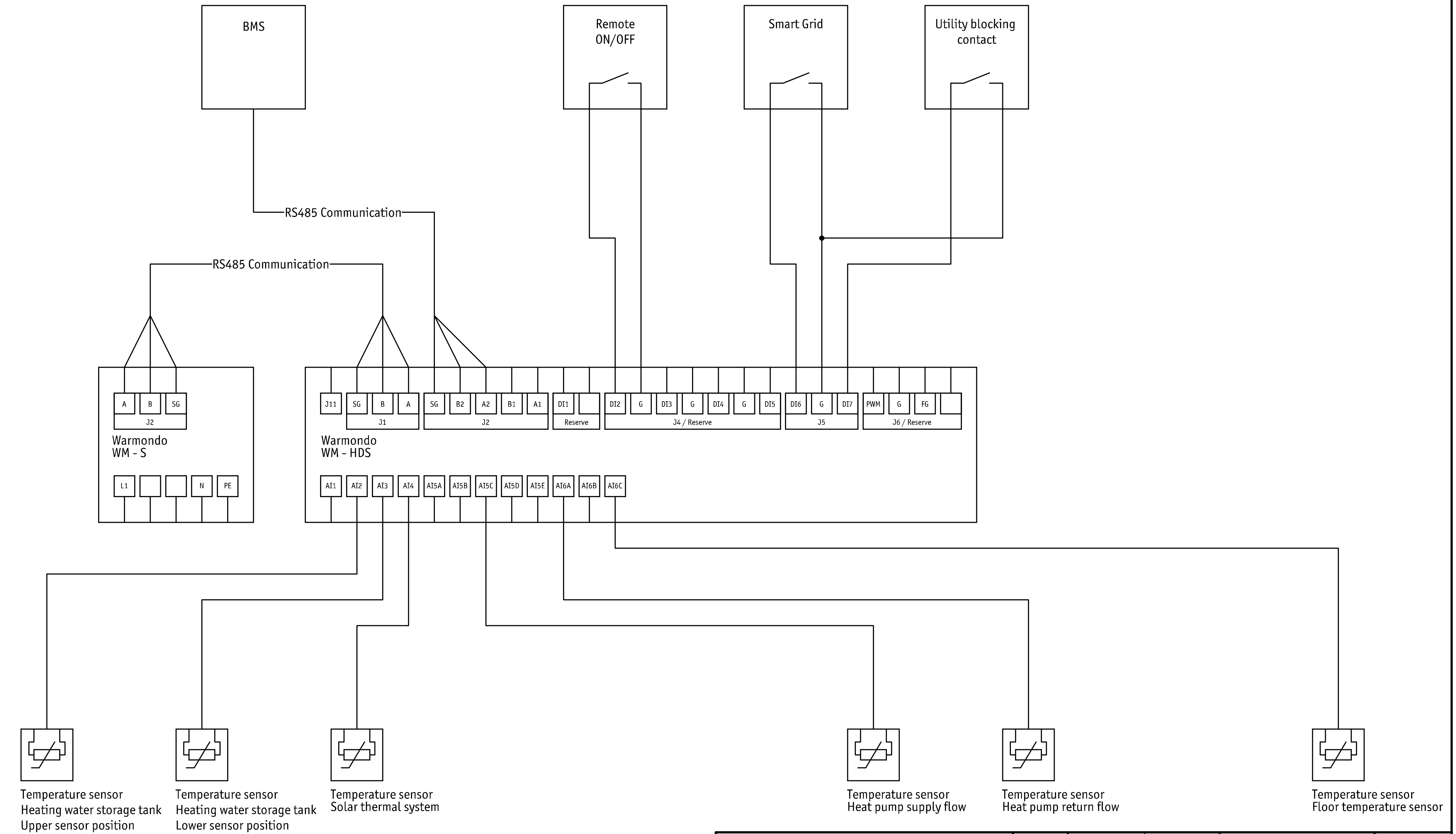
A	B	C	D	E	F



Designation		Date	Name	Changes		
WM-001_Hydraulics	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
Installation principle (not exhaustive) Reproduction only with written permission of MULTIBETON GmbH	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						5



Designation		Date	Name	Changes		
WM-001_Load	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
Installation principle (not exhaustive) Reproduction only with written permission of MULTIBETON GmbH	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						6



Designation		Date	Name	Changes		
WM-001_Sensors	drawn by	11.05.2026	Küpper	Date	Name	Sheet count
Installation principle (not exhaustive) Reproduction only with written permission of MULTIBETON GmbH	checked					7
MULTIBETON	MULTIBETON GmbH Heuserweg 23 53842 Troisdorf					Sheet no.
						7