

A

B

C

D

E

F

## Hydraulic scheme 004

### Hydraulic scheme configuration

- |   |  |
|---|--|
| <input type="checkbox"/> Buffertank                 | <input checked="" type="checkbox"/> Extrenal heating source              |
| <input checked="" type="checkbox"/> Multibuffertank | <input checked="" type="checkbox"/> Solar thermal system                 |
| <input type="checkbox"/> Duobuffertank              | <input type="checkbox"/> Fresh water station                             |
| <input type="checkbox"/> DHW Buffertank             | <input checked="" type="checkbox"/> Fresh water station with circulation |
| <input type="checkbox"/> Chilled buffer tank        | <input type="checkbox"/> Hot water outlet with circulation               |
| <input type="checkbox"/> Two buffer tanks           | <input checked="" type="checkbox"/> Mixed heating circuit                |
| <input checked="" type="checkbox"/> Cascade         | <input checked="" type="checkbox"/> Direct heating circuit               |

Integrated electric immersion heater (activated at the bivalence point)

External electric heater DHW  DHW

Fixed setpoint temperature  Heating

Weather-compensated temperature  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 = (Enable)  
Domestic hot water  
(Enable/Disable)

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

Parameter N26 = (2)  
Selection of control zones  
(0 = Singel 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 M03 = (Enter the desired value)  
DHW setpoint temperature

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

Parameter M13 = (Select the desired heating curve)  
Selection of the weather-compensated  
heating curve in Zone B

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)

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A

B

C


D

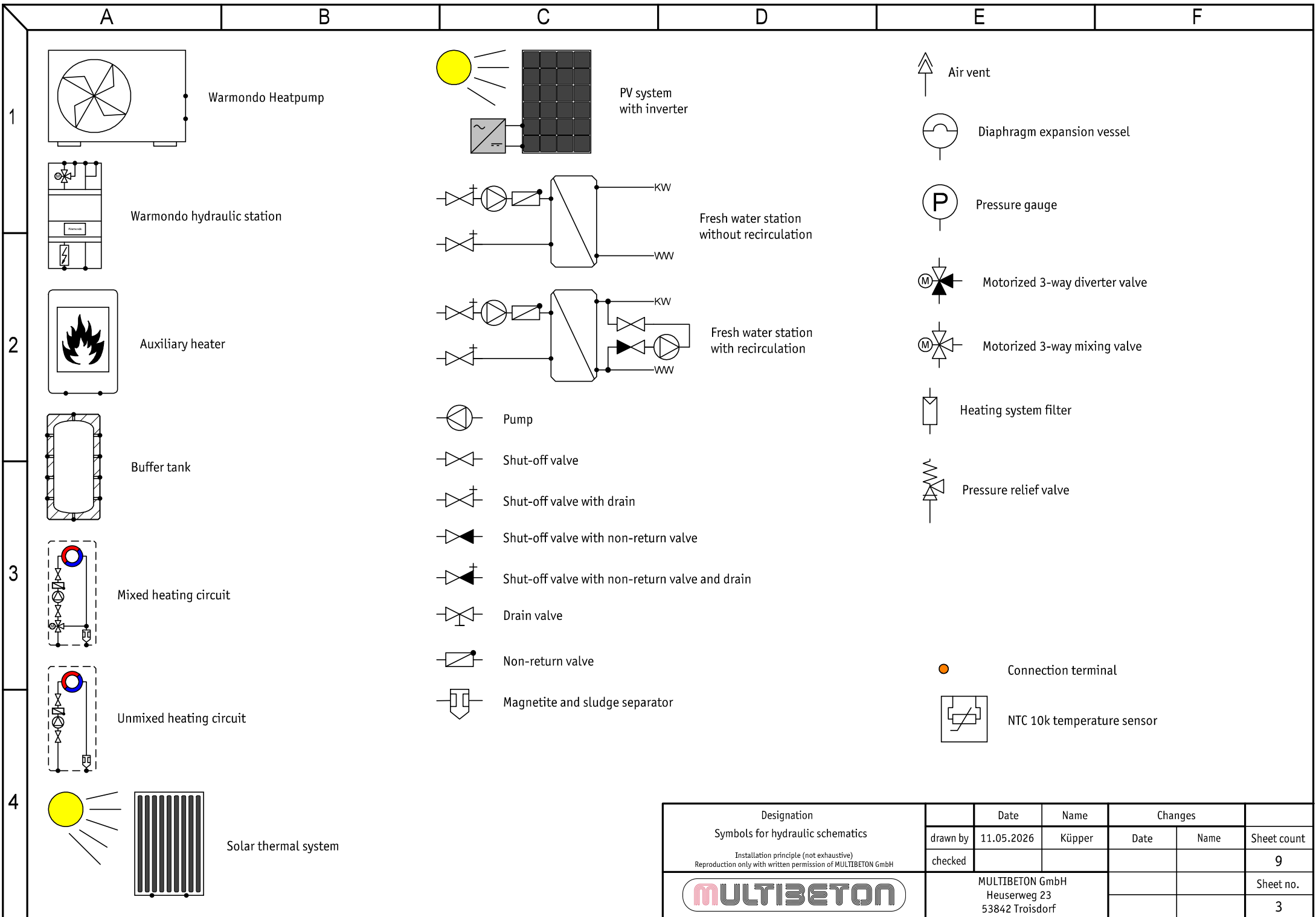
E

F

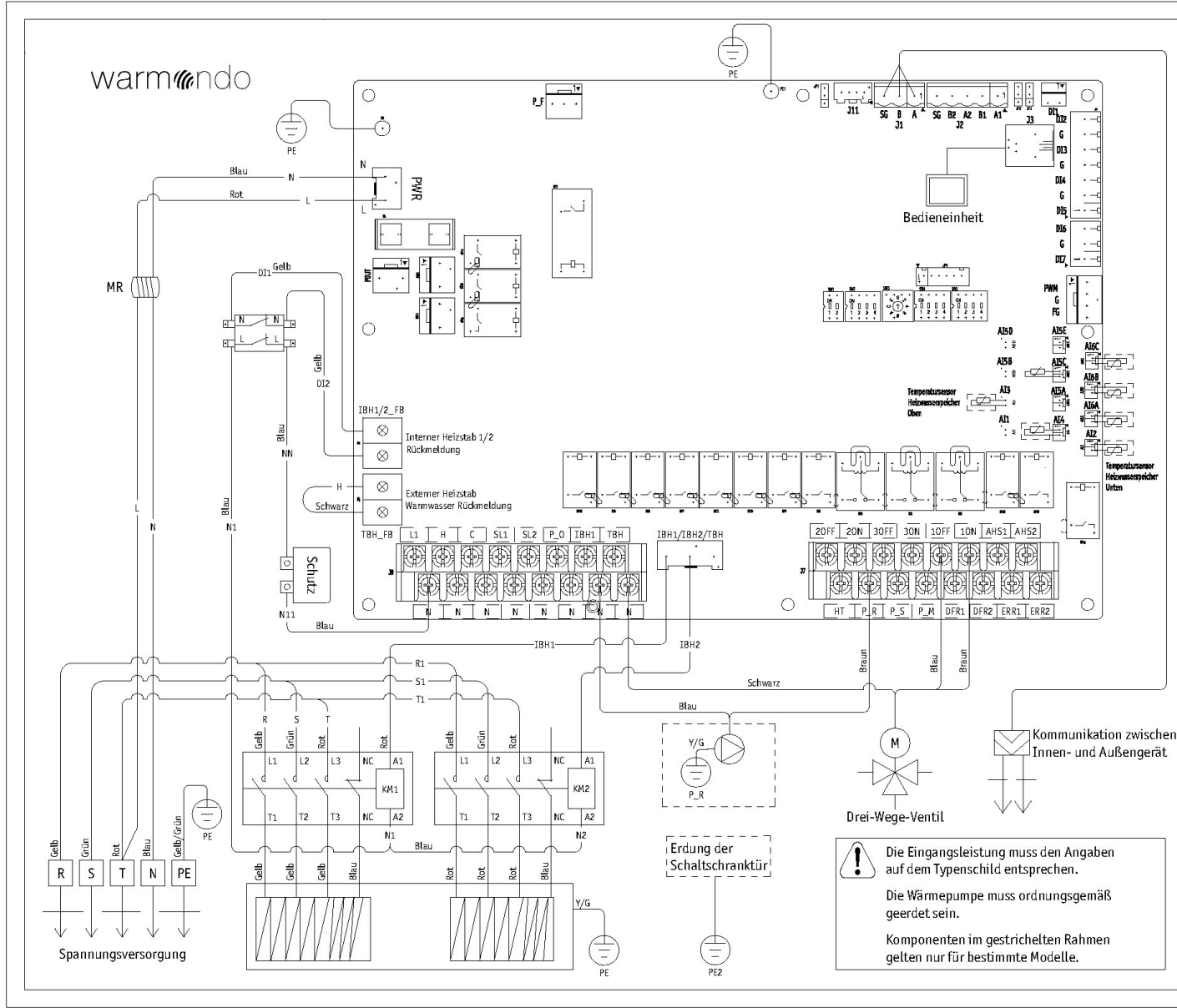
**IMPORTANT:**

- 1
- 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.
- 2
- 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.
- 3
- The fresh water station is controlled by its integrated controller.
  - A minimum domestic hot water storage volume of 300 litres must be provided.
  - The tapping capacity of the fresh water station must be considered.
  - Please note the tap temperatures at the fresh water station when flow temperatures are low
  - The domestic hot water temperatures of the fresh water station at low supply temperatures must be considered.
  - The number of heat pumps assigned to domestic hot water generation is configured by the manufacturer's service department via remote access. Please open a service ticket or contact them by phone to arrange configuration.
  - 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 are connected only to the lead heat pump (primary unit). The subordinate units receive the values from the primary unit.
  - The bus addresses of the individual heat pumps are assigned by the manufacturer's service department via remote access. Please open a service ticket or contact them by phone to arrange assignment.
  - 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.
- 4

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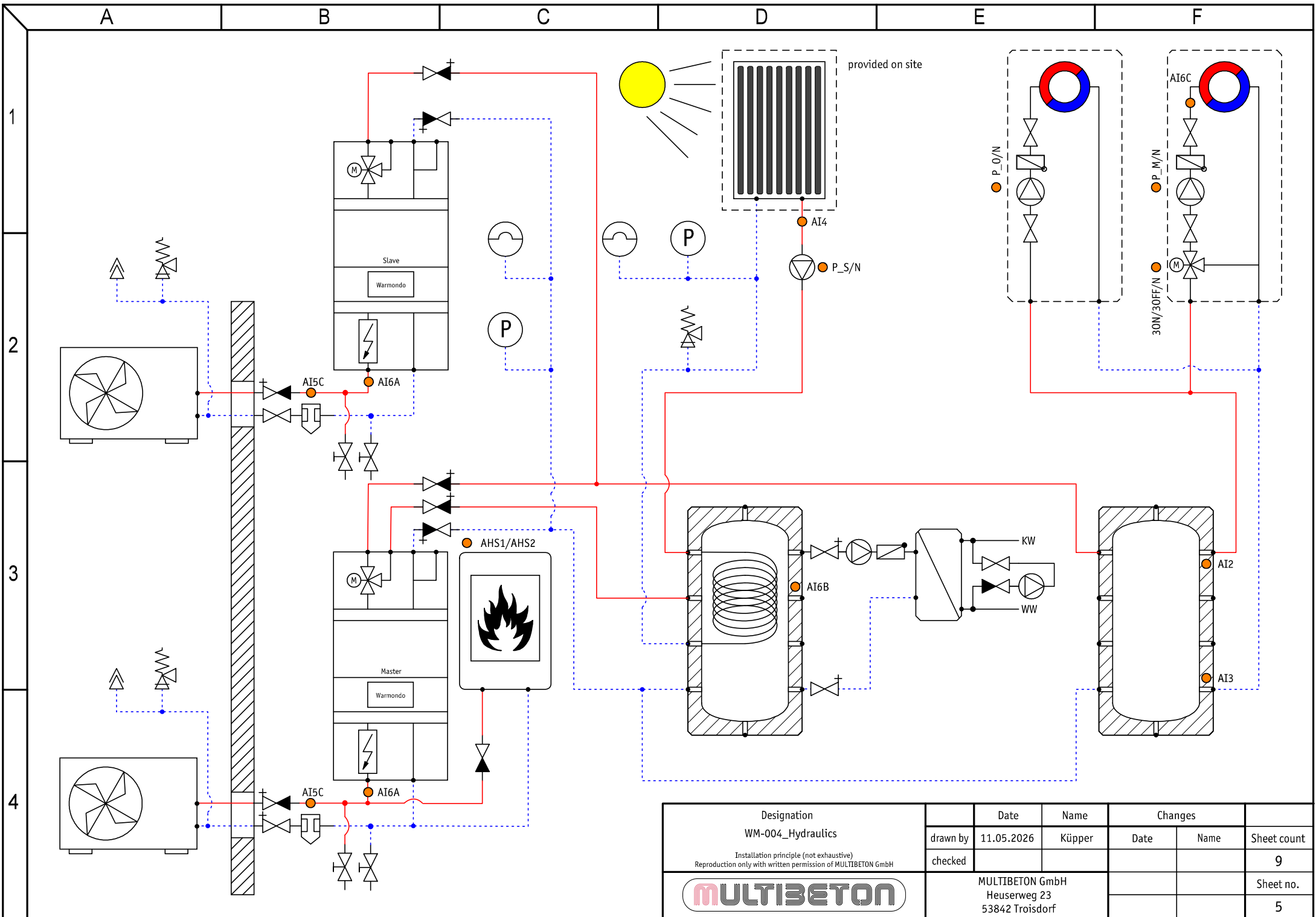
Designation Symbols for hydraulic schematics <small>Installation principle (not exhaustive)          Reproduction only with written permission of MULTIBETON GmbH</small>	Date	Name	Changes			
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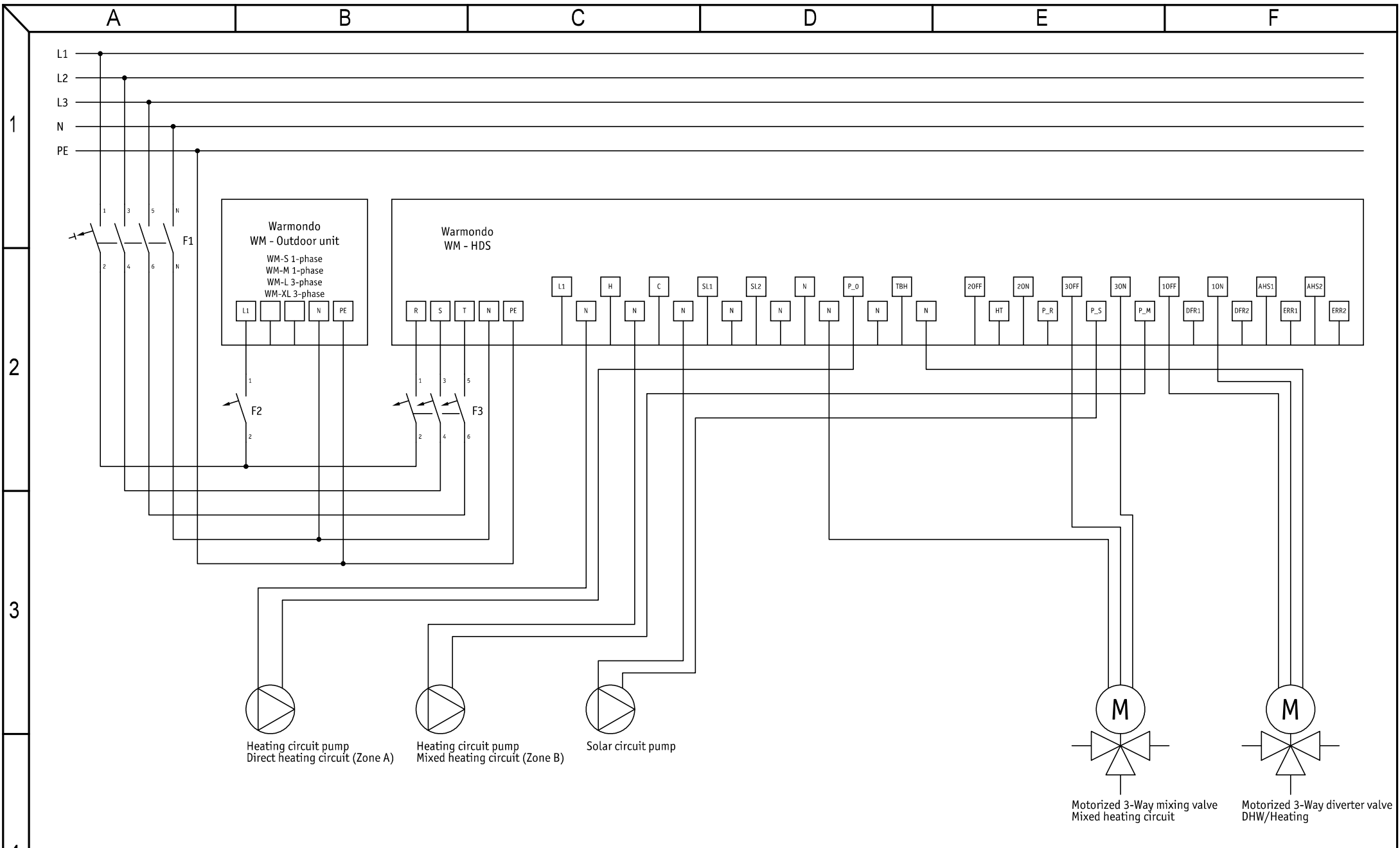
Legende	
AI6C	Temperatursensor gemischter Heizkreis Vorlauf
AI6B	Temperatursensor Pufferspeicher Trinkwasser
AI6A	Temperatursensor Gesamt Vorlauf Luft/Wasser Wärmepumpe und AH5
AI5C	Temperatursensor Vorlauf Luft/Wasser Wärmepumpe
AI4	Temperatursensor Solar Vorlauf
20FF	2# Dreiflueventil Heizen/Kuehlen (Heizen)
20N	2# Dreiflueventil Heizen/Kuehlen (Kuehlen)
30FF	3# Muecher geregelter Heizkreis
30N	3# Muecher geregelter Heizkreis
10FF	1# Dreiflueventil Heizen/Warmwasser (Warmwasser)
10N	1# Dreiflueventil Heizen/Warmwasser (Warmwasser)
AHS1	Potentialfreier Schaltkontakt externe Waermequelle
AHS2	Potentialfreier Schaltkontakt externe Waermequelle
HT	Heizband Abtropfwanne
P_R	Pumpe Zirkulation
P_S	Pumpe Solar
P_M	Pumpe gemischter Heizkreis
DFR1	Potentialfreier Schaltkontakt Abtauen Aktiv
DFR2	Potentialfreier Schaltkontakt Abtauen Aktiv
ERR1	Potentialfreier Schaltkontakt Fehlermeldung Luft/Wasser Wärmepumpe
ERR2	Potentialfreier Schaltkontakt Fehlermeldung Luft/Wasser Wärmepumpe
L1	Relais Umschaltung Heizen/Kuehlen
H	Relais Umschaltung Heizen/Kuehlen
C	Relais Umschaltung Heizen/Kuehlen
SL1	Externer Eingang Solaranlage
SL2	Externer Eingang Solaranlage
P_0	Pumpe ungemischter Heizkreis
TBH1	Interner Heizstab Stufe 1
TBH2	Interner Heizstab Stufe 2
TBH	Externer Heizstab Warmwasser
DI2	Externer Eingang
G	Externer Eingang
DI6	Smart Grid (SG)
DI7	ERU Kontakt
G	Externer Eingang
MR	Entstaerfilter
Y/G	Erdung

**!** Die Eingangsleistung muss den Angaben auf dem Typenschild entsprechen.  
 Die Wärmepumpe muss ordnungsgemäß geerdet sein.  
 Komponenten im gestrichelten Rahmen gelten nur für bestimmte Modelle.

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			Date	Name	
Hydraulic station schematic diagram	11.05.2026	Küpper			9
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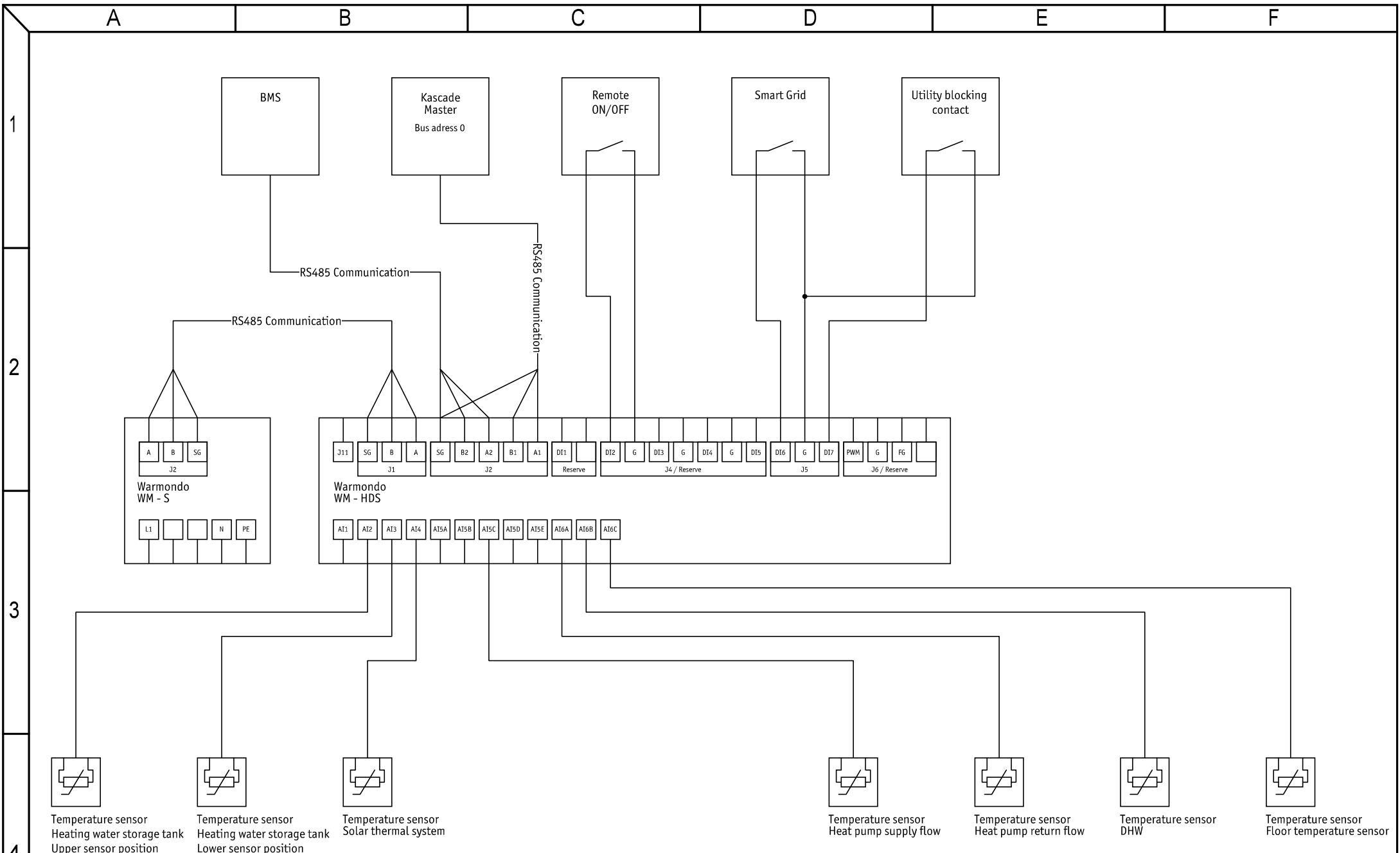
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- Temperature sensor Heating water storage tank Upper sensor position
- Temperature sensor Heating water storage tank Lower sensor position
- Temperature sensor Solar thermal system
- Temperature sensor Heat pump supply flow
- Temperature sensor Heat pump return flow
- Temperature sensor DHW
- Temperature sensor Floor temperature sensor

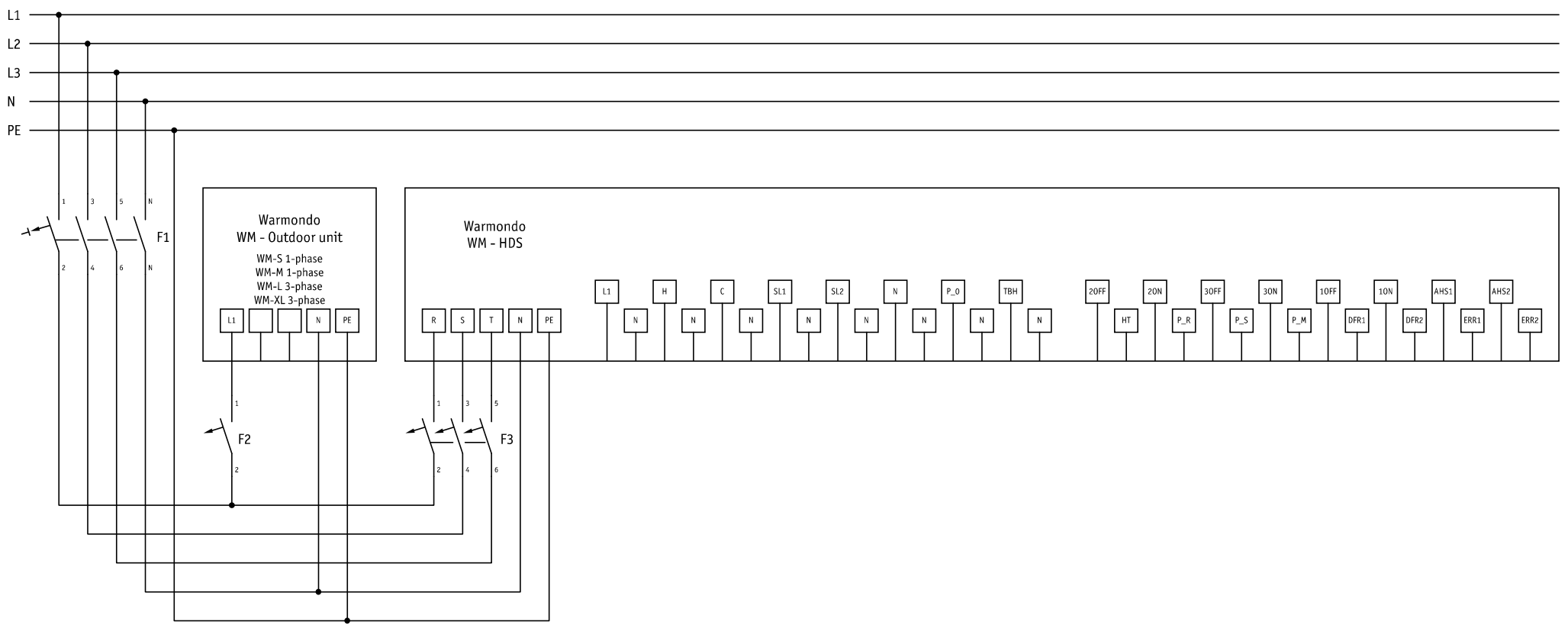
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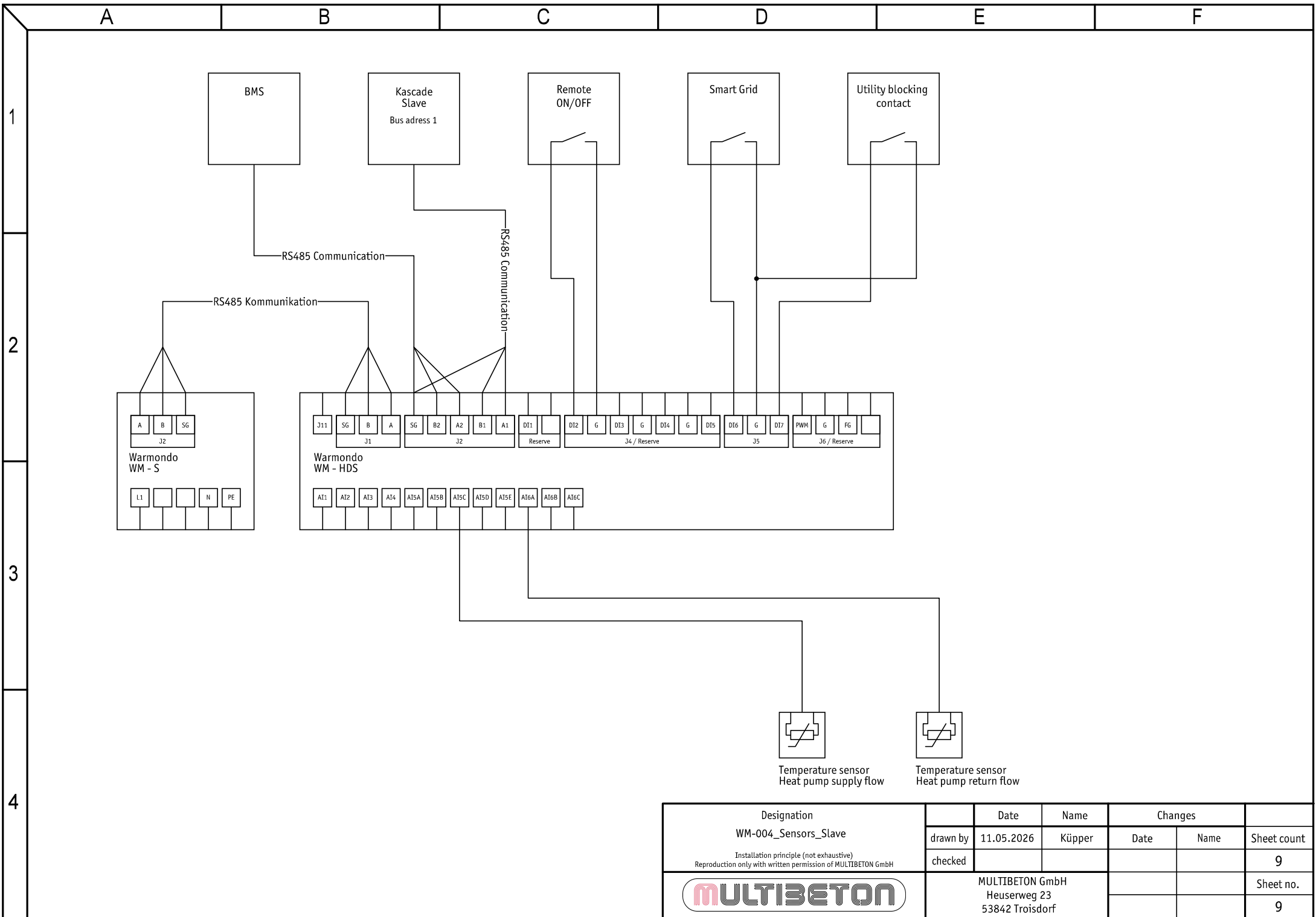
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