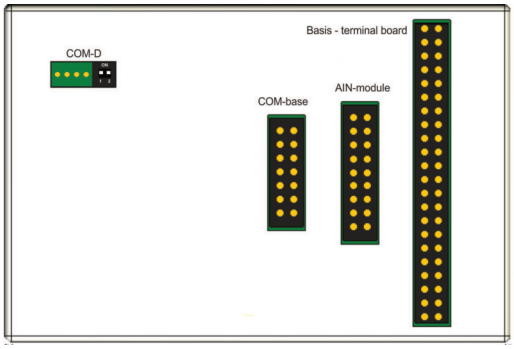
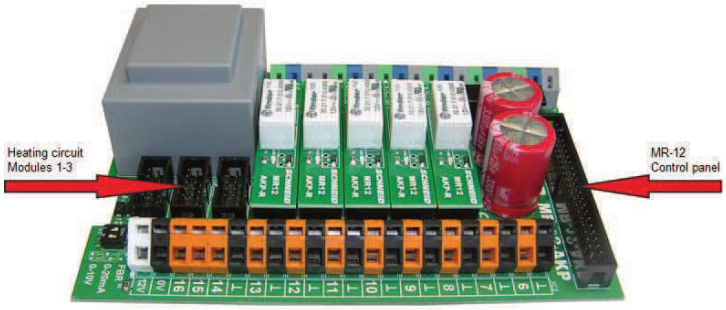
MR12 module controller base

Terminal board (AKP) module regulator MR12:

The SCHNEID MR-12 is an electronic control unit for installation mounting. The AKP of the module regulator MR-12 is compatible with the components of the module regulator MR-08.

The AKP board (terminal board) is connected directly to the control unit.
If a communication board (COM-BASE) is available, it will also be connected directly to the control unit, as well as a possible extension with an additional module for analog and digital inputs and outputs (AIN module). The cable routing takes place in the DIN rail rail.
The heating circuit expansion modules 1-3 are connected to the AKP board.





Connection diagram :

Supply 230 VAC L
Supply 230 VAC N
Protective conductor PE

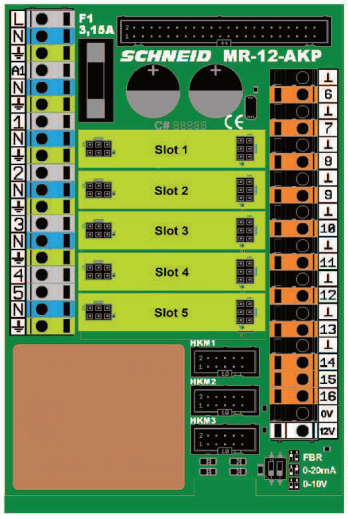
230 VAC output for heating circuit modules L.
230 VAC output for heating circuit modules N
Protective conductor PE

P1 heating circuit 0 pump L
P1 heating circuit 0 pump N

P2 boiler 1 pump L
P2 boiler 1 pump N

P3 boiler 2 pump L
P3 boiler 2 pump N

M45 district heating valve OPEN L
M45 district heating valve CLOSED L
M45 district heating valve N



Temperatures PT1000
(2-pole shielded)

GND
Terminal 6: T6 outside temperature
GND
Terminal 7: T7 return temperature primary
GND
Terminal 8: T8 secondary flow temperature
GND
Terminal 9: T9 boiler 1 temperature above
GND
Terminal 10: T10 boiler 1 temperature below
GND
Terminal 11: T11 return temperature secondary
GND
Terminal 12: T12 boiler 2 temperature above
GND
Terminal 13: T13 Boiler 2 temperature below
GND room remote control circuit 0
Terminal 14: FBT room temperature circuit 0
Terminal 15: FBS remote control signal
Terminal 16: VCC remote control supply

12VDC output (for e.g. SCHNEID radio modules)
maximum load: 500mA

FBR
0-20mA
0-10V

Supply 115 VAC L
Supply 115 VAC N
Protective conductor PE

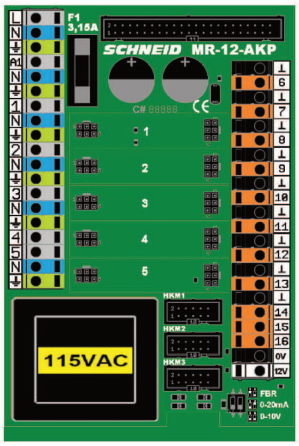
115 VAC output for heating circuit modules L.
115 VAC output for heating circuit modules N
Protective conductor PE

P1 heating circuit 0 pump L
P1 heating circuit 0 pump N

P2 boiler 1 pump L
P2 boiler 1 pump N

P3 boiler 2 pump L
P3 boiler 2 pump N

M45 district heating valve OPEN L
M45 district heating valve CLOSED L
M45 district heating valve N



Temperatures PT1000
(2-pole shielded)

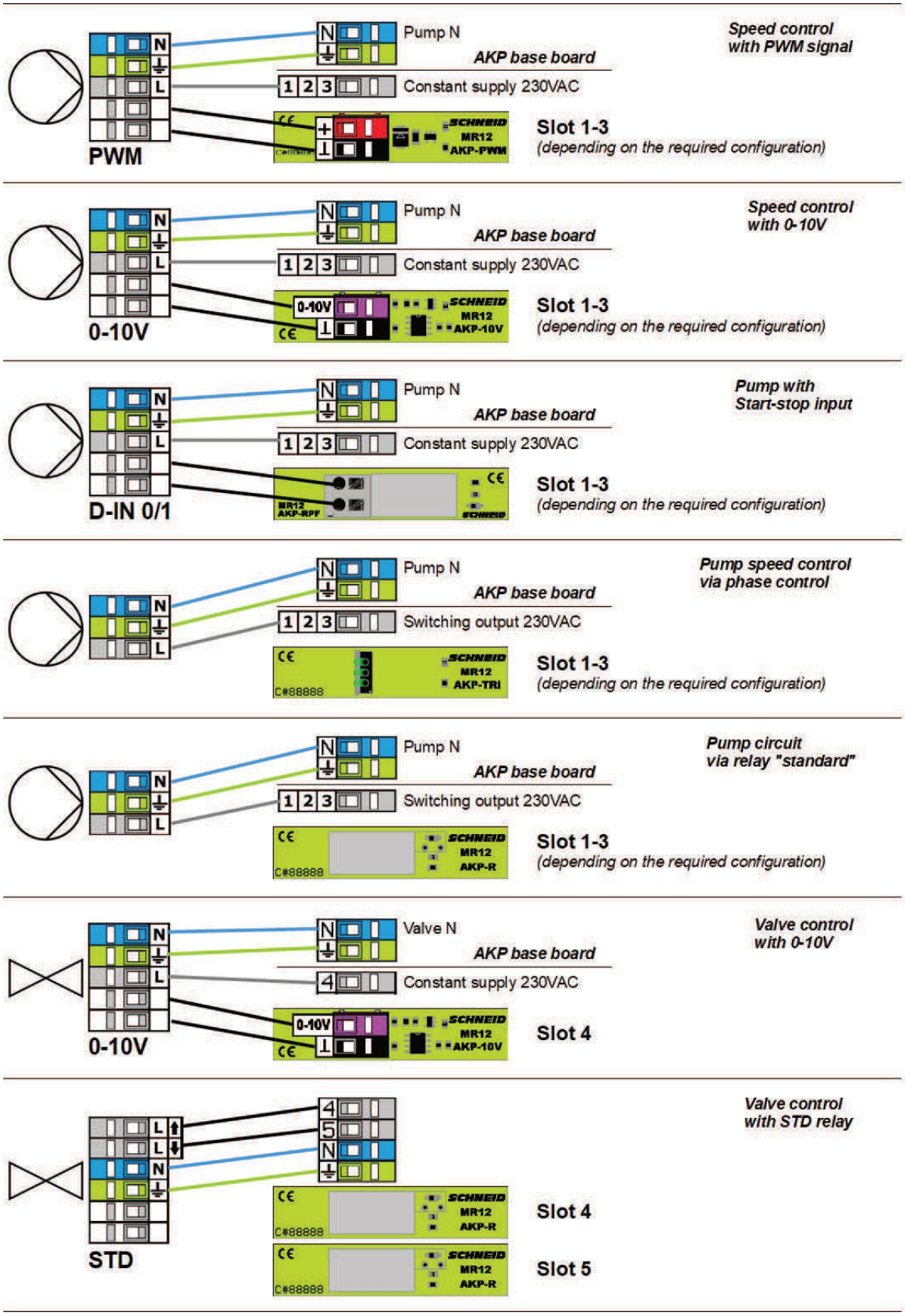
GND
Terminal 6: T6 outside temperature
GND
Terminal 7: T7 return temperature primary
GND
Terminal 8: T8 secondary flow temperature
GND
Terminal 9: T9 boiler 1 temperature above
GND
Terminal 10: T10 boiler 1 temperature below
GND
Terminal 11: T11 return temperature secondary
GND
Terminal 12: T12 boiler 2 temperature above
GND
Terminal 13: T13 Boiler 2 temperature below
GND room remote control circuit 0
Terminal 14: FBT room temperature circuit 0
Terminal 15: FBS remote control signal
Terminal 16: VCC remote control supply

12VDC output (for e.g. SCHNEID radio modules)
maximum load: 500mA

FBR
0-20mA
0-10V

MR12 module controller base

Connection diagram :



MR12 module controller base

Supply 230 VAC L
Supply 230 VAC N
Protective conductor PE

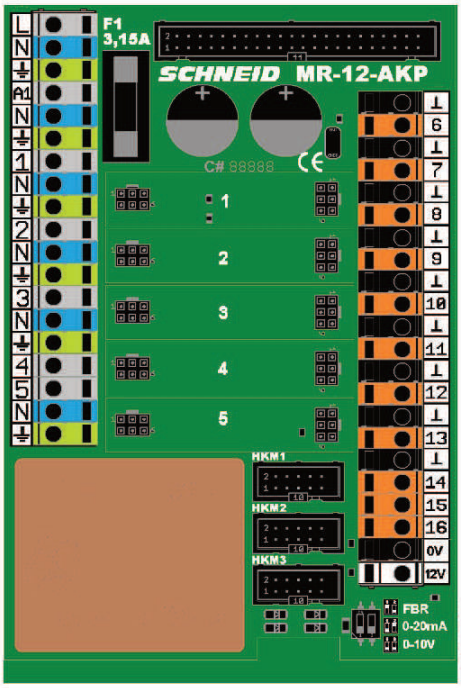
230 VAC output for heating circuit modules L.
230 VAC output for heating circuit modules N
Protective conductor PE

P1 heating circuit 0 pump L
P1 heating circuit 0 pump N

P2 boiler 1 pump L
P2 boiler 1 pump N

P3 boiler 2 pump L
P3 boiler 2 pump N

M45 district heating valve OPEN L
M45 district heating valve CLOSED L
M45 district heating valve N



Temperatures PT1000
(2-pole shielded)

GND
Terminal 6: T6 outside temperature
GND
Terminal 7: T7 return temperature primary
GND
Terminal 8: T8 secondary flow temperature
GND
Terminal 9: T9 boiler 1 temperature above
GND
Terminal 10: T10 boiler 1 temperature below
GND
Terminal 11: T11 return temperature secondary
GND
Terminal 12: T12 boiler 2 temperature above
GND
Terminal 13: T13 Boiler 2 temperature below
GND room remote control circuit 0
Terminal 14: FBT room temperature circuit 0
Terminal 15: FBS remote control signal
Terminal 15: alternatively AIN
Terminal 16: VCC remote control supply

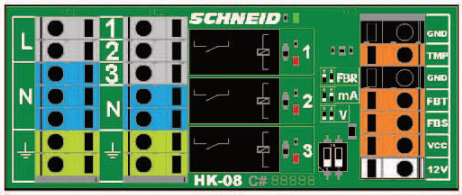
12VDC output (for e.g. SCHNEID radio modules)
maximum load: 500mA

FBR
0-20mA
0-10V

Outputs 230VAC

1P1 pump heating circuit 1 1
1M1 mixing valve circuit 1 OPEN 2
1M1 mixing valve circuit 1 CLOSED 3

FBR
0-20mA
0-10V

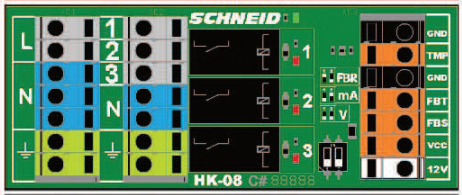


Heating circuit module circuit 1
GND
TMP 1T1 flow temperature circuit 1
GND room remote control circuit 1
FBT remote control room temperature
FBS remote control signal
VCC remote control supply
12VDC output (max. 100mA load)

Outputs 230VAC

2P1 pump heating circuit 2 1
2M1 mixing valve circuit 2 OPEN 2
2M1 mixing valve circuit 2 CLOSED 3

FBR
0-20mA
0-10V

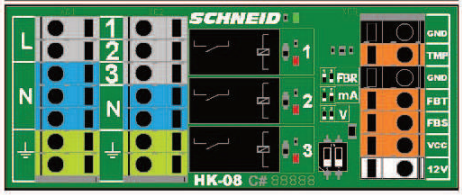


Heating circuit module circuit 2
GND
TMP 2T1 flow temperature circuit 2
GND room remote control circuit 2
FBT remote control room temperature
FBS remote control signal
VCC remote control supply
12VDC output (max. 100mA load)

Outputs 230VAC

3P1 pump heating circuit 3 1
3M1 mixing valve circuit 3 OPEN 2
3M1 mixing valve circuit 3 CLOSED 3

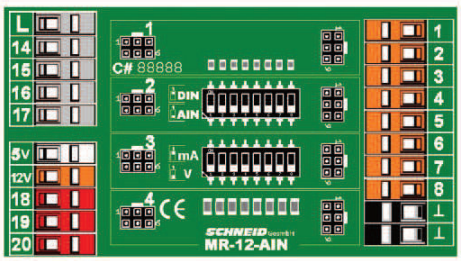
FBR
0-20mA
0-10V



Heating circuit module circuit 3
GND
TMP 3T1 flow temperature circuit 3
GND room remote control circuit 3
FBT remote control room temperature
FBS remote control signal
VCC remote control supply
12VDC output (max. 100mA load)

GND signal ground
Terminal 14: **AOUT 1** district heating valve
Terminal 15: **AOUT 2** base C / circuit 1
Terminal 16: **AOUT 3** base D / circuit 2
Terminal 17: **AOUT 4** circuit 3

VCC + 5V: supply 5V
VCC + 12V: supply 12V
Terminal 18: **DOUT 1** leak warning
Terminal 19: **DOUT 2** RESET
Terminal 20: **DOUT 3** reserve



Terminal 1: AIN 1 0-10V circuit 1
Terminal 2: AIN 2 0-10V circuit 2
Terminal 3: AIN 3 0-10V circuit 3
Terminal 4: IN 4
Terminal 5: IN 5
Terminal 6: IN 6
Terminal 7: IN 7
Terminal 8: IN 8