

# MR12 AIN additional board



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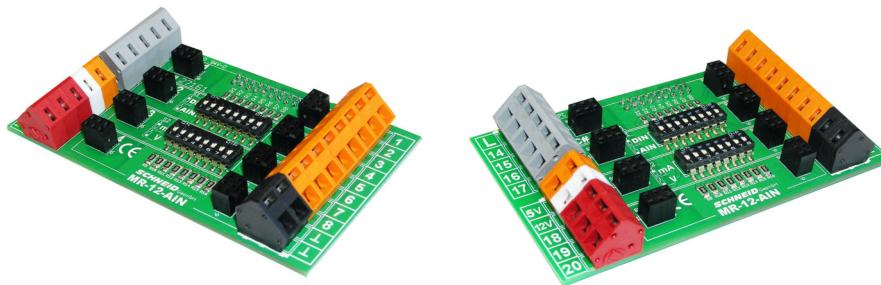
Products, data sheets, documentation, MR12-SCHEMA-calculator: [www.schneid.at](http://www.schneid.at)

## SCHNEID MR12 AIN additional board

Expansion board with 8 analog inputs 0-10V or 0-20mA

Order number: 190.16905

Order code: MR12 AIN-Zusatzplatine

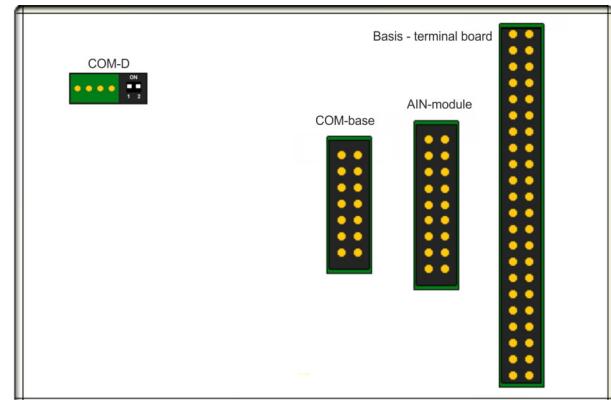


## Overview:

The add-on module extends the module controller MR08 / MR12 by analog and digital inputs and outputs.

### Use cases:

- Detection of supply and return pressure in heating systems
- External setpoint specification via 0-10V signal (the 10V value can be calibrated on the temperature side in the controller)
- External request (setpoint adjustable by parameter)
- Speed output for pumps or valve control  
By using different plug-in modules, the following output signals are possible:
  - Relay output 230V
  - Relay output floating
  - TRIAC output
  - PWM signal
  - 0-10V
- Leak warning systems



The AIN module is connected directly to the back of the controller using a ribbon cable.

## Terminal plan:

### GND Signalground

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

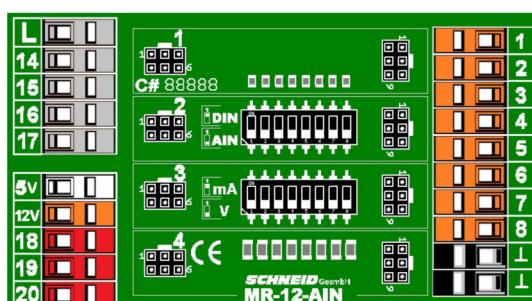
**VCC +5V:** Supply 5V

**VCC +12V:** Supply 12V

Terminal 18: **DOUT 1** Leak warning

Terminal 19: **DOUT 2** RESET

Terminal 20: **DOUT 3** Reserve



Terminal1: **AIN 1** 0-10V Circuit1

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**

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## Signal connections:

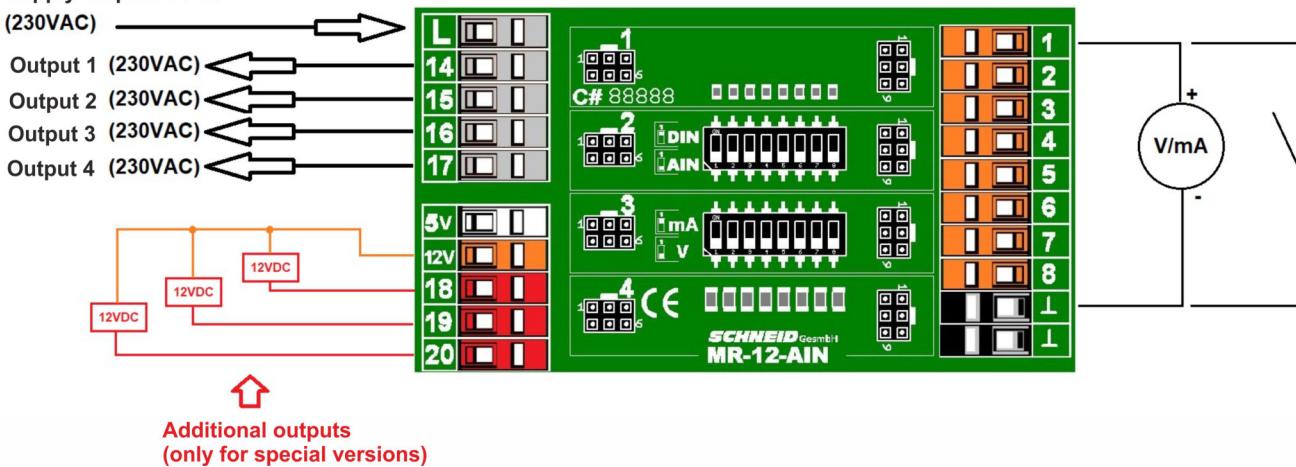
### Connections inputs (right side)

- 1 - Input 1 (digital, 0-10V or 0-20mA depending on the configuration) ext. Setpoint specification HK1
- 2 - Input 2 (digital, 0-10V or 0-20mA depending on the configuration) ext. Setpoint specification HK2
- 3 - Input 3 (digital, 0-10V or 0-20mA depending on the configuration) ext. Setpoint specification HK3
- 4 - Input 4 (digital, 0-10V or 0-20mA depending on the configuration)
- 5 - Input 5 (digital, 0-10V or 0-20mA depending on the configuration)
- 6 - Input 6 (digital, 0-10V or 0-20mA depending on the configuration)
- 7 - Input 7 (digital, 0-10V or 0-20mA depending on the configuration)
- 8 - input 8 (digital, 0-10V or 0-20mA depending on configuration)

GND-Signalground

GND-Signalground

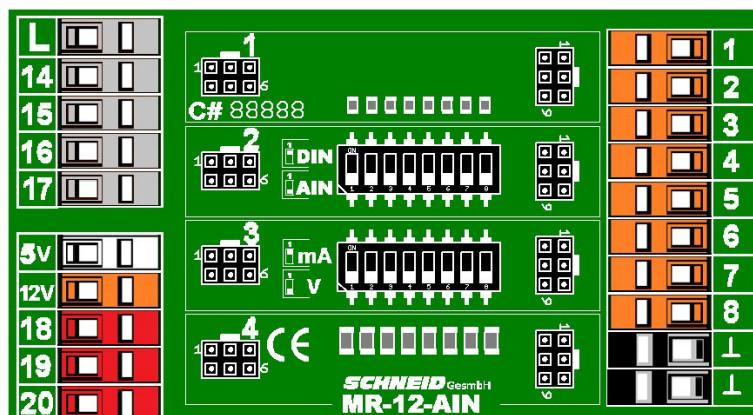
### Supply outputs 14-17



### Output connections (left side)

- L - infeed plug-in modules (230VAC)
- 14 - Output module slot 1 (230VAC)
  - 15 - Output module slot 2 (230VAC)
  - 16 - Output module position 3 (230VAC)
  - 17 - Output module slot 4 (230VAC)

- +5 - output terminal 5 VDC (max 200mA)
- +12 - output terminal 12VDC (max 200mA)
- 18 - D-Out LWG (switching output 12V)
- 19 - D-Out RESET (switching output 12V)
- 20 - D-Out RES (switching output 12V)



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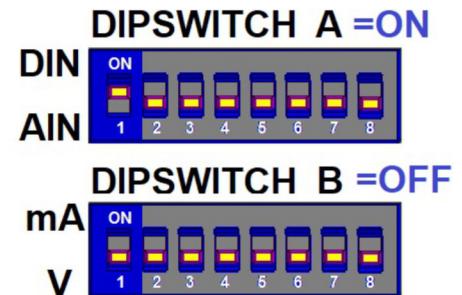
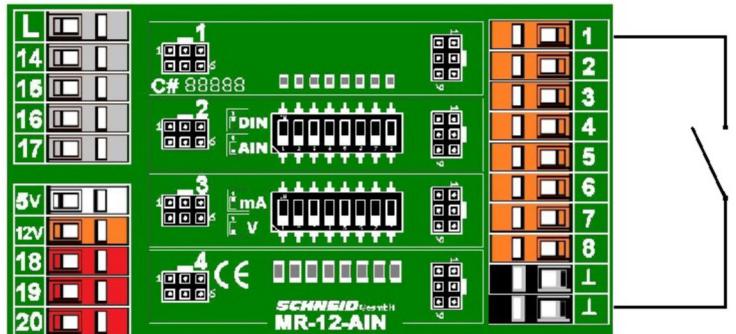
## Configuration:

There is one pair of configuration switches for each signal input (1-8).

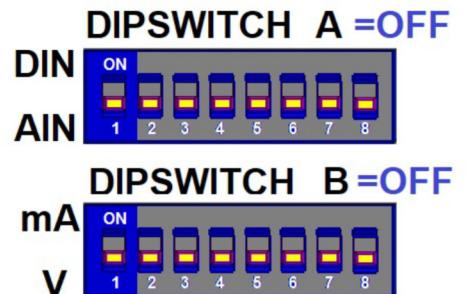
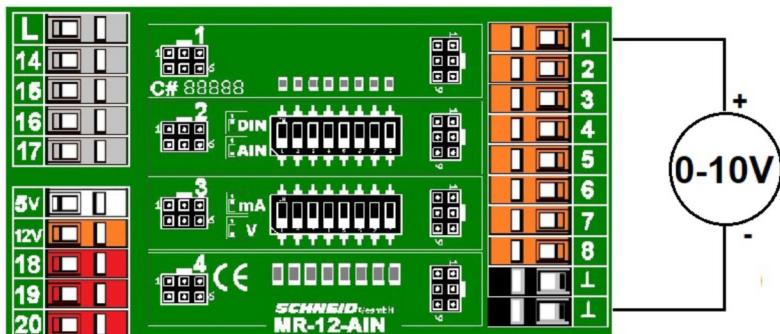
The following graphic only refers to the first input.

Switch pairs 2-8 must be used for the other inputs.

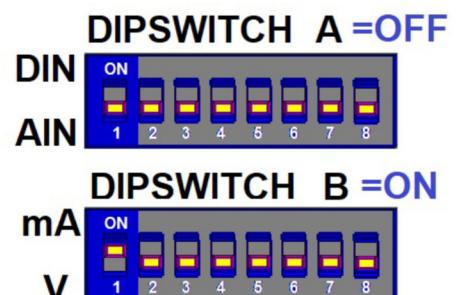
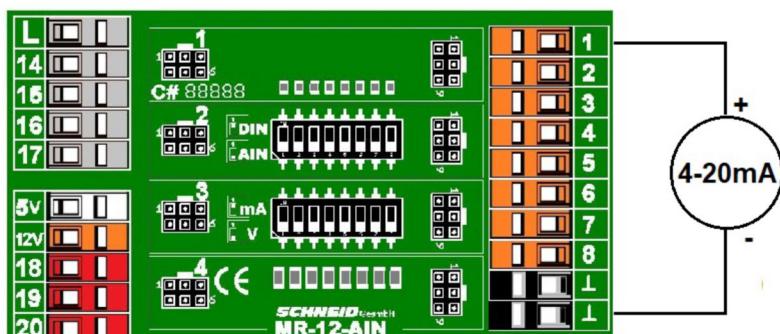
## Configuration as digital input



## Configuration as 0-10V input



## Configuration as mA input

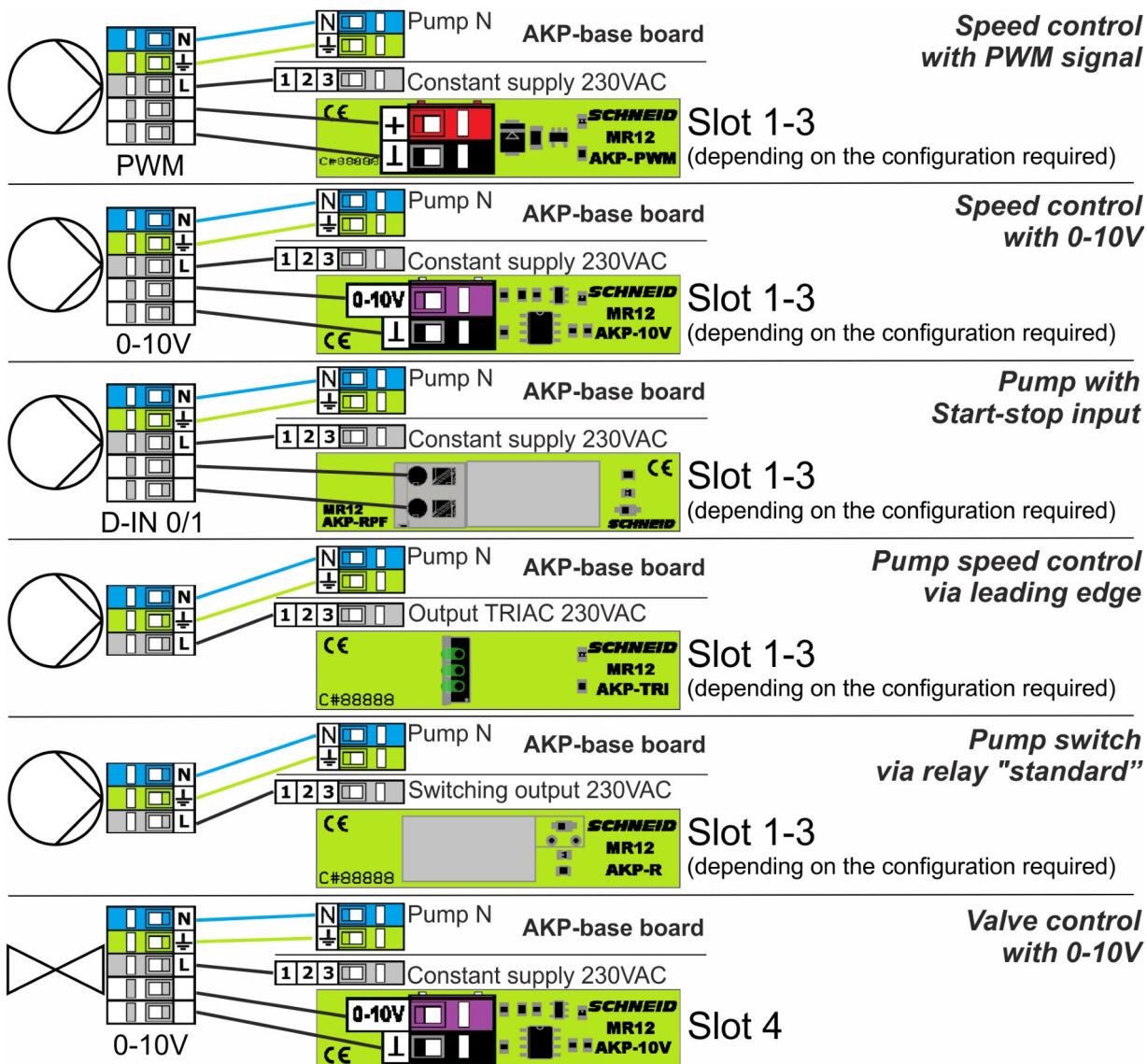


## Scope of delivery:

SCHNEID MR12 AIN additional board with 8 analog inputs 0-10V or 0-20mA and ribbon cable 800mm.

- WITHOUT plug-in modules - depending on the desired function, these have to be selected yourself.

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## Technical specifications:

Intrastat number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	55x100x24
Weight (in kg)	0.108 (incl. cable 800mm)
Protection class	IP00
Ambient temperature	0°C....+40°C
Operating voltage	12VDC
Power consumption	< 0,1W
Connection type	Fixed wiring terminals