

# MR12 control unit

## SCHNEID MR12 control unit

- only available as a spare part -

Order number:	190.xxxxx
Order code:	MR12 Bedienteil xxx



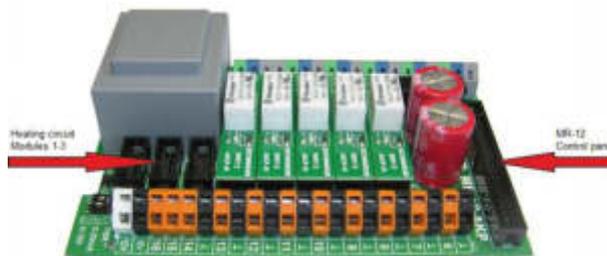
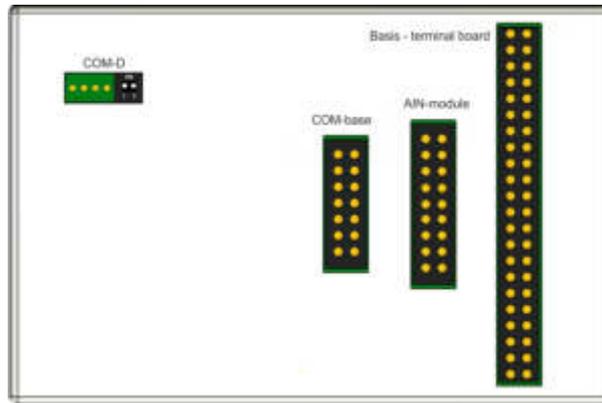
### Overview:

The module controller MR12 is a microprocessor-controlled device for controlling district heating transfer stations with the option of modular expansion for another three mixer circuits and additional acquisition of the heat meter data and forwarding of all data to a higher-level network optimization computer in the boiler house.

The AKP board (BASIS board) is connected directly to the control unit.

If a communication board (COM-BASIS) is available, this is also 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 cables are routed in the DIN rail.

The heating circuit expansion modules 1-3 are connected to the AKP board.



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## - Zero cross detection (zero crossing circuit)

The relays are switched exactly at the zero point of the sine curve. At this moment, the inrush current is smallest. This protects the relay contacts and extends the service life of the relays.

## - Possibility to use internal wireless modules.

(WiFi, Bluetooth or radio) For communication with end devices such as Tablet, smartphones or detection of future wireless sensors (outdoor, room sensors or radio FBR). The interface cards are installed inside the controller (no ComBasis required). This interface is shared with ComC on the COM basis. The CPU can select between ComC external and internal.

## - 4.UART interface (COM-D) in the form of RS485.

Executed on the backplane with 4-pin connector (12V +/- RS485 D + / D-). For the direct connection of a digital remote control SCHNEID-FBR7 per heating circuit.

The AKP board (BASIS board) is connected directly to the control unit. If a communication board (COM-BASIS) is available, this is also 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 COM-D is designed in the form of RS485 and is used for the direct connection of a digital SCHNEID FBR7 per heating circuit. The cables are routed in the DIN rail. The heating circuit expansion modules are connected to the AKP board.

- Optional: the MR12 can be equipped with an additional expansion connection with the following signals:

- \* 3 pc pulse inputs for counting applications
- \* 1 pc additional PT1000 sensor input
- \* 1 pc additional analog input 0-10V



## Order variants:

### MR12 control unit

with connection for 3 heating circuits

Order number: 190.15205

Order code: MR12 Bedienteil



### MR12 control unit PLC

with connection for 7 heating circuits

Order number: 190.15635

Order code: MR12 Bedienteil SPS

