Control panel MR07-PLC module controller

SCHNEID MR07-PLC control panel

Order number:	170.12067
Order code:	MR07 SCHNEID SPS Bedienteil

Overview:

Microprocessor-controlled control device for controlling district heating transfer stations with the option of modular expansion to a total of ten heating circuits and additional recording of the heat meter data and forwarding of all data to a higher-level network optimization computer in the boiler house.
The controller has a modular design and can control and regulate a direct heating circuit, seven mixer circuits, a boiler circuit and a circulation circuit in its maximum configuration.

The MR-07 module controller is equipped with a graphic display with 128x64 pixels. To support menu selection and parameter input, there are also four symmetrically arranged buttons.

The MR-07 module controller is also equipped with an MMC card, which can be used as program memory, parameter memory or trend memory. This makes commissioning standard systems a simple matter because MMC cards can be preprogrammed using a notebook.
The MMC card can also be used as a data memory for various bitmaps for graphic display on the controller and as a foreign language memory.

There are three ways to upload new application programs:
- – Installation of a new MMC card
- – Upload the program via programming adapter
- – Upload a program via data interface and boiler house computer

HEATING CONTROLLER base unit

- – Three-point output for primary valve
- – Two-point output for boiler 1
- – Two-point output for boiler 2 (or circulation circuit)
- – Two-point output for a direct heating circuit
- – Three-point output for a mixer heating circuit#
- – six mixer heating circuit modules can also be connected
- – A remote control can be connected to each heating circuit
- – two analog inputs for the set temperature via 0-10V (4-20mA)
- – Additional detection of the secondary return temperature
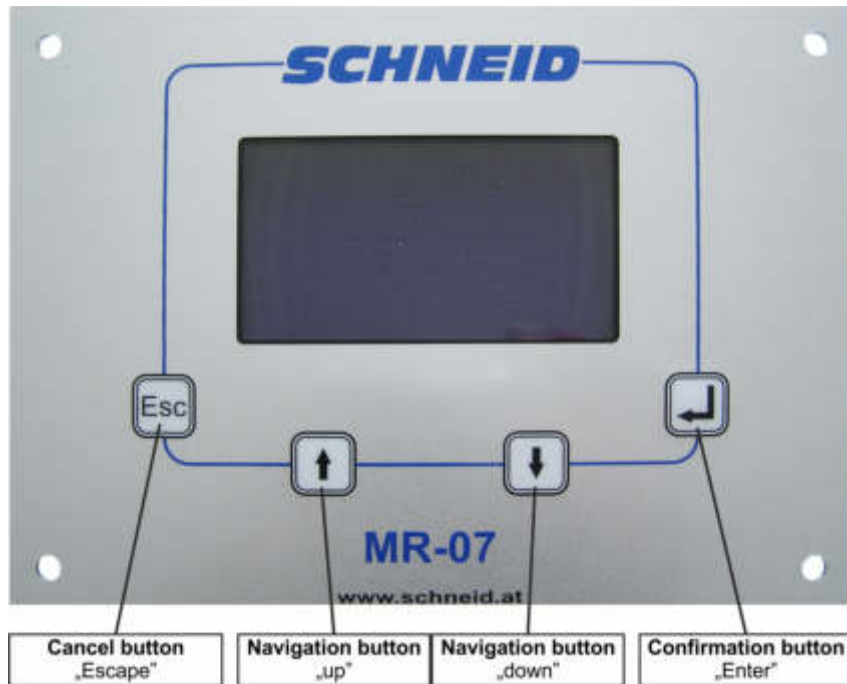- – two temperature inputs for visualization purposes
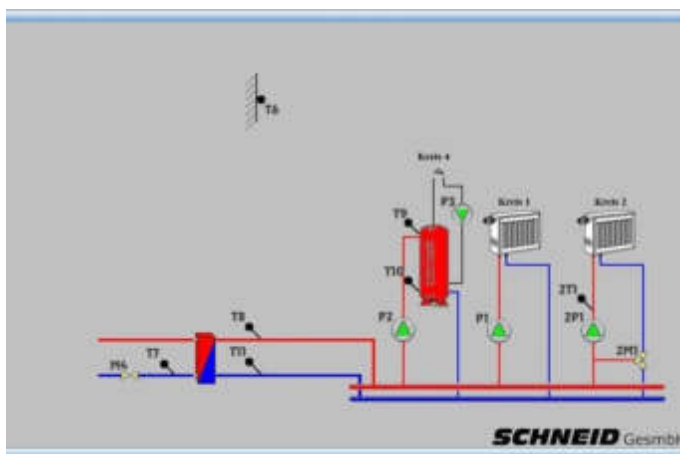
General regulatory specifications:

- – Power limited heat transfer
- – Heat transfer dependent on outside temperature
- – Heat absorption-controlled heat transfer
- – Return temperature-dependent return limitation
- – Connection option for 6 heating circuit modules
- – Regulation of a direct heating circuit and 7 direct / mixer heating circuits
- – Heating curve control dependent on outside temperature
- – Pump shutdown dependent on outside temperature
- – Pump temperature cut-off depending on the room temperature
- – three daily heating times per heating circuit
- – Heating time inversion as reduction times
- – blackout times
- – Outside temperature averaging up to nine hours
- – building coefficient (= building storage capacity)
- – Optimization of the on / off times with a room sensor
- – Control via room sensor
- – Regulation via adjustable room influence
- – Room control via thermostat function
- – Remote control for each heating circuit
- – Two external 0-10V setpoint specifications with additional print
- – Control of boiler circuits in various designs
- – Boiler priority circuit / parallel boiler operation
- – Different boiler hydraulic variants such as loading module / with mixer / primary etc.
- – Various boiler loading criteria such as periods / minimum temperature / setpoint charging
- – various boiler shutdown criteria such as setpoint above / below / loading time etc.
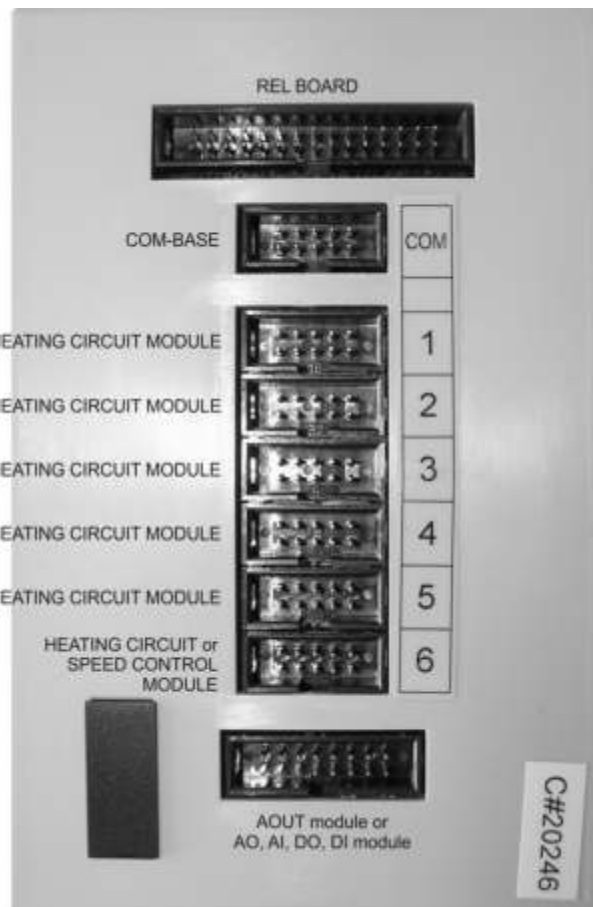- – Boiler load locks after temperature / if target values are not reached

SCHNEID MR07-PLC control unit:

Key assignment

| Cancel button „Escape" | Navigation button „up" | Navigation button „down" | Confirmation button „Enter" |

Connections

cope of delivery:

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Technical specifications:

Intrastat number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	119x164x38
Weight (in kg)	0,42
Degree of protection	IP-20
Ambient temperature	0°C....+40°C
Operating voltage	230VAC
Power consumption	Max. 10VA
Max. Nominal current "A1 + A2"	Je 2 A
Max. Total nominal current	3,15A
Max. Nominal current per output	2A continuous current // max. 15A inrush current
Relay output life	50×10^3 switching cycles
Connection type	Fixed wiring terminals
Connection technology	Spring clamp
Cable cross section	Max. 2.5mm²
Mounting type	DIN-RAIL TS35
Operating time	Continuous operation
Degree of pollution	2
Rated impulse voltage	1kV
Sensor type temperature sensor	PT1000

SCHNEID GesmbH