### **Heating circuit module HK12**

# Heating circuit module (HK) 12 for the module controller MR06 / 07/08/12 in use with the MR12 plug-in modules

Order number: 300.xxxxx

Order code: Heizkreismodul-HK12 xxx



#### Overview:

The heating circuit module is used to connect to a SCHNEID basic module controller. With this module a complete mixer heating circuit including remote control connection possibility can be realized.

#### The following inputs and outputs are available:

- -Three-point output heating circuit mixer
- -Two-point output heating circuit pump
- -Flow temperature sensor
- -Remote control with built-in room sensor
- -LED display for pump and mixer status

#### Innovations to the heating circuit module HK6:

The outputs on the HK12 board are implemented on plug-in modules and are available in the following variants:

#### Relais module standard

R16 Relais-module 16A / 250V

**TRIAC** module for controlling drives with a very high switching frequency (primary valves).

**PWM** module for controlling pumps with a PWM signal. In this case, the 230V terminal on the AKP is permanently connected to 230V. The PWM signal is connected to the plug-in module.

**0-10V** module for controlling pumps with 0-10V signal. In this case, the 230V terminal on the AKP is permanently connected to 230V. The 0-10V signal is connected to the plug-in module.

**RPF** module for controlling pumps with start-stop input. In this case, the 230V terminal on the AKP is permanently connected to 230V. The potential-free relay contact is connected to the plug-in module.

### **Equipment variants:**

### Heating circuit module-HK12 without plug-in modules

Order number: 300.15999

Order code: Heizkreismodul-HK12 ohne Steckmodule

(with 10pol ribbon cable, 800mm standard)

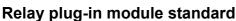


### Heating circuit module-HK12 with 3 plug-in modules relay STD

Order number: 300.16129

Order code: Heizkreismodul-HK12 mit 3 Steckmodule Relais STD

(with 10pol ribbon cable, 800mm standard)



Order number: 190.15206

Order code: MR12 Steckmodul Relais Standard für MR12-AKP/HK12

### Relay plug-in module R16

Order number: 190.16614

Order code: MR12 Steckmodul Relais R16 für MR12-AKP & HK12

### PWM plug-in module

Order number: 190.15209

Order code: MR12 Steckmodul PWM für MR12-AKP & HK12

### TRIAC plug-in module

Order number: 190.15210

Order code: MR12 Steckmodul TRIAC für MR12-AKP & HK12

### 0-10V plug-in module

Order number: 190.15300

Order code: MR12 Steckmodul Analogsignal für MR12-AKP & HK12

### Relay plug-in module RPF

Order number: 190.15404

Order code: MR12 Steckmodul Relais RPF für MR12-AKP & HK12



### **Connection diagram:**

### **Outputs 230VAC**

1P1 Pump of Heating Circuit 1 1
1M1 Circuit 1 of Mixed Valve OPEN 2
1M1 Circuit 1 of Mixed Valve CLOSED 3



**Heating circuit module HK12** 

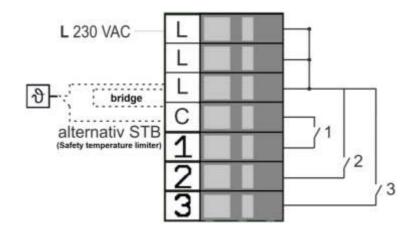
### Heating Module Circuit 1

GND

TMP 1T1 Flow Temperature Circuit 1 GND Remote Control Circuit 1

FBT Remote Control Room Temperature

FBS Remote Control Signal VCC Remote Control Supply



### Connections 230V:

L connection 230VAC

L additional connection 230VAC (continuation to further module)

1 output heating circuit pump

2 output heating circuit mixer OPEN

3 heating circuit mixer CLOSE output

neutral conductor

N PE

### Signal connections:

GND Signalground

TMP Heating circuit flow temperature sensor

GND Signalground

FBT Room temperature sensor FBS Remote control signal line VCC Remote control supply line

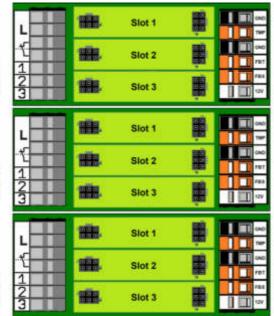
### Connection diagram:

#### **Outputs 230VAC**

- 1P1 Pump of Heating Circuit 1 1
  1M1 Circuit 1 of Mixed Valve OPEN 2
  1M1 Circuit 1 of Mixed Valve CLOSED 3
- **Outputs 230VAC**
- 2P1 Pump of Heating Circuit 2 1
  2M1 Circuit 2 of Mixed Valve OPEN 2
  2M1 Circuit 2 of Mixed Valve CLOSED 3

### Outputs 230VAC

3P1 Pump of Heating Circuit 3 1
3M1 Circuit 3 of Mixed Valve OPEN 2
3M1 Circuit 3 of Mixed Valve CLOSED 3



#### **Heating Module Circuit 1**

GND

- TMP 1T1 Flow Temperature Circuit 1
  GND Remote Control Circuit 1
- FBT Remote Control Room Temperature
- FBS Remote Control Signal
- 12V VCC 12VDC

### Heating Module Circuit 2

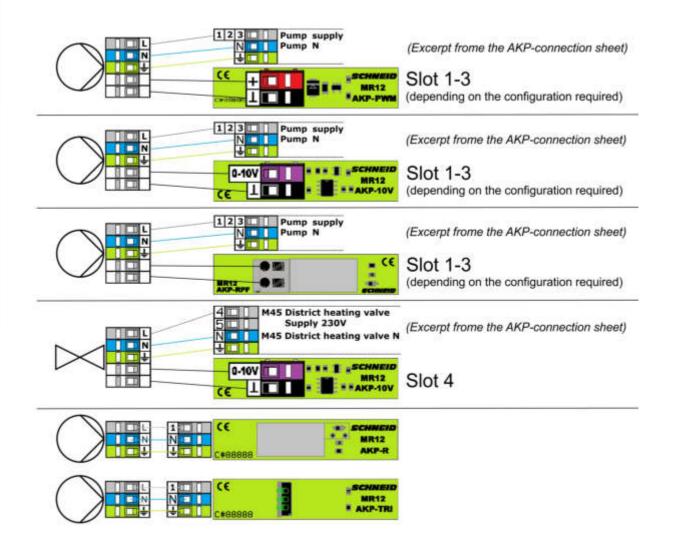
GND

- TMP 2T1 Flow Temperature Circuit 2
- GND Remote Control Circuit 2
- FBT Remote Control Room Temperature
- FBS Remote Control Signal
- 12V VCC 12VDC

### Heating Module Circuit 3

GND

- TMP 3T1 Flow Temperature Circuit 3
- GND Remote Control Circuit 3
- FBT Remote Control Room Temperature
- FBS Remote Control Signal
- 12V VCC 12VDC



## **Heating circuit module HK12**

### Scope of delivery:

SCHNEID heating circuit module-HK12 xxx, with ribbon cable (800mm).

Technical specifications:	
Intrastat Number	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	40x100x34
Weight in (kg)	0,077 (0,109 with 3 plug-in modules relais standard)
Degree of protection	IP-20
Ambient temperature	0°C+40°C
Operating voltage	12VDC
Power consumption	< 1VA
Max. Nominal current per output	Fixed wiring terminals
Relay output life	Spring clamp
Connection type	Max. 2.5mm²
Connection technology	DIN-RAIL TS35
Cable cross section	Continuous operation
Mounting type	2
Operating time	1kV
Degree of pollution	PT1000