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Products, data sheets, documentation, MR12-SCHEMA-calculator: www.schneid.at

SCHNEID MR12 plug-in modules

for module controller MR12-AKP & heating circuit module HK12

Order number:	190.xxxxx
Order code:	MR12 Steckmodul xxxx



Overview:

The outputs on the MR12-AKP (terminal board) and the HK12 board are implemented on plug-in modules and are available in the following variants.

MR12 plug-in module relay standard

Order number: 190.15206 Order code: MR12 Steckmodul Relais Standard

MR12 plug-in module relay R16

Order number: 190.16614 Order code: MR12 Steckmodul Relais R16

MR12 plug-in module PWM

Order number: 190.15209 Order code: MR12 Steckmodul PWM PWM 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.

MR12 plug-in module TRIAC

Order number: 190.15210 Order code: MR12 Steckmodul TRIAC TRIAC module for controlling drives with a very high switching frequency (primary valves).

MR12 plug-in module analog signal

Order number: 190.15300 Order code: MR12 Steckmodul Analogsignal 0-10V 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.

MR12 plug-in module relay RPF

Order number: 190.15404

Order code: MR12 Steckmodul Relais RPF

RPF 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.



Terminal plan:

Outputs 230VAC

1P1 Pump of Heating Circuit 11**1M1** Circuit 1 of Mixed Valve OPEN2**1M1** Circuit 1 of Mixed Valve CLOSED 3

Outputs 230VAC

2P1 Pump of Heating Circuit 212M1 Circuit 2 of Mixed Valve OPEN22M1 Circuit 2 of Mixed Valve CLOSED 3

Outputs 230VAC

3P1 Pump of Heating Circuit 31**3M1** Circuit 3 of Mixed Valve OPEN2**3M1** Circuit 3 of Mixed Valve CLOSED 3

L Slot 1	GND GND GND FBT CTP FBS CTP T2V
Slot 1	GND
1	FBT FBS
2 Slot 3 00	12V
	GND
L Slot 1	
	FBT
2	FBS
2 Image: state st	12V

Heating Module Circuit 1

TMP1T1 Flow Temperature Circuit 1GNDRemote Control Circuit 1FBTRemote Control Room TemperatureFBSRemote Control Signal12VVCC 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 Signal12V VCC 12VDC
- 123 L Ň Pump N (Excerpt frome the AKP-connection sheet) 🗌 🛄 N ÷ "SCHNEID CE Slot 1-3 + **MR12** (depending on the configuration required) T AKP-PW 123 🔲 📔 Pump supply N 🗖 🛛 (Excerpt frome the AKP-connection sheet) Pump N 🗌 🗖 N ÷ SCHNEID 0-10V Slot 1-3 **MR12** AKP-10V (depending on the configuration required) CE 123 Pump supply (Excerpt frome the AKP-connection sheet) Pump N 0 🔲 N Ť = CE Slot 1-3 (depending on the configuration required) MR12 4 🗆 | 5 🗆 | N 🗖 | M45 District heating valve Supply 230V (Excerpt frome the AKP-connection sheet) M45 District heating valve N Ν Π ÷ 🗆 🗋 Ŧ SCHNEID 0-10V **MR12** Slot 4 L = = AKP-10V CE CE SCHNEID MR12 N Ν AKP-R C#8888

Technical data MR12 plug-in module relay standard for MR12-AKP & HK12

Intrastat Number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	12x55x22,3mm
Weight (in kg)	0,009
Degree of protection	IP-20
Ambient temperature	0°C+40°C
Operating voltage	12VDC
Power consumption	0,25W
Max. Rated current output	2A continuous current // max. 15A inrush current
Relay output life	50 x 10 ³ switching cycles
Connection type	No terminals for outer conductors available
Mounting type	Attachable to carrier boards
Operating time	Continuous operation
Degree of pollution	2

Technical data MR12 plug-in module relay R16 for MR12-AKP & HK12		
Intrastat Number:	8537.10.91.90	
Country of origin	EU/AT	
Height, width, depth (in mm)	12x55x26,8mm	
Weight (in kg)	0,014	
Degree of protection	IP-20	
Ambient temperature	0°C+40°C	
Operating voltage	12VDC	
Power consumption	0,3W	
Max. Rated current output	3 A continuous current // max. 25A inrush current	
Relay output life	50 x 10 ³ switching cycles	
Connection type	No terminals for outer conductors available	
Mounting type	Attachable to carrier boards	
Operating time	Continuous operation	
Degree of pollution	2	

Technical data MR12 plug-in module analog signal for MR12-AKP & HK12

Intrastat Number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	12x55x24,5mm
Weight (in kg)	0,006
Degree of protection	IP-20
Ambient temperature	0°C+40°C
Operating voltage	12VDC
Power consumption	< 0,1W
Signal output	0-10V
Max. Nominal current per output	10mA
Connection type	Fixed wiring terminals
Connection technology	Spring clamp
Cable cross section	Max. 2.5mm ²
Mounting type	Attachable to carrier boards
Operating time	Continuous operation
Degree of pollution	2

Technical data MR12 plug-in module TRIAC for MR12-AKP & HK12		
Intrastat Number:	8537.10.91.90	
Country of origin	EU/AT	
Height, width, depth (in mm)	12x55x30mm	
Weight (in kg)	0,007	
Degree of protection	IP-20	
Ambient temperature	0°C+40°C	
Operating voltage	12VDC	
Power consumption	< 0,1W	
Max. Nominal current per output	3.15A continuous current // max. 105A inrush current	
Connection type	No terminals for outer conductors available	
Mounting type	Attachable to carrier boards	
Operating time	Continuous operation	
Degree of pollution	2	

Technical data MR12 plug-in module PWM for MR12-AKP & HK12

Intrastat Number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	12x55x24,5mm
Weight (in kg)	0,006
Degree of protection	IP-20
Ambient temperature	0°C+40°C
Operating voltage	12VDC
Power consumption	< 0,1W
Signal output	PWM 12V
Max. Nominal current per output	10mA
Relay output life	50 x 10 ³ switching cycles
Connection	Fixed wiring terminals
Connection technology	Spring clamp
Cable cross section	Max. 2.5mm²
Mounting type	Attachable to carrier boards
Operating time	Continuous operation
Degree of pollution	2

Technical data MR12 plug-in module relay RPF for MR12-AKP & HK12

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Intrastat Number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	12x55x28mm
Weight (in kg)	0,011
Degree of protection	IP-20
Ambient temperature	0°C+40°C
Operating voltage	12VDC
Power consumption	0,25W
Max. Rated current output	2A continuous current // max. 15A inrush current
Relay output life	50 x 10 ³ switching cycles
Connection type	Fixed wiring terminals
Connection technology	Spring clamp
Cable cross section	Max. 1,5mm²
Mounting type	Attachable to carrier boards
Operating time	Continuous operation
Degree of pollution	2