

Super-multifunction relay SMR-K, SMR-T, SMR-H, SMR-B



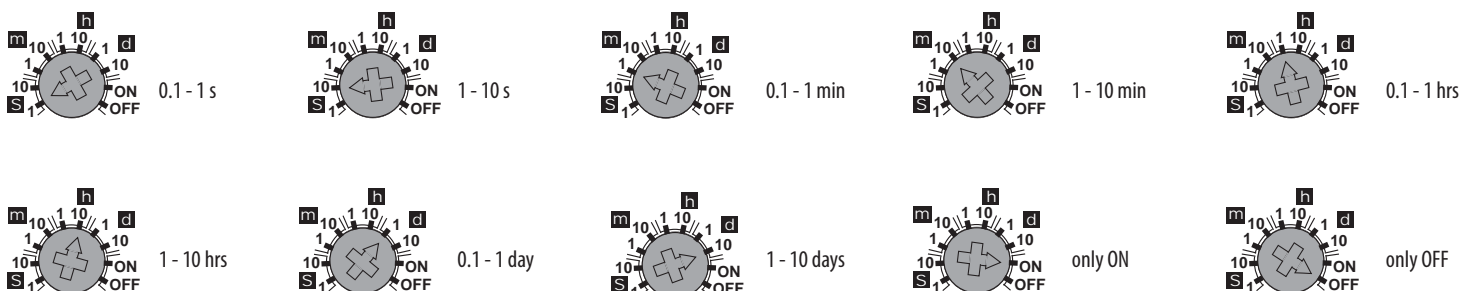
EAN code
 SMR-K / 230V: 8595188145176
 SMR-T / 230V: 8595188129107
 SMR-H / 230V: 8595188129114
 SMR-B / 230V: 8595188135566

- Multifunction relay designed for installation into a wiring box or under wall-switch in an existing electrical installation
- Advantageous and fast solution for exchanging standard wall-switch for a switch controlled by time or for an impulse relay controlled by a button
- More information about type and size of load for these products can be found on page 127-128
- **SMR-K**
 - 3-wire connection, works without the connection of a neutral conductor
 - power output: 10-160 VA
 - for flawless function of the product is necessary the presence of a load R, L or C between input S and neutral wire
- **SMR-T**
 - 3-wire connection, works without the connection of a neutral conductor
 - power output: 10 - 160 VA
 - between input S and neutral wire is possible connect any load R, L, or C – that is not necessary (unlike SMR-K)
- **SMR-H**
 - 4-wire connection
 - power output: 0 - 200 VA
- **SMR-B**
 - 4-wire connection
 - 10 functions
 - output contact 1x16A / 4000 VA, 250V AC1
 - enables switching of fluorescent lights and also energy saving lights
 - suitable for switching loads greater than SMR-K, SMR-T, SMR-H, for example pulse relay, stair automatic switch, switching of ladder radiators in bathrooms
 - independent galvanically separated input AC/DC 5-250V, for example for control from a security system

Technical parameters	SMR-K	SMR-T	SMR-H	SMR-B
Number of functions:		9		10
Connection:	3-wire, without neutral		4-wire, with neutral	
Voltage range:	AC 230V / 50-60Hz			
Power input (no operation/make):		0.8 / 3VA		max 1 / 1VA
Supply voltage tolerance:		-15%; +10%		
Time ranges:		0.1 s - 10 days		
Time setting:		via rotaty switch		
Time deviation:		10 % - mechanical setting		
Repeat accuracy:		2 % - set value stability		
Temperature coefficient:		0.1 % / °C, at = 20 °C		
Output				
Number of contacts:		1 x triac		1x NO(AgSnO ₂)
Resistive load:		10 - 160 VA	0 - 200 VA	16A 125/250 V AC1
Inductive load:		10 - 100 VA	0 - 100 VA	8A 250V AC (cos φ > 0.4)
Control				
Control voltage:		AC 230 V		AC230V, UNI-5-250VAC/DC
Control current:	25μA		3 mA	
Impulse length:		min. 50ms / max. unlimited		
Glow tubes connetions:	x	Yes		
Max. amount of glow lamps connected to controlling input:		230V - max. amount 50 pcs (measured with glow lamp 0.68mA/230V AC)		
Other information				
Operating temperature:		0...+50°C		
Operating position:		any		
Mounting:		free at connecting wires		
Protection degree*:		IP30 in standard conditions		
Overvoltage category:		III.		
Pollution degree:		2		
Fuse:		F 1A / 250V		x
Connection:	3x CY, Ø 0.75 mm ² (AWG 18) length 90mm (3.5")	4x sol. wir., Ø 0.75 mm ² (AWG 18) length 90mm (3.5")		2 x CY, Ø 0.75mm ² (AWG 18) 2 x CY, Ø 2.5 mm ² (AWG 10)
Glow-lamps in control button:	x	max.10		max.20
Dimensions:		49 x 49 x 13 mm (1.9" x 1.9" x 0.8")		49x49x21 mm (1.9"x1.9"x0.8")
Weight:	26 g (0.92 oz.)	26 g (0.92 oz.)	27 g (0.95 oz.)	53 g (1.9 oz.)
Standards:		EN 61812-1, EN 61010-1		

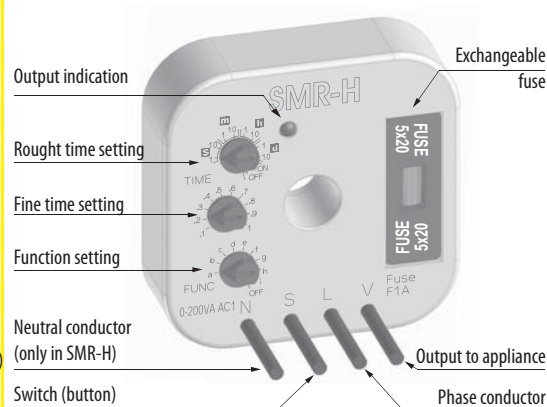
* - for more information see page 38

Time ranges

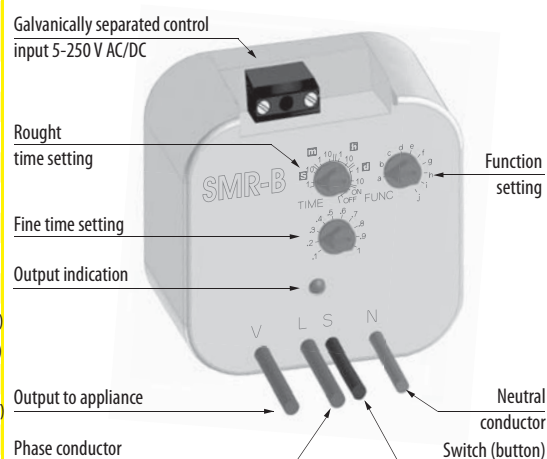


Description

SMR-H



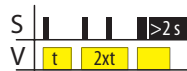
SMR-B



Function

Function a - delay OFF on entering edge

output times when it is switched. Each following pressing (max. 5x) increases time. Long pressing switches output off



Function b - delay OFF on downward edge

output times after button is switched off, switches immediately



Function c - delay OFF on downward edge

after switching off output switches on and times.



Function d - cycler - flasher impulsem

output cycles in regular interval, cycler starts with an impulse



Function e - puls shift

delay on after the switch is switched on and delay on after it is switched off



Function f - delay ON

delay on after switch is switched on until it is switched off



Function g - impulse relay

switches on by a press, another pressing switches the output off. The length of pressing doesn't matter, it is possible to set reaction delay by a potentiometer and thus eliminate rebound of a button



Function h - impulse relay with delay

one press switches on, another one switches the output off in case it is done before the end of timing



Function i - cycler starting with pause

output cycles in regular intervals, cycler starts with a pause

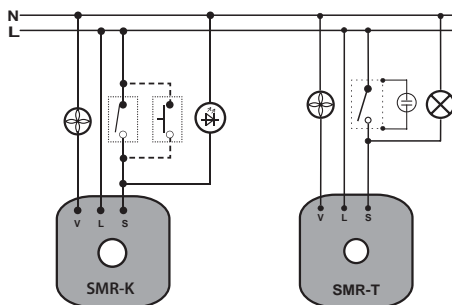


Function j* - cycler starting with gap

delay ON until switched off until it is de-energized or a switch is pressed again. Note.: * - Function j is valid only for SMR-B

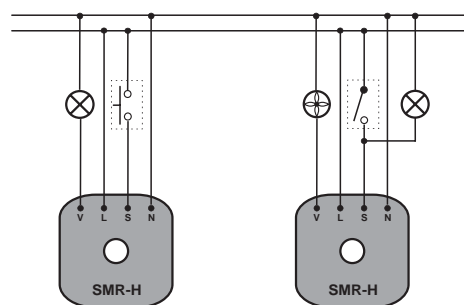


Connection SMR-K, SMR-T, SMR-H, SMR-B



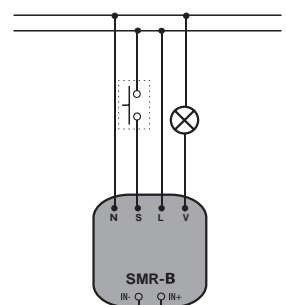
Typical wiring of SMR-K
- timer for fan

SMR-T: Fan controlling
depending on the lighting



Typical wiring of SMR-H
- timer for lamp

Fan control depending on
the lighting

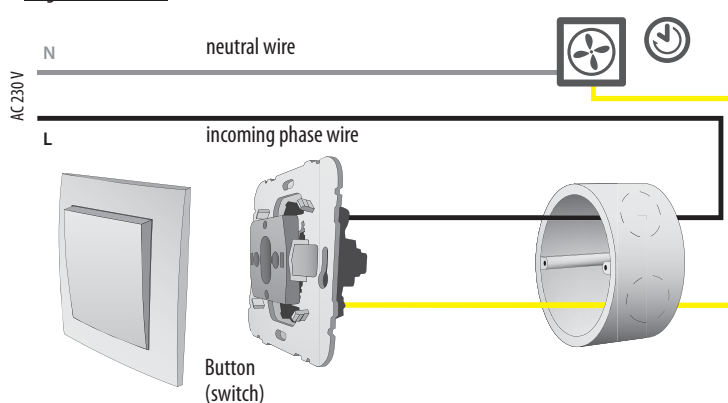


Input for external control
voltage AC/DC 5-250 V

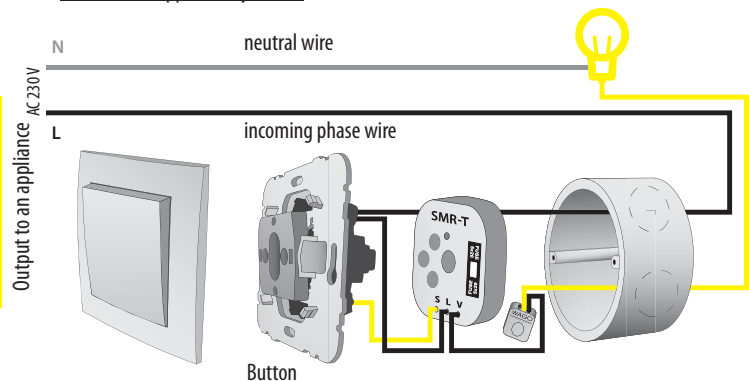
Note: SMR-K, SMR-T, SMR-H are not intended for switching capacity load (energy saving bulbs and LED lights with capacity power etc.), these products are only intended for switching resistive and inductive loads (incandescent bulbs, fans, etc.). SMR-B with relay output is intended to other types of load. Using this output it is possible to switch the load of R, L or C-values listed in the load table. Between inputs S and neutral wire is possible to connect any load of R, L or C, however this is not (unlike the SMR-K) condition.

Example of connection SMR-T

Original connection



Control of an appliance by button



After the light bulb switch is switched off, fan starts operating and after set time switches off.

