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

SMR-B
60mm
21mm

SMR-K
SMR-T
SMR-H
60mm
13mm

- 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 125

- SMR-K
  - 3-conductor connection, works without the connection of a neutral conductor.
  - power output: 10-160 VA
  - extra-low power input at the control input allows the connection of LED lamp and energy-saving fluorescent lamp
- SMR-T
  - 3-wire connection, works without the connection of a neutral conductor
  - power output: 10 - 160 VA
- 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 5-250 V, for example for control from a security system

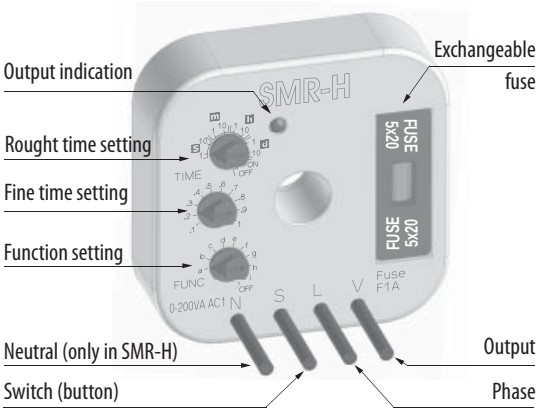
EAN code

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

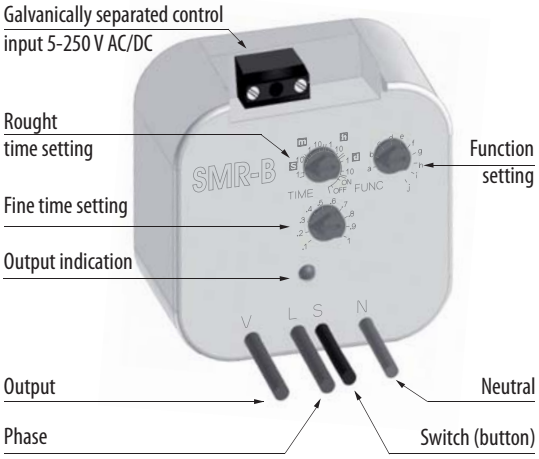
Technical parameters	SMR-K	SMR-T	SMR-H	SMR-B
Number of functions:	9			10
Connection:	3-wire, without neutral		4-wire, with neutral	
Voltage range:	AC 230V / 50-60Hz			
Power input (no operation/make):	0.8 / 3VA			max 1 / 1VA
Supply voltage tolerance:	-15%; +10%			
Time ranges:	0.1 s - 10 days			
Time 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 250 V 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 cathegory:	III.			
Pollution degree:	2			
Fuse:	F 1A / 250V			x
Connection:	3x CY, ∅ 0.75 mm² (AWG 18) lenght 90mm (3.5˝)	4x sol. wir., ∅ 0.75 mm² (AWG 18) lenght 90mm (3.5˝)		2 x CY, ∅ 0.75mm² (AWG 18) 2 x CY, ∅ 2.5 mm² (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˝)			49 x 49 x 21 mm (1.9˝x 1.9˝x 0.8˝)
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			

Description

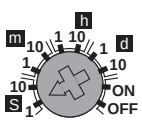
SMR-H

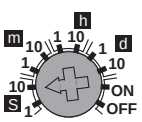


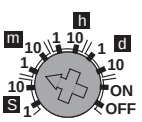
SMR-B

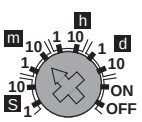


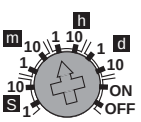
Time ranges

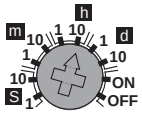


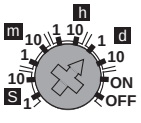


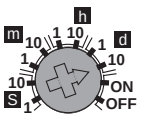


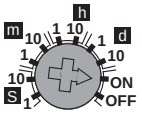


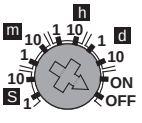












Function

Function a - delay OFF on entrering edge
output times when it is switched. Each following pressing (max. 5x) increases time. Long pressing swithes output off

Function b - delay OFF on downward edge
output times after button is swithed off, switches immediately

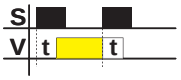
Function c - delay OFF on downward edge
after switching off output switches on and times.

Function d - cycler - flasher impulsem
output cycles in regular interval, cycler starts with an impulse

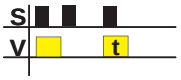
Function e - puls shift
delay on after the switch is switched on and delay on after it is switched off

Function f - delay ON
delay on ater 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



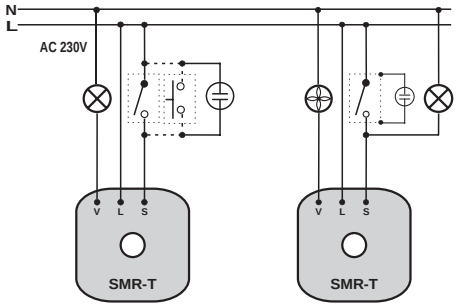
Function h - impulse relay with delay
one press switches on, another one switches the output off incase it is done before the end of timing



Function i - cycler starting with pause
output cycles in regular intervals, cycler starts with a pause

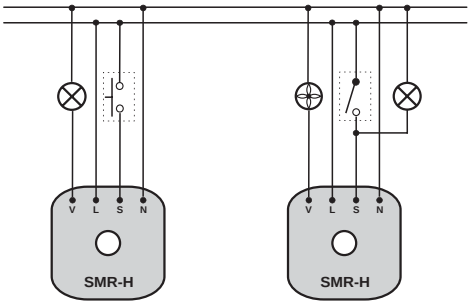
Function j* - cycler starting with gap
delay ON until switched off until it is de-energized or a switch is pressed again.
Note.: *- Function j is valid only for SMR-B

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



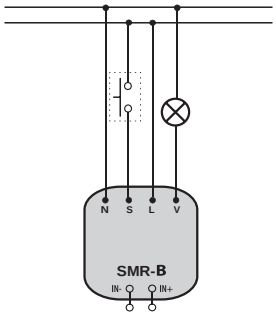
Typical wiring of SMR-K, SMR-T - timer for lamp unit

Fan control depending on the SMR-K , SMR-T lighting



Typical wiring of SMR-H - timer for lamp unit

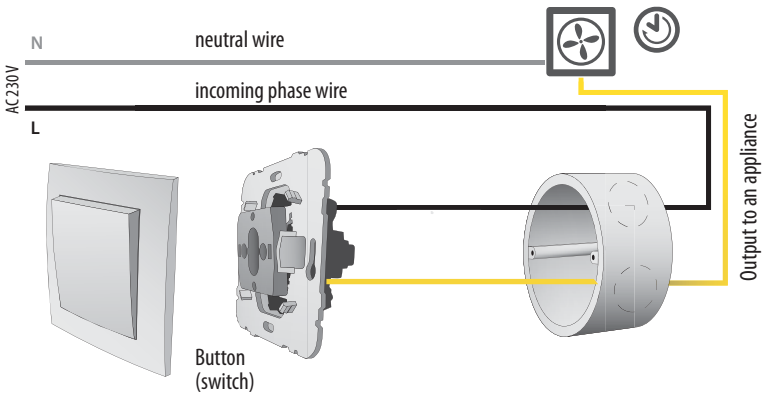
Fan control depending on the lighting



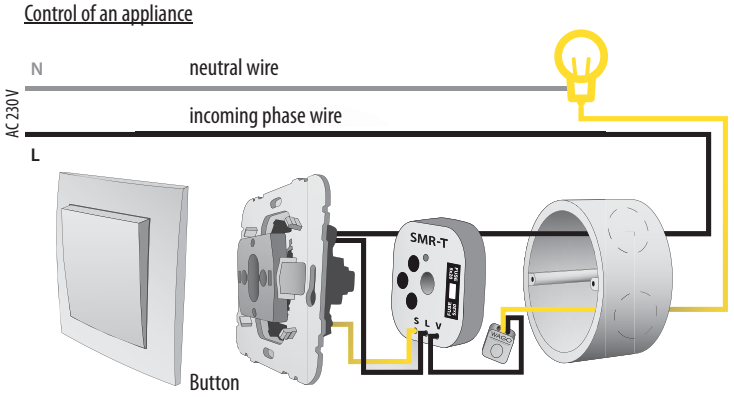
Input for external control voltage AC/ DC 5-250 V

Example of connection SMR-T

Original connection



Control of an appliance



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