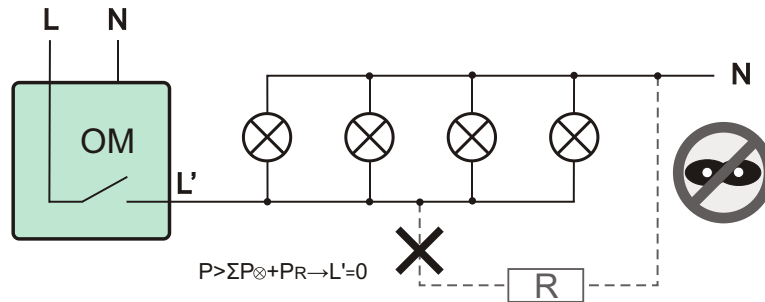


# 13. POWER CONSUMPTION LIMITERS

## PURPOSE

Power consumption limiters are devised for the automatic disconnection of power from the circuit of single-phase wiring systems once the rated power consumption of the receivers incorporated into the system is exceeded.



## FUNCTIONING

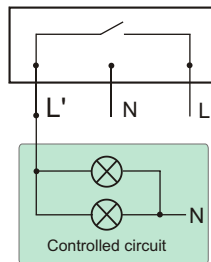
The limiter enables the user to supply power to the circuit if the total consumed power applied to the receivers constituting the system is lower than the preset value on the limiter's scale. Once the rated power consumption threshold in the controlled circuit is exceeded, the element is automatically disconnected from the power source. The supply is reinstated automatically once the preset time lapses. If the value of power consumption remains over the rated input, the power supply to the circuit is cut off again.

## ATTENTION!

The power consumption limiter has been equipped with a delayed activation circuit (1.5÷2sec) which prevents disconnection of the power supply in the event of momentary power consumption surges over the rated level.

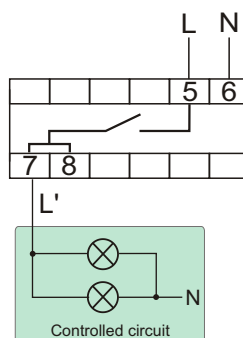
**OM-1** POWER SUPPLY RETURN: 30SEC.

**OM-2** ADJUSTABLE POWER SUPPLY RETURN: 4÷150SEC.



supply	180+240V AC
current load	<16A
power limit	200+2000 VA
activation lag	1,5+2sec
power supply return	
OM-1 (factory setting)	30sec
OM-2 (to set)	4+150sec
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	26×50×67mm
fixing	two screws to substrate

**OM-631**

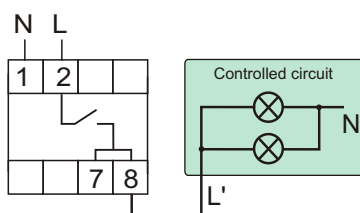


supply	180+240V AC
current load	<16A
power limit	200+2000 VA
activation lag	1,5+2sec
power supply return	30sec
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	3 modules (52,5mm)
fixing	on rail TH-35

## FOR CIRCUITS WITH CONVERTERS

### OM-632

Limiter adapted for the protection of circuits with converters, e.g. fluorescent lamps, transformers.

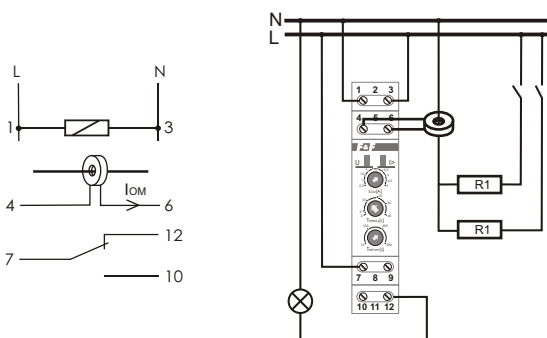


supply	180+240V AC
contact	1O
current load for $\cos\phi=1$	<16A
for $\cos\phi\neq 1$	<4A
power limit	200+1000 VA
activation lag	1,5+2sec
power supply return	10+100sec
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	2 modules (35mm)
fixing	on rail TH-35

## TO WORK WITH A CURRENT TRANSFORMER

### OM-611

The relay is adapted to cooperate with current transformer whose primary circuit is connected to the circuit to be measured, and output terminals for measuring the OM, which allows for control circuits of any load and the actual setting of the relay activation threshold higher than 5A (I<sub>OM</sub>). Range of measured current dependence on the transmission transformer for example, from 5A to 50A with the transmission ratio of 10:1 for the transformer 50/5A.



supply	180+240V AC
contact	1C/O
current load	<10A
actuation threshold adjustable	0,5+5 A
actuation delay adjustable	2+40sec
power supply recovery hysteresis	2%
power supply recovery time adjustable	15+300sec
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	1 module (18mm)
fixing	on rail TH-35

## WITH STAIRCASE TIMER

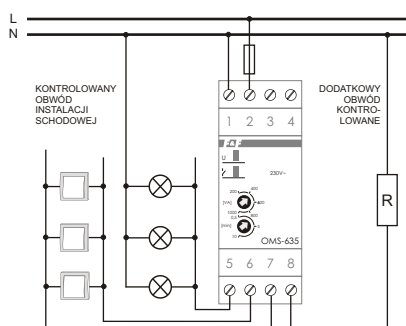
### OMS-635

#### PURPOSE

The OMS-635 power consumption limiter allows the user to maintain lighting in halls, staircases or other places active for a specified time when it will then turn off automatically. The user may also preset the automatic disconnection of power supply to a single-phase wiring system if the rated power input to the receivers in a given circuit is exceeded.

#### FUNCTIONING

Once activated by means of a release button (bell push), the limiter keeps the lighting active for a specified period of time preset by the potentiometer. After the lapse of this period, the device turns off the lighting automatically. The lights may then be turned on again. The limiter allows the user to supply power to the circuit if the total consumed power of all the receivers incorporated into the system is lower than the value set on the limiter's scale. Once the rated threshold of power consumption in the controlled circuit is exceeded, the supply to this element is disconnected and returned automatically after 30sec. If the value of power consumed continues to exceed the rated level, the supply is disconnected again.



supply	180+240V AC
current load	<10A
power limit	200+1000VA
switching off delay (to set)	0,5+10min
activation lag	1,5+2sec
power supply return	30sec
work time setting range	0,5+10min
power consumption	0,8W
working temperature	-25+50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	3 modules (52,5mm)
fixing	on rail TH-35