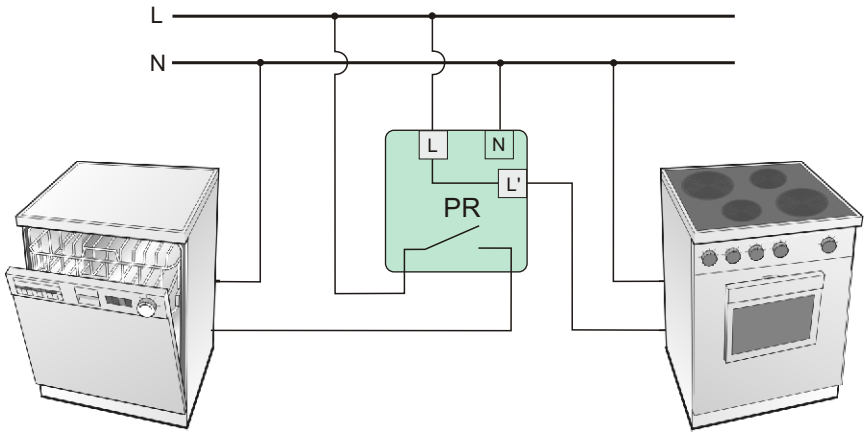
14. PRIORITY RELAYS

PURPOSE

Priority relays are designed to control the value of current drawn by electric receivers and their control units in cases where their simultaneous work could result in circuit overload or current overload protection activation.

FUNCTIONING

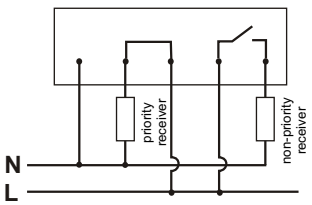
The potentiometer sets the value of drawn current (from 2A to 15A; for PR-615: from 4A to 30A) in the priority circuit, above which the receiver cuts off the non-primary circuit. A drop in current consumption in the priority circuit below the set threshold value will result in an automatic activation of the non-priority circuit. In cases where the priority receiver is already activated, the priority relay will prevent the activation of the non-priority receiver.



ATTENTION!

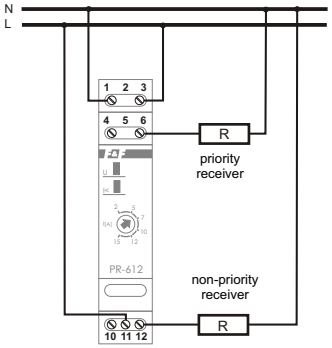
Circuits equipped with master relays require over-current security devices with increased actuation time, in order to prevent them operating before actuation of the relay.

PR-602 SETTING RANGE: 2÷15A



supply	230V AC
non-priority receivers current	<16A
	or higher with the use of a contactor
priority receivers current	<15A
contact	1 N/O
activation threshold	2÷15 A (priority circuit)
recovery hysteresis	10%
cut off delay	0,1sec
plug in delay	0,1sec
power consumption	0,4 W
dimensions	50×67×26 mm
terminal	screws terminal 2,5mm²
fixing	2 screws to substrate

PR-612 SETTING RANGE: 2÷15A

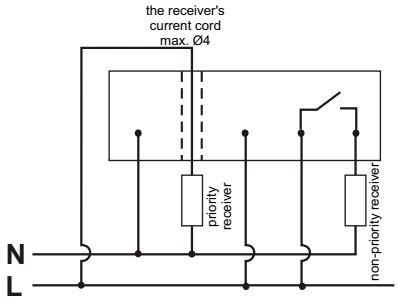


supply	230V AC
non-priority receivers current	<16A
	or higher with the use of a contactor
priority receivers current	<15A
contact	1 C/O
activation threshold	2÷15 A (priority circuit)
recovery hysteresis	10%
cut off delay	0,1sec
plug in delay	0,1sec
power consumption	0,4 W
terminal	screw terminals 2,5mm²
dimensions	1 module (18mm)
fixing	on rail TH-35

WITH THE RECEIVER'S CURRENT CORD SECTION

(GALVANIC SEPARATED FROM THE MEASUREMENT SYSTEM)

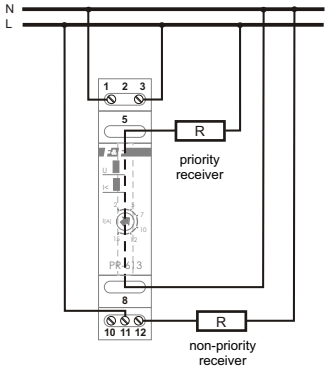
PR-603 SETTING RANGE: 2÷15A



supply	230V AC
non-priority receivers current	<16A
priority receiver current	or higher with use of contactor limited by the cross-section of the reciver cable (max Ø=4 mm)
contact	1 N/O
activation treshold	2÷15A (priority circuit)
recovery hysteresis	10%
cut off delay	0,1sec
plug In delay	0,1sec
working temperature	-25÷50°C
power consumption	0,4W
connection	screw terminals 2,5mm²
dimensions	26×50×67mm
fixing	two screws to substrate

PR-613 SETTING RANGE: 2÷15A

PR-615 SETTING RANGE: 4÷30A



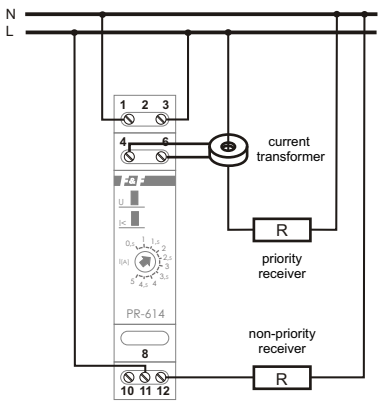
supply	230V AC
non-priority receivers current	<16A
priority receiver current	or higher with use of contactor limited by the cross-section of the reciver cable (max Ø=4 mm)
contact	1 N/O
activation treshold PR-613	2÷15A (priority circuit)
PR-614	4÷30A (priority circuit)
recovery hysteresis	10%
cut off delay	0,1sec
plug in delay	0,1sec
working temperature	-25÷50°C
power consumption	0,4W
connection	screw terminals 2,5mm²
dimensions	1 modules (18mm)
fixing	on rail TH-35

Priority receiver current can be higher than 15A. It is only restricted by the receiver's current cord section (galvanic separated from the measurement system) revved through the relay's throughway channel.

TO CO-OPERATION WITH A CURRENT TRANSFORMER

PR-614

The relay is designed to work with the current transformer with secondary current 5A. Transformer primary circuit is included in the priority receiver circuit, and secondary to the measurement relay terminals.
Example: For the receiver a priority for a maximum load of 140A we use the parameters of current transformer 150/5A. Torque is 30 at setting values on a scale equal to 2A relay will work with the actual value of current equal to 60A (2A×30=60A).



supply	230V AC
non-priority receivers current	<16A
priority receiver current	or higher with use of contactor <16A
	or increased with the use of current transformer
contact	1 C/O
activation treshold	2÷15A (priority circuit)
recovery hysteresis	10%
cut off delay	0,1sec
plug in delay	0,1sec
working temperature	-25÷50°C
power consumption	0,4W
connection	screw terminals 2,5mm²
dimensions	1 modules (18mm)
fixing	on rail TH-35