

PRIORITY CURRENT RELAYS




- They monitor the strength of current in the circuit and close/open the contact (terminals 1, 2) at a jump exceeding of a guaranteed switched current.
- They make it possible to interrupt the power supply of one (non-priority) circuit, if the current of the other (priority) circuit jumps to a set value.
- They are most frequently installed in distribution systems where concurrent operation of more appliances is not possible because of risk of exceeding a permitted power input.
- For example, the relays can disconnect electric heating, a storage block heater from the network if an instantaneous water heater is switched – therefore it is possible to select a main circuit breaker and conductors for a lower power input.
- They make it possible to increase the number of appliances for existing installations.
- In the circuits with electronic (e.g. thyristor) control, they cannot be used directly, but with a time-delay relay – see connection examples.
- Maximum current through the current coil: depending on design (15 A, 28 A, 63 A).
- Maximum current through the contact: 16 A.

Operating current range I_n	Arrangement of contacts ¹⁾	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
5 ÷ 15 A	01	RPL-15-01	35548	1	0.115	1
	10	RPL-15-10	35549	1	0.115	1
10 ÷ 28 A	01	RPL-28-01	35550	1	0.115	1
	10	RPL-28-10	35551	1	0.115	1
26 ÷ 63 A	01	RPL-63-01	35552	1	0.115	1
	10	RPL-63-10	35553	1	0.115	1

¹⁾ Each digit indicates successively the number of make and break contacts

Specifications

Type	RLP-..		
Approval marks			
Contact (terminals 1,2)			
Arrangement of contacts ¹⁾			10, 01
Rated voltage/current	AC-1	U_e/I_n	250 V a.c. / 16 A
Electrical endurance			75 000 operating cycles
Switching frequency			max. 1200 operating cycles/h
Connection			0.75 ÷ 2.5 mm ²
Torque			0.8 Nm
Current coil (terminals A1, A2)			
Operating current range		I_n	5 ÷ 15 A, 10 ÷ 28 A, 26 ÷ 63 A
Guaranteed switched current for I_n ²⁾	range 5 ÷ 15		≥ 5 A
	range 10 ÷ 28		≥ 10 A
	range 26 ÷ 63		≥ 26 A
Guaranteed unswitched current for I_n ²⁾	range 5 ÷ 15		≤ 2 A
	range 10 ÷ 28		≤ 6 A
	range 26 ÷ 63		≤ 16 A
Connection - terminals A1, A2			0.75 ÷ 16 mm ²
Torque			2 Nm
Power loss			3 W
Other data			
Isolation voltage		U_i	400 V a.c.
Mounting on "U" rail according to EN 60715 - type			TH 35
Degree of protection			IP20
Ambient temperature			-20 ÷ 50 °C
Working position			arbitrary

¹⁾ Each digit indicates successively the number of make and break contacts

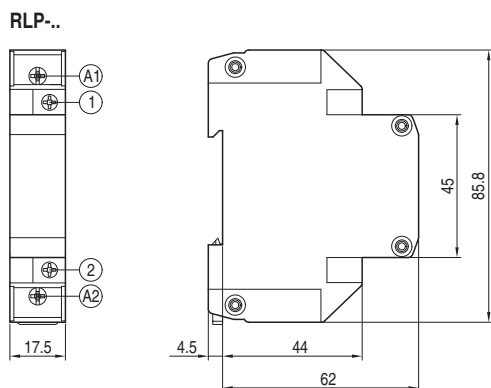
²⁾ Only for jump increase in current

RPL selection -.. according to power output of the switched appliance

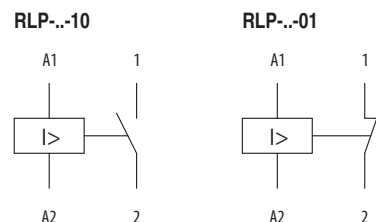
Appliance	type RPL-..	
Voltage	Power output [kW]	
230 V a.c.	1.2 ÷ 3.4	RPL-15-..
	2.3 ÷ 6.4	RPL-28-..
	6.0 ÷ 14.5	RPL-63-..
400 V a.c.	3.4 ÷ 10.0	RPL-15-..
	6.9 ÷ 19.3	RPL-28-..
	18.0 ÷ 43.5	RPL-63-..

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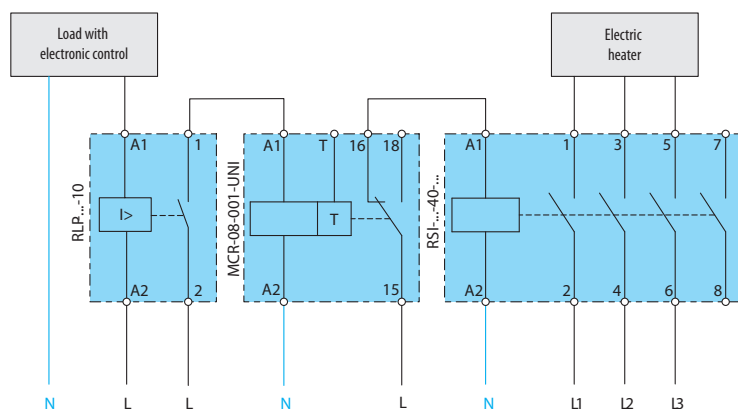
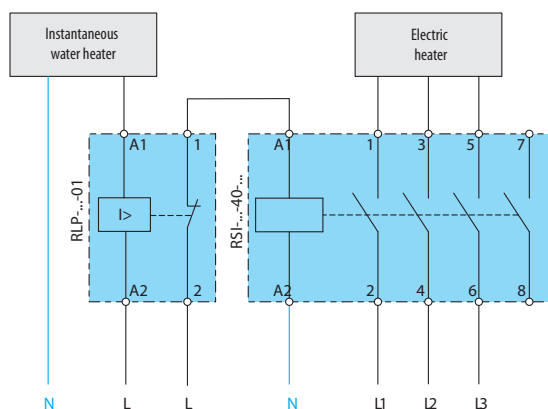
Dimensions



Diagram



Connection examples



- For example, at blocking of consumption of an electric heater (a non-priority appliance) the current coil (terminals A1, A2) is connected in the circuit of an instantaneous water heater (a priority appliance) at switching the latter on, and control contact (terminals 1, 2) is connected in the circuit of the electric heater contactors. So if the instantaneous water heater is switched on and the current steeply reaches so called "guaranteed switched current", the control break contact will interrupt the power supply of contactor, and subsequently disconnects the electric boiler.

- At priority switching of an appliance with electronic control the relay function is troubled (the relay is synchronized with the electronic control). For this reason it is recommended to connect a time-delay relay in the control contact circuit.