

### ELKO EP, s.r.o.

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Made in Czech Republic 02-2/2017 Rev.: 1



## **PRI-52**

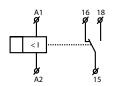
# Monitoring current relay



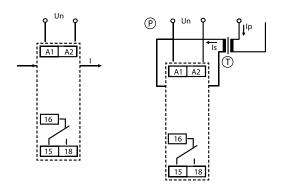
## Characteristics

- relay is designated for:
- distant device diagnostic (short circuit, take-off increasing)
- preferred (priority) relay two appliances (boiler and floor heating) operating on one phase, but never run together - prevention against current overload and circuit breaker tripping. Enables to save your main breaker expenses.
- current tranzit indicator informs about heating activation, ceramic hob, ventilator...
- changing over of appliances according to inverter's (converter) output by photocell applications
- NEW hole for threaded conductor passes through the body of device
- part of device is current transformer, which is sensing size of current in threaded conductor
- possible to use also for sensing of current up to 600 A from external current transformer
- slight setting (by potentiometer) of tripping current range AC 0.5.. 25 A
- slight setting (by potentiometer) of delay adjustable in range 0.5.. 10 s
- supply voltage AC 230 V
- output contact 1x switching 8 A (AC1)
- 1-phase version, 1-MODULE, mounting onto DIN rail, saddle terminals

## **Symbol**

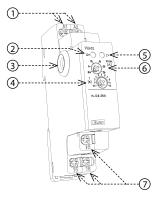


#### Connection



- P Connection example: PRI-52 with current transformer for increasing of current range.
- T Current transformer

## Description



- 1. Supply voltage terminals
- 2. Supply voltage indication
- 3. Hole for threaded conductor (max. Ø 5.8 mm)
- 4. Adjusting of time delay delay of output reaction to overrun of preset current
- 5. Output indication
- 6. Adjusting of current in A it's overrun is indicated by closing of the relay and by red LED diode shine
- 7. Output contact

Type of load	 cos φ ≥ 0.95 AC1	(M) AC2	—(M)— AC3	=(]‡ AC5a uncompensated	¶□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	HAL.230V AC5b	AC6a	 AC7b	AC12
Mat. contacts AgNi, contact 8A	250V / 8A	250V / 3A	250V / 2A	230V / 1.5A (345VA)	х	300W	х	250V / 1A	250V / 1A
Type of load	AC13	_ <del></del>	 	— <u> </u>		M DC5	DC12	_ <del></del>	_ <del></del>
Mat. contacts AgNi, contact 8A	х	250V / 3A	250V / 3A	24V / 8A	24V / 3A	24V / 2A	24V / 8A	24V / 2A	х

## PRI-52

Supply	
Supply terminals:	A1 - A2
Voltage range:	AC 230 V / 50 - 60 Hz
Power input (apparent / loss):	max. 5 VA / 1.4 W
Max. dissipated power	
(Un + terminals):	2.5 W
Supply voltage tolerance:	-15 %; +10 %

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Current range:	AC 0.5 25 A (50-60 Hz)
Maximal permanent current:	25 A
Inrush overload < 1s:	50 A
Current adjustment:	potentiometer
Time delay:	adjustable 0.5 10 s

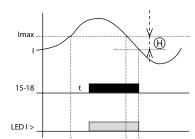
### Accuracy

Setting accuracy (mechanical):	10 %
Repeat accuracy:	< 1 %
Temperature dependance:	< 0.2 % / °C (°F)
Limit values tolerance:	10 %
Hysteresis:	0.25 A

### Output

Number of contacts:	1x changeover / SPDT (AgNi / Silver Alloy)		
Current rating:	8 A / AC1		
Breaking capacity:	2000 VA / AC1, 240 W / DC		
Output indication:	red LED		

Other information				
Operating temperature:	-20 55 °C (-4 °F 131 °F )			
Storage temperature:	-30 70 °C (-22 °F 158 °F )			
Electrical strengh:	4 kV (supply - output)			
Operating position:	any			
Mounting:	DIN rail EN 60715			
Protection degree:	IP40 from front panel / IP10 terminals			
Overvoltage category:	III.			
Pollution degree:	2			
Max. cable size (mm²):	max. 2x 2.5, max. 1x 4 /			
	with sleeve max. 1x 2.5, max. 2x 1.5 (AWG 12)			
Dimensions:	90 x 17.6 x 64 mm (3.5″ x 0.7″ x 2.5″)			
Weight:	65 g (2.3 oz.)			
Standards:	EN 60255-1, EN 60255-26, EN 60255-27			



H - Hysteresis

Monitoring relay PRI-52 serves for monitoring of current level in 1-phase AC circuits. Slight setting of release current level designates this relay for many various applications. Output relay is in normal status switched off. When set current level is overrun, relay get closed after preset delay. By return from error to normal status is used hysteresis.

PRI-52 range is possible to increase with external current transformer.

Adventage of PRI-52 is that the hole for threaded conductor is located under the level of covering in the switchboard - thanks that, threaded conductor is not accessible for unwanted manipulation.

## Warning

The device is constructed to be connected into 1-phase main and must be installed in accordance with regulations and norms applicable in a particular country. Installation, connection and setting can be done only by a person with an adequate electrotechnical qualification which has read and understood this instruction manual and product functions. The device contains protections against overvoltage peaks and disturbing elements in the supply main. Too ensure correct function of these protection elements it is necessary to front-end other protective elements of higher degree (A, B, C) and screening of disturbances of switched devices (contactors, motors, inductive load etc.) as it is stated in a standard. Before you start with installation, make sure that the device is not energized and that the main switch is OFF. Do not install the device to the sources of excessive electromagnetic disturbances. By correct installation, ensure good air circulation so the maximal allowed operational temperature is not exceeded in case of permanent operation and higher ambient temperature. While installing the device use screwdriver width approx. 2 mm. Keep in mind that this device is fully electronic while installing. Correct function of the device is also depended on transportation, storing and handling. In case you notice any signs of damage, deformation, malfunction or missing piece, do not install this device and claim it at the seller. After operational life treat the product as electronic waste.