



- Designed to protect a motor of a pump (submersible pump) against dry running.
- Monitor a current of a motor by means of current transformer (CT) X/5A.
- Current level (I_{SET}) and TRIP delay (t) are adjustable by potentiometers
- Indication of operating states by the red LED on the front panel.

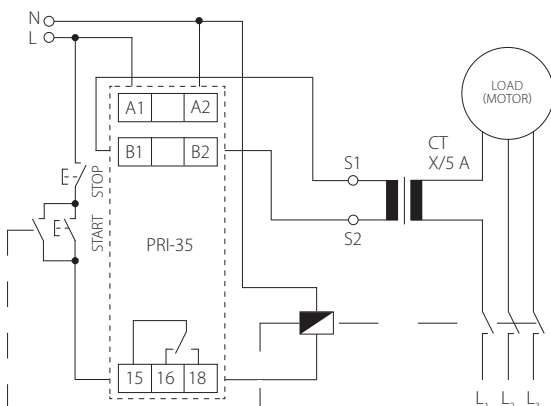


- The power supply is not galvanically separated from the monitored current terminals, terminals A2, B2 are internally connected.
- Wiring between B1, S1 and B2, S2 must be insulated and not connected to any external voltage or ground.
- External current transformer X/5A must be used.

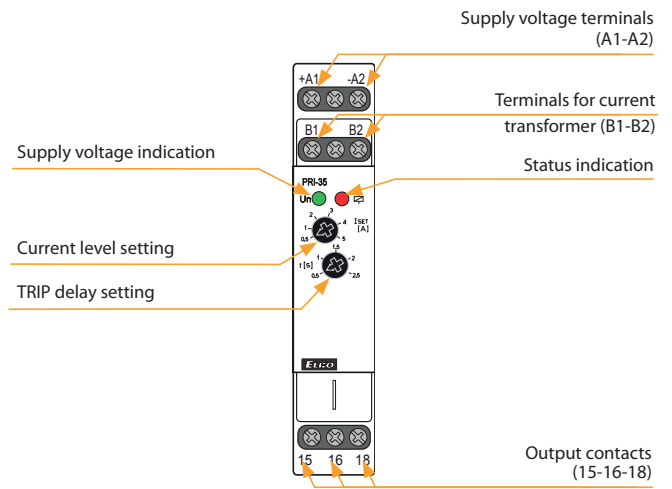
Technical parameters **PRI-35**

Supply	
Supply terminals:	A1 - A2
Voltage range:	AC/DC 24 - 240 V (AC 50-60 Hz)
Consumption (max.):	3.8 VA / 0.7 W
Supply voltage tolerance:	-15 %; +10 %
Measuring circuit	
Current range:	adjustable, AC 0.5 - 5A
Max. permanent current:	AC 10 A
Inrush overload < 1s:	30 A
TRIP delay (t):	adjustable, 0.5 - 2.5 s
Accuracy	
Setting accuracy (mech.):	5 %
Temperature dependency:	< 0.1 % / °C (°F)
Limit values tolerance:	5 %
Hysteresis (fault to OK):	10 %
Output	
Number of contacts:	1x changeover / SPDT (AgNi)
Rated current:	16 A / AC1
Switching power:	4000 VA/AC1, 384 W/DC
Switching voltage:	250 V AC/24V DC
Power dissipation (max.):	1.2 W
Mechanical life:	10.000.000 ops.
Electrical life (AC1):	100.000 ops.
Other information	
Operating temperature:	-20 to +55 °C (-4 °F to 131 °F)
Storage temperature:	-30 to +70 °C (-22 °F to 158 °F)
Dielectric strenght:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP20 terminals
Overvoltage category:	III.
Pollution degree:	2
Cable size (mm ²):	max. 1x 2.5, max. 2x 1.5/ with sleeve max. 1x 2.5
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

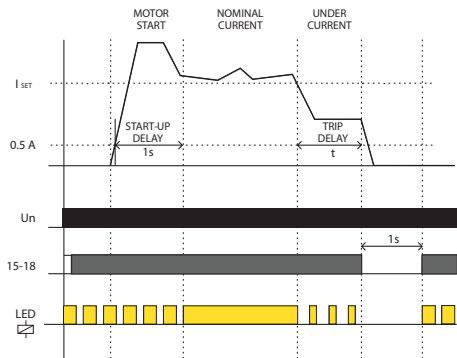
Connection



Description



Function



Right after connecting a supply voltage, an output relay is immediately closed and waits for a motor to be started by a START button. Once the START button is activated a contactor closes and the motor starts. An auxiliary contact of the contactor bridges the START button and keeps the contactor closed.

Fixed START-UP delay prevents undercurrent spikes when the contactor contacts bounce.

If the motor current is higher than the I_{SET} value after the START-UP delay, the output relay and contactor remain closed.

If the motor current falls below the I_{SET} value, the TRIP delay is triggered and after running out a set time the output relay opens and contactor drops out.

The output relay is open for 1s, then the output relay closes again and waits for the next start activated by the START button.