

General

This overload devices are designed to prevent the loads getting harm from high currents and ability of control at the same time. TRM-03, TRM-12 and TRM-25 are have internal current transformers.

Usage of Device and Working Principle


Make the connection of the device according to the connection diagram. Energize the device after making the connections. The display shows the set values for 5 seconds when the devices is energized. When the device is energized, you can make a overload adjustment with the "A>" knob. While the setting is being made, the set value is shown on the left display. You can set the delay time with the "t" knob. While the setting is being made, the set value is shown on the left display. When the device is energized, the relay is energised, the contact output goes to terminal 3 and OUT led is on. If the currents is higher than the set high current [A>], the device is counts the delay time and ERR led is on. After the time has elapsed, the relay is de-energised, the contact output goes to terminal 1, and OUT led is goes out.


Demurrage (Start Current): After the relay is energized or reset, the device does not current control for 5 seconds. Allows to demurrage.

Asymmetry: If there is more than 50% difference between the highest and lowest current passing on the phases, the device will enter asymmetry fault within **2 seconds**. (When the engine is running, it prevents the system from being damaged if the system drops to two phases out of three phases.) When the device enters the asymmetry error, the display group of the two phases causing the fault flashes and error LED is on. If the current is less than these values, the device does not control asymmetry. **0,1A for TRM-03, 1A for TRM-12 and 2A for TRM-25**. The device has to be manually reset in order to exit from the asymmetry error.

Reset Modes

Manual Mode: The reset key must be pressed to reset the device when a high current error. When the device is in this mode, the  LED lights up.

Semi-Automatic Mode. The device automatically resets the system 3 times when a high current error. The device wait for the next error to manually reset it. When the device is in this mode, the  LED lights up.

Automatic Mode: The device automatically resets the system at high current error. When the device is in this mode, the  LED lights up.

Note: Press the SELECT button for 10 seconds to change the mode. The mode light will change.

Warnings

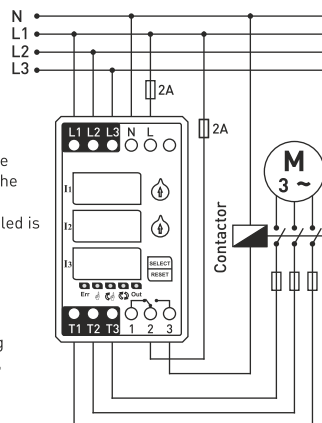
- Please use the device according to the manual.
- Don't use the device in wet.
- Include a switch and circuit breaker in the assembly.
- Put the switch and circuit breaker nearby the device, operator can reach easily.
- Mark the switch and circuit breaker as releasing connection for device.
- Maximum currents to be applied to the devices; **3A for TRM-03, 12A for TRM-12 and 25A for TRM-25**. If current is applied above these values, the device may make incorrect measurement or damage.

Technical Specifications

Operating Voltage	: 150V - 260VAC
Operating Freq.	: 50/60 Hz
Operating Power	: <6VA
Operating Temp.	: -20°C.....+55°C
Display	: 3x3 Digit Display, 5 LEDs
Asymmetry	: %50 (Fixed)
High Current (Overload)	: TRM-03; 0,1A - 3A, TRM-12; 3A - 12A, TRM-25; 0,1A - 25A
Waiting (t)	: 0,1sec. - 10sec., 0,1sec. - 20sec. (TRM-25)
Connection Type	: Terminal Connection
Contact	: 5A / 250VAC (Resistive Load)
Cable Diameter	: 2,5mm ²
Weight	: Max. 250gr.
Mounting	: Assembled on the din rail.
Operating Altitude	: <2000m.

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Connection Diagram



Maintenance

Switch off the device and release from connections. Clean the trunk of device with a swab. Don't use any conductor or chemical might damage the device. Make sure device works after cleaning.

Dimensions

