

- **Self-powered by the voltage to be monitored (S, ST and ST-D).**
- **Visual indication of tripping cause.**
- **DIN rail mounting.**

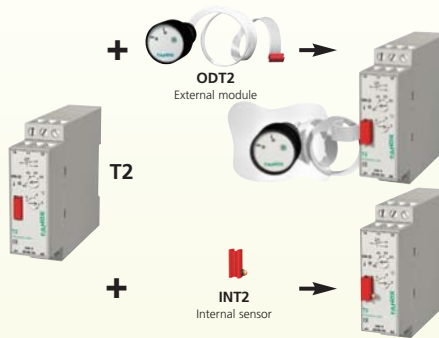
Phase and temperature relay

- To protect 3-phase devices
- Suitable for motors with built-in PTC sensors in applications such as elevators, cranes, hoists and similar installations.
- Sensitive to incorrect phase sequence.
- Monitoring of short-circuit and broken wire in PTC circuit.
- Two output relays, one for phase imbalance, phase loss and phase sequence and the other for over temperature.

ST-D



T



MT



Thermistor protection relay

- Controls the temperature by the use of thermistors (PTC sensors)
- Detects short-circuit ($< 25\Omega$) and breakage in the circuit of sensors.
- Protects the motors against over temperature caused by excess ambient temperature, insufficient ventilation or cooling, etc.
- Applicable in transformers and other machines.

ST2-D	ST4-D	T2	ODT2	INT2	MT2
3 x 230 V	3 x 400 V	—	—	—	—
Self-powered (3-phase)		230 Vac (Aux)	24 Vac, dc	—	230 Vac (Aux.supply)
12002	12013	12051	12052	12037	12036
					12039

50/60 Hz	50/60 Hz	50/60 Hz
Phase loss: with resistive loads it trips when a phase loss occurs. With three-phase motors it trips if the voltage regenerated by the motor is lower than 60% of the main voltage. Phase imbalance $> 40\%$	Maximum temperature setting from 40°C to 55°C Minimum temperature setting from -5°C to 5°C	According to the PTC installed
100 Ω / 1500 Ω - 2300 Ω	2 $^{\circ}\text{C}$	25 Ω / 1500 Ω - 3600 Ω . Reset 1800 Ω
$< 0,1$ s	-	$< 0,1$ s
Automatic	Automatic	Automatic
3 LED's: ON + +	2 LED's: ON +	3 LED's: ON + +
2 relays (+) with 1 NO	1 relay with 1 change over NO - NC	1 relay with 1 NO + 1 NC
I_{th} : 5A; AC15 - 250V - 2A; DC13 - 30V - 2A	I_{th} : 5A; AC15 - 250V - 2A; DC13 - 30V - 2A	I_{th} : 5A; AC15 - 250V - 2A; DC13 - 30V - 2A
2,5 mm ² , No. 22 - 12AWG / 20Ncm, 1.8 LB - IN	2,5 mm ² , No. 22 - 12AWG / 20Ncm, 1.8 LB - IN	2,5 mm ² , No. 22 - 12AWG / 20Ncm, 1.8 LB - IN
7,5 VA (230 Vac) - 11 VA (400 Vac)	5 VA (230 Vac) - 0,5 W (24 Vdc)	6 VA (230 Vac)
IP20 / 0,13 kg	IP20 / 0,11 kg	IP20 / 0,12 kg
-30°C $+70^{\circ}\text{C}$ / -15°C $+60^{\circ}\text{C}$	-30°C $+70^{\circ}\text{C}$ / -15°C $+60^{\circ}\text{C}$	-30°C $+70^{\circ}\text{C}$ / -15°C $+60^{\circ}\text{C}$

