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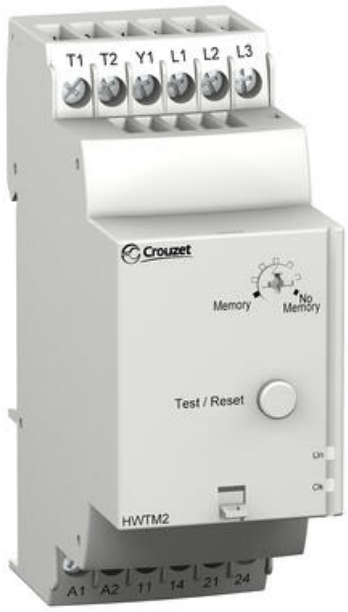
PHASE AND TEMPERATURE MONITORING RELAYS FOR MOTORS HWTM, HWTM2

84873028
Phase Monitor Relay HWTM2 3 x 208-480V ac



- OBSOLETE WITH NO REPLACEMENT
- Control of 3-phase networks: phase sequence, phase interruption
- Motor temperature monitoring with PTC sensors
- Wide range input voltage

PRODUCT DESCRIPTION

Relays HWTM and HWTM2 monitor production disturbances on 3-phase networks and temperatures in motors with integrated PTC sensors. The control functions
“phase and temperature” are independent of one another.
Control of 3-phase networks (208-480 V) concerns phase sequence L1, L2, L3 and phase interruptions. Complete phase interruptions are detected, even during regeneration
(returned voltage U is measured at <0.7 x Un).
The temperature control can encompass up to 6 PTC sensors (resistance with positive temperature coefficient) that are connected in series between T1 and T2.
A fault is detected when the resistance in the temperature sensor circuit exceeds 3100 Ω. Returns to normal mode when the resistance falls below 1650 Ω.
The result of the control is specified by the “temperature relay's” position – contact NO 11-14 drops out in the event of a fault. A break in the temperature sensor circuit has the same effect
as for high temperature (the resistance exceeds 3100 Ω) and is thus interpreted as a fault). A complete short circuit in the temperature sensor(s) is detected when the resistance falls below 15 Ω ± 5 %, which is considered as a fault.
HWTM2 has a rotary switch that is used to set the function position for the temperature control, with or without memory. In the “with memory” position, the temperature relay is blocked in the open position when a fault is detected. As soon as the temperature is correct again, the relay can be reset, either by pressing the “Test/Reset” button
at the front (at least 50 ms) or by closing the floating contact between Y1 and T1 (without a load connected in parallel). Can also be easily reset by switching off the supply voltage to the relay.
With HWTM2, a test for overheating can be easily made by pressing the test button at the front marked “Test/Reset”. The yellow LED turns off and the relay drops out.
This test is made when the temperatures is normal. Green LED (Un) indicates supply voltage OK. Yellow LED (R) indicates active relay output.

TECHNICAL DATA

Approvals	CSA, GL, RoHS, UL
Boundary limit	3 100 Ω ±10 %
Breaking capacity	5A, 250V AC/DC
External reset	Fault Latching and reset/test
Function	Phase Sequence, Phase Failure, Motor Temperature

IP class connection	IP20
IP class housing	IP30
Measurement range	3x208 - 3x480V AC
Output	2x Relay
Resistance of temperature sensor at 20 ° C max	1500 Ω
Restriction limit	1 650 Ω ±10 %
Storage temperature max	70 °C
Storage temperature min	-40 °C
Supply voltage	24-240V ac/dc
Temperature operational max	50 °C
Temperature operational min	-20 °C
Time delay startup	0.5 s
Time delay when exceeding the limit value	0.3 s
Weight	107 g