

## CROUZET - 3 PHASE, PHASE CONTROL MWUA

84873025

MWUA PHASE CONTROL RELAY

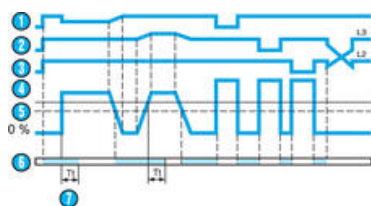
- Triggers alarm upon incorrect phase sequence, phase interruption, asymmetry and over-/under-voltage
- Adjustable line voltage
- Measures returned voltage to 70 %
- 17.5 mm cabinet with DIN rail



### PRODUCT DESCRIPTION

Control relay for phase monitoring with regeneration of voltage and asymmetry. Adjustable switch at the front for adjustment of correct voltage in 3-phase networks. Voltage switch's position is not registered until the operating voltage is switched on. If the switch position is changed during operation, all LEDs (LED indications) begin to flash but the unit will continue to function normally with the voltage that was set at the most recent power connection. The LEDs return to normal function when the correct voltage is restored. The relay monitors the correct phase sequence between the three phases or if any phase is lacking (measured  $U < 0.7 \times U_n$ ), 70 % of the returned voltage. The asymmetry setting is made at the front between 5 and 15 % (the rated voltage between the phases  $U_n \times$  degree of asymmetry, %). Deviations in over-/under-voltage are adjustable between 2 and 20 % of the line voltage (window relay function). In the event of incorrect phase sequence or phase interruption, the relay immediately produces an alarm (drops out), and in the event of an asymmetry or voltage fault, the relay drops out after the set time  $T_t$ . If the power is switched on with a measured fault, the relay remains deactivated. Green LED (Un) indicates supply voltage OK. Yellow LED (R) indicates active relay output.

#### Phase interruption, phase sequence and asymmetry



1: L1

2: L2

3: L3

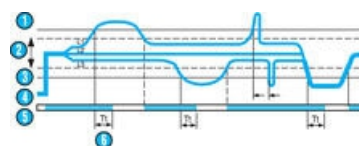
4: Limit value for asymmetry

5: Hysteresis

6: Relay

7: Delay upon exceeding limit value  $T_t$

#### Over- and under-voltage with range control



1: Limit value, over-voltage

2: Hysteresis


3: Limit value, under-voltage

4: L1, L2, L3

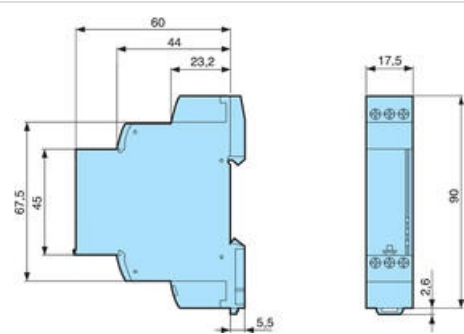
5: Relay

6: Delay upon exceeding limit value  $T_t$

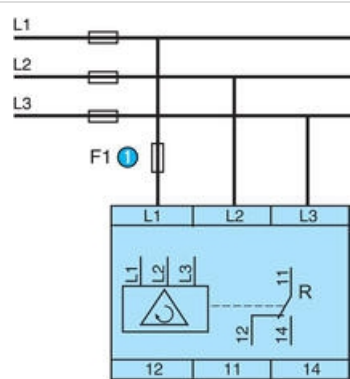
# TECHNICAL DATA

Supply voltage	3x208-480 V AC 50/60 Hz ±10 %
Power consumption	1.8 VA
Selection of rated voltage (line)	208, 220, 380, 400, 415, 440, 480 V
Time delay upon exceeding the limit value Tt	0.1-10 sec.
Time delay, alarm	<200 ms
Time delay, start-up	500 ms
Hysteresis	2 % of Un static value
Output relay	Max. breaking current 5 A Max. breaking voltage 250 V AC
Operating temperature	-20 °C to +50 °C
Weight	80 g
Approval	 (LVD) 73/23/EEC-EMC 89/336/EEC RoHs.WEEE
Mounting	DIN rail

# DIMENSIONS



# CONNECTION



F1: Fast-blow fuse 100 mA (recommendation)

# ORDER NUMBER

Order no.	Description	Supply voltage
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## SPECIFICATIONS

Approvals	CSA, GL, RoHS, UL
Breaking capacity	5A, 250V AC/DC
IP Class Connection	IP20
IP Class Housing	IP30
Output	Relay
Selection of rated voltage	208, 220, 380, 400, 415, 440, 480 V
Supply voltage	3 x 208-480V AC
Temperature range bearing, from	-40 °C
Temperature range bearing, to	70 °C
Temperature range from	-20 °C
Temperature range to	50 °C
Time Delay Alarm	0.2 s
Time Delay On Crossing The Threshold	0,1-10s
Time Delay Start	0.5 s
Weight	80 g

