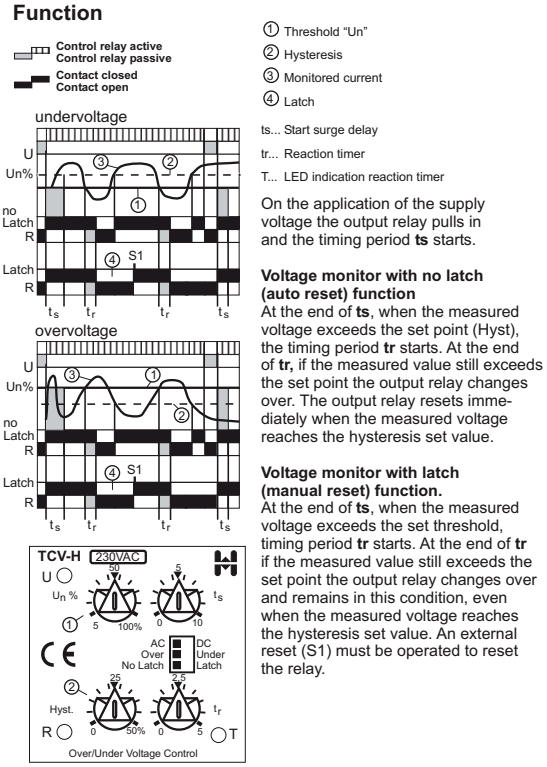
TCV-H

overview



- **AC or DC over or under voltage monitor**
- **DPCO output max. 6A**
- **3 measuring ranges 0.5 - 600V RMS**
- **level and hysteresis adjustments**
- **programmable latch/no latch alarm**
- **LED indicators for power supply, contact and reaction timer**
- **45mm DIN rail mount housing**

Function



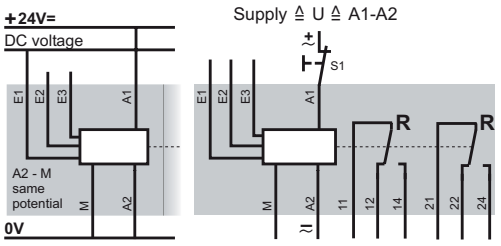
① Threshold "Un"
② Hysteresis
③ Monitored current
④ Latch

ts... Start surge delay
tr... Reaction timer
T... LED indication reaction timer

On the application of the supply voltage the output relay pulls in and the timing period **ts** starts.

Voltage monitor with no latch (auto reset) function
At the end of **ts**, when the measured voltage exceeds the set point (Hyst), the timing period **tr** starts. At the end of **tr,** if the measured value still exceeds the set point the output relay changes over. The output relay resets immediately when the measured voltage reaches the hysteresis set value.

Voltage monitor with latch (manual reset) function.
At the end of **ts**, when the measured voltage exceeds the set threshold, timing period **tr** starts. At the end of **tr** if the measured value still exceeds the set point the output relay changes over and remains in this condition, even when the measured voltage reaches the hysteresis set value. An external reset (S1) must be operated to reset the relay.



input	range	resistance	U_{EMAX} (20°C)
E1-M	0,5V - 10V	3,9 kOhm	30V
E2-M	3V - 60V	68 kOhm	130V
E3-M	30V - 600V	820 kOhm	660V

specification

supply voltage variation	nominal voltage +10% / -15%
frequency range	48 - 63 Hz
duty cycle	100%
start surge delay	0 - 10s
reaction time	0 - 5s
reset time	< 100ms
output relay specification	max. 6A 230V~
Ue/Ie AC-15	120V/4A 240V/3A
Ue/Ie DC-13	24V/2A
expected life time	DPCO SPCO
mechanical	2 x 10^6 resp. 1 x 10^7 operations
electrical	1 x 10^5 resp. 1 x 10^5 operations
screws	pozidrive 1
screw tightening torque	0,6..0,8Nm
operating conditions	-20 to +60°C non condensing

* EN 60947-5-1 VDE 0435

ordering information

part no	supply		output	sup. galv. iso*	cULus	housing types
TCV-H 230Vac	230V~	2,5VA	DPCO	yes	yes	C
TCV-H 115Vac	115V~	2,5VA	DPCO	yes	yes	C
TCV-H 24Vac	24V~	2,5VA	DPCO	yes	yes	C
TCV-H 24Vdc	24V=	2W	DPCO	no	yes	C

* The measurement input is galvanically isolated from the power supply

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