TCV-P

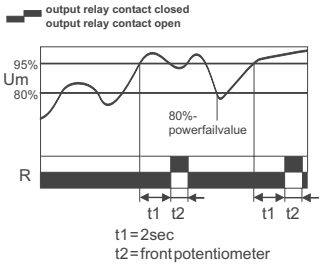
overview

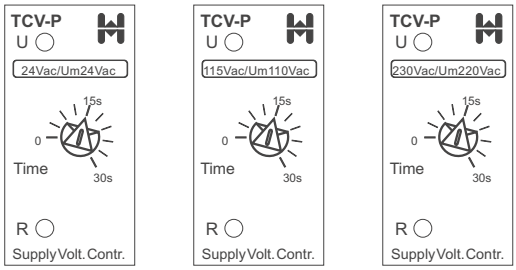
- **supply voltage 'brown-out' monitor for 24V~, 115V~ and 230V~ supplies**
- **SPCO output for post brown-out control panel reset**
- **LED indicators for power supply and relay**
- **22.5mm DIN rail mount housing**

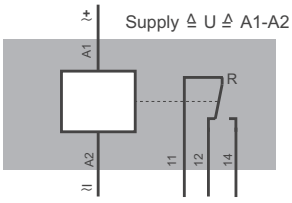
Function

With the introduction of modern multi-voltage electronic devices a common problem exists under supply voltage dip ('brown-out') conditions where electrical devices such as Contactors and Relays can drop out, but multi-voltage electronic devices remain energised, thus the control panel switch sequence is lost. The TCV-P monitors the supply voltage to detect a supply 'brown-out' (< Vn x 0.8) or supply interruption.

When the supply is first established and the supply voltage value increases above 95% of the nominal value (Un), time ***t1*** (fixed 2 seconds) starts to run to 'prove' the supply. When ***t1*** expires the output relay contact closes for time ***t2***. Time ***t2*** can be selected with the potentiometer on the front plate (0-30sec). If the supply voltage decreases below 80% of the nominal value (Un - 'brown-out' value) or there is a supply voltage interruption of 1 cycle or more the relay 'remembers' this event and when the supply returns above 95% for at least 2 seconds (***t1***) the output relay pulses On for the duration of timer ***t2***. This pulse is used to initiate a reset of the control panel.







specification

supply voltage variation	nominal voltage +10% / -30%
frequency range	48 - 63 Hz
duty cycle	100%
repeat accuracy	<1% of the selected range
output relay spec	max. 12A 250V~
Ue/Ie AC-15	120V/2,5A 240V/2,5A
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*	housing types
TCV-P 24Vac/Um 24Vac	230V~	6VA	DPCO	yes	A
TCV-P 115Vac/Um110Vac	115V~	6VA	DPCO	yes	A
TCV-P 230Vac/Um220Vac	24V~	6VA	DPCO	yes	A

* The measurement input is galvanic isolated from the power supply

HIQUEL® HIGH QUALITY ELECTRONICS