

# Type: M3CVR/2

## Single Phase, Under and Over Voltage plus Time Delay

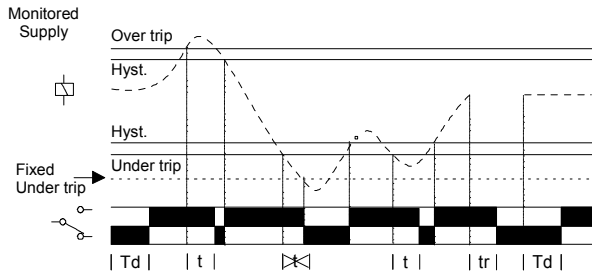
- 35mm DIN rail housing
- Microprocessor controlled with internal monitoring (self-checking)
- Monitors own supply
- Detects if supply exceeds the set Under or Over Voltage trip levels
- Fixed trip level - 70% of Un (time delay automatically cancelled when the supply drops below this level)
- Adjustments for under and over voltage trip level
- Adjustment for time delay (from under or over voltage condition)
- 1 x DPDT relay output 8A
- Intelligent LED indication for supply and relay status



Dims:  
to DIN 43880  
W. 35mm

Terminal Protection to IP20

### FUNCTION DIAGRAM



### INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required. The diagram below shows a typical installation, whereby the supply to the load is being monitored by the relay. If a fault should occur (i.e. fuse blowing), the contactor or relay is de-energised removing the supply to the load. The contactor or relay only re-energises after the fault has cleared.

#### Applying power.

- Set the "over %" adjustment to maximum and the "under %" adjustment to minimum. Set the "time delay" to minimum.
- Apply power and the green "supply on" and red "relay" LED's will illuminate, the relay will energise and contacts 15 and 18 / 25 and 28 will close. Refer to the troubleshooting table if the unit fails to operate correctly.

#### Setting the unit.

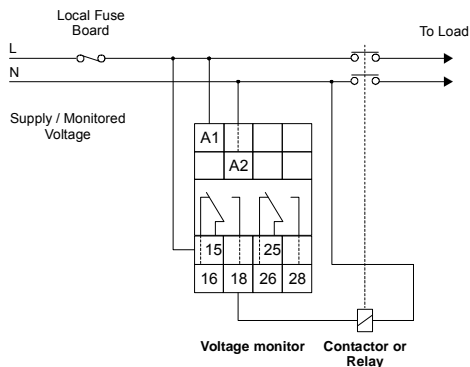
- Set the "over %" and the "under %" adjustments to give the required monitoring range.
- If large supply variations are anticipated, the adjustments should be set further from the nominal voltage.
- Set the "time delay" as required. (Note that the delay is only effective should the supply increase above or drop below the set trip levels. However, if during an under voltage condition the supply drops below the 2<sup>nd</sup> under voltage trip level, any set time delay is automatically cancelled and the relay de-energises).

#### Troubleshooting.

The table below shows the status of the unit during a fault condition.

Supply fault	Green LED	Red LED	Relay
Supply missing	Off	Off	De-energised
Under or Over Voltage condition (during timing)	On	Flashing	Energised for set delay (t)
Under or Over Voltage condition (after timing)	On	Off	De-energised
Supply below 70% of Un (fixed under trip level [2])	On	Off	De-energised
Supply below 50% of Un	Off	Off	De-energised

### CONNECTION DIAGRAM



### MOUNTING DETAILS

