

234

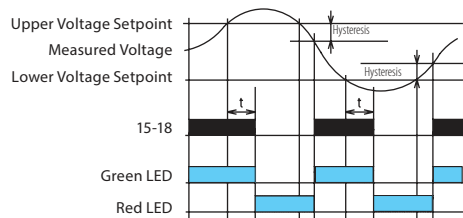
DC VOLTAGE MONITOR

11/14/14

FEATURES

- DC Voltage monitor / Band (window) voltage relay
- Controls supply voltage for equipment sensitive to supply tolerance and offers protection against under- and over-voltage conditions.
- Monitors voltage range of 6 to 30VDC for battery applications
- Adjustable time delay up to 10 seconds to avoid nuisance tripping
- Minimum voltage setting as a percentage of the maximum voltage
- Red and green LEDs indicate 3 conditions, normal operation and 2 fault conditions
- DIN rail mounting
- UL and CE approvals, RoHS compliant

MODE OF OPERATION



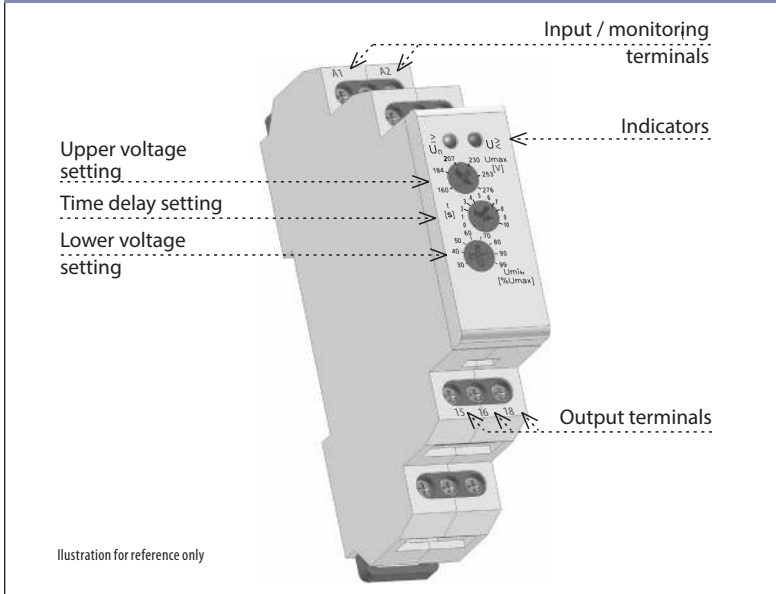
The 234 DC Voltage Monitor has an active output during normal operation and turns off when a fault is sensed. Loss of supply voltage therefore is a recognized fault.

Built-in hysteresis eliminates chattering at the transition point. SPDT (Form C) contacts allow various connection options. Red and green LED indicators allow quick identification of various fault conditions.

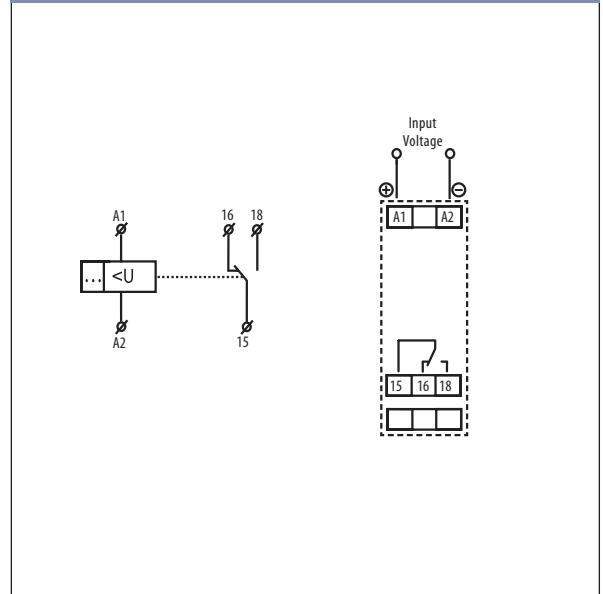
SPECIFICATIONS

- Input/monitoring terminals** A1-A2
- Supply voltage** 6-30VDC
- Power consumption (DCmax)** 1.2 VA
- Upper voltage setting** 18-30VDC
- Lower voltage setting** 35-95% of maximum
- Maximum constant voltage** . 36VDC
- Peak overload <1ms** 50VDC
- Time delay** adjustable, 0-10s
- Setting accuracy** 5%
- Repeatability** <1%
- Dependence on temperature** <0.1% / °C
- Limit tolerance** 5%
- Hysteresis** 2-6% of set value
- Relay output form** SPDT Form C (AgNi)
- Rated current** 16 A/ AC
- Switching capacity** 4000 VA/ AC, 384 W/ DC
- Inrush current** 30 Amps / <3s
- Switching voltage** 250VAC / 24VDC
- Switching capacity DC (min)** 500mW
- Indication of state** Red and Green LEDs
- Mechanical life** 30 million operations
- Electrical life** 70,000 operations
- Operating temperature** ... -20°C to +55°C
- Storage temperature** -30°C to +70°C
- Dielectric strength** 4 kV
- Operating position** any
- Mounting** DIN rail EN 60715
- Protection degree** IP 40 from front panel
- Max. cable size** 14AWG
- Standards** EN 60255-6, EN 61010-1, UL, CE, RoHS

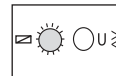
FEATURES



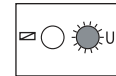
WIRING DIAGRAM



LED INDICATORS



Normal state
 $U_{min} < U_n < U_{max}$
 Green = ON
 Red LED = OFF



Exceeded U_{max} (**Over voltage**)
 Drop below U_{min} (**Under voltage**)
 $U_n > U_{max}$ or $U_n < U_{min}$
 Green LED = OFF
 Red LED = ON