

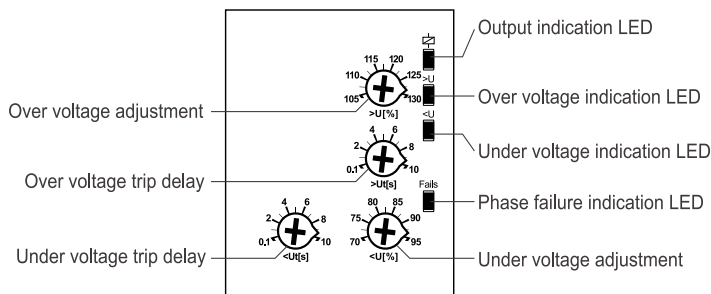
FEATURES

True RMS Measurement
 Over Voltage Monitoring
 Under Voltage Monitoring
 Phase Failure Monitoring
 Trip LED Indicator
 Adjustable Over / Under Voltage Settings
 Adjustable Trip Delay
 Auto-reset
 Din-railed Mount

TECHNICAL DATA

Models	M380/415 (3P3W)	M220/240 (3P4W)
Measurement	True RMS Monitoring	
Rated voltage supply (Un)	AC 380 V, 415V	AC 220 V, 240 V
Rated frequency	50 / 60 Hz	
U > setting value	(105% ~ 130%) x Un	
U < setting value	(70% ~ 95%) x Un	
U > trip delay	0.1~10 sec	
U < trip delay	0.1~10 sec	
Voltage hysteresis	6 V	7 V
Phase failure sensitivity	$\leq 0.5 * Un$	
Trip delay for phase failure	≤ 0.2 sec	
Voltage measurement error	$\pm 1\%$	
Trip delay error	$\pm 5\%$, +0.1 sec	
Knob setting error	$\pm 1\%$ x scale value	
Max. power consumption	2 VA	
Rated insulation voltage	480 V	
Output contact	1C / O	
Current rating	8A / 250 V AC1	
Mechanical life	10^6	
Electrical life	10^5	
Protection degree	IP20	
Pollution degree	3	
Altitude	≤ 2000 m	
Operating temperature	$-20^\circ \sim +55^\circ \text{C}$	
Relativity humidity	$\leq 50\%$ at 40°C (without condensation)	
Storage temp.	$-30^\circ \text{C} \sim +70^\circ \text{C}$	
Wire size	0.5 ~ 2.5 mm ²	
Torque	0.5 Nm	
Weight	~ 95 g	
Mounting	DIN Rail mount / TH35 Rail (EN60715)	
Standard of Compliance	IEC 60947-5-1	

PANEL DESCRIPTION



OPERATION INSTRUCTION

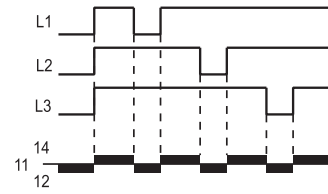
1. Set threshold value and trip delay as required by adjusting knobs.
2. When fault is detected, the output relay will be energize and open based on the trip delay time.
3. Phase failure protection function will be activated when measured voltage value $\leq 0.5 * Un$.
4. The relay trips instantly when measured voltage value $\geq 1.5 * Un$.

Voltage Monitoring Relay DVS-1000E

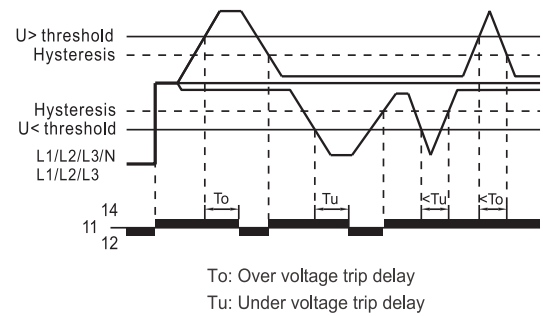


FUNCTION DIAGRAMS

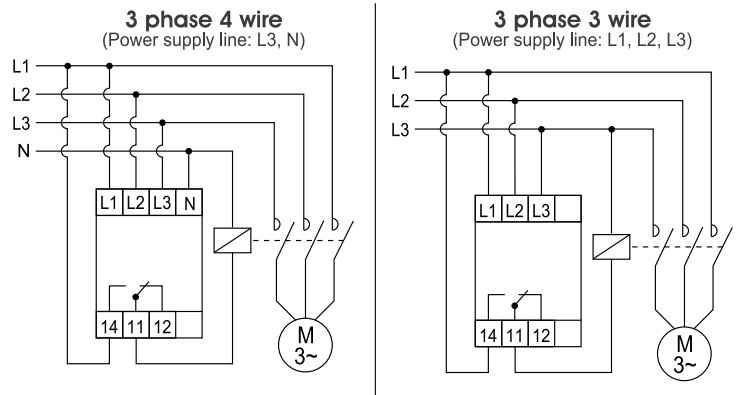
- Phase failure monitoring



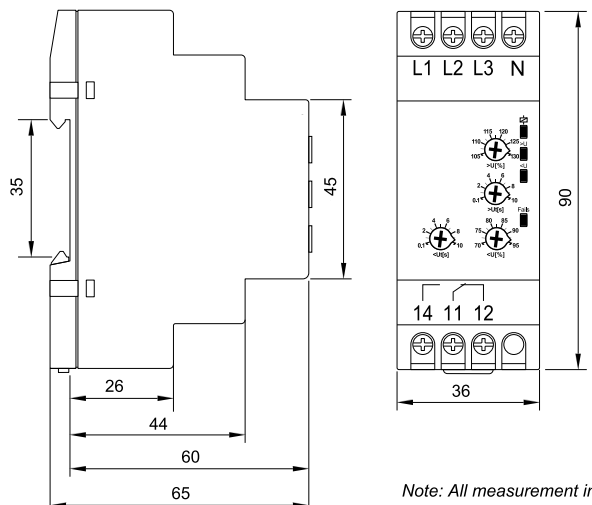
- Over voltage and Under voltage monitoring



WIRING DIAGRAMS



CASING DIMENSIONS



Note: All measurement in mm.