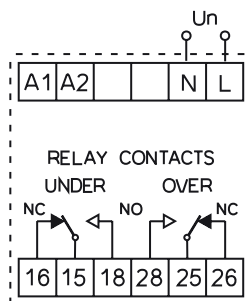




EAN code
 VROU1-28/69: 8595188155274
 VROU1-28/139: 8595188155281
 VROU1-28/277: 8595188155298

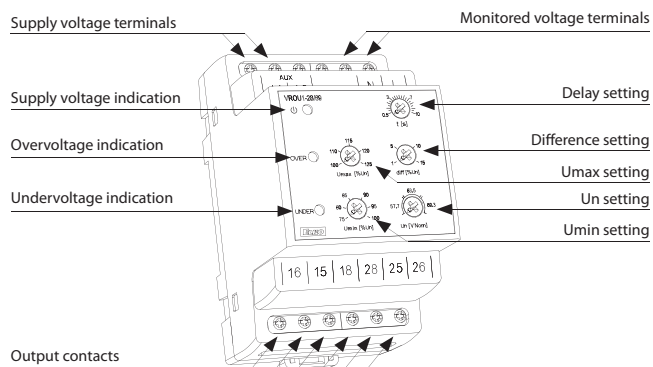
Technical parameters	VROU1-28/69	VROU1-28/139	VROU1-28/277
Nominal voltage range (Un):	57.7-69.3 V	100-139 V	220-277 V
		L-N	
Overload capacity			
- continuous:	87 V	174 V	346 V
- 10 s max:	104 V	209 V	416 V
Operating frequency:		45-65 Hz	
Auxiliary Supply Voltage:		24 V - 240 V AC/DC	
AC Supply frequency:		45-65 Hz	
Supply voltage tolerance:		±10%	
Auxiliary Voltage Burden (Max):		3 VA / 1.2 W	
Over-voltage range (Umax):		100-125 %Un	
Under-voltage range (Umin):		75-100 %Un	
Differential:		Adjustable 1-15 %Un	
Trip time delay:		Adjustable 0.5 to 10s	
Relay contacts:		2 x changeover, volt-free, for general switching operations	
Load capacity - AC:		250 V @ 8 A, 2 kVA	
Load capacity - DC:		30 V 8A	
Insulation:		4 kV/1 min	
Mechanical endurance:		30 x 10 ⁶ operations	
Other Data			
Dimensions:		90 x 52 x 64 mm	
Weight:		138 g	
Maximum conductor size:		2 x 1.5 mm ² or 1 x 2.5 mm ²	
Operating temperature:		-20 to +55 °C	
Storage temperature:		-30 to +70 °C	
Over-voltage category:		III	
Pollution degree:		2	
Environmental protection:		IP40 for front panel, IP20 for terminals	
Standards:		EN 60255-6, EN 60255-27, EN 61000-6-2, EN 61000-6-4	

Connection

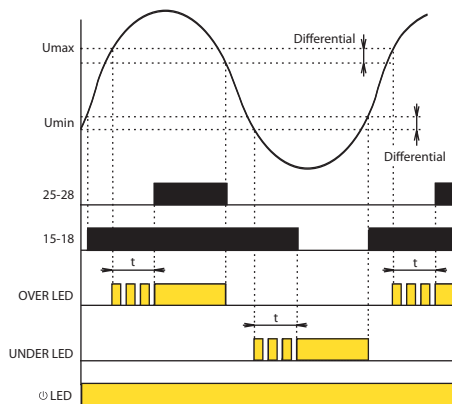


- These units monitor a single phase supply and operate relays if the phase voltage goes below or above set levels. Front panel controls allow selection of:
 - Under- and Over-voltage trip levels,
 - nominal rated voltage,
 - differential voltage for operating hysteresis and
 - time delay before a trip triggers a relay response.
- LEDs indicate power on and trip status. A relay with two changeover volt-free contacts is fitted.
- These instructions contain important safety information. Please read them thoroughly before commissioning, operating or maintenance of the unit.

Device description



Function



The time delay and differential trip levels help to prevent relay chatter as the monitored voltage level varies.

As the relays have changeover contacts, the relay outputs can be inverted by wiring to the alternative terminals 15-16 or 25-26.

The unit obtains its power from the separate auxiliary supply. The green LED lights to show when this supply is present.

Under normal conditions, with voltage at nominal level, both red LEDs will be off, the Under relay will be energised and the Over relay will be de-energised. With mains supply off, both relays will be de-energised.

Under-voltage Operation

If the monitored phase voltage goes below the set under-voltage level (Umin), the Under LED will light and the Under relay (15-16/18) will deenergise after the set delay. During the delay period, the Under LED will flash.

If the voltage then returns above Umin plus the differential value, the Under LED will go off and the Under relay will energise again, without delay.

Over-voltage Operation

If the monitored phase voltage goes above the set over-voltage level (Umax), the Over LED will light and the Over relay (25-26/28) will energise after the set delay. During the delay period, the Over LED will flash.

If the voltage then falls below Umax minus the differential value, the Over relay will de-energise and the Over LED will go off, without delay.