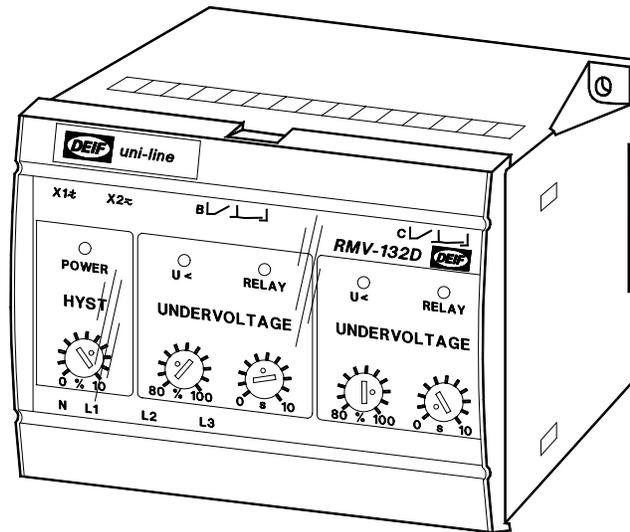


Undervoltage relay type RMV-132D

uni-line

4189340117E (UK)



- 2 levels: $U< + U<$
- 3 phase measurement
- LED indication of fault condition
- Timer controlled tripping
- LED indication for activated relay
- 35 mm DIN rail or base mounting



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1. Description

This undervoltage relay with 2 voltage levels type RMV-132D forms part of a complete DEIF series (the *uni-line*) of relays for protection and control of generators.

2. Label

The relay is provided with a label with the following data:

Measuring voltage ¹
corresp. to 100% on scale

Supply voltage

Coupling ¹
(set by DEIF)

Relay coupling
Shown is relay B as a normally de-energised relay, relay C as a normally energised relay with latch circuit

Type designation

DEIF's order ack. No.
To be stated when contacting DEIF

Mounted voltage module

"Further information"
(E.g. time delay(s), special calibration)

Contact remains locked in alarm position even though the input returns to normal. Latch circuit is reset by disconnecting the supply voltage.

Distributor's ID No.
Filled in by distributor when customizing the unit.

Highest voltage in relation to earth.

Installation category

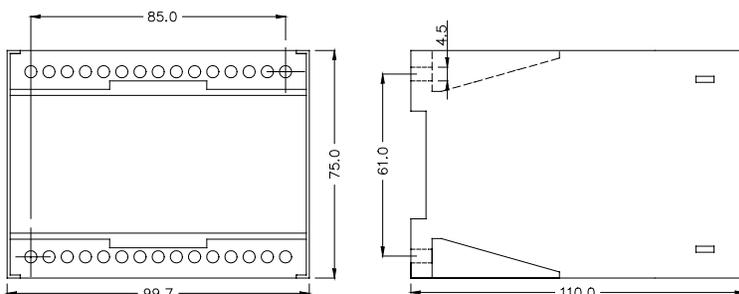
TYPE	RMV-132D	121120
MEAS VOLTAGE	230V/400V	MODULE 230V
MEAS CURRENT		MODULE
MEAS POWER		SCALE
SUPPLY	24VDC	
COUPLING	STAR	"Further information"
RELAY B	<input checked="" type="checkbox"/> NORM. DEENERGIZED <input type="checkbox"/> NORM. ENERGIZED <input type="checkbox"/> LATCH	RELAY C <input type="checkbox"/> NORM. DEENERGIZED <input checked="" type="checkbox"/> NORM. ENERGIZED <input checked="" type="checkbox"/> LATCH
		"Distributor No."

Note 1: Example of a label for an RMV-132D for delta coupling:

MEAS VOLTAGE	400/230V	MODULE	400V
COUPLING	DELTA		

Note: The relay is provided with a 200 ms power-up relay, ensuring correct function of the relay on connection of the auxiliary voltage. Normally energised contacts ("NE") are not activated (contact does not open/close) until 200 ms after connection of the auxiliary voltage. Likewise, the relay is provided with a 200 ms power-down circuit, ensuring supervision and maintenance of any set point exceeding for 200 ms after disconnection of the auxiliary voltage.

3. Mounting instructions



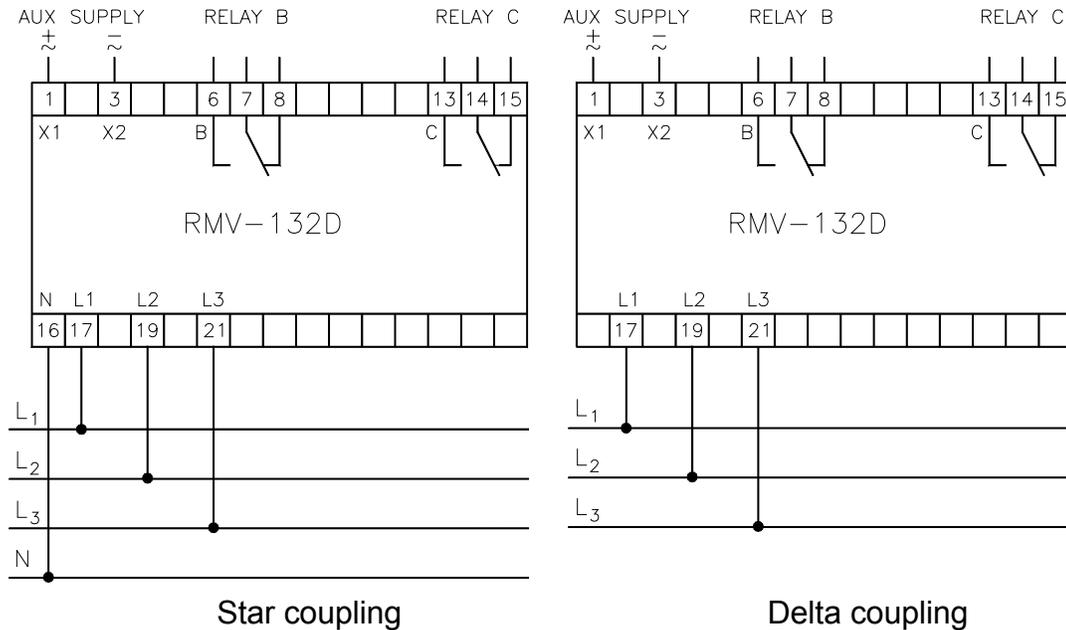
The RMV-132D is designed for panel mounting, being mounted on a 35 mm DIN rail, or by means of two 4-mm screws.

Weight: approx. 0.650 kg

The design of the relay makes mounting of it close to other *uni-line* units possible, however make sure there are min. 50 mm between the top and bottom of this relay and other relays/units.

The DIN rail must always be placed horizontally when several relays are mounted on the same rail.

4. Connection diagram



Please note the difference between relays for delta coupling and for star coupling. The coupling is stated on the label.

A 2A fuse may protect all voltage inputs.

The relay is protected against ESD (electrostatic electricity), and further special protection against this during the mounting of the relay is not necessary.

5. Start up instructions

5.1 Setting and indication

Setting of	LED/relay	
Undervoltage set point: (80...100%) of U_n Undervoltage set point: (80...100%) of U_n	"U<" "U<"	Yellow LED is lit when the input voltage drops below the set point, but the output contact has not yet been activated.
Time delay: 0...10 s	The contact is activated and the red LED is lit after the timer has expired.	
Hysteresis: (1...10%) of U_n	Relay contact is reset when fault voltage equals or is less than the preset hysteresis.	



The built-in relays of the RMV-132D are activated when the input voltage drops below the set points preset on the front of the unit.

A suitable hysteresis is selected in relation to the preset set points, e.g. to ensure, that the relay contacts are not reset, until the input voltage is within its nominal range.

The ranges of the 2 set points of the RMV-132D are identical, and each set point is connected to a relay output.

One of these set points is normally applied as a prewarning, the other is then applied for disconnection of the supervised unit.

When setting the set points on the front of the RMV-132D an accuracy of $\pm 10\%$ of the scaling, corresponding to $\pm 2\%$ of U_n , may normally be obtained.

If a higher accuracy is required, the unit (the generator) connected to the relay must be regulated until the required set point value is reached. When the input voltage drops below the set point, the relevant yellow LED of the RMV-132D is lit.

6. Technical specifications

Frequency range:	40... <u>45...65</u> ...70Hz
Max. input voltage:	1.2 x U_n , continuously, 2 x U_n for 10 s
Load:	2k Ω /V
Relay contacts:	1 changeover switch per relay
Contact ratings:	250V-8A-2000A (AC) 24V-8A-200W (DC)
Response time:	<100 ms
Galvanic separation:	Between inputs and outputs: 3250V-50Hz-1 min.
Consumption:	(Aux. supply) 3.5VA/2W