

# Voltage Relay - Digital Din



## PRODUCT OVERVIEW

ME-VR-DD-1P and ME-VR-DD-3P are voltage relays that combine various protections and start-up delays.

ME-VR-DD-1P is used for single-phase monitoring while ME-VR-DD-3P is used for 3-phase monitoring.

## FEATURES

- Din mount
- Microprocessor based numerical relay
- Undervoltage
- Overvoltage
- Start-up delay
- 2 voltage-free output contacts
- Voltage and frequency display
- ANSI Code : 27, 47, 59, 60
- 3-Phase
- Unbalance
- Phase loss
- Phase sequence
- With or without neutral connection
- Phase to phase or phase to neutral monitoring

## ORDERING INFORMATION

### PART NUMBER

ME-VR-DD-1P  
ME-VR-DD-3P

### DESCRIPTION

1hase, 220~240V AC, 45-65Hz power supply  
3-Phase, 380~415V AC, 45-65Hz power supply

## TECHNICAL DATA

### SETTING RANGES

Undervoltage	: 1% to 25%
Time delay for undervoltage	: 0.1s to 30s
Overvoltage	: 1% to 20%
Time delay for overvoltage	: 0.1s to 30s
Start time delay	: 0s to 999s
Unbalance	: 3% to 20%
Time delay for unbalance	: 0.1s to 30s
Phase loss	: Fixed time <0.1s
Phase sequence	: Fixed time <0.1s

### INDICATORS

Auxiliary supply	: Green indicator
Pickup indicator	: Red indicator
Trip	: 7-segment display and red LED indicators

### POWER SUPPLY INPUT

<b>Input Voltage:</b>
ME-VR-DD-1P : 220V(-25%) to 240V(+20%) AC(Phase-Neutral)
ME-VR-DD-3P : 380V(-25%) to 415V(+20%) AC(Phase-Phase)

Supply frequency : 45Hz to 65Hz

<b>Maximum power consumption:</b>
ME-VR-DD-1P : 2.5VA
ME-VR-DD-3P : 3VA

### OUTPUT CONTACTS

Rated voltage	: 250 V AC
Contact rating	: 5 A
Expected electrical life	: 100,000 operations at rated current
Expected mechanical life	: 5 x 10 <sup>6</sup> operations

### ACCURACY

<b>Protection thresholds</b>	: ± 3%
Time delay	: 0 to 0.5s, ± 15% with minimum 40ms
Measurements	: 0.6s and above, < ± 3%

### ENVIRONMENTAL CONDITIONS

Temperature	: -5°C to +55°C
Humidity	: 56 days at 93% RH and 40°C non-condensing

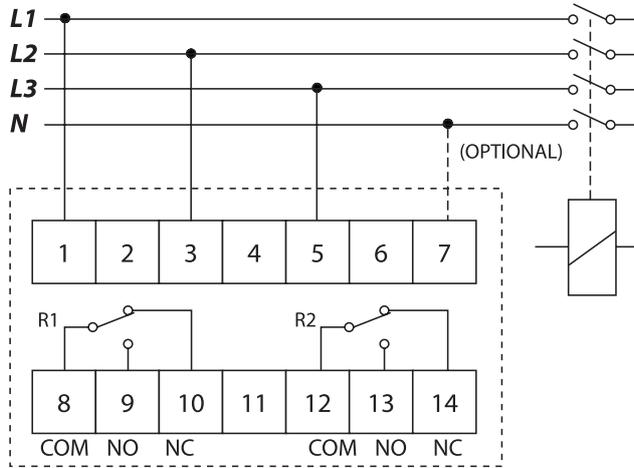
### MECHANICAL

Mounting	: DIN rail
Dimension (mm)	: 71(w) x 85(h) x 70(d)
Approximate weight	: 0.4 kg
Enclosure protection	: IP20 at the panel

TYPICAL APPLICATIONS DIAGRAM

CASE DIMENSIONS

ME-VR-DD-3P



(Neutral connection is optional)

ME-VR-DD-1P

