Digital Voltage Monitoring relay 3 Ph + Neutral	ARD-VMR-31N

☐ Features

- Microcontroller based
- LCD indication for operating voltage and status
- Overvoltage, undervoltage, phase failure, asymmetry and phase sequence protection
- 45Hz~65Hz wide measuring frequency
- Supply voltage measurement (True RMS)
- Menu setting for protection parameters
- Test and manual reset by keys
- N phase failure protection for 3phase 4wire system
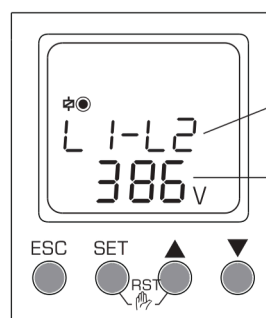- 2 module DIN rail housing

☐ Technical data

Models	ARD-VMR-31N	
Supply terminals	L3,N	
Supply voltage	~	AC 125~300V/50Hz
U> setting value	~	OFF-221~300V
U< setting value	150V~219V-OFF	
Asymmetry setting	OFF-5%~20%	
U> trip delay	0.1~20s	
U< trip delay	0.1~20s	
Asymmetry trip delay	0.1~20s	
Start-up delay	0.1~30s	
Reset delay	0.1~30s	
Voltage hysteresis	6V	5V
Asymmetry hysteresis	2%	
Trip delay for phase failure	≤0.2s	
Voltage measurement error	≤1%	
Delay error	±5%+0.1s	
Rated insulation voltage	415V	
Output contacts	1C/O, 1NO+1NC	
Current rating	8A/250V AC1	
Mechanical life	10^6	
Electrical life	10^5	
Protection degree	IP20	
Pollution degree	3	
Altitude	≤2000m	
Operating temperature	-20˚C~55˚C	
Permissable relative humidity	≤50% at 40˚C(without condensation)	
Storage temperature	-30˚C~70˚C	
Wire size	0.5mm²~2.5mm²	
Mounting	TH35 Rail(EN60715)	

● Default setting parameters

Technical parameters	ARD-VMR-31N
Overvoltage trip value	253V
Overvoltage trip delay	2s
Undervoltage trip value	187V
Undervoltage trip delay	2s
Asymmetry trip value	8%
Asymmetry trip delay	2s
Phase sequence protective function	ON
Start-up delay	0.3s
Reset delay	0.3s
Auto-reset	ON

☐ Front-face panel and legend of symbol

○ Panel

Display L1-L2 if work normally; display faults symbol when faults occured.

Operating voltage value

Symbol legend

⏚◉ — Relay ON		OV — Over voltage	
⏚○ — Relay OFF		UV — Under voltage	
SET — Paremeters setting		ASY — Asymmetry	
Error — Fault		PHSEQ — Phase sequence	
start — Start-up delay		PHFAIL — Phase failure	

Keys

ESC	○Exit configuration menu ○Back to last menu	SET	○ Enter configuration menu ○ Confirm settings
▲	○Select menu ○Digit -	▼	○ Select menu ○ Digit +
SET ▲ RST ☝	○Manual reset		

Supply terminals

L1 L2 L3 N

LCD display

Keys

14 11 12

Output contact