



# DPR350B

## Features:

- Under voltage, over voltage, under frequency, over frequency, asymmetry, phase failure and phase sequence monitoring in 3Ø system
- RMS measurement
- Power ON delay, Trip time delay and Delay on release
- Adjustable switching hysteresis
- Two separate alarm relays

## Din-Rail Mount

Certifications: C, E, UL Recognized

# Voltage Phase Monitor

## Technical Specifications

### Display

Display	Liquid Crystal Display
Digits	3

### Input Specifications

Functions	
Measurements	Voltage ( $V_{L-N}$ , $V_{L-L}$ ), Frequency, Phase Asymmetry, Phase Failure, Phase Sequence
Time Setting	Power ON delay, Trip time delay and Delay on release
Alarm Indications	Trip
Latching	Selectable
Reset	Auto / Manual reset
<b>Electrical Connection</b>	3Ø-3 wire, 3Ø-4 wire
<b>Auxiliary Supply</b>	
Supply Voltage	Self powered
Operating Range	280 - 520V AC (L-L) 160 - 300V AC (L-N)
VA Rating	30VA max.
Frequency	45 - 65Hz
<b>Measuring Range</b>	
(RMS Value)	0 - 520V AC (L-L)* 0 - 300V AC (L-N)*
<b>Trip Settings</b>	
Under Voltage	280 to 520V AC (L-L) [for 3Ø-3 wire] 160 to 300V AC (L-N) [for 3Ø-4 wire]
Over Voltage	280 to 520V AC (L-L) [for 3Ø-3 wire] 160 to 300V AC (L-N) [for 3Ø-4 wire]
Under Frequency	45 - 65Hz
Over Frequency	45 - 65Hz
Phase Failure	Yes
Phase Sequence	Yes
Phase Asymmetry	5.0 - 99.9%

### Input Specifications

Trip Time Settings	
Power ON Delay	2 - 99.9sec
Trip Time Delay	0 - 99.9sec
Delay on Release	0 - 99.9sec
Response Time	< 200ms
<b>Hysteresis</b>	
Voltage	1.0 - 99.9V
Frequency	0.2 - 2Hz
Asymmetry	2 - 20%
<b>Resolution</b>	
Voltage	1V
Frequency	0.1Hz
<b>Accuracy</b>	
Voltage	±1%
Frequency	±0.3Hz
Time (Recovery Time, Trip Delay, Power ON Delay)	±5% of setting + 200ms

### Output Specifications

No. of Relays	2
Type of output (Relay1)	1C/O (SPDT)
Type of output (Relay2)	1C/O (SPDT)
Relay Rating	NO : 5A @ 250V AC NC : 3A @ 250V AC

### LED Indication

LED1 (Green)	Power ON
LED2 (Red)	Relay1 (Continuously ON after trip)
LED3 (Red)	Relay2 (Continuously ON after trip)

\* For 3Ø-3W, at least 2 phase must be present ; \* For 3Ø-4W, at least 1 phase must be present

# DPR350B

## Environmental Specifications

Ambient Temperature	Operating Temperature: 0°C to 50°C Storage Temperature : -20°C to +70°C
Humidity (non-condensing)	95% RH
Pollution Degree	2
Degree of protection	IP50 Faceplate IP30 Housing IP20 Terminals

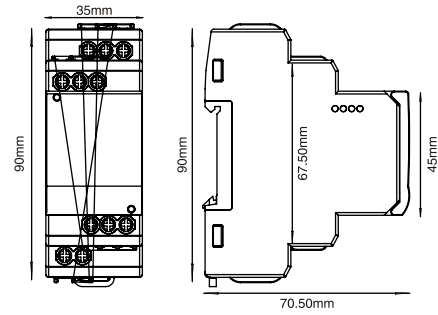
## Mechanical Specifications

No. of Push Button	3
Size	35mm width
Mounting	Din Rail Mount
Weight	135 g
Conductor cross section (Solid)	1 x (0.5 to 4) Sq mm
Conductor cross section sleeved (Standard)	2 x (0.5 to 1.5) Sq mm 1 x (0.5 to 2.5) Sq mm
Screw tightening torque	0.5 N-M

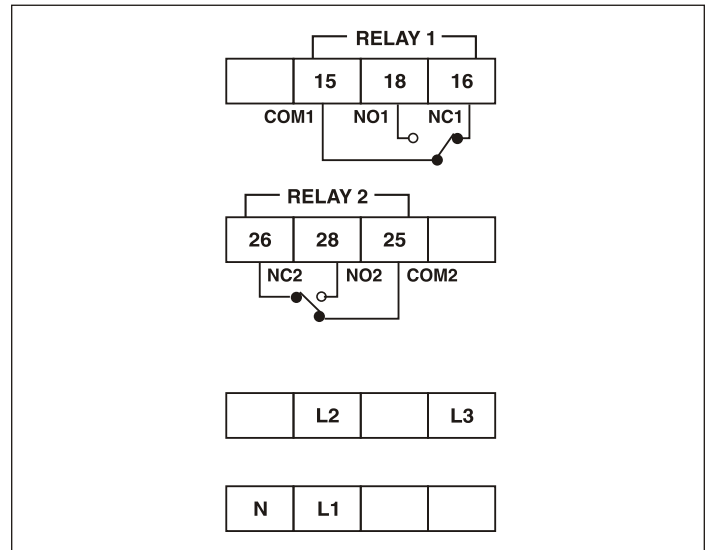
## EMC

Electromagnetic compatibility	IEC 61326-1
ESD Immunity: IEC 61000-4-2	Level III
Surge Immunity: IEC 61000-4-5	+/- 2 kV common mode, +/- 1 kV differential mode
Radiated Susceptibility: IEC 61000-4-3	Level III, 80 to 1000 MHz
Conducted Susceptibility: IEC 61000-4-6	Level II
Voltage Dips and Interruption: IEC 61000-4-11	Dips: 0% residual voltage/1 cycle (Crit B), 40% residual voltage/10 cycles 50 Hz / 12 cycles 60 Hz (Crit C) 70% residual voltage / 25 cycles 50 Hz / 30 cycles 60 Hz (Crit C) Interruptions: 0% residual voltage / 250 cycles 50 Hz / 300 cycles 60 Hz (Crit C)
Conducted Emissions	CISPR-11 & IEC 61000-6-3
Radiated Emissions	CISPR-22
Electrical Fast Transient: IEC 61000-4-4	Level 3.

## Dimensions



## Terminal Connections



## Ordering Information

Part No.	Supply Voltage	Certification
DPR350B	280-520V AC	CE, UL E55826



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