

**SUPER MONITORING RELAY**



SCAN QR TO VIEW THE PRODUCT

MODEL : SMB-5P  
 CODE : 13B3  
 (72 x86 x60) mm  
 IP 30

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**Shiva Amvaj Phase Monitoring Relay Features and Specification**

- No use of neutral enables accurate monitoring of the power system (ocasionally neutral may be electrified )
- Protection
  - voltage asymmetry
  - over or under voltage
  - phase loss or phase sequence
- Indicators
  - U : power supply
  - ON: relay connection
  - ΔU: phase asymmetry
  - >U: over voltage
  - <U: under voltage
  - P: phase sequence
- Adjustable asymmetry and delay parameters
- No change in parameters due to panel contractor impact

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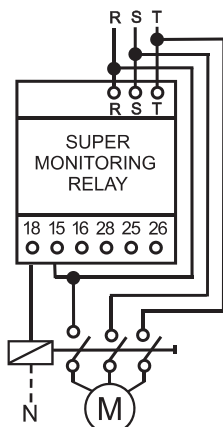
**Technical Specification of Shiva Amvaj Monitoring Relay**

- Input/Supply voltage: 300 – 500 VAC / 3PH / 50-60 Hz
- Delay for
  - on: 2 – 240 Sec
  - off: 0 - 10 Sec
  - delay start because of under voltage :Off delay + 5Sec
- Disconnection for
  - over voltage: 400 – 480V
  - under voltage: 300 – 380V
  - voltage asymmetry : 7 – 25%
- Operating condition
  - 20°C ..... +65°C
  - Humidity: 70%
- Output: 5A ( two relays )

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**Installation Guide**

Install the monitoring relay inside the enclosure and wire up according to the following diagram



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**Operation of knobs**

Detail	Variation range	Knob name
Adjustable time for connecting relay since the time that device is connected to power or after fixing a fault	2-240 s	On Delay S
Adjustable time for relay disconnection during fault occurrence	0-10 s	Off Delay S

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Relay disconnection in case of increasing voltage upper than set value	400-480 v	Over Voltage V
Relay disconnection in case of decreasing voltage lower than set value	300-380 v	Under Voltage V
Relay disconnection in case of passing higher phases unbalance than set value (compared to average)	7-25 %	Unbalance %U

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**Indicators Operation**

Detail	Color	Indicator name
Input electricity	Green	U
Relay on	Yellow	ON
Asymmetry phases	Red	ΔU
Over voltage	Red	>U
Under voltage	Red	<U
Phase sequence or phase loss	Red	P

**Note1:** fault indicators turn on just after fault occurrence.

**Note2:** relay disconnection occurs by turning fault indicators on and elapsing Off Delay.

In some motors when one phase is lost, due to reversal voltage which is about the lost phase, the monitoring relay cannot detect the power outage. So you are offered to use a load monitoring relay as well.

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**Respecting the customer is our duty**

3 year no question asked guarantee under these conditions;

- 1-at most it should be within 3 years from the date printed on the label of the product
- 2-the label on the product should be safe and sound

Shiva Amvaj products in accordance with international standards and with a 3 year no question asked guarantee are presented



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