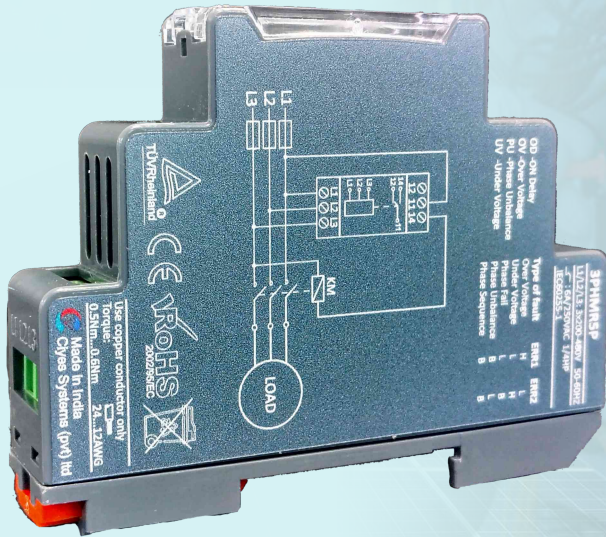




Three Phase Monitoring Relay

Powered for Performance

About Us

CIYES SYSTEMS is a product engineering solutions company with a proven track record of offering technological solutions to diverse industries, such as semiconductors, constructions, automobiles, avionics, railways and medicine through AI-based embedded technologies. CIYES is an ISO 9001 certified company and has offices globally, with a combined workforce of over 600+ engineers.

Key Features & Benefits

Protects Your Equipment: Constantly monitors the three-phase electrical line and protects the equipment from damage due to overload, short circuit, phase loss, and other electrical faults.

Effortless Installation and Intuitive Operation: Easy to install and use, and come with user-friendly instructions and guides.

Saves Time and Money: By detecting electrical faults in the three-phase system, our 3 phase monitoring relay can help reduce downtime and repair costs.

Enhanced Safety Measures: Prioritizes safety by mitigating equipment damage and minimizing the potential for electrical hazards.

Highlights of Three Phase Monitoring Relay

Essential Protection:

Guards equipment in three-phase systems by monitoring voltage discrepancies across phases.

Advanced Technology:

Utilizes TRMS measuring principle for accurate voltage readings.

High-Quality Materials:

Constructed with UL 94 V-0 material for top-tier fire safety.

User-Friendly Design:

Features easy-to-use controls for custom configuration and LED indicators for fault identification.

Reliable Monitoring:

Ensures system balance to prevent equipment damage and power outages.

Applications

- INDUSTRIAL MACHINERIES
- HVAC SYSTEMS
- PUMPS AND COMPRESSORS
- MOTORS AND GENERATORS
- SOLAR POWER SYSTEMS
- POWER PANELS



Functions of the 3-Phase Monitoring Relay

1 Over-voltage Setting : 400V to 480V
Three phases can be continuously monitored for detection of over-voltage set by the user using the potentiometer

2 Under-voltage Setting : 300V to 380V
Three phases can be continuously monitored for detection of under-voltage set by the user using the potentiometer

3 Phase unbalance Setting : 20 to 100V
Individual phase voltage is monitored for detecting imbalance between phases as set by the user using the potentiometer

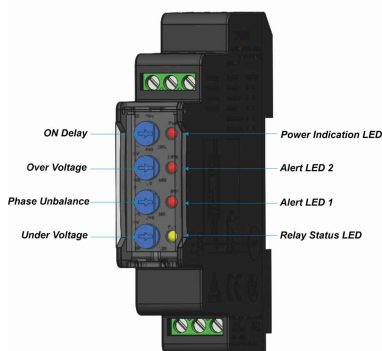
Phase sequence & Phase loss

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- In case of input supply Phase reversal, device will detect the wrong Phase sequence.
 - In case of any Phase failure, device will detect the phase loss

Fault Indications

Type of Fault	Alert LED 1	Alert LED 2
Over Voltage	L	H
Under Voltage	H	L
Phase Fail	B	L
Phase Unbalance	L	B
Phase Sequence	B	B

H : High L : Low B : Blink



Technical Features

Specifications

Supply voltage	:	3 - Phase 440V AC
Frequency	:	50Hz
Operating voltage	:	180-500V
Current consumption	:	80mA
Rated output	:	250V AC, 10A (SPDT)

Measurements

Height	:	69.0 mm
Width	:	19.10 mm
Length	:	90.1 mm

Over Voltage

Range	:	400 - 480V
Accuracy	:	+/-3%
Response Time	:	< 1 Second

Under Voltage

Range	:	300 - 380V
Accuracy	:	+/-3%
Response Time	:	< 1 Second

Phase Imbalance

Range	:	20 - 100V
Accuracy	:	+/-3%
Response Time	:	< 2 Second

Phase Fail

Response Time	:	< 2 Second
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Phase Sequence

Response Time	:	< 2 Second
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Electrical & Electromagnetic Compatibility

VDI	-> IEC 61000-4-11
Radiated Emission	-> CISPR 11
Radiated Susceptibility	-> IEC 61000-4-3
Conducted Emission	-> CISPR 22
Conducted Susceptibility	-> IEC 61000-4-6
Fast transients	-> Upto 4kV (IEC 61000-4-4)
Surge	-> Upto 2kV (IEC 61000-4-5)
Power Frequency Magnetic Field	-> 100A/cm (IEC 61000-4-8)
ESD	-> Upto +/-6kV (IEC 61000-4-2)