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# PC Series Three-Phase Monitor Relays with Communication



### Protects equipment and communicates data via Modbus TCP



Compact 60 mm wide enclosure mounts on DINrail or can be panel mounted with two screws inserted through clips that extend from the back of the enclosure. Pluggable terminal blocks on both the inlet and output side enable easy installation and replacement without removing any wires.



PC Series Three-Phase Relays monitor and protect valuable equipment from voltage faults. Embedded communication provides both control and data connectivity in one device. This affordable smart device uses real time and historical data to improve decision making, simplify troubleshooting and increase efficiency.

## **PC Series Three-Phase Monitor Relays**

# Relays provide real time status and measurement data via Modbus TCP in smart control systems.



Troubleshooting is easy with full fault indication on the front face. Dials allow adjustment of undervoltage trip point, trip delay, restart delay, unbalance trip point and selection of line-to-line system voltage.

#### PROTECT AND COMMUNICATE

PC Series Three-Phase Monitor Relays make data available for continuous monitoring, real-time alerts and intelligent troubleshooting of voltage systems.

This affordable IoT solution is an advantage in automation applications requiring protection of valuable three-phase equipment within a "smart" connected control system.

PC Series relays monitor three-phase system voltages to protect from damage due to:

- Phase loss
- Phase reversal
- Phase unbalance
- Undervoltage
- Overvoltage

These devices detect single phasing, high, low and unbalanced voltages regardless of any regenerative voltages.

#### **DESCRIPTION**

- Compact 60 mm wide enclosure mounts on 35 mm DIN-rail or panel mounted with two #8 screws using extendable clips
- Wide voltage ranges to cover more global applications
- True RMS voltage measurement with full wave monitoring increases accuracy
- Pluggable terminal blocks simplify initial wiring and replacement
- 5A SPDT output contacts
- Modbus Connector: RJ45
- Connection speed:
  10/100 Mb Full and Half Duplex
- IP addressing: Static (default), Dynamic (DHCP)



CATALOG NUMBER	COMMUNICATION PLATFORM	MONITORED RANGE (50/60 Hz ±5%)	CONTROL VOLTAGE	MINIMUM VOLTAGE	MAXIMUM VOLTAGE
PC1MDUL	Modbus TCP	190 - 600V AC	102 - 132V AC 10 - 132V DC	30V AC	660V AC

#### **APPLICATION DATA**

Three-Phase Line-Line Voltage:

The Voltage Line-Line dial on the PC1MDUL selects between the seven line-to-line system voltage set points: 190, 208, 220, 240, 380, 480, 600.

Power Consumption: 3VA

#### Operation:

As standard the PC1 Series Relays are in the Automatic Reset mode. However, they can be set to Manual Reset mode by connecting a momentary N.C. switch across terminals 5 and 6. Upon application of control voltage, the PC1 Series will go into Manual Reset mode if it recognizes an N.C. switch across terminals 5 and 6. The N.C. switch must be opened and then closed (pressed and released) to reset the relay and resume normal operation after either a fault clears or after each power-up when the unit is in Manual Reset mode.

Termination: 1 x 14-24 AWG solid or stranded wire, or 2 x 16-18 AWG stranded wire Recommended tightening torque of 7 in-lb.

Weight: 0.35 lb (0.02 kg)