

3-Phase Voltage/Phase Monitor

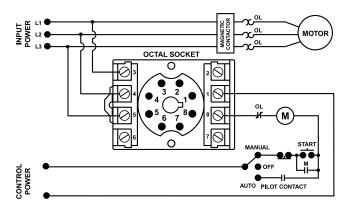


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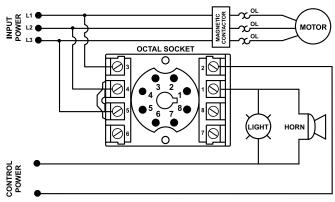


Wiring Diagram

201A-AU WITH MOTOR CONTROL



201A-AU WITH ALARM CONTROL



Description

The 201A-AU is a 3-phase, auto-ranging, dual-range voltage monitor that protects 190–480 V ac, 50/60 Hz motors regardless of size. The product provides a user selectable nominal voltage setpoint and the voltage monitor automatically selects between the 200 V and 400 V range. Additional adjustment knobs allow the user to set a 1–30 second trip delay, a manual restart or 1–500 second restart delay and a 2–8% voltage unbalance trip point. The model 201A-AU includes advanced single LED diagnostics, where color and light patterns distinguish between faults and normal conditions.

This unique microcontroller-based voltage and phase-sensing device constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the 201A-AU's output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return to acceptable levels for a specified amount or restart delay time (or manual reset).

Features & Benefits

| FEATURES | BENEFITS | |
|--|--|--|
| Proprietary microcontroller based circuitry | Constant monitoring of loss of any phase, low voltage, high voltage, voltage unbalance, phase reversal, rapid cycling, harmful power line conditions | |
| Compact design for 8-pin; DIN rail or surface mount | r 8-pin; mount Allows flexiblility in panel installation | |
| Auto-sensing wide voltage range | Automatically senses system voltage between 190–480 V ac. Saves setup time. | |
| Advanced LED diagnostics | Quick visual indicator for cause of trip. | |
| Adjustable voltage unbalance trip setting | Allows compatibility with a variety of motors and reduces nuisance tripping. | |
| Adjustable trip & restart delay settings | Prevent nuisance tripping due to rapidly fluctuating power line conditions. | |

Accessories



OT08PC Octal 8-pin Socket 8-pin 35 mm DIN rail or surface mount. Rated at 10A @ 600 V ac. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.

Ordering Information

| MODEL | LINE VOLTAGE | DESCRIPTION |
|---------------|-----------------|-------------------------------|
| 201A-AU | 190–480 V ac | DIN rail or surface mountable |
| 201575-AU | 475–600 V ac | DIN rail or surface mountable |
| 201A-AU-OT | 190–480 V ac | Sold with OT08PC socket |
| 201-575-AU-OT | 475–600 V ac | Sold with OTO8PC socket |

201A-AU SERIES



IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air

IEC 61000-4-4, Level 3, 3.5 kV input power

IEC 61000-4-5, Level 3, 4 kV line-to-line;

C62.41 Surge and Ring Wave Compliance to

Meets UL 508 (2 x rated V +1000 V for 1 min.)

H 44.45 mm (1.75"); **W** 60.325 mm (2.375");

D 104.775 mm (4.125") (with socket)

Level 4, 4 kV line-to-around

a level of 6 kV line-to-line

UL 508 (File #E68520)

0.7 lb. (11.2 oz., 317.51 g)

DIN rail or surface mount

(plug in to OT08PC socket)

OT08PC (UL Rating 600 V)

Polycarbonate

150 MHz, 10 V/m

and controls

Specifications

Frequency Functional Characteristics Low Voltage (% of setpoint) Trip Reset High Voltage (% of setpoint) Trip Reset Voltage Unbalance (NEMA) Trip Reset

Trip Delay Time High, Low and Unbalanced Voltage Single-Phasing Faults Restart Delay Time After a Fault After a Complete Power Loss Output Characteristics Output Contact Rating

(1-Form C) Pilot Duty General Purpose General Characteristics

Ambient Temperature Range Operating Storage Trip & Reset Accuracy Maximum Input Power Relative Humidity Terminal Torque Wire Gauge

50/60 Hz

90 % ±1 % 93 % ±1 % 110 % ±1 % 107 % ±1 %

> 2–8 % adjustable Trip Setting Minus 1 % (5–8%) Trip Setting Minus 0.5 % (2–4%)

1–30 seconds adjustable 1 second fixed

Manual, 1-500 seconds adj.

Manual, 1-500 seconds adj.

480 VA @ 240 V ac, B300 10 A @ 240 V ac

-40° to 70°C (-40° to 158°F) -40° to 80°C (-40° to 176°F) ±1 % 5 W 10–95 %, non-condensing per IEC 68-2-3 12 in.-Ibs. (for OT08-PC socket) 12-22 AWG solid or stranded

Standards Passed

Electrostatic Discharge (ESD) Radio Frequency Immunity, Radiated Fast Transient Burst

Surge IEC

ANSI/IEEE

Hi-potential Test

Safety Marks UL (0T08PC octal socket required) Enclosure Dimensions

Weight Mounting Method

Socket Available

The 600 V socket can be surface mounted or installed on DIN Rail.

Note: Manufacturer's recommended screw terminal torque for the OT Series Octal Sockets is 12 in.-lbs.

Must use Model OT08PC socket for UL Rating!