# 201A SERIES

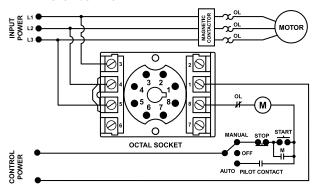
## 3-Phase Voltage/Phase Monitor



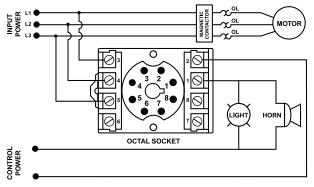


### Wiring Diagram

201A WITH MOTOR CONTROL



#### 201A WITH ALARM CONTROL



### **Description**

The 201A 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. The 201A 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'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 restart delay time.

### **Features & Benefits**

FEATURES	BENEFITS
Proprietary microcontroller based circuitry	Constant monitoring of single-phase, low voltage, voltage unbalance, phase reversal, harmful power line conditions. High voltage monitoring optional.
Compact design for 8-pin; DIN rail or surface 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	Ouick visual indicator for cause of trip. LED indications include: normal operation, power-up restart delay, reverse-phase trip, unbalance/single-phase trip, high/low voltage trip

### **Accessories**



### **OT08PC Octal 8-pin Socket**

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

## **Ordering Information**

MODEL	LINE VOLTAGE	DESCRIPTION
201A	190-480VAC	DIN rail or surface mountable
201A-9	190-480VAC	Includes high voltage detection. DIN rail or surface mountable



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# **Specifications**

Frequency 50/60 Hz **Functional Characteristics** Low Voltage (% of setpoint) Trip 90 % ±1 % Reset 93 % ±1 % Voltage Unbalance (NEMA) Trip 6 % Reset 4.5 % **Optional High Voltage** (% of setpoint) Trip 110 % ±1 % Reset 107 % ±1 % **Trip Delay Time** High/Low Voltage Fault 4 seconds **Unbalance & Phasing Faults** 2 seconds **Restart Delay Time** 

After a Fault 2 seconds After a Complete Power Loss 2 seconds

**Output Characteristics Output Contact Rating (SPDT)** 

**Pilot Duty** 480 VA @ 240 V ac **General Purpose** 10 A @ 240 V ac **General Characteristics** 

Temperature Range -20° to 70°C (-4° to 158°F)

Trip & Reset Accuracy ±1% **Maximum Input Power** 5 W

**Relative Humidity** 10-95%, non-condensing per IEC 68-2-3 Terminal Torque 12 in.-lbs. (for OT08-PC socket) Wire Gauge 12-22 AWG solid or stranded

Transient Protection

(Internal) 2500 V for 10 ms

#### Standards Passed

Electrostatic Discharge (ESD) IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air **Radio Frequency Immunity** 

(RFI), Radiated 150MHz, 10 V/m

**Fast Transient Burst** IEC 61000-4-4, Level 3, 3.5 kV input power

& controls

Surae

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

Level 4, 4 kV line-to-ground

ANSI/IEEE C62.41 Surge and Ring Wave Compliance to

a level of 6 kV line-to-line

**Hi-potential Test** Meets UL508 (2 x rated V + 1000V for 1 min.)

**Safety Marks** UL (OT08PC octal

socket required) UL 508 (File #E68520)

**Dimensions H** 44.45 mm (1.75"); **W** 60.33 mm (2.38");

**D** (with socket) 104.78 mm (4.13")

Weight 0.7 lbs. (11.2 oz., 317.51 g) **Mounting Method** DIN rail or surface mount

(plug in to OT08PC socket)

**Socket Available** Model OT08PC (UL Rating 600 V)

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

Must use Model OT08PC socket for UL Rating!