

## 201A SERIES

### 3-Phase Voltage/Phase Monitor



### 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.

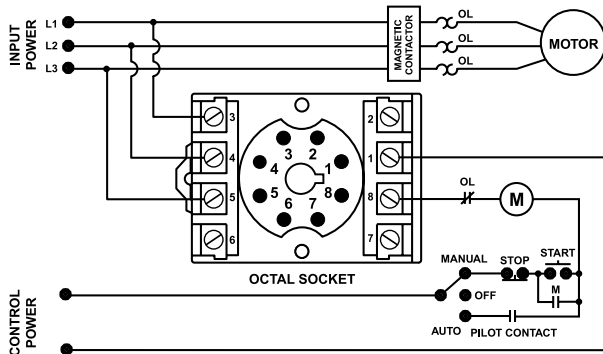
This unique microcontroller-based voltage and phase-sensing device constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the 201A's output relay is deactivated after a specified trip delay. The output relay reactivates after power line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

### Features & Benefits

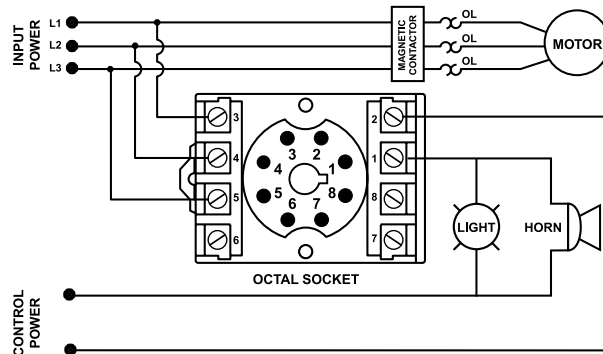
FEATURES	BENEFITS
<b>Proprietary microcontroller based circuitry</b>	Constant monitoring of single-phase, low voltage, voltage unbalance, phase reversal, harmful power line conditions. High voltage monitoring optional.
<b>Compact design for 8-pin; DIN rail or surface mount</b>	Allows flexibility in panel installation
<b>Auto-sensing wide voltage range</b>	Automatically senses system voltage between 190 - 480 V ac. Saves setup time.
<b>Advanced LED diagnostics</b>	Quick 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

### Wiring Diagram

201A WITH MOTOR CONTROL



201A WITH ALARM CONTROL



### 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

<b>Frequency</b>	50/60 Hz
<b>Functional Characteristics</b>	
<b>Low Voltage (% of setpoint)</b>	
<b>Trip</b>	90 % ±1 %
<b>Reset</b>	93 % ±1 %
<b>Voltage Unbalance (NEMA)</b>	
<b>Trip</b>	6 %
<b>Reset</b>	4.5 %
<b>Optional High Voltage (% of setpoint)</b>	
<b>Trip</b>	110 % ±1 %
<b>Reset</b>	107 % ±1 %
<b>Trip Delay Time</b>	
<b>High/Low Voltage Fault Unbalance &amp; Phasing Faults</b>	4 seconds
<b>Restart Delay Time</b>	2 seconds
<b>After a Fault</b>	
<b>After a Complete Power Loss</b>	2 seconds
<b>Output Characteristics</b>	
<b>Output Contact Rating (SPDT)</b>	
<b>Pilot Duty</b>	480 VA @ 240 V ac
<b>General Purpose</b>	10 A @ 240 V ac
<b>General Characteristics</b>	
<b>Temperature Range</b>	-20° to 70°C (-4° to 158°F)
<b>Trip &amp; Reset Accuracy</b>	±1%
<b>Maximum Input Power</b>	5 W
<b>Relative Humidity</b>	10–95%, non-condensing per IEC 68-2-3
<b>Terminal Torque</b>	12 in.-lbs. (for OT08-PC socket)
<b>Wire Gauge</b>	12-22 AWG solid or stranded
<b>Transient Protection (Internal)</b>	2500 V for 10 ms

### Standards Passed

<b>Electrostatic Discharge (ESD)</b>	IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air
<b>Radio Frequency Immunity (RFI), Radiated</b>	150MHz, 10 V/m
<b>Fast Transient Burst</b>	IEC 61000-4-4, Level 3, 3.5 kV input power & controls
<b>Surge Immunity IEC</b>	IEC 61000-4-5, Level 3, 4 kV line-to-line; Level 4, 4 kV line-to-ground
<b>ANSI/IEEE</b>	C62.41 Surge and Ring Wave Compliance to a level of 6 kV line-to-line
<b>Hi-potential Test</b>	Meets UL508 (2 x rated V + 1000V for 1 min.)
<b>Safety Marks</b>	
<b>UL (OT08PC octal socket required)</b>	UL 508 (File #E68520)
<b>Dimensions</b>	<b>H</b> 44.45 mm (1.75"); <b>W</b> 60.33 mm (2.38"); <b>D</b> (with socket) 104.78 mm (4.13")
<b>Weight</b>	0.7 lbs. (11.2 oz., 317.51 g)
<b>Mounting Method</b>	DIN rail or surface mount (plug in to OT08PC socket)
<b>Socket Available</b>	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 12 in.-lbs.

**Must use Model OT08PC socket for UL Rating!**