

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.

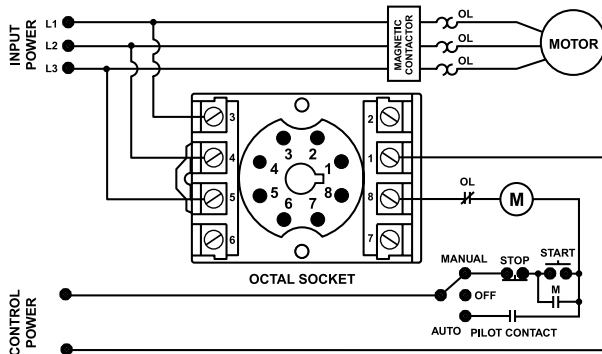
This unique microcontroller-based voltage and phase-sensing device constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the 201A's output relay is deactivated after a specified trip delay. The output relay reactivates after power line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

Features & Benefits

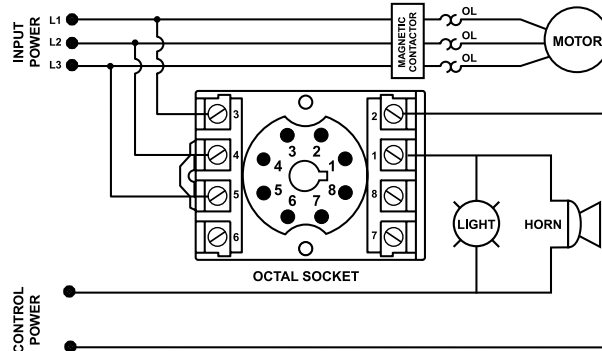
FEATURES	BENEFITS
Proprietary microcontroller based circuitry	Constant monitoring of single-phase, low voltage, voltage unbalance, phase reversal, harmful power line conditions. High voltage monitoring optional.
Compact design for 8-pin; DIN rail or surface mount	Allows flexibility in panel installation
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. 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

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 Unbalance & Phasing Faults	4 seconds
Restart Delay Time	2 seconds
After a Fault	
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
Surge 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 12 in.-lbs.

Must use Model OT08PC socket for UL Rating!