201A SERIES

3-Phase Voltage/Phase Monitor

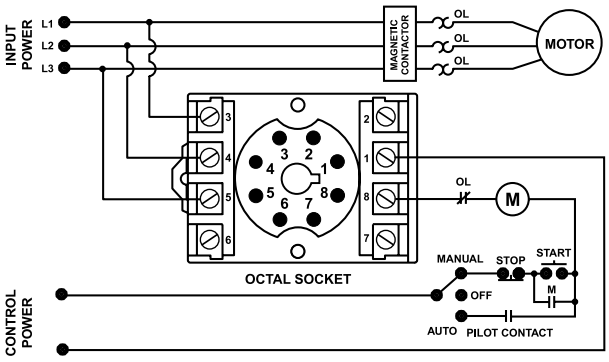
Description

The 201A is a 3-phase, auto-ranging, dual-range voltage monitor that protects 190-480VAC, 50/60Hz motors regardless of size. The product provides a user selectable nominal voltage setpoint and the voltage monitor automatically selects between the 200V and 400V range. The 201A includes advanced single LED diagnostics, where color and light patterns distinguish between faults and normal conditions.

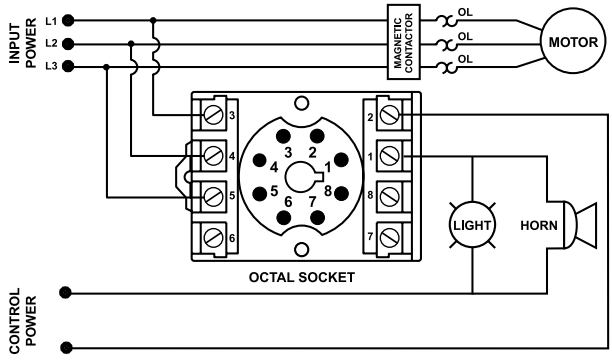
This unique microcontroller-based voltage and phase-sensing device constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the 201A's output relay is deactivated after a specified trip delay. The output relay reactivates after power line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

Wiring Diagram

201A WITH MOTOR CONTROL



201A WITH ALARM CONTROL



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 - 480VAC. 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

Accessories

OT08PC Octal 8-pin Socket
8-pin 35mm DIN rail or surface mount. Rated at 10A @ 600VAC. 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

201A SERIES

Specifications

Frequency	50/60Hz
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	480VA @ 240VAC
General Purpose	10A @ 240VAC
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)	2500V for 10 ms

Standards Passed	
Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity (RFI), Radiated	150MHz, 10V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 3.5kV input power & controls
Surge	
Immunity IEC	IEC 61000-4-5, Level 3, 4kV line-to-line; Level 4, 4kV line-to-ground
ANSI/IEEE	C62.41 Surge and Ring Wave Compliance to a level of 6kV line-to-line
Hi-potential Test	Meets UL508 (2 x rated V + 1000V for 1 min.)
Safety Marks	
UL (OT08PC octal socket required)	UL508 (File #E68520)
CE	IEC 60947-6-2
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 600V)

The 600V 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!