

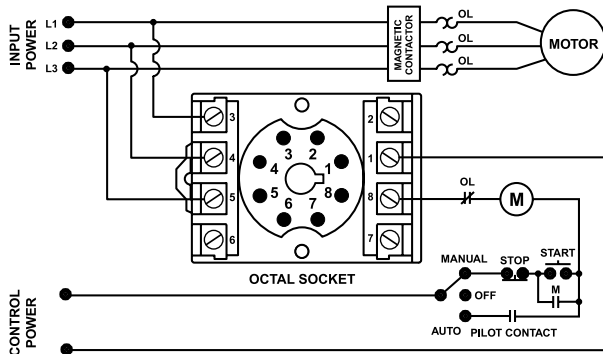
201A SERIES

3-Phase Voltage/Phase Monitor

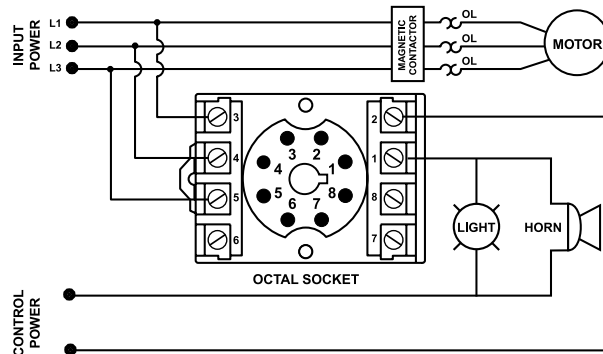


Wiring Diagram

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 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

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

201A SERIES

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	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

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

Mounting Method	0.7 lbs. (11.2 oz., 317.51 g)
	DIN rail or surface mount (plug in to OT08PC socket)

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!

Mouser Electronics

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