

Protection Relays
Voltage Monitoring Relays



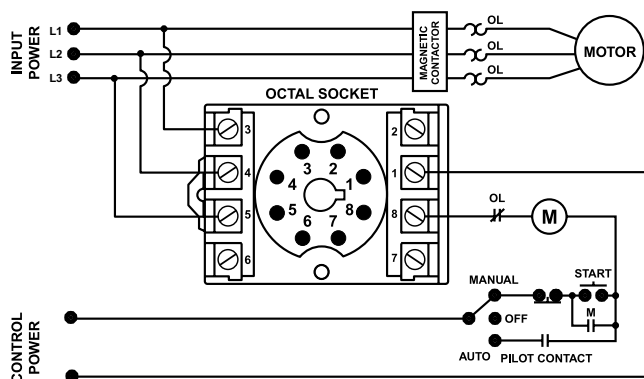
201A-AU SERIES

3-Phase Voltage/Phase Monitor

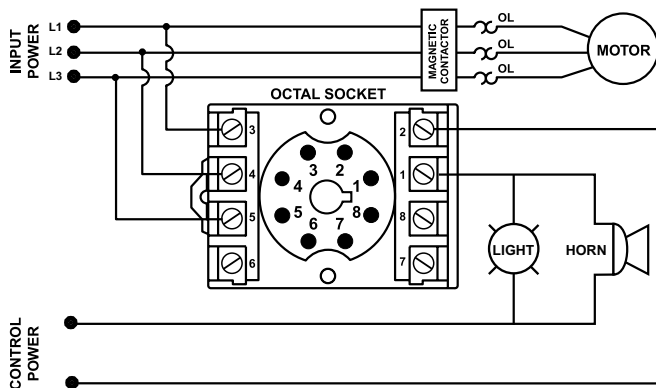


Wiring Diagram

201A-AU WITH MOTOR CONTROL



201A-AU WITH ALARM CONTROL



Description

The 201A-AU 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. Additional adjustment knobs allow the user to set a 1-30 second trip delay, a manual restart or 1-500 second restart delay and a 2-8% voltage unbalance trip point. The Model 201A-AU 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-AU'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 amount or restart delay time (or manual reset).

Features & Benefits

FEATURES	BENEFITS
Proprietary microcontroller based circuitry	Constant monitoring of loss of any phase, low voltage, high voltage, voltage unbalance, phase reversal, rapid cycling, harmful power line conditions
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 - 480VAC. Saves setup time.
Advanced LED diagnostics	Quick visual indicator for cause of trip.
Adjustable voltage unbalance trip setting	Allows compatibility with a variety of motors and reduces nuisance tripping.
Adjustable trip & restart delay settings	Prevent nuisance tripping due to rapidly fluctuating power line conditions.

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-AU	190-480VAC	DIN rail or surface mountable
201575-AU	475-600VAC	DIN rail or surface mountable
201A-AU-OT	190-480VAC	Sold with OT08PC socket
201-575-AU-OT	475-600VAC	Sold with OT08PC socket

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Specifications

Frequency	50/60Hz
Functional Characteristics	
Low Voltage (% of setpoint)	
Trip	90% ±1%
Reset	93% ±1%
High Voltage (% of setpoint)	
Trip	110% ±1%
Reset	107% ±1%
Voltage Unbalance (NEMA)	
Trip	2-8% adjustable
Reset	Trip Setting Minus 1% (5-8%) Trip Setting Minus 0.5% (2-4%)
Trip Delay Time	
High, Low and Unbalanced Voltage	1-30 seconds adjustable
Single-Phasing Faults	1 second fixed
Restart Delay Time After a Fault	Manual, 1-500 seconds adj.
After a Complete Power Loss	Manual, 1-500 seconds adj.
Output Characteristics	
Output Contact Rating (1-Form C)	
Pilot Duty	480VA @ 240VAC, B300
General Purpose	10A @ 240VAC
General Characteristics	
Ambient Temperature Range	
Operating	-40° to 70°C (-40° to 158°F)
Storage	-40° to 80°C (-40° to 176°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

Standards Passed

Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6kV contact, 8kV air
Radio Frequency Immunity, Radiated	150 MHz, 10V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 3.5kV input power and controls
Surge	
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 Meets UL508 (2 x rated V +1000V for 1 min.)
Hi-potential Test	
Safety Marks	
UL (OT08PC octal socket required)	UL508 (File #E68520)
CE	IEC 60947-6-2
Enclosure	Polycarbonate
Dimensions	H 44.45 mm (1.75"); W 60.325 mm (2.375"); D 104.775 mm (4.125") (with socket)
Weight	0.7 lb. (11.2 oz., 317.51 g)
Mounting Method	DIN rail or surface mount (plug in to OT08PC socket)
Socket Available	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!