

Voltage Monitoring Relays

201-xxx-DPDT Series

3-Phase Voltage/Phase Monitor



Description

The 201-xxx-DPDT series is an 11-pin octal base, plug-in voltage monitor designed to protect three-phase motors regardless of size. The 201-100-DPDT is used on 95–120 V ac, 50/60 Hz motors to prevent damage caused by low voltage. The 201-200-DPDT is used on 190–240 V ac, 50/60 Hz motors to prevent damage caused by incoming voltage problems. These monitors feature two isolated sets of contacts that are ideal for use with two control circuits with different voltages. The unique microcontroller-based voltage and voltage-sensing circuit constantly monitors the voltage to detect harmful power line conditions. When a harmful condition is detected, the MotorSaver deactivates its output relay after a specified trip delay. The output relays reactivate after power line conditions return to an acceptable level and a specified amount of time has elapsed (restart delay). The trip delay prevents nuisance tripping due to rapidly fluctuating power line conditions.

Notes:

Must use Model OT11PC socket for UL Rating.

Manufacturer's recommended screw terminal torque for the RB series and OT series octal sockets is 12 in.-lbs.

Features & Benefits

FEATURES	BENEFITS
Proprietary microcontroller-based circuitry	Constantly monitors three-phase voltage to protect against harmful power line conditions, even before the motor starts
Two isolated Form C relays (DPDT)	Ideal for use in systems that have two control circuits with different voltages
Advanced LED diagnostics	Provides diagnostics that can be used for troubleshooting and to determine relay status
Compact design for 11-pin, DIN-rail or surface mounted	Allows flexibility in panel installation

Applications

- Fan motors
- Air conditioners
- Compressors
- Heat, well, and sump pumps
- Small conveyer motors

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Specifications

Input Characteristics

Line Voltage	
201-100-DPDT	95–120 V ac
201-200-DPDT	190–240 V ac
Frequency	50/60 Hz

Functional Characteristics

Low Voltage (% of setpoint)	
Trip	90% +/-1%
Reset	93% +/-1%

Voltage Unbalance	
Trip	6%
Reset	4.5%

Trip Delay Time	
Low Voltage	4 seconds
Unbalance, Phasing Faults	2 seconds

Restart Delay Times	
After a Fault or Complete Power Loss	2 seconds

Output Characteristics

Output Contact Rating (DPDT)	
Pilot Duty	480 VA @ 240 V ac
General Purpose	10 A @ 240 V ac

General Characteristics

Temperature Range	-40° to 70 °C (-40° to 158 °F)
Maximum Input Power	5 W

Standards Passed

Electrostatic Discharge (ESD)	IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air
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Radio Frequency	
Immunity, Radiated	150 MHz, 10 V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 2.5 kV input power

Dimensions	H 44.45 mm (1.75"); W 60.33 mm (2.38"); D 104.78 mm (4.125")
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Weight	0.65 lb. (10.4 oz., 294.84 g)
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Mounting Method	DIN rail or surface mount (plug in to OT11PC socket)
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Socket Available	Model OT11PC (UL Rated 300 V)
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The 300 V socket can be surface mounted or installed on DIN Rail.

Certification & Compliance

UL (OT11PC octal socket required)

UL 508 (File #E68520)

Accessories

OT11PC Octal Socket

11-pin surface & DIN-rail mountable. Rated for 10 A @ 300 V ac.

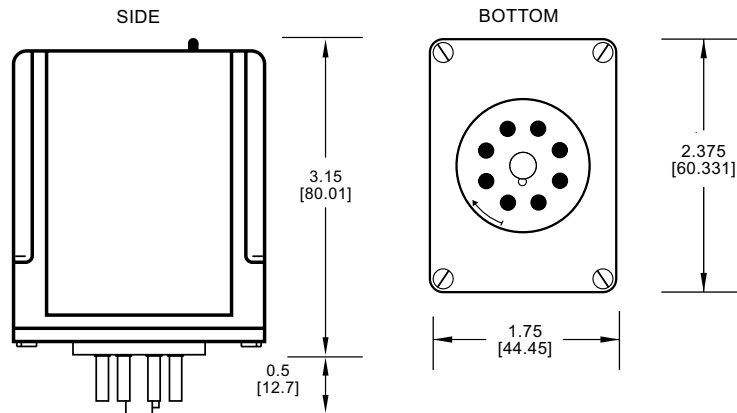
Ordering Information

MODEL	LINE VOLTAGE	DESCRIPTION
201-100-DPDT	95–120 V ac	Fixed unbalance, trip delay 4 s for low voltage fault and 2 s for unbalance and phase loss, restart delay 2 s
201-200-DPDT	190–240 V ac	Fixed unbalance, trip delay 4 s for low voltage fault and 2 s for unbalance and phase loss, restart delay 2 s

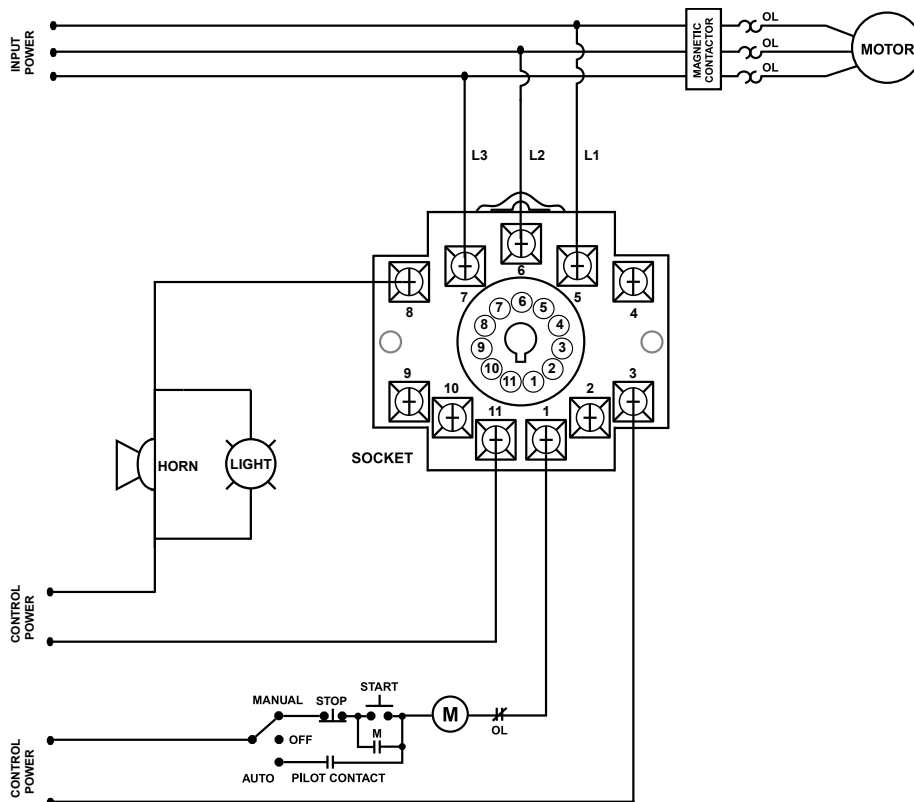
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Dimensions Inches (mm)



Wiring Diagram



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