

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

## Applications

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

# Voltage Monitoring Relays

## 201-xxx-DPDT Series

### Specifications

#### Input Characteristics

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

#### Functional Characteristics

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

<b>Voltage Unbalance</b>	
Trip	6%
Reset	4.5%

<b>Trip Delay Time</b>	
Low Voltage	4 seconds
Unbalance, Phasing Faults	2 seconds

<b>Restart Delay Times</b>	
After a Fault or Complete Power Loss	2 seconds

#### Output Characteristics

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

#### General Characteristics

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

#### Standards Passed

<b>Electrostatic Discharge (ESD)</b>	IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air
--------------------------------------	--

<b>Radio Frequency</b>	
Immunity, Radiated	150 MHz, 10 V/m
Fast Transient Burst	IEC 61000-4-4, Level 3, 2.5 kV input power

<b>Dimensions</b>	<b>H</b> 44.45 mm (1.75"); <b>W</b> 60.33 mm (2.38"); <b>D</b> 104.78 mm (4.125")
-------------------	---

<b>Weight</b>	0.65 lb. (10.4 oz., 294.84 g)
---------------	-------------------------------

<b>Mounting Method</b>	DIN rail or surface mount (plug in to OT11PC socket)
------------------------	--

<b>Socket Available</b>	Model OT11PC (UL Rated 300 V)
-------------------------	-------------------------------

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.

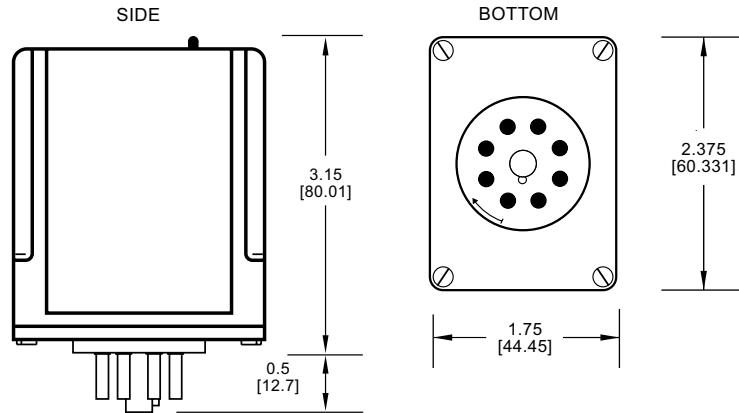
### Ordering Information

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

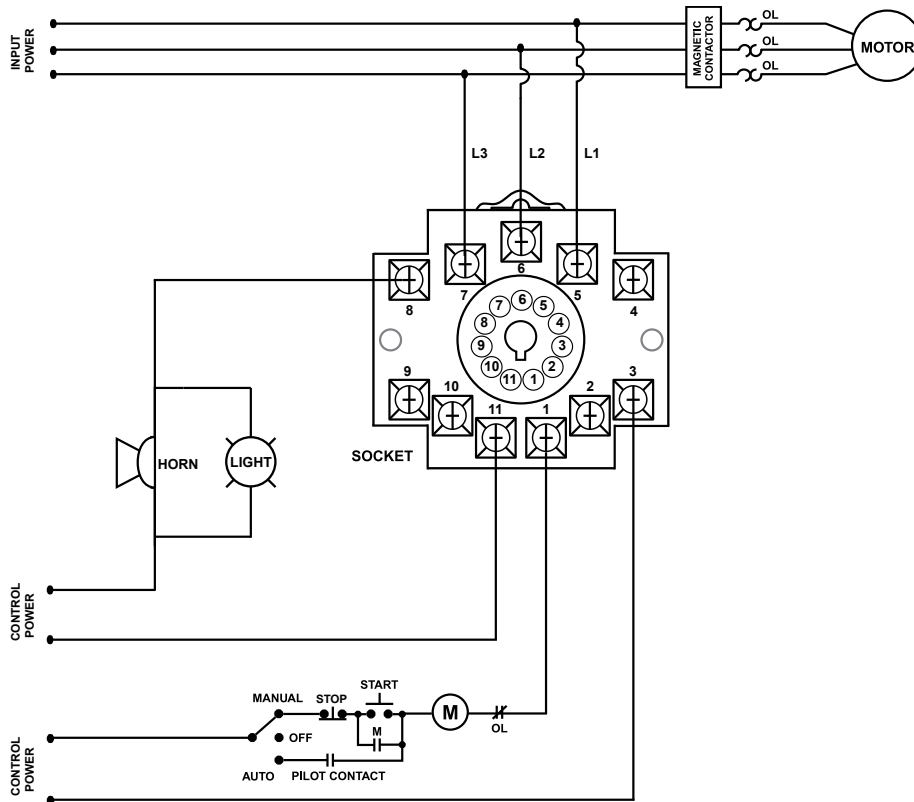
# Voltage Monitoring Relays

## 201-xxx-DPDT Series

### Dimensions Inches (mm)



### Wiring Diagram



**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).