



# DUAL VOLTAGE PHASE MONITORS

## THREE PHASE MOTOR PROTECTION

MADE IN  
THE U.S.A.



UL FILE #E101681



\*UL listed models require use of an RB08 or RB08-PC socket.

### PROTECTS AGAINST:

- Under Voltage
- Phase Loss
- Phase Reversal
- Phase Unbalance
- (Optional Over Voltage)

### OPERATION

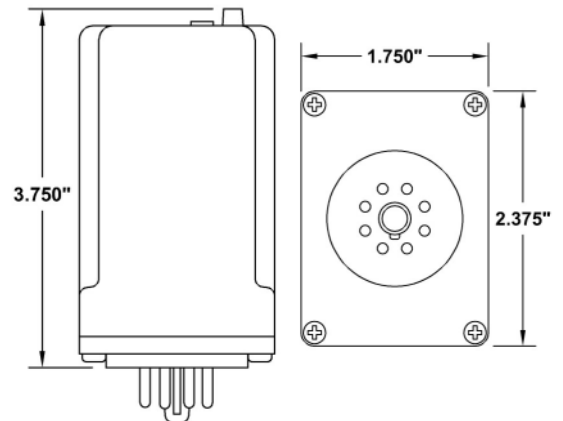
The Dual Voltage Phase Monitor automatically selects which voltage scale to operate from, either the 200-280V or the 425-525V.

When the proper voltage is connected to the phase monitor the internal relay will be energized and the LED will be on steady. An abnormal condition will cause the LED to blink during the trip delay. When the trip delay has expired the internal relay will be de-energized. The LED will then provide a series of pulses that indicate which fault condition is present. When conditions return to normal, the LED will blink during the reset delay. When the reset delay has expired, the LED will come on steady and the internal relay will be energized. The reset delay is also active immediately after power is turned on to the unit.

These units can be used on Delta or Wye systems, 50/60 Hz.

To add the Over Voltage feature select the OV option.

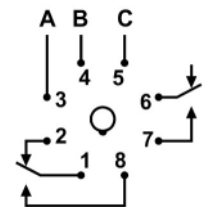
To extend the standard Reset Delay select one of the G options.



### SPECIFICATIONS

Under Voltage:	
Trip:	- 15% of 200-280V or -10% of 425-525V
Reset:	- 12% of 200-280V or -8% of 425-525V
Over Voltage:	
Trip:	+ 15% of 200-280V or +10% of 425-525V
Reset:	+ 12% of 200-280V or +8% of 425-525V
Phase Unbalance:	
Trip:	5% with 5 Second Trip Delay 10% with 1 Second Trip Delay
Reset:	4%
Trip Delay:	5 Seconds (Delay is Reduced to 1 Second
(Delay on Release)	if Phase Unbalance is 10% or Greater)
Reset Delay:	2 Seconds Standard (See Options)
(Delay on Operate)	
Voltage Range:	200V to 280V or 425V to 525V
Output Rating:	10A Resistive @ 240VAC
Operating Temp:	-40°C to +40°C
Storage Temp:	-45°C to +85°C
Enclosure:	White Lexan
Base:	Phenolic

LED STATUS	CONDITION
ON STEADY	NORMAL
⏏	TRIP or RESET
⏏	UNDERVOLTAGE
⏏	OVERVOLTAGE
⏏	UNBALANCE
⏏	REVERSAL



### ORDERING INFORMATION

Product Type	001 - DVM - 11	8 - XXXXX
Operating Voltage (Dual Voltage)		
Relay Type (SPDT, SPST)		
Base (8 Pin Octal)		
Options:		
OV - Over Voltage		
G5 - 5 Second Reset Delay		
G10 - 10 Second Reset Delay		
G20 - 20 Second Reset Delay		
G30 - 30 Second Reset Delay		
G60 - 60 Second Reset Delay		

Order from: **C A Briggs Company**; 622 Mary Street, Suite 101 - Warminster, PA 18974

Phone: 267-673-8117 - Fax: 267-673-8118; E-Mail: [Sales@cabriggs.com](mailto:Sales@cabriggs.com) - [www.cabriggs.com](http://www.cabriggs.com)



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### PROTECTS AGAINST:

- Under Voltage
- Phase Loss
- Phase Reversal
- Phase Unbalance
- (Optional Over Voltage)

### OPERATION

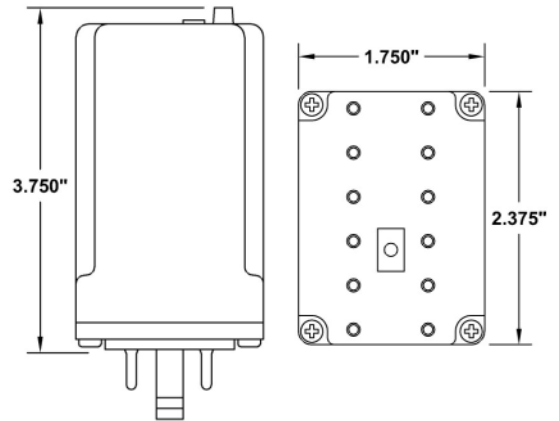
The Dual Voltage Phase Monitor automatically selects which voltage scale to operate from, either the 200-280V or the 425-525V.

When the proper voltage is connected to the phase monitor the internal relay will be energized and the LED will be on steady. An abnormal condition will cause the LED to blink during the trip delay. When the trip delay has expired the internal relay will be de-energized. The LED will then provide a series of pulses that indicate which fault condition is present. When conditions return to normal, the LED will blink during the reset delay. When the reset delay has expired, the LED will come on steady and the internal relay will be energized. The reset delay is also active immediately after power is turned on to the unit.

These units can be used on Delta or Wye systems, 50/60 Hz.

To add the Over Voltage feature select the OV option.

To extend the standard Reset Delay select one of the G options.



### SPECIFICATIONS

Under Voltage:	
Trip:	- 15% of 200-280V or -10% of 425-525V
Reset:	- 12% of 200-280V or -8% of 425-525V
Over Voltage:	
Trip:	+ 15% of 200-280V or +10% of 425-525V
Reset:	+ 12% of 200-280V or +8% of 425-525V
Phase Unbalance:	
Trip:	5% with 5 Second Trip Delay 10% with 1 Second Trip Delay
Reset:	4%
Trip Delay:	5 Seconds (Delay is Reduced to 1 Second if Phase Unbalance is 10% or Greater)
Reset Delay:	2 Seconds Standard (See Options)
(Delay on Operate)	
Voltage Range:	200V to 280V or 425V to 525V
Output Rating:	10A Resistive @ 240VAC
Operating Temp:	-40°C to +40°C
Storage Temp:	-45°C to +85°C
Enclosure:	White Lexan
Base:	Phenolic

LED STATUS	CONDITION	C	B	A
ON STEADY	NORMAL	•	•	•
⏏	TRIP or RESET	6	5	4
⏏	UNDERVOLTAGE	3	2	1
⏏	OVERVOLTAGE	7	8	9
⏏	UNBALANCE	10	11	12
⏏	REVERSAL			

### ORDERING INFORMATION

001 - DVM - 12 12 - XXXXX

Product Type	└─┬─┘
Operating Voltage (Dual Voltage)	└─┬─┘
Relay Type (DPDT)	└─┬─┘
Base (12 Pin)	└─┬─┘
Options:	
OV - Over Voltage	
G5 - 5 Second Reset Delay	
G10 - 10 Second Reset Delay	
G20 - 20 Second Reset Delay	
G30 - 30 Second Reset Delay	
G60 - 60 Second Reset Delay	

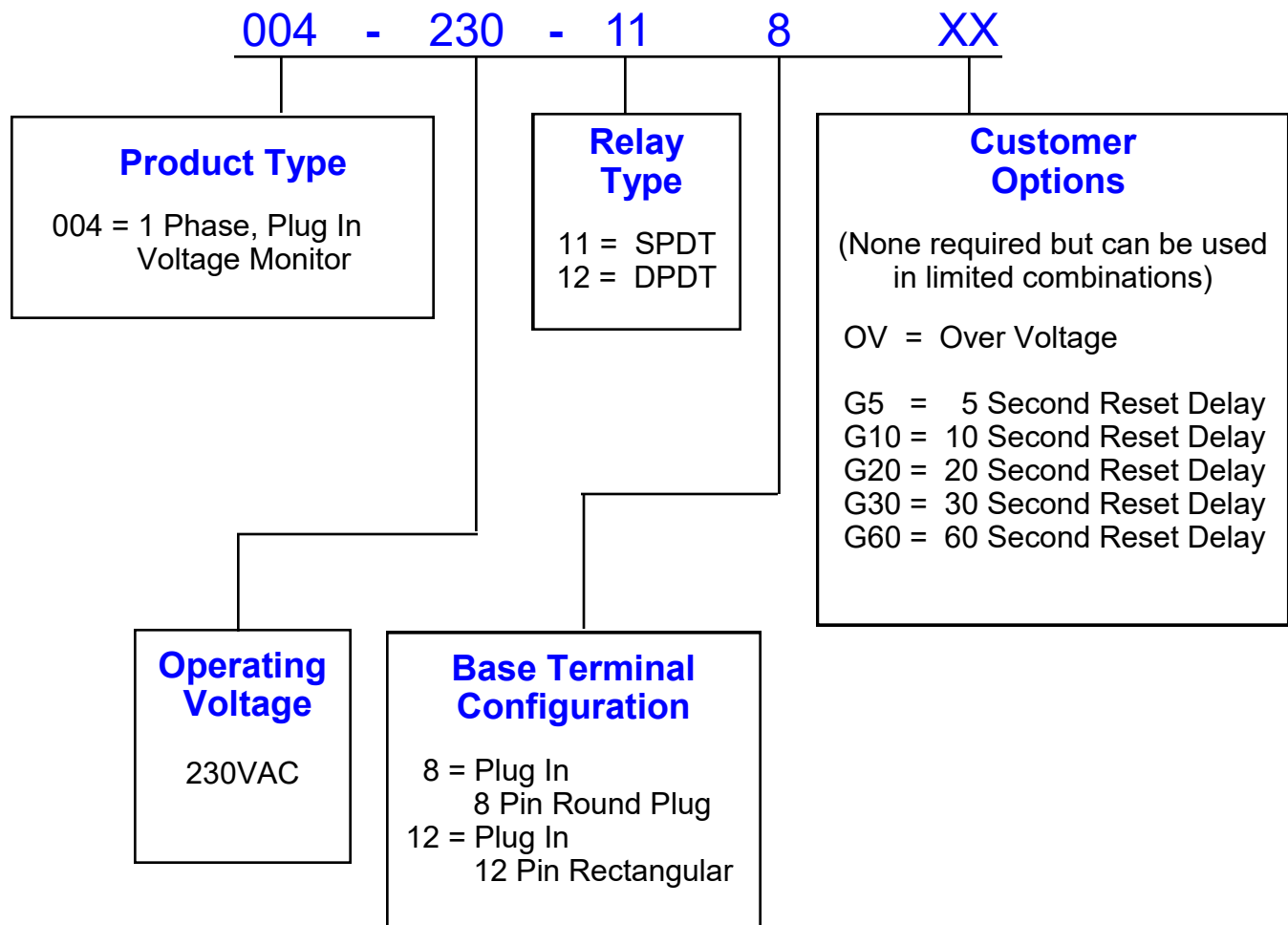
# Ordering Information - Voltage Monitors

## Voltage Monitor Designations

Example: M.P.E. Product Number

004 - 230 - 118

Product Number Breakdown:





# VOLTAGE MONITORS

## SINGLE PHASE MOTOR PROTECTION

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### PROTECTS AGAINST:

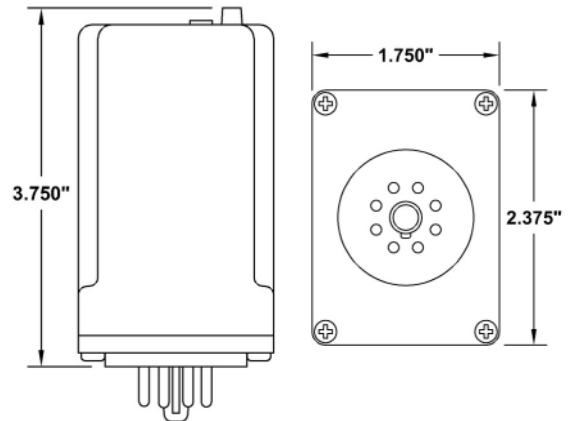
- Under Voltage
- Rapid Load Cycling
- (Optional Over Voltage)

\*UL listed models require use of an RB08 or RB08-PC socket.

### OPERATION

When proper voltage is connected to the voltage monitor the internal relay will be energized and the LED will come on steady. An abnormal condition will cause the LED to blink during the trip delay. When the trip delay has expired the internal relay will be de-energized. The LED will then provide a series of pulses that indicate which fault condition is present. When conditions return to normal, the LED will blink during the reset delay. When the reset delay has expired, the LED will come on steady and the internal relay will be energized. The reset delay is also active immediately after power is turned on to the unit.

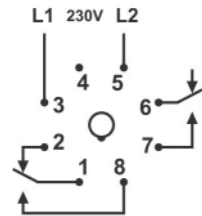
To add the Over Voltage feature select the OV option.  
To extend the standard Reset Delay select one of the G options.



### SPECIFICATIONS

- Under Voltage:
  - Trip: - 15% of 200V-280V
  - Reset: - 12% of 200V-280V
- Over Voltage:
  - Trip: + 15% of 200V-280V
  - Reset: + 12% of 200V-280V
- Trip Delay: 5 Seconds  
(Delay on Release)
- Reset Delay: 2 Seconds Standard (See Options)  
(Delay on Operate)
- Voltage Range: 200V to 280V
- Output Rating: 10A Resistive @ 240VAC  
6A Inductive @ 240VAC
- Operating Temp: -40°C to +50°C
- Storage Temp: -45°C to +85°C
- Enclosure: White Lexan
- Base: Phenolic

LED STATUS	CONDITION
ON STEADY	NORMAL
⏏	TRIP or RESET
⏏	UNDERVOLTAGE
⏏	OVERVOLTAGE



### ORDERING INFORMATION

- 004 - 230 - 11 8 - XXXXX
- Product Type
  - Operating Voltage
  - Relay Type (SPDT)
  - Base (8 Pin Octal)
  - Options:
    - OV - Over Voltage
    - G5 - 5 Second Reset Delay
    - G10 - 10 Second Reset Delay
    - G20 - 20 Second Reset Delay
    - G30 - 30 Second Reset Delay
    - G60 - 60 Second Reset Delay



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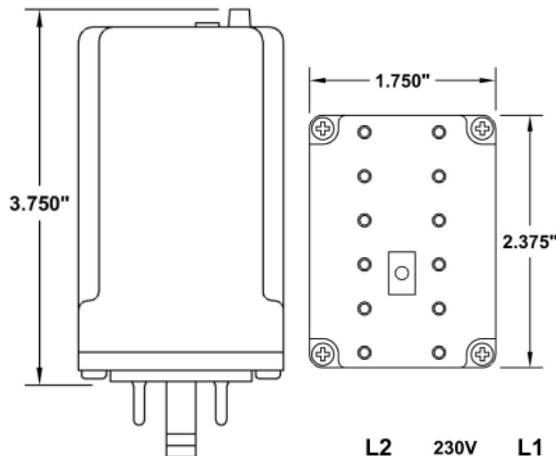
### PROTECTS AGAINST:

- Under Voltage
- Rapid Load Cycling
- (Optional Over Voltage)

### OPERATION

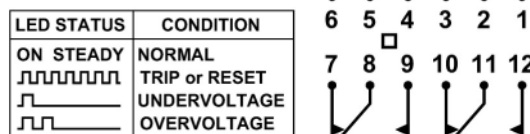
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- Base: Phenolic



### ORDERING INFORMATION

- 004 - 230 - 12 12 - XXXXX
- Product Type
  - Operating Voltage
  - Relay Type (DPDT)
  - Base (12 Pin)
  - Options:
    - OV - Over Voltage
    - G5 - 5 Second Reset Delay
    - G10 - 10 Second Reset Delay
    - G20 - 20 Second Reset Delay
    - G30 - 30 Second Reset Delay
    - G60 - 60 Second Reset Delay