

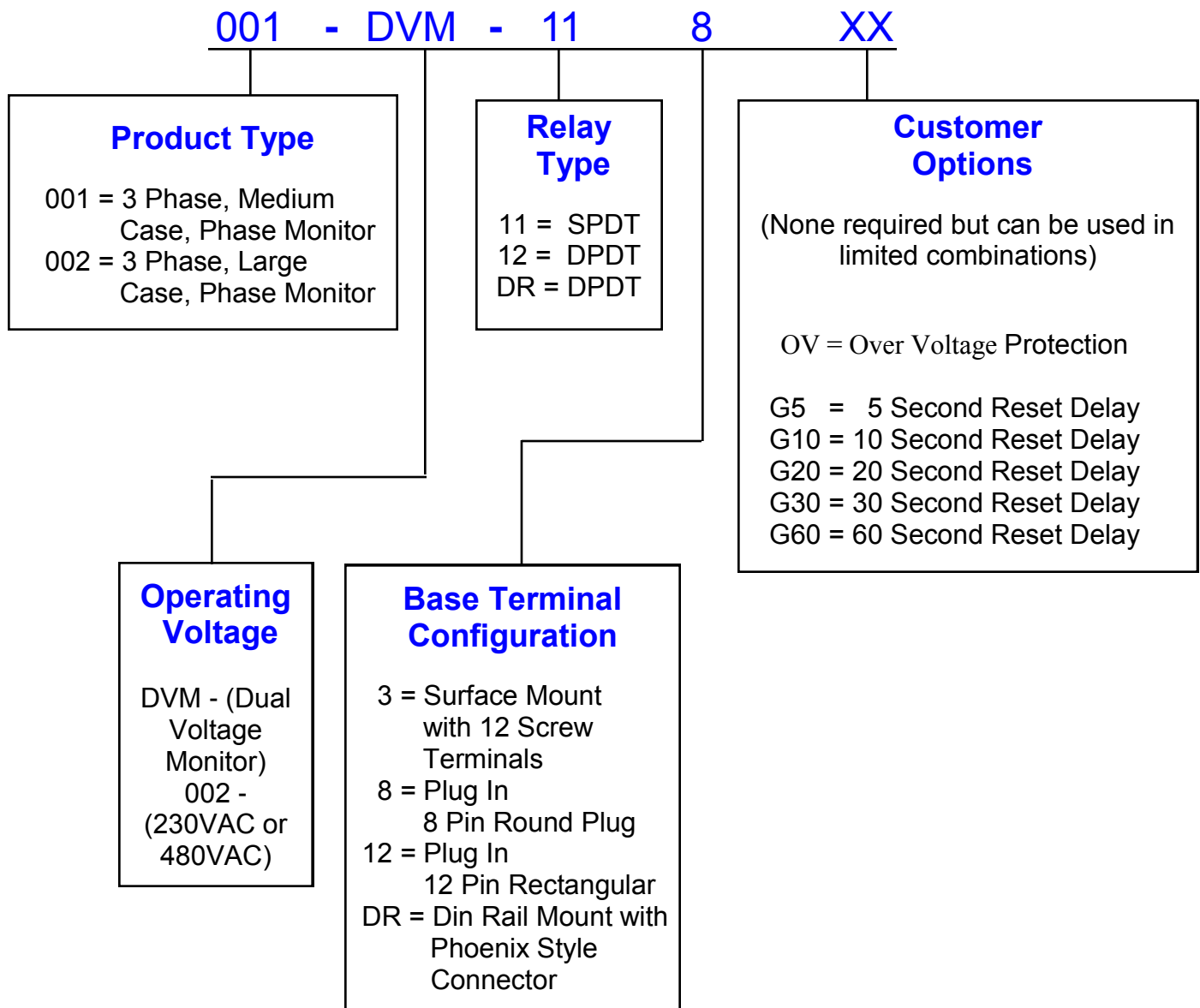
# Ordering Information - Phase Monitors

## Phase Monitor Designations

Example: M.P.E. Product Number

001 - DVM - 118

Product Number Breakdown:







# DUAL VOLTAGE PHASE MONITORS

## THREE PHASE MOTOR PROTECTION

**MADE IN  
THE U.S.A.**

UL FILE #E101681



### PROTECTS AGAINST:

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

### OPERATION

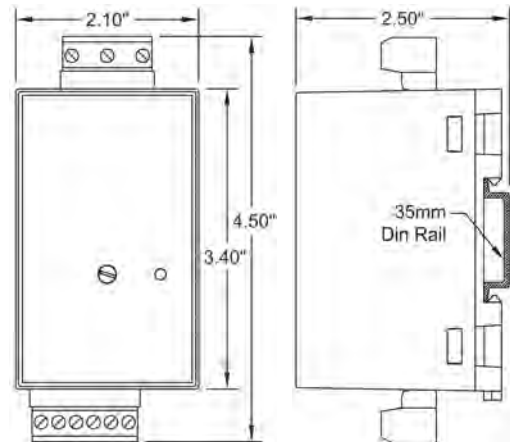
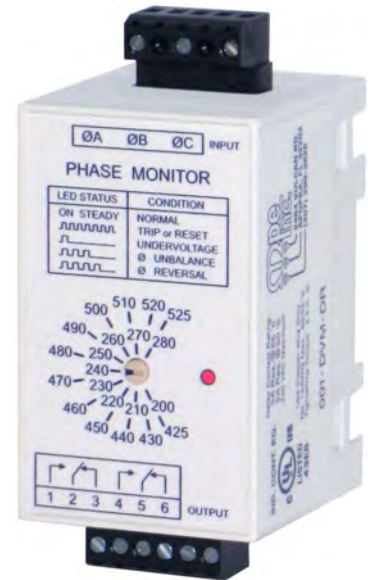
The Dual Voltage Phase Monitor automatically selects which voltage scale to operate from, either 200-280V or 425-525V.

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.

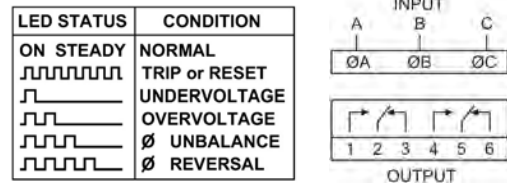
To add the Over Voltage feature select the OV option.

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)	
Input Voltage Range:	200V to 280V or 425V to 525V
Output Voltage Rating:	240VAC Maximum
Output Current Rating:	3A* @ -40°C to +65°C      *Total Load on 5A* @ -40°C to +50°C      Both Outputs
Storage Temp:	-45°C to +85°C
Enclosure:	White Plastic



### ORDERING INFORMATION

001 - DVM - DR - XXXXX

Product Type: 001

Operating Voltage (Dual Voltage): DVM

Din Rail Mount: DR

Options: XXXXX

- 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



# 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

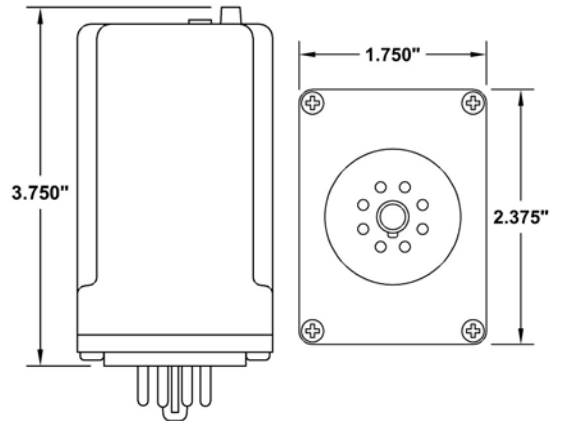
The Dual Voltage Phase Monitor automatically selects which voltage scale to operate from, either the 200-280V or the 425-525V.

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.

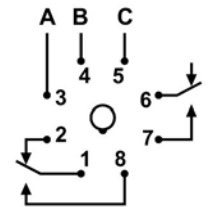
To extend the standard Reset Delay select one of the G options.



### 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 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



# DUAL VOLTAGE PHASE MONITORS

## THREE PHASE MOTOR PROTECTION

MADE IN THE U.S.A.



UL FILE #E101681



\*UL listed models require use of an SD12-PC socket.



### PROTECTS AGAINST:

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

### OPERATION

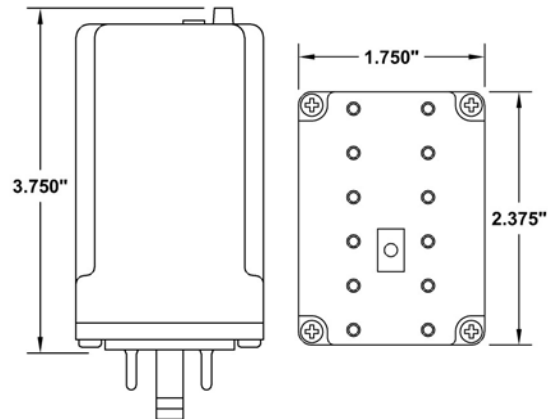
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When the proper voltage is connected to the phase monitor the internal relay will be energized and the LED will be on steady. An abnormal condition will cause the LED to blink during the trip delay. When the trip delay has expired the internal relay 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	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	001
Operating Voltage (Dual Voltage)	DVM
Relay Type (DPDT)	12 12
Base (12 Pin)	XXXXX

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