

PVT

Three Phase Voltage Relay (Microprocessor)



- 15 Amp Contacts
- 600V Contact (Available)
- Dual Voltage Model
- Removable Terminal Blocks
- Over & Undervoltage
- Phase Loss
- Phase Imbalance
- Phase Rotation
- Adj. Re-Start Timer



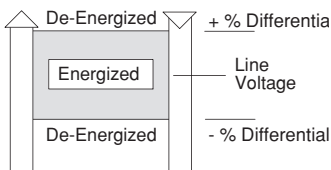
Operation

The PVT's output contacts are energized when:

1. All phases are present,
2. Voltages are within differential %,
3. Phases are in the proper rotation,
4. Phases are balanced, and
5. Re-Start timer has timed out.

The PVT uses a re-start timer to allow the three phase line to stabilize after a fault and delays re-starting of pumps, compressors and other equipment.

The PVT also has a switch selectable voltage option (Series 201) that provides both 208 to 240VAC and 420 to 480VAC, 3Ø in one unit. The installer to select the proper voltage.



Specifications

Electrical

Line Voltage:
110VAC to 600VAC, 3Ø
Frequency: 49Hz to 63Hz
Line Voltage Ranges:
200 Series - 208VAC to 245VAC, 3Ø
300 Series - 380VAC to 415VAC, 3Ø
400 Series - 420VAC to 480VAC, 3Ø
600 Series - 575VAC to 600VAC, 3Ø

Maximum Overvoltage:

15% of highest nominal voltage

Over & Undervoltage:

7% to 15%, Adj. around set point

Phase Imbalance:

5% Typical

Phase Rotation:

A - B - C

Phase Loss:

<75% of set point

Time Delays:

Re-Start: Adj. 1 Sec. to 300 Sec

Drop-Out:

- 5 Sec. fixed (Over & Under Voltage, Phase Imbalance, Phase Loss)
- Instantaneous (Loss of all Phases)

LED Indicators:

Fault LED: Red: Phase Reversal

Green: Phase Loss

Relay LED

Output Contacts:

Gen. Purpose: 15 Amps@250VAC*

Horse Power:

1/2HP @ 120VAC

1HP @ 240VAC

V-A Rating: 720VA Max.

Rating Code: A150, A300 & A600

1C: Single Pole Double Throw

2C: Double Pole Double Throw

HV: SPDT, 2 Amps @ 600VAC (6,000 cyc)

Physical

Mounting: Din Rail or Surface

Shock Rating: 17g@21 Milliseconds

Termination: Screw Terminals

Removable (Plug-In)

Packaging: Dust Cover

Weight: 8 Oz. Approx.

Ambient Temperatures

Operating: -40°C to 65°C

Storage: -40°C to 85°C

* All circuits must have a common supply to maintain a 15 Amp rating per contact. Otherwise total may not exceed 20 Amps.

Ordering Information

PVT R - 201 - A 2C

R-K Model

Mounting Options

R - DIN Rail

S - Surface

3Ø Input Voltages

200 - 200 to 240VAC

201 - Switch Selectable

& 208 to 240VAC

420 to 480VAC

300 - 380 to 415VAC

400 - 440 to 480VAC

600 - 575 to 600VAC

Output Contacts

1C - 15A @ 250VAC, SPDT

2C - 15A @ 250VAC, DPDT

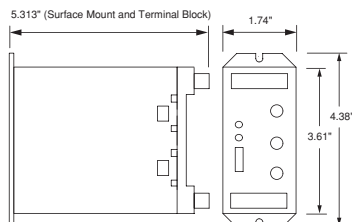
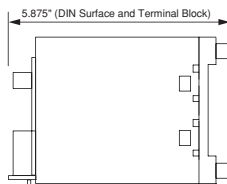
HV - 2A @ 600VAC, SPDT

Restart Delay

A - Adjustable

S - Special

Dimensions



Connections

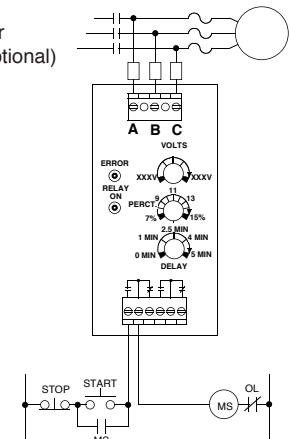
The PVTs should be connected to the line voltage on the load side on the last line fuse before the motor and on the line side of the starter (MS).

M = Motor

MS = Motor Starter

Fuses = ≤1 amp (optional)

OL = Overloads



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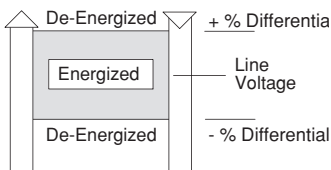
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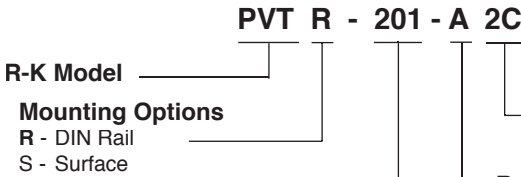
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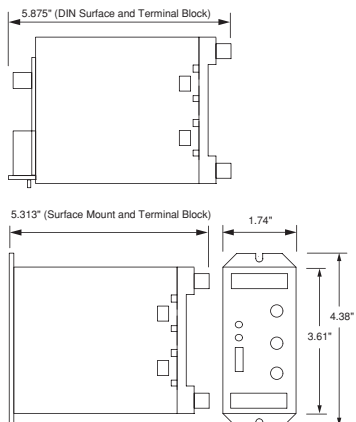
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