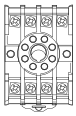
3 Phase Voltage Monitor
PLMU Series (SPDT)
Universal Voltage Plug-in Monitor

ANSI Device #27/47/59

- Protects Against: Phase Loss, Phase Reversal, Overvoltage, Undervoltage, & Unbalanced Voltages
- Octal Plug-in with SPDT Isolated 10 A Contacts
- Operates from 200 ... 480 V AC
- LED Indicator Glows Green when Voltages are Acceptable, Red for Faults
- Simple 3-Wire Connection for Delta or Wye Systems
- ASME A17.1 rule 210.6
- NEMA MG1 14:30, 14:35
- IEEE C62.41-1991 Level B

Complete Product Details:
http://www.ssac.com/pp1.htm

Mounting and Connection Accessory

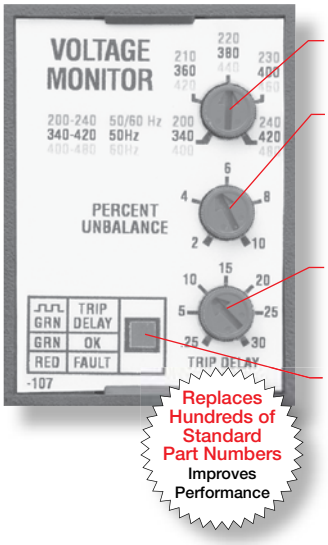


35 mm DIN or Surface Mounting

Octal 8 pin socket
P/N: OT08PC

Must be rated for 600 V operation

See accessory pages



Universal Operating Voltage
200 - 480 V AC; 50 & 60 Hz

Improved Phase Loss Protection
Unbalance sensitivity assures improved phase loss protection not affected by regenerated voltages; knob adjustable 2 to 10% unbalance protection.

Prevents Nuisance Tripping
Adjustable 0.25 to 30 s trip delay prevents nuisance tripping.

Bicolor LED indicates relay status, delays, faults, and phase reversal.

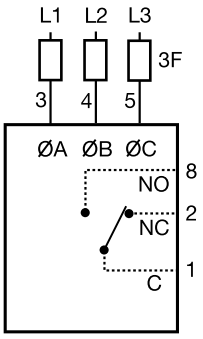
Universal voltage operation and standard base connection allows the PLMU to replace hundreds of competitive part numbers.

The PLMU Series continuously measures the voltage of each of the three phases to provide protection for three phase motors and sensitive loads. Its microcontroller senses under and over voltage, voltage unbalance, phase loss, and phase reversal. Protection is provided even when regenerated voltages are present.

Operation

Upon application of power, a 0.6 s random start delay begins and the PLMU measures the voltage levels and line frequency and selects the voltage range. The output relay is energized and the LED glows green when all voltages are acceptable and the phase sequence is correct. LED flashes green during trip delay, glows red when output de-energizes. Undervoltage, overvoltage, and voltage unbalance must be sensed for continuous trip delay before the relay de-energizes. Re-energization is automatic upon fault correction. The output relay will not energize if a fault condition is sensed as three phase input voltage is applied. Line voltage is selected with the knob, setting the over and under voltage trip points. Voltage range is automatically selected by the insert as last sentence: Both Delta and Wye systems can be monitored; no connection to neutral is required.

Connection



2 amp fast acting fuses recommended to protect the equipment. They are not required to protect the PLMU.

F = Fuses
ØA = Phase A = L1
ØB = Phase B = L2
ØC = Phase C = L3
NO = Normally Open
NC = Normally Closed
C = Common, Transfer Contact

Relay contacts are isolated; 277V AC max.

Dashed lines are internal connections.

Technical Data

Line Voltage	
Line Voltage	200 ... 480 V AC +/-15%; 50 ... 60 Hz +/-2 Hz
Output	
Rating	10 A resistive @ 240 V AC; 1/4 hp @ 125 V AC; 1/3 hp @ 250 V AC; max. voltage 277 V AC
Mechanical	
Mounting & Connection	Requires an accessory plug-in socket rated 600 V AC
Package	3.03 x 2.39 x 1.78 in. (77.0 x 60.7 x 45.2 mm)

Ordering Table

Part Number	Voltage Unbalance	Trip Delay
PLMU11	Adjustable 2 ... 10%	Adjustable 0.25 ... 30 s