



Size:
5.43 x 3.43 x 1.76 inches
138.0 x 87.0 x 44.6 mm

Weight:
1.1 lbs (500g)

FEATURES

- Class I
- Single to Quad Outputs
- RoHS Compliant
- Internal EMI Filter
- Up to 63 Watts Output Power
- 100% Burn-in Tested
- Wide Input Voltage Range: 90~264VAC, 47~63Hz
- Output Voltage Available from 3VDC to 50VDC
- Over Voltage Protection (Crowbar Design)
- Input Surge Current, Over Voltage, and Over Load Protection
- 3-Pin Input Connector
- 2-Pin Input Connector Available (See PSSEU61 Series)
- Meets FCC Part-15 Class B and CISPR-22 Class B Emission Limits
- UL/cUL(UL 60950-1:2nd Edition) Safety Approvals

DESCRIPTION

The PSSEU60 series of Class I AC/DC switching mode power supplies provides up to 63 Watts of continuous output power in a 5.43" x 3.43" x 1.76" enclosed package. This series has single, dual, triple, and quad output models with a wide input voltage range of 90~264VAC. These power supplies have an internal EMI filter and are protected against over load, over voltage, and input surge current conditions. This series also has UL/cUL (UL 60950-1: 2nd edition) safety approvals and meets FCC Part-15 class B and CISPR-22 Class B emission limits. These units are well suited for use in industrial equipment as well as many other applications. All models are 100% burn-in tested.

TECHNICAL SPECIFICATIONS: PSSEU60 SERIES

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

| SPECIFICATION | TEST CONDITIONS | Min | Typ | Max | Unit |
|-------------------------------------|--|--|-----|-------|-------|
| INPUT SPECIFICATIONS | | | | | |
| Input Voltage | Safety Approvals Input Voltage Range | 100 | | 240 | VAC |
| | Operating Input Voltage Range | 90 | | 264 | |
| Input Frequency | | 47 | | 63 | Hz |
| Input Current | 100VAC, full load | | 1.6 | | A |
| | 240VAC, full load | | 1.0 | | |
| Inrush Current | 115VAC, full load, 25°C, cold start | | | 33 | A |
| | 230VAC, full load, 25°C, cold start | | | 65 | |
| No Load Power Consumption | 230VAC, no load | Single Output Models | | 5 | W |
| | | Dual, Triple, & Quad Output Models | | 5.5 | |
| OUTPUT SPECIFICATIONS | | | | | |
| Output Voltage | | See Table | | | |
| Line Regulation | LL to HL, full load | 0.5 | | 1 | % |
| Load Regulation | 230VAC | 3 | | 7 | % |
| Output Power | | | | 63 | W |
| Output Current | | See Table | | | |
| Ripple & Noise (peak to peak) | 90VAC, full load | Outputs under 3.3VDC | | 2 | % |
| | | Others | | 1 | |
| Hold-up Time | 110VAC, full load | 12 | | | ms |
| Start-up Time | 100VAC, full load | | | 2 | s |
| Transient Response Time | 100VAC, Full load to half load | | | 4 | ms |
| Temperature Coefficient | 0~50°C | -0.04 | | +0.04 | %/°C |
| PROTECTION | | | | | |
| Over Voltage Protection | | 112 | | 132 | % |
| Over Current Protection | | 110 | | 150 | % |
| GENERAL SPECIFICATIONS | | | | | |
| Efficiency | 230VAC, full load | 70 | | 88 | % |
| Dielectric Withstanding Voltage | Primary to Secondary | 4242 | | | VDC |
| | Primary to PE | 2506 | | | |
| Isolation Resistance | Test Voltage = 500VDC | 50 | | | MΩ |
| Leakage Current | 240VAC/60Hz | | | 0.75 | mA |
| ENVIRONMENTAL SPECIFICATIONS | | | | | |
| Operating Temperature | Derating linearly from 100% Load at 25°C to 50% load at 70°C | 0 | | +70 | °C |
| Storage Temperature | | -40 | | +85 | °C |
| Operating Humidity | | 0 | | 95 | % |
| Storage Humidity | | 0 | | 95 | % |
| Cooling | | Free air convection | | | |
| MTBF | MIL-HDBK-217F, 25°C | 100,000 | | | hours |
| PHYSICAL SPECIFICATIONS | | | | | |
| Weight | | 1.1 lbs (500g) | | | |
| Dimensions (L x W x H) | | 5.43 x 3.43 x 1.76 inches (138.0 x 87.0 x 44.6 mm) | | | |
| Input Connector | | See mechanical drawing | | | |
| Output Connector | | See mechanical drawing | | | |
| SAFETY & EMC | | | | | |
| Safety Approvals | | UL/cUL (UL 60950-1: 2 nd edition) | | | |
| EMI Requirements for CISPR-22 | 220VAC | B | | | Class |
| EMI Requirements for FCC PART-15 | 110VAC | B | | | Class |

MODEL SELECTION TABLE

SINGLE OUTPUT MODELS

| Model Number | Input Voltage Range | Output Voltage | Output Current | Total Regulation | Output Power |
|--------------|---------------------|----------------|-----------------|------------------|--------------|
| PSSEU60-101 | 90 ~ 264 VAC | 3 ~ 5 VDC | 16.66 ~ 10.00 A | 5% | 50W |
| PSSEU60-102 | | 5 ~ 6 VDC | 11.00 ~ 9.16 A | 5% | 55W |
| PSSEU60-103 | | 6 ~ 8 VDC | 10.00 ~ 7.50 A | 4% | 60W |
| PSSEU60-104 | | 8 ~ 11 VDC | 7.87 ~ 5.72 A | 3% | 63W |
| PSSEU60-105 | | 11 ~ 13 VDC | 5.72 ~ 4.84 A | 3% | 63W |
| PSSEU60-106 | | 13 ~ 16 VDC | 4.84 ~ 3.93 A | 3% | 63W |
| PSSEU60-107 | | 16 ~ 21 VDC | 3.93 ~ 3.00 A | 3% | 63W |
| PSSEU60-108 | | 21 ~ 27 VDC | 3.00 ~ 2.33 A | 2% | 63W |
| PSSEU60-109 | | 27 ~ 33 VDC | 2.33 ~ 1.90 A | 2% | 63W |
| PSSEU60-110 | | 33 ~ 40 VDC | 1.90 ~ 1.57 A | 2% | 63W |
| PSSEU60-111 | | 40 ~ 50 VDC | 1.57 ~ 1.26 A | 2% | 63W |

DUAL OUTPUT MODELS

| Model Number | Output #1 | | | | Output #2 | | | | Output Power |
|--------------|-----------|----------|----------|-----------|-----------|----------|----------|-----------|--------------|
| | Vo (nom) | Io (min) | Io (max) | Reg (max) | Vo (nom) | Io (min) | Io (max) | Reg (max) | |
| PSSEU60-200 | +3.3 VDC | 1.4A | 7A | 7% | +12 VDC | 0.6A | 3A | 5% | 59.1W |
| PSSEU60-201 | +5 VDC | 0.7A | 7A | 5% | +12 VDC | 0.3A | 3A | 5% | 63W |
| PSSEU60-202 | +5 VDC | 0.7A | 7A | 5% | +15 VDC | 0.3A | 3A | 5% | 63W |
| PSSEU60-203 | +5 VDC | 0.7A | 7A | 5% | +24 VDC | 0.4A | 2A | 5% | 63W |
| PSSEU60-204 | +3.3 VDC | 1.4A | 7A | 7% | +5 VDC | 0.5A | 5A | 5% | 48.1W |
| PSSEU60-215 | +5 VDC | 0.7A | 7A | 5% | -24 VDC | 0.2A | 2A | 5% | 63W |
| PSSEU60-218 | +3.3 VDC | 0.5A | 5A | 7% | +48 VDC | 0.1A | 1.25A | 5% | 63W |
| PSSEU60-219 | +5 VDC | 0.1A | 5A | 5% | +28 VDC | 0.2A | 2A | 5% | 63W |
| PSSEU60-220 | +5 VDC | 0.5A | 5A | 5% | +35 VDC | 0.1A | 1.5A | 5% | 63W |
| PSSEU60-221 | +5 VDC | 0.5A | 5A | 5% | +36 VDC | 0.1A | 1.5A | 5% | 63W |

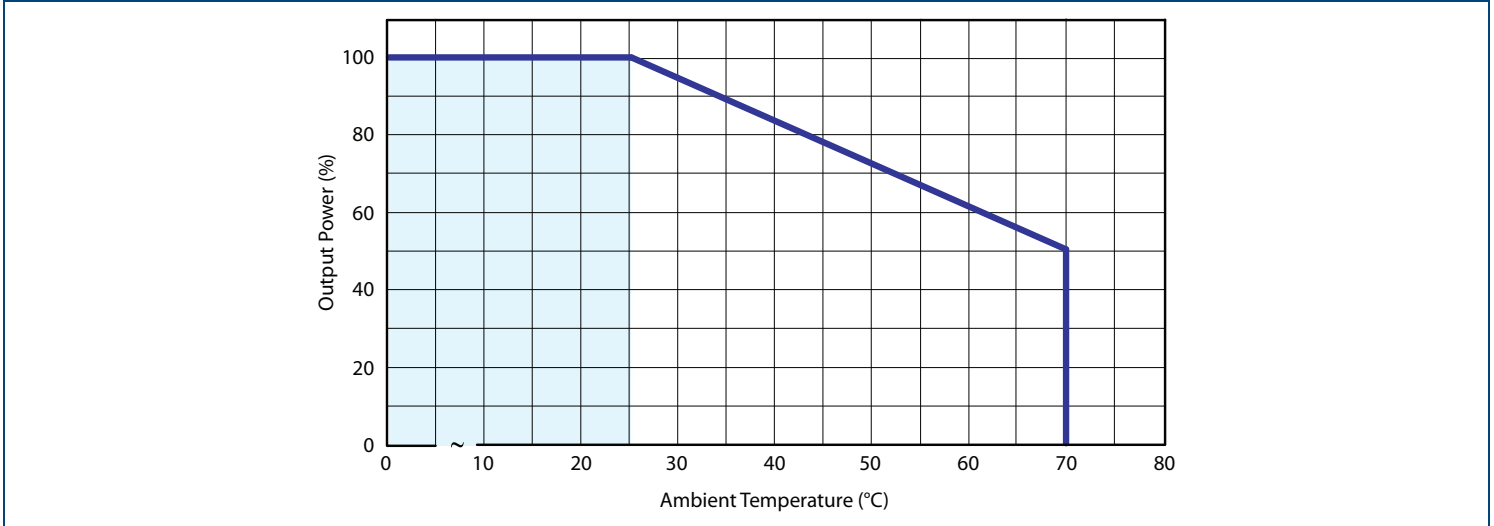
TRIPLE OUTPUT MODELS

| Model Number | Output #1 | | | | Output #2 | | | | Output #3 | | | | Output Power |
|---------------|-----------|---------|---------|----------|-----------|---------|---------|----------|-----------|---------|---------|----------|--------------|
| | Vo(nom) | Io(min) | Io(max) | Reg(max) | Vo(nom) | Io(min) | Io(max) | Reg(max) | Vo(nom) | Io(min) | Io(max) | Reg(max) | |
| PSSEU60-300 | +3.3 VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-300-1 | +3.3 VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-301 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-301-1 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-302 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-302-1 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-303 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | -15 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-303-1 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | +15 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-304 | +5 VDC | 1.2A | 6A | 5% | +24 VDC | 0.4A | 2A | 5% | -24 VDC | 0A | 0.5A | 5% | 63W |
| PSSEU60-304-1 | +5 VDC | 1.2A | 6A | 5% | +24 VDC | 0.4A | 2A | 5% | +24 VDC | 0A | 0.5A | 5% | 63W |
| PSSEU60-305 | +5 VDC | 1.2A | 6A | 5% | +24 VDC | 0.4A | 2A | 5% | -12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-305-1 | +5 VDC | 1.2A | 6A | 5% | +24 VDC | 0.4A | 2A | 5% | +12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-306 | +3.3 VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | -5 VDC | 0A | 0.8A | 5% | 59.8W |
| PSSEU60-306-1 | +3.3 VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | +5 VDC | 0A | 0.8A | 5% | 59.8W |
| PSSEU60-307 | +5 VDC | 0.6A | 6A | 5% | +10 VDC | 0.2A | 2A | 5% | -10 VDC | 0A | 1A | 5% | 60W |
| PSSEU60-307-1 | +5 VDC | 0.6A | 6A | 5% | +10 VDC | 0.2A | 2A | 5% | +10 VDC | 0A | 1A | 5% | 60W |
| PSSEU60-308 | +3.3 VDC | 0.5A | 5A | 7% | +5 VDC | 0.5A | 5A | 5% | +12 VDC | 0A | 1A | 5% | 53.5W |
| PSSEU60-308-1 | +3.3 VDC | 0.5A | 5A | 7% | +5 VDC | 0.5A | 5A | 5% | -12 VDC | 0A | 1A | 5% | 53.5W |

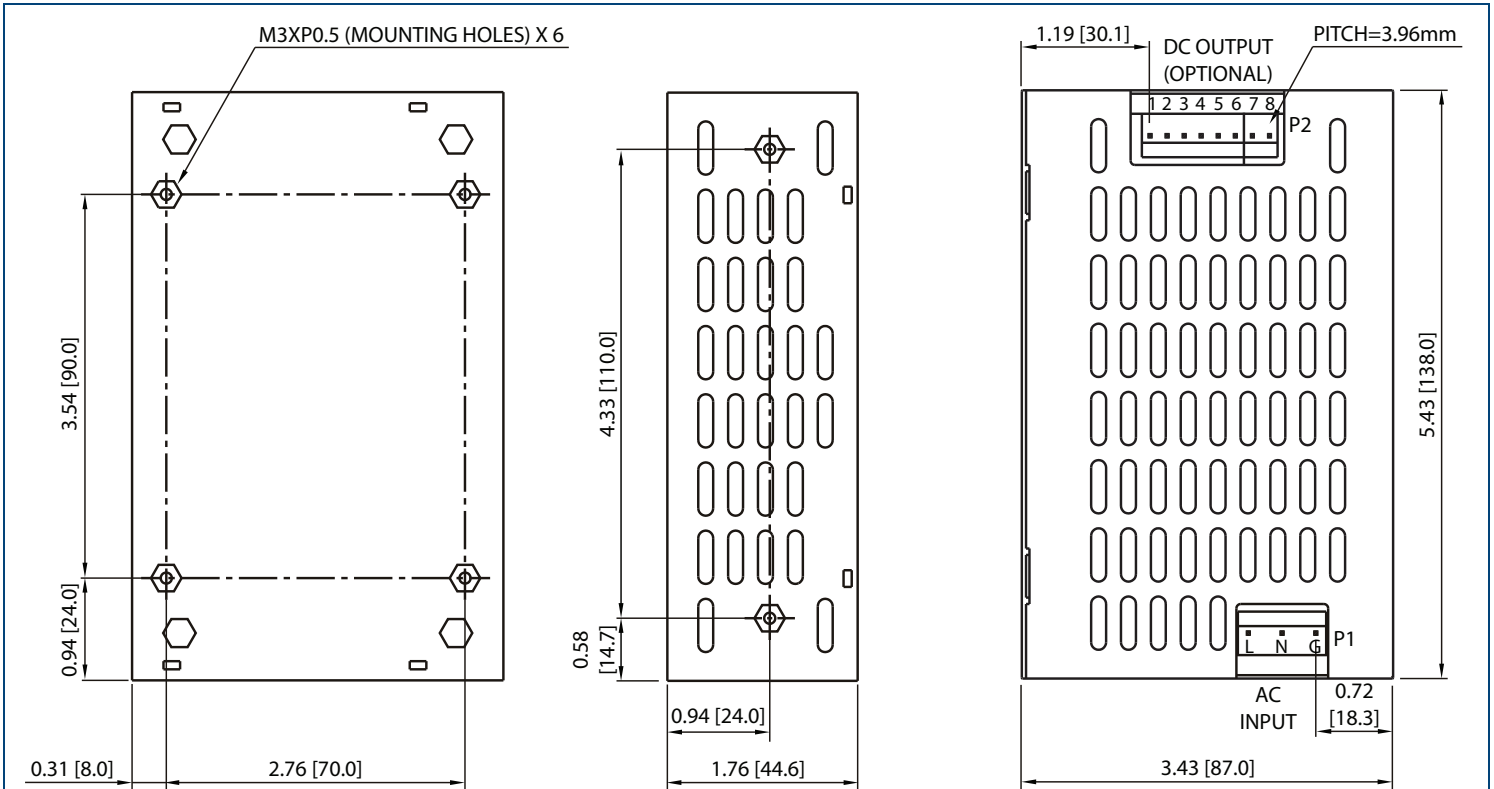
QUAD OUTPUT MODELS

| Model Number | Output #1 | | | | Output #2 | | | | Output #3 | | | | Output #4 | | | | Output Power |
|---------------|-----------|---------|---------|----------|-----------|---------|---------|----------|-----------|---------|---------|----------|-----------|---------|---------|----------|--------------|
| | Vo(nom) | Io(min) | Io(max) | Reg(max) | Vo(nom) | Io(min) | Io(max) | Reg(max) | Vo(nom) | Io(min) | Io(max) | Reg(max) | Vo(nom) | Io(min) | Io(max) | Reg(max) | |
| PSSEU60-400 | +3.3VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-400-1 | +3.3VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-400-2 | +3.3VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-400-3 | +3.3VDC | 1.2A | 6A | 7% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-401 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-401-1 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-401-2 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-401-3 | +5 VDC | 0.6A | 6A | 5% | +12 VDC | 0.3A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-402 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | +12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-402-1 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | +12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-402-2 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | -12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-402-3 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | -12 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-403 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | +24VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-403-1 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | +24VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-403-2 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | +12 VDC | 0A | 0.8A | 5% | -24 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-403-3 | +5 VDC | 1.2A | 6A | 5% | +12 VDC | 0.6A | 3A | 5% | -12 VDC | 0A | 0.8A | 5% | -24VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-404 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | -15 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-404-1 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | -15 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-404-2 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | +15 VDC | 0A | 0.8A | 5% | -5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-404-3 | +5 VDC | 0.6A | 6A | 5% | +15 VDC | 0.3A | 3A | 5% | +15 VDC | 0A | 0.8A | 5% | +5 VDC | 0A | 0.8A | 5% | 63W |
| PSSEU60-423 | +5 VDC | 0.1A | 1A | 5% | +24 VDC | 0.18A | 1.8A | 5% | -15 VDC | 0A | 0.1A | 5% | +12 VDC | 0A | 0.8A | 5% | 59.3W |

DERATING



MECHANICAL DRAWING



| PIN CONNECTIONS | | | | | | | | |
|-----------------|-----------------|-----------------|-----------------|-----|-----|-----------------|-----------------|-----------------|
| MODEL \ PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| PSSEU60-1XX | OUT | OUT | OUT | RTN | RTN | RTN | | |
| PSSEU60-2XX | Vo ₂ | Vo ₁ | Vo ₁ | COM | COM | N/C | | |
| PSSEU60-215 | N/C | Vo ₁ | Vo ₁ | COM | COM | Vo ₃ | | |
| PSSEU60-3XX | Vo ₂ | Vo ₁ | Vo ₁ | COM | COM | Vo ₃ | | |
| PSSEU60-4XX | Vo ₂ | Vo ₁ | Vo ₁ | COM | COM | Vo ₃ | Vo ₄ | Vo ₄ |

NOTES

- Unit: Inches [mm]
- Tolerance: ±0.02 [±0.5]
- Weight: 1.1 lbs (500g)
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
- Output connector mates with Molex housing 09-50-3061 (or 09-50-3081) and Molex 2478 series crimp terminal.
- 2-pin Input connector also available (See PSSEU61 Series)
- All dimensions are for reference only

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

Phone: ☎ (603)778-2300
Toll Free: ☎ (888)597-9255
Fax: ☎ (603)778-9797
E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833