

Wall Industries, Inc.

DTMPU60 SERIES

90~264VAC Input Voltage Range
63 Watts, Single Outputs
Class I for A & C Types; Class II for B Type
Medical AC/DC Desktop Power Supplies



IEC-320-C14



IEC-320-C8



IEC-320-C6



Agree to apply for the PSE if order on hand

FEATURES

- Class I for A & C Types; Class II for B Type
- 100% Burn-in Tested
- RoHS Compliant
- Energy Star 2.0, Efficiency Level V Compliant
- Single Output
- Output Voltages Available from 12VDC to 48VDC
- Wide Input Voltage Range: 90~264VAC, 47~63Hz
- Optional Output Connectors
- Output Voltage Protection (Crowbar Design)
- Input Surge Current, Over Voltage, and Over Load Protection
- Dimensions: 5.17" x 2.18" x 1.46"
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 Input Inlets Available
- Meets FCC Part-18 Class B and CISPR-11 EN55011 Class B Emission Limits
- UL/cUL 60601-1: 2nd Edition and TUV/T-mark EN60601-1: 2nd Edition Medical Approvals

DESCRIPTION

The DTMPU60 series of medical AC/DC desktop power supplies provides 63 Watts of continuous output power in a 5.17" x 2.18" x 1.46" package. This series consists of single output models with a 90~264VAC input voltage range. These supplies also have input surge current, over voltage, and over load protection. All units are UL94V-1, RoHS, and Energy Star 2.0 Level V compliant. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission limits and have UL/cUL (UL 60601-1: 2nd Edition) and TUV/T-mark (EN 60601-1: 2nd Edition) medical approvals. These units also meet new CE requirements and are well suited for use in hospital equipment as well as many other applications. The DTMPU60 series has three types of input inlets available: IEC-320-C14 (A Type), IEC-320-C8 (B Type), and IEC-320-C6 (C Type). Optional output connectors are also available for this series. Please call factory for ordering details.

| SPECIFICATIONS: DTMPU60 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 | Nom | Max | Unit |
| INPUT SPECIFICATIONS | | | | | | | |
| Operating Voltage Range | | Operating Input Voltage Range | | 90 | | 264 | VAC |
| | | Safety Approvals Input Voltage Range | | 100 | | 240 | |
| Input Frequency | | | | 47 | | 63 | Hz |
| Input Current | Low Line | Io = Full Load, Vin = 115VAC | | | | 1.62 | A |
| | High Line | Io = Full Load, Vin = 230VAC | | | | 0.72 | A |
| Inrush Current | Low Line | Io = Full Load, 25°C, Cool Start, Vin = 115VAC | | | 26 | 30 | A |
| | High Line | Io = Full Load, 25°C, Cool Start, Vin = 230VAC | | | 43 | 47 | A |
| No Load Power Consumption | | No Load, Vin = 240VAC | | 0.3 | 0.4 | 0.5 | W |
| OUTPUT SPECIFICATIONS | | | | | | | |
| Output Voltage | | | | See Table | | | |
| Load Regulation | | Vin = 230VAC | | | | 5 | % |
| Line Regulation | | Io = Full Load | | | | 1 | % |
| Output Power | | Vin = 90 to 264VAC | | 0 | | 63 | W |
| Output Current Range | | | | See Table | | | |
| Ripple & Noise (peak to peak) | | Full Load, Vin = 100VAC | | | | 1 | % |
| Transient Response Time | | Io = Full Load to Half Load, Vin = 100VAC | | | | 4 | ms |
| Hold-Up Time | | Io = Full Load, Vin = 110VAC | | 16 | | | ms |
| Start-Up Time | | Io = Full Load, Vin = 100VAC | | 0.3 | 1 | 2 | s |
| Temperature Coefficient | | | | -0.04 | | +0.04 | %/°C |
| PROTECTION | | | | | | | |
| Input Surge Current Protection | | | | yes | | | |
| Over Voltage Protection | | | | 112 | | 132 | % |
| Over Current Protection | | | | 110 | | 150 | % |
| GENERAL SPECIFICATIONS | | | | | | | |
| Efficiency | | Io = Full Load, Vin = 230VAC | | 87 | | 92 | % |
| Dielectric Withstanding Voltage | | Primary to Secondary | | A, B, and C types | | 5656 | VDC |
| | | Primary to Ground | | A and C types | | 2828 | |
| Isolation Resistance | | Test Voltage = 500VDC | | 50 | | | MΩ |
| Safety Ground Leakage Current | | Io = Full Load, Vin = 240VAC | | | | 0.1 | mA |
| ENVIRONMENTAL SPECIFICATIONS | | | | | | | |
| Operating Temperature | | Derate linearly from 100% Load at 50°C to 50% load at 70°C | | 0 | 50 | 70 | °C |
| Storage Temperature | | | | -40 | | 85 | °C |
| Operating Humidity | | | | 0 | | 95 | % |
| Storage Humidity | | | | 0 | | 75 | % |
| MTBF | | Operating Temperature at 25°C, calculated per MIL-HDBK-217F | | 100,000 hours | | | |
| PHYSICAL SPECIFICATIONS | | | | | | | |
| Weight | | A, B, and C types | | Approx. 11.64~13.40oz (330~380g) | | | |
| Dimensions (L x W x H) | | A, B, and C types | | 5.17 x 2.18 x 1.46 inches (131.3 x 55.4 x 37.0 mm) | | | |
| AC Inlets | | A Type | | IEC-320-C14 | | | |
| | | B Type | | IEC-320-C8 | | | |
| | | C Type | | IEC-320-C6 | | | |
| SAFETY | | | | | | | |
| Safety Approvals | | UL/cUL (UL60601-1: 2 nd Edition), TUV/T-mark (EN 60601-1: 2 nd Edition), CE | | | | | |
| EMI Requirements for CISPR-11 | | Vin = 220VAC | | B | | | Class |
| EMI Requirements for FCC PART-18 | | Vin = 110VAC | | B | | | Class |

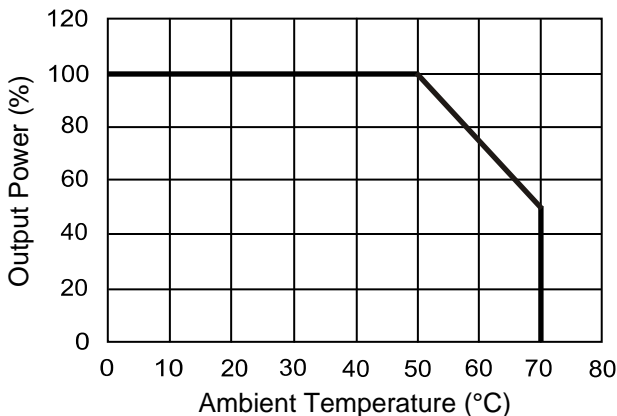
MODEL SELECTION TABLE

| Model Number | Input Voltage Range | Output Voltage | Output Current | Total Regulation ⁽²⁾ | Output Power | Class | AC Inlet |
|---------------|---------------------|----------------|----------------|---------------------------------|--------------|----------|-------------|
| *DTMPU60A-105 | 90 ~ 264 VAC | 12 VDC | 5.25 A | 5% | 63W | Class I | IEC-320-C14 |
| *DTMPU60A-106 | 90 ~ 264 VAC | 15 VDC | 4.20 A | 5% | 63W | | |
| *DTMPU60A-107 | 90 ~ 264 VAC | 18 VDC | 3.50 A | 5% | 63W | | |
| *DTMPU60A-108 | 90 ~ 264 VAC | 24 VDC | 2.62 A | 3% | 63W | | |
| *DTMPU60A-109 | 90 ~ 264 VAC | 30 VDC | 2.10 A | 3% | 63W | | |
| DTMPU60A-110 | 90 ~ 264 VAC | 36 VDC | 1.75 A | 3% | 63W | | |
| DTMPU60A-111 | 90 ~ 264 VAC | 48 VDC | 1.31 A | 3% | 63W | | |
| DTMPU60B-105 | 90 ~ 264 VAC | 12 VDC | 5.25 A | 5% | 63W | Class II | IEC-320-C8 |
| DTMPU60B-106 | 90 ~ 264 VAC | 15 VDC | 4.20 A | 5% | 63W | | |
| *DTMPU60B-107 | 90 ~ 264 VAC | 18 VDC | 3.50 A | 5% | 63W | | |
| *DTMPU60B-108 | 90 ~ 264 VAC | 24 VDC | 2.62 A | 3% | 63W | | |
| *DTMPU60B-109 | 90 ~ 264 VAC | 30 VDC | 2.10 A | 3% | 63W | | |
| DTMPU60B-110 | 90 ~ 264 VAC | 36 VDC | 1.75 A | 3% | 63W | | |
| *DTMPU60C-105 | 90 ~ 264 VAC | 12 VDC | 5.25 A | 5% | 63W | Class I | IEC-320-C6 |
| *DTMPU60C-106 | 90 ~ 264 VAC | 15 VDC | 4.20 A | 5% | 63W | | |
| *DTMPU60C-107 | 90 ~ 264 VAC | 18 VDC | 3.50 A | 5% | 63W | | |
| *DTMPU60C-108 | 90 ~ 264 VAC | 24 VDC | 2.62 A | 3% | 63W | | |
| *DTMPU60C-109 | 90 ~ 264 VAC | 30 VDC | 2.10 A | 3% | 63W | | |
| DTMPU60C-110 | 90 ~ 264 VAC | 36 VDC | 1.75 A | 3% | 63W | | |
| DTMPU60C-111 | 90 ~ 264 VAC | 48 VDC | 1.31 A | 3% | 63W | | |

NOTES

1. The “*” next to the model number means PSE Approval.
2. Models DTMPU60-105~107 needs to use AWG#16/2C/4FT output cable in order to meet the total regulation specified.
Models DTMPU60-108~110 needs to use AWG#18/2C/6FT output cable in order to meet the total regulation specified.
The regulation and efficiency will change if a different output cable is used.
3. Optional output connectors are available. Please call factory for ordering details.

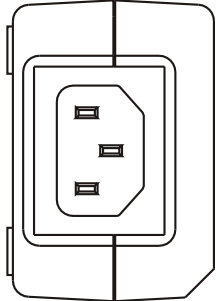
DERATING CURVE



MECHANICAL DRAWING

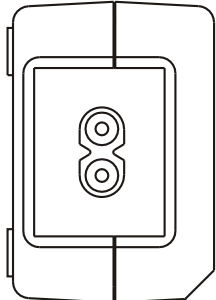
Unit: inches (mm)

AC INLET
 IEC-320-C14



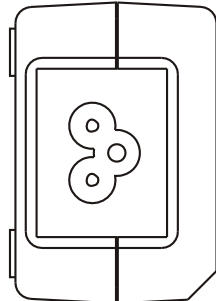
"A" TYPE

AC INLET
 IEC-320-C8

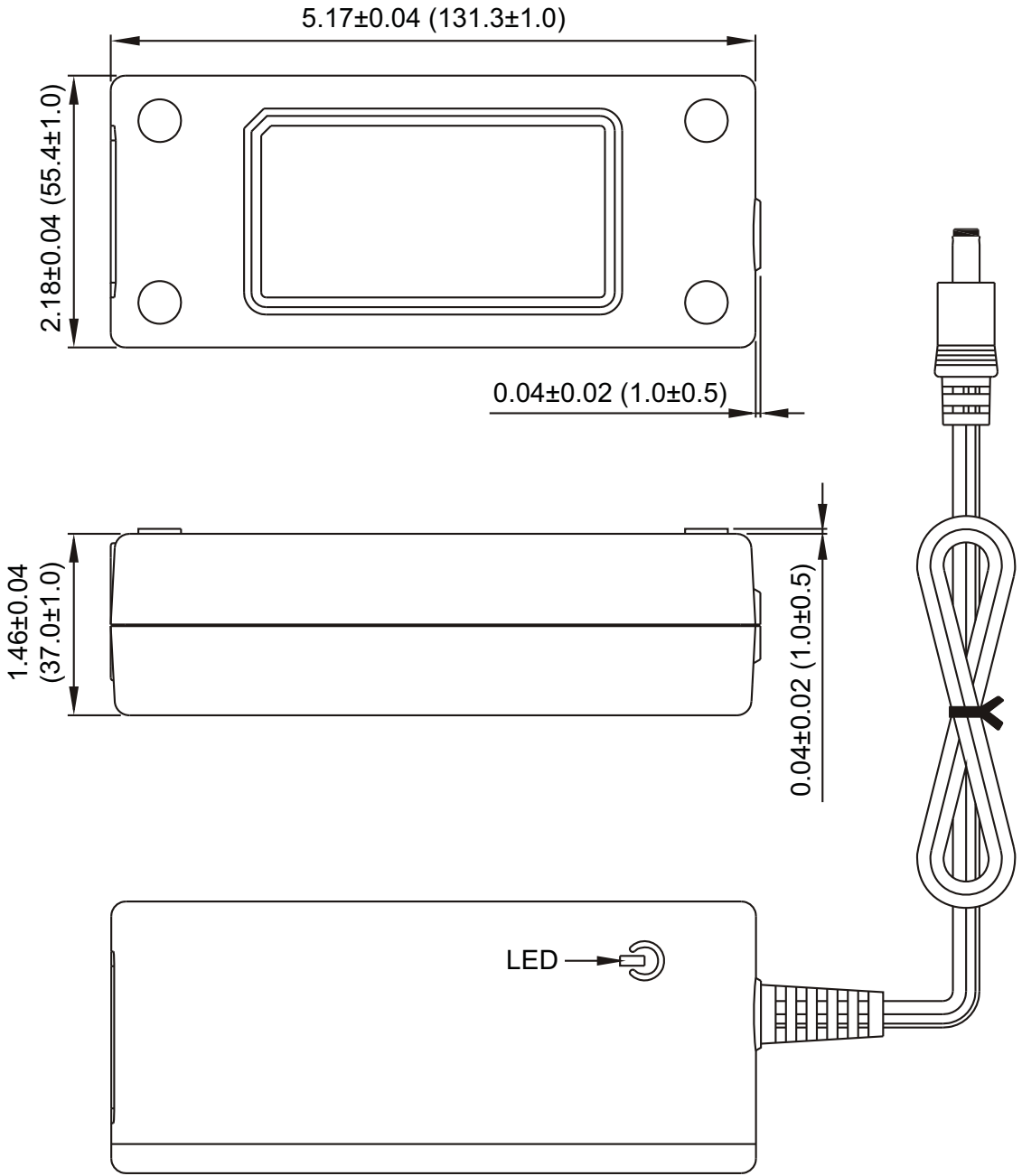


"B" TYPE

AC INLET
 IEC-320-C6



"C" TYPE



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:

| | |
|-------------------|--|
| <u>Phone:</u> | ☎ (603)778-2300 |
| <u>Toll Free:</u> | ☎ (888)597-9255 |
| <u>Fax:</u> | ☎ (603)778-9797 |
| <u>E-mail:</u> | sales@wallindustries.com |
| <u>Web:</u> | www.wallindustries.com |
| <u>Address:</u> | 5 Watson Brook Rd. Exeter, NH 03833 |