



Size: 3.94in x 2.20in x 1.30in (100mm x 56mm x 33mm)

FEATURES

- Universal Input Voltage
- Single Output
- Optional Output Connectors Available
- IEC-320-C14, IEC-320-C8, or IEC-320-C6 Optional Input Inlets
- Over Voltage, Over Current, and Short Circuit Protection
- Meets EISA 2007/DoE (VI) & EU ErP/CoC (5) Approvals
- UL60905-1; CSA C22.2 and EN60905-1 Safety Approvals

DESCRIPTION

The DTA2-50 series of AC/DC desktop power supplies offers up to 50 watts of output power in a 3.94" x 2.20" x 1.30" package. This series consists of single output models with a universal input voltage range of 100~240VAC. Each model in this series has optional input inlets as well as over voltage, over current, and short circuit and each model is DoE(VI) and CoC (5) complaint. This series has UL60905-1; CSA C22.2 and EN6095-1 safety approvals.

MODEL SELECTION TABLE

| Model Number ⁽¹⁾ | Input Voltage Range | Output Voltage | Output Current | Ripple Max. | No Load Power Consumption | Output Power | Efficiency ⁽²⁾ | |
|-----------------------------|---------------------|----------------|----------------|-------------|---------------------------|--------------|---------------------------|---------|
| | | | | | | | DoE (VI) | CoC (5) |
| DTA2-50S12X | 100~240VAC | 12VDC | 4.16A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S125X | | 12.5VDC | 4.00A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S13X | | 13VDC | 3.84A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S135X | | 13.5VDC | 3.70A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S14X | | 14VDC | 3.57A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S145X | | 14.5VDC | 3.44A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S15X | | 15VDC | 3.33A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S155X | | 15.5VDC | 3.22A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S16X | | 16VDC | 3.12A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S165X | | 16.5VDC | 3.03A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S17X | | 17VDC | 2.94A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S18X | | 18VDC | 2.77A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S185X | | 18.5VDC | 2.70A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S19X | | 19VDC | 2.63A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S195X | | 19.5VDC | 2.56A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S20X | | 20VDC | 2.50A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S205X | | 20.5VDC | 2.43A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S21X | | 21VDC | 2.38A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S215X | | 21.5VDC | 2.32A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S22X | | 22VDC | 2.27A | 250mV | <0.15W | 50W | >88% | >89% |
| DTA2-50S225X | 22.5VDC | 2.22A | 250mV | <0.15W | 50W | >88% | >89% | |
| DTA2-50S23X | 23VDC | 2.17A | 250mV | <0.15W | 50W | >88% | >89% | |
| DTA2-50S235X | 23.5VDC | 2.12A | 250mV | <0.15W | 50W | >88% | >89% | |
| DTA2-50S24X | 24VDC | 2.08A | 250mV | <0.15W | 50W | >88% | >89% | |

SPECIFICATIONS

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.

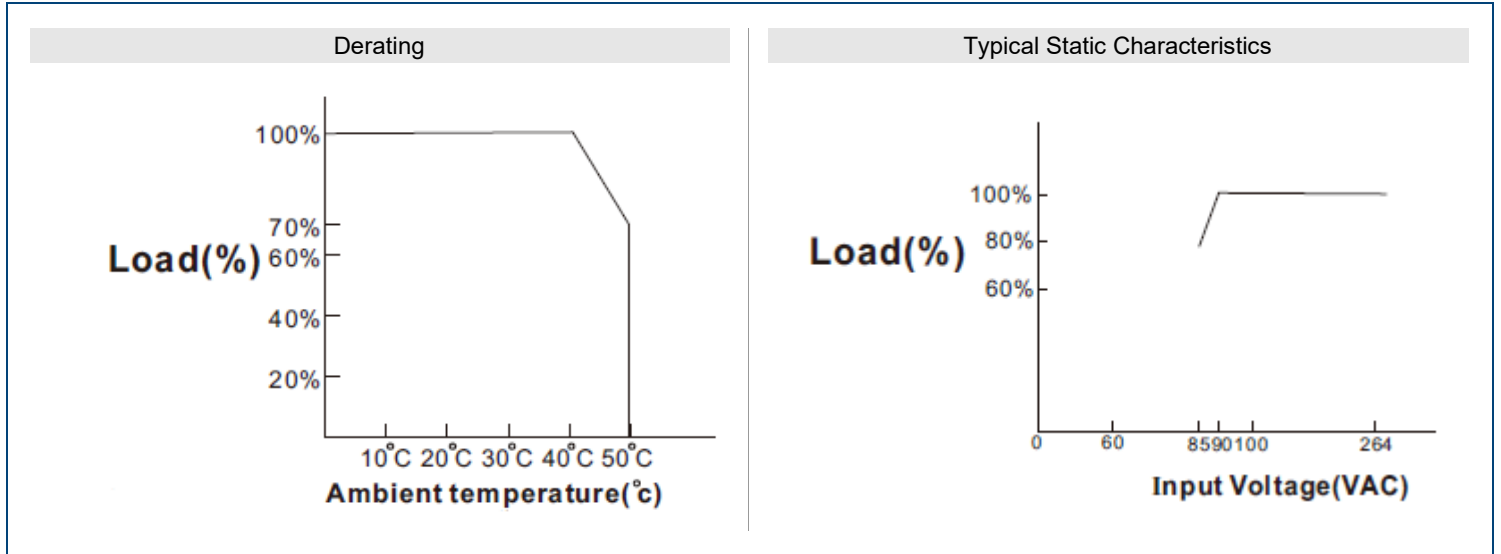
| SPECIFICATION | TEST CONDITIONS | Min | Typ | Max | Unit |
|-------------------------------------|--|--|------|-------|-------|
| INPUT SPECIFICATIONS | | | | | |
| Input Voltage Range | | 100 | | 240 | VAC |
| Input Frequency | | 50 | | 60 | Hz |
| Input Current | | | | 1.5 | A |
| Inrush Current | @230VAC at 25°C Cold Start | | 100 | | A |
| Leakage | Class I @240VAC/50Hz | | 3.5 | | mA |
| | Class II @240VAC/50Hz | | 0.25 | | |
| OUTPUT SPECIFICATIONS | | | | | |
| Output Voltage | | See Table | | | |
| Line Regulation | For any input voltage change between input voltage range | | | ±2 | % |
| Load Regulation | Variations from minimum to maximum output current | | ±5 | | % |
| Output Power | | See Table | | | |
| Output Current | | See Table | | | |
| Ripple | | See Table | | | |
| Transient Response | Maximum excursion of 4% or better on all models. Recovering to 1% of final value within 500usS after a 25% step load change | | | | |
| Set Up Time | @Full Load | | 3000 | | mS |
| Hold Up Time | @Full Load | | 10 | | mS |
| Rise Time | @Full Load | | 50 | | mS |
| Temperature Coefficient | All Outputs | | | ±0.04 | %/°C |
| PROTECTION | | | | | |
| Short Circuit Protection | | Hiccup Mode, Automatic Recovery | | | |
| Over Current Protection | Hiccup Mode, Automatic Recovery | | | | |
| | Rated Output Voltage | 110 | | | % |
| Over Voltage Protection | Protected by Zener Diode | | | | |
| | Rated Output Voltage | 110 | | 140 | % |
| ENVIRONMENTAL SPECIFICATIONS | | | | | |
| Operating Temperature | | 0 | | 40 | °C |
| Storage Temperature | | -40 | | 85 | °C |
| Relative Humidity | Non Condensing | 5 | | 95 | % |
| Derating | Derating from 100% at +40°C linearly to 70% at 50°C | | | | |
| MTBF | @Full Load, 25°C Ambient | 40,000 | | | Hours |
| GENERAL SPECIFICATIONS | | | | | |
| Efficiency | | See Table | | | |
| Withstand Voltage | Input to Output | | 4242 | | VDC |
| Insulation Resistance | Input to Output | 50 | | | MΩ |
| PHYSICAL SPECIFICATIONS | | | | | |
| Weight | | 8.82oz (250g) | | | |
| Dimensions (L x W x H) | | 3.94in x 2.20in x 1.30in (100mm x 56mm x 33mm) | | | |
| SAFETY CHARACTERISTICS | | | | | |
| Safety Approvals | | UL60950-1 ⁽⁶⁾ ; CSA C22.2 EN60950-1 | | | |
| EMC | | CE: Emission: EN55022 EN61000-3-2, 3/ Immunity : IEC61000-4-2, 3, 4, 5, 6, 11 | | | |

NOTES

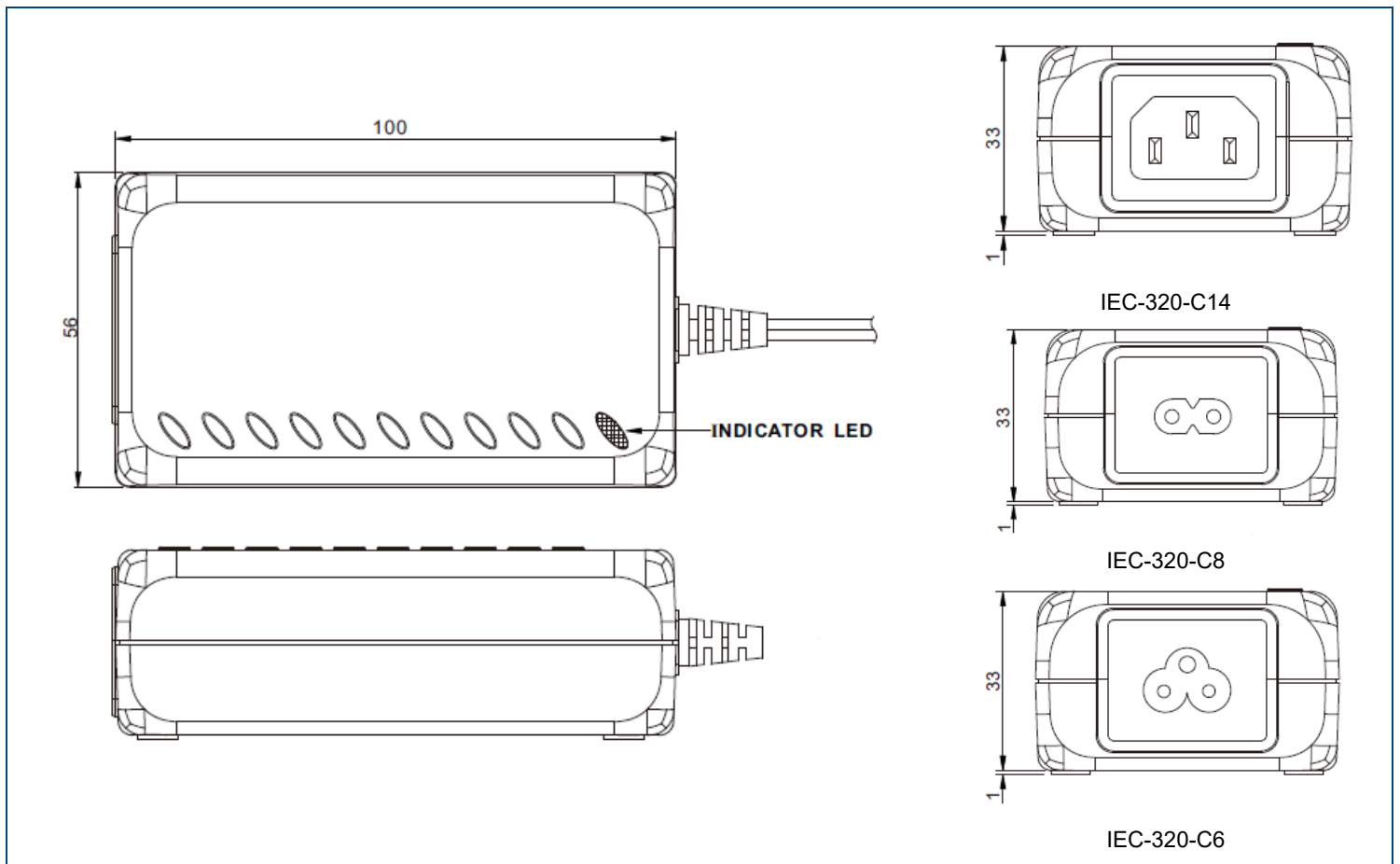
1. "X" in model number indicates AC inlet. "X" can either be "A" for IEC-320-C14, "B" for IEC-320-C8, or "C" for IEC-320-C6.
2. Avg. efficiency at 25, 50, 75, and 100% of max. rated output current.
3. Standard Output Cable: 12~21V: UL2468, 16AWG, 1M
21~24V: UL2468, 18AWG, 1M
4. Optional output connectors available.
5. This product is Listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES



MECHANICAL DRAWINGS



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: 2015 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.

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