# SIDA45E SERIES

# 50W Desktop Power Supply for Industrial Equipment



- Wide Input Voltage 90 to 264 VAC, 47 to 63Hz
- IEC-320-C14 Input Inlet
- Output Voltage Available From 2VDC Thru 50VDC
- Input Surge Current, Over Voltage and Overload Protection
- Operating temperature -20~70°C
- Single to Triple Output
- Class I Insulation

**2 Year Warranty**

Approvals:

## Single Output

| Part Number | Output Voltage | Max. Output Current | Total Regulation | Max Output Power |
|---|---|---|---|---|
| SIDA45E-S00 | 02 ~ 03 VDC | 8.00 A max | 7% | 24W |
| SIDA45E-S01 | 03 ~ 05 VDC | 8.00 A max | 5% | 40W |
| SIDA45E-S02 | 05 ~ 06 VDC | 8.00 ~ 6.66 A | 5% | 40W |
| SIDA45E-S03 | 06 ~ 08 VDC | 7.00 ~ 5.25 A | 5% | 42W |
| SIDA45E-S04 | 08 ~ 11 VDC | 5.63 ~ 4.00 A | 4% | 45W |
| SIDA45E-S05 | 11 ~ 13 VDC | 4.00 ~ 3.46 A | 3% | 45W |
| SIDA45E-S06 | 13 ~ 16 VDC | 3.46 ~ 2.81 A | 3% | 45W |
| SIDA45E-S07 | 16 ~ 21 VDC | 3.12 ~ 2.38 A | 3% | 50W |
| SIDA45E-S08 | 21 ~ 27 VDC | 2.30 ~ 1.85 A | 2% | 50W |
| SIDA45E-S09 | 27 ~ 33 VDC | 1.85 ~ 1.51 A | 2% | 50W |
| SIDA45E-S10 | 33 ~ 40 VDC | 1.51 ~ 1.25 A | 2% | 50W |
| SIDA45E-S11 | 40 ~ 50 VDC | 1.25 ~ 1.00 A | 2% | 50W |

## Multi Output

| Model Number | Output 1 | | | | Output 2 | | | | Output 3 | | | | Max Output Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vonom | Iomin | Iomax | Regmax | Vonom | Iomin | Iomax | Regmax | Vonom | Iomin | Iomax | Regmax | |
| STDA45E-D00 | +3.3V | 0.5A | 5A | 7% | +12V | 0.3A | 2A | 5% | | | | | 40W |
| STDA45E-D01 | +5V | 0.5A | 5A | 5% | +12V | 0.3A | 2A | 5% | | | | | 42W |
| STDA45E-D02 | +5V | 0.8A | 5A | 7% | +15V | 0.3A | 1.5A | 5% | | | | | 42W |
| STDA45E-D03 | +5V | 0.5A | 5A | 5% | +24V | 0.1A | 1A | 5% | | | | | 42W |
| STDA45E-D04 | +3.3V | 0.5A | 5A | 7% | +5V | 0.2A | 2A | 5% | | | | | 26.5W |
| STDA45E-D09 | +12V | 0.3A | 3A | 5% | | | | | -12V | 0.1A | 1A | 5% | 42W |
| STDA45E-D10 | +15V | 0.2A | 2A | 5% | | | | | -15V | 0.1A | 1A | 5% | 42W |
| STDA45E-D15 | +5V | 0.5A | 5A | 5% | | | | | -24V | 0.1A | 1A | 5% | 42W |
| STDA45E-D16 | +5.1V | 0A | 1A | 5% | | | | | +7.2V | 0.2A | 2.6A | 5% | 23.82W |
| STDA45E-T00 | +3.3V | 1.0A | 5A | 7% | +12V | 0.3A | 2A | 5% | -12V | 0.1A | 0.8A | 5% | 42W |
| STDA45E-T01 | +5V | 0.5A | 5A | 5% | +12V | 0.2A | 2A | 5% | -5V | 0A | 0.8A | 5% | 42W |
| STDA45E-T02 | +5V | 0.5A | 5A | 5% | +12V | 0.2A | 2A | 5% | -12V | 0A | 0.8A | 5% | 42W |
| STDA45E-T03 | +5V | 0.5A | 5A | 5% | +15V | 0.3A | 2A | 6% | -15V | 0A | 0.8A | 5% | 42W |
| STDA45E-T04 | +5V | 0.5A | 5A | 5% | +24V | 0.2A | 1A | 5% | -24V | 0A | 0.5A | 5% | 42W |
| STDA45E-T05 | +5V | 0.5A | 5A | 5% | +24V | 0.1A | 1A | 5% | -12V | 0A | 0.8A | 5% | 42W |
| STDA45E-T06 | +3.3V | 0.5A | 5A | 7% | +12V | 0.4A | 2A | 5% | -5V | 0A | 0.8A | 5% | 42W |

STDA45E-S00,S01,D15,D16,T00,T05,T06 is not approved by TUV-PSE

## Conditions

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Operating Temperature | | -20 | 40 | 70 | °C |
| Storage Temperature | | -40 | | 85 | °C |
| Relative Humidity | | 5 | | 95 | % |
| Operating Temperature at 25°C, calculated per MIL-HDBK-217F | | 0.1M | | | Hrs |
| De-rate linearly from 100% load at 40°C to 50% load at 70°C | | | | | |

## Electrical Characteristics

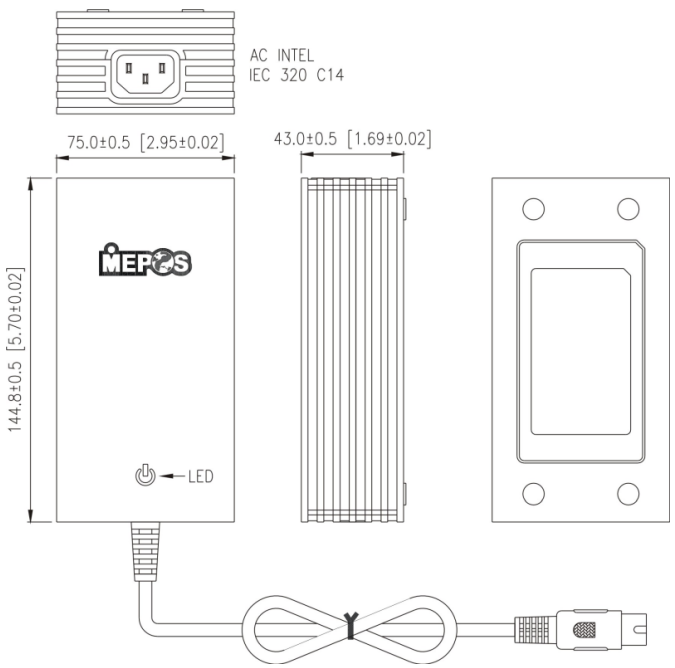
| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Input Voltage | Operating Voltage | 90 | | 264 | VAC |
| Input Frequency | | 47 | | 63 | Hz |
| Output Power Range | Vin=90 to 264VAC | 0 | | 50 | W |
| Input Current (Low Line) | Io=Full load, Vin=115VAC | | | 1.35 | A |
| Input Current (High Line) | Io=Full load, Vin=230VAC | | | 0.7 | A |
| Low Line Inrush Current | Io=Full load, 25℃, Cool start, Vin=115VAC | | 12 | 15 | A |
| High Line Inrush Current | Io=Full load, 25℃, Cool start, Vin=230VAC | | 26 | 30 | A |
| Efficiency | Io=Full Load, Vin=230VAC | 70 | 75 | 80 | % |
| Line Regulation | Io=Full Load | | 0.5 | 1 | % |
| Load Regulation | Vin=230VAC | | 3 | 15 | % |
| Over Voltage Protection | | 112 | | 132 | % |
| Over Current Protection | | 110 | | 150 | % |
| Transient Response | Io=Full Load to Half Load, Vin=100VAC | | | 4 | mS |
| Hold-Up Time | Io=Full Load, Vin=110VAC | 10 | | | mS |
| Start Up Time | Io=Full Load, Vin=100VAC | 0.3 | 1 | 2 | S |
| * Ripple & Noise (Peak to Peak) | Full Load, Vin=90VAC | | 0.5 | 1 | % |
| Safety Ground Leakage Current | Io=Full Load, Vin=240VAC | | 0.5 | 0.75 | mA |
| Temperature Coefficient | All output | -0.04 | | 0.04 | %/°C |

*The Ripple & Noise which is under 3.3VDC at 2% max

## Approvals and Compliance

| Parameter | Test Conditions | Min. | Unit |
|---|---|---|---|
| Dielectric Withstanding Voltage for Primary to Secondary | Primary to Secondary | 4242 | VDC |
| Dielectric Withstanding Voltage for Primary to Ground | Primary to Ground (Not applicable for class II) | 2121 | VDC |
| Isolation Resistance | Test Voltage = 500VDC | 50 | MΩ |
| EMI requirements for CISPR-22 | Vin=220VAC | B | CLASS |
| EMI requirements for FCC PART-15 | Vin=110VAC | B | CLASS |

## Mechanical




**Note:**

1. Dimensions are shown in inches or mm.
2. Weight: 535-560gs approx.
3. Optional output connector.