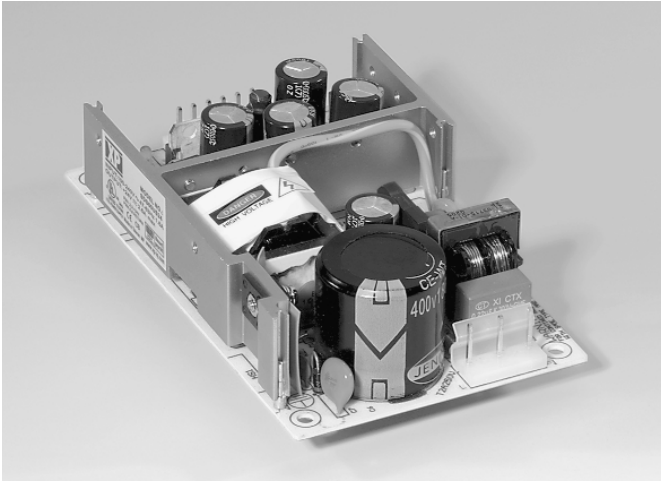


AC-DC Open Frame

60 Watts SDS Series



THE XPERTS IN POWER

Factory Settable Non-Standard Outputs

- Universal AC Input
- Low 1.2" Profile
- Fits 1U Applications
- 1-4 Outputs
- Extensive Range
- High Efficiency

Specification

Input

- *Input Voltage* • 90-264 VAC
- *Input Frequency* • 47-63 Hz
- *Input Current* • 1.6 A max at 115 VAC, 1.0 A max at 230 VAC
- *Inrush Current* • <15 A at 115 VAC, <30A at 230 VAC
- *Earth Leakage Current* • <0.45 mA at 240 VAC

Output

- *Output Voltage* • See Table
- *Output Voltage Adjustment* • $\pm 10\%$ V1 only
- *Output Power* • See Table
- *Minimum Load* • 10% required on V1 & V2 of multi output models, unit will start up with no load
- *Start Up Rise Time* • 1 s typical
- *Hold Up Time* • 20 ms typical
- *Initial Set Accuracy* • $\pm 1\%$ single output, $\pm 5\%$ on auxiliary outputs
- *Line Regulation* • $\pm 1\%$ from low line to high line
- *Load Regulation* • $\pm 3\%$ typical, $\pm 5\%$ max on multi output models, ($\pm 10\%$ with no load on V1)
- *Ripple & Noise* • $\pm 1\%$ max at low line, full load
- *Transient Response* • 4% max deviation, 500 μ s recovery time for a 25% load change
- *Overvoltage Protection* • 112% to 132%
- *Overcurrent Protection* • 110% to 150%
- *Temperature Coefficient* • $\pm 0.04\%/^{\circ}\text{C}$

General

- *Efficiency* • 80% typical
- *Isolation Voltage* • 3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VAC Output to Ground
- *Switching Frequency* • 60 kHz typical
- *Power Density* • 3.5 W/in³
- *MTBF* • 100,000 hrs min to MIL-HDBK-217F
- *LED Indicator* • Green DC OK LED
- *Size* • 3.0" x 5.0" x 1.2"
- *Weight* • 250 g

Environmental

- *Operating Temperature* • 0 $^{\circ}$ C to +70 $^{\circ}$ C, derate from 100% load at +50 $^{\circ}$ C to 50% at +70 $^{\circ}$ C
- *Storage Temperature* • -40 $^{\circ}$ C to +85 $^{\circ}$ C
- *Cooling* • Convection cooled
- *Humidity* • 5% to 95% RH, non-condensing

EMC & Safety

- *EMI/EMC* • EN55022 (CISPR 22) Class B & FCC Part 15 Level B conducted
- *ESD Susceptibility* • IEC61000-4-2 Level 2 Perf Criteria A
- *Radiated Susceptibility* • IEC61000-4-3 3 V/m Perf Criteria A
- *EFT/Burst* • IEC61000-4-4 3 Level 2 Perf Criteria A
- *Surge* • IEC61000-4-5 3 Level 3 Perf Criteria A
- *Conducted Susceptibility* • IEC61000-4-6 3 V Perf Criteria A
- *Magnetic Field* • IEC61000-4-8 1 A/m Perf Criteria A
- *Safety Approvals* • UL1950, CSA C22.2 No 234, EN60950, CE Mark LVD

OUTPUT VOLTAGE & CURRENT RATINGS - SINGLE OUTPUT MODELS

SDS60

Maximum Output Power	Output Voltage	Output Current	Factory Settable Voltage Range ⁽¹⁾	Current Range	Total Regulation	Model Number
50 W	3.3 V	15.1 A	3.0-5.0 VDC	16.6-10.0 A	5.0%	SDS60US03*
55 W	5.0 V	11.0 A	5.0-6.0 VDC	11.0-10.0 A	5.0%	SDS60US05*
60 W	7.0 V	8.6 A	6.0-9.0 VDC	10.0-6.7 A	4.0%	SDS60US07
63 W	9.0 V	7.0 A	9.0-11.0 VDC	6.7-5.4 A	3.0%	SDS60US09*
63 W	12.0 V	5.0 A	11.0-13.0 VDC	5.4-4.6 A	3.0%	SDS60US12*
63 W	15.0 V	4.2 A	13.0-16.0 VDC	4.6-3.9 A	3.0%	SDS60US15*
63 W	19.0 V	3.3 A	16.0-21.0 VDC	3.9-2.8 A	3.0%	SDS60US19
63 W	24.0 V	2.6 A	21.0-27.0 VDC	2.8-2.2 A	2.0%	SDS60US24*
63 W	30.0 V	2.1 A	27.0-33.0 VDC	2.2-1.8 A	2.0%	SDS60US30
63 W	36.0 V	1.8 A	33.0-40.0 VDC	1.8-1.5 A	2.0%	SDS60US36
63 W	48.0 V	1.3 A	40.0-50.0 VDC	1.5-1.2 A	2.0%	SDS60US48*

Notes

1. If an output voltage within the factory settable voltage range is required, a model number will be allocated at the time of order.

* Also available from Farnell InOne, see pages 350 & 351.

OUTPUT VOLTAGE & CURRENT RATINGS - MULTI OUTPUT MODELS

SDS60

Maximum Output Power	Output 1 ^(1,3)	Output 2 ^(2,3)	Output 3	Output 4	Model Number
63.0 W	5.00 VDC/7.0 A	12.0 VDC/3.0 A			SDS60UD01
48.0 W	3.30 VDC/7.0 A	5.0 VDC/5.0 A			SDS60UD04
63.0 W	3.30 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A		SDS60UT00*
63.0 W	3.30 VDC/6.0 A	12.0 VDC/3.0 A	-5.0 VDC/0.8 A		SDS60UT01
63.0 W	3.30 VDC/6.0 A	12.0 VDC/3.0 A	+5.0 VDC/0.8 A		SDS60UT02
53.5 W	3.30 VDC/5.0 A	5.0 VDC/5.0 A	+12.0 VDC/1.0 A		SDS60UT03*
53.5 W	3.30 VDC/5.0 A	5.0 VDC/5.0 A	-12.0 VDC/1.0 A		SDS60UT04
63.0 W	5.00 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A		SDS60UT05*
63.0 W	5.00 VDC/6.0 A	12.0 VDC/3.0 A	-5.0 VDC/0.8 A		SDS60UT06*
63.0 W	5.00 VDC/6.0 A	15.0 VDC/3.0 A	-15.0 VDC/0.8 A		SDS60UT07*
63.0 W	5.00 VDC/6.0 A	24.0 VDC/2.0 A	-24.0 VDC/0.5 A		SDS60UT08
63.0 W	5.00 VDC/6.0 A	24.0 VDC/2.0 A	-12.0 VDC/0.8 A		SDS60UT09
63.0 W	5.00 VDC/6.0 A	24.0 VDC/2.0 A	+12.0 VDC/0.8 A		SDS60UT10*
63.0 W	3.30 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A	-5.0 VDC/0.8 A	SDS60UQ00
63.0 W	3.30 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A	+5.0 VDC/0.8 A	SDS60UQ01*
63.0 W	5.00 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A	-5.0 VDC/0.8 A	SDS60UQ02*
63.0 W	5.00 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A	+24.0 VDC/0.8 A	SDS60UQ03*
63.0 W	5.00 VDC/6.0 A	12.0 VDC/3.0 A	-12.0 VDC/0.8 A	-24.0 VDC/0.8 A	SDS60UQ04
63.0 W	5.00 VDC/6.0 A	15.0 VDC/3.0 A	-15.0 VDC/0.8 A	-5.0 VDC/0.8 A	SDS60UQ05*
59.3 W	5.00 VDC/6.0 A	24.0 VDC/1.8 A	-15.0 VDC/0.1 A	+12.0 VDC/0.8 A	SDS60UQ06

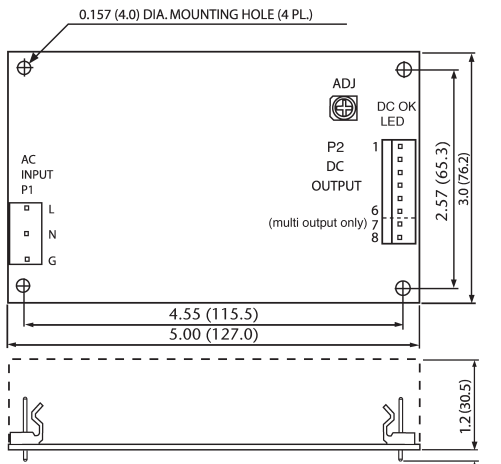
Notes

1. 10% minimum load required on V1 & V2 of multi output units to maintain regulation of ±5%. Regulation increases to ±10% with no load.
 2. Other output combinations are available - contact Sales for more information.
 3. On multi output units V2 tracks V1, if V1 is adjusted by 5%, V2 changes by 5%.

4. For optional U bracket, add suffix '-B' to model number. For optional cover, add suffix '-C' to model number.

* Also available from Farnell InOne, see pages 350 & 351.

Mechanical Details



For optional cover order model number SDS60 COVER KIT* 01(2.5)
 For cover fitted add suffix '-C' to model numbers. (Overall size with cover 140 x 91 x 39.7 mm).

PIN CONNECTIONS				
Pin No.	Single Output	Dual Output	Triple Output	Quad Output
1	Output 1	Output 2	Output 2	Output 2
2	Output 1	Output 1	Output 1	Output 1
3	Output 1	Output 1	Output 1	Output 1
4	Return	Common	Common	Common
5	Return	Common	Common	Common
6	Return	N/C	Output 3	Output 3
7	N/A	N/A	N/A	Output 4
8	N/A	N/A	N/A	Output 4

Notes:

1. Dimensions are shown in inches (mm).
2. Weight approx 250 g.
3. I/P connector mates with Molex housing 09-50 3051 & 2878 series crimp terminal.
4. O/P connector mates with Molex housing 09-50-3061 or 09-50-3081 & Molex 2878 series crimp terminal.

Mating Connectors & Loom Kits

Order model numbers:

- SDS60 CON* - Single, dual & triple output models
- SDS60Q CON* - Quad output models
- SDS60 LOOM* - Single output models
- SDS60DT LOOM* - Dual & triple output models
- SDS60Q LOOM* - Quad output models

