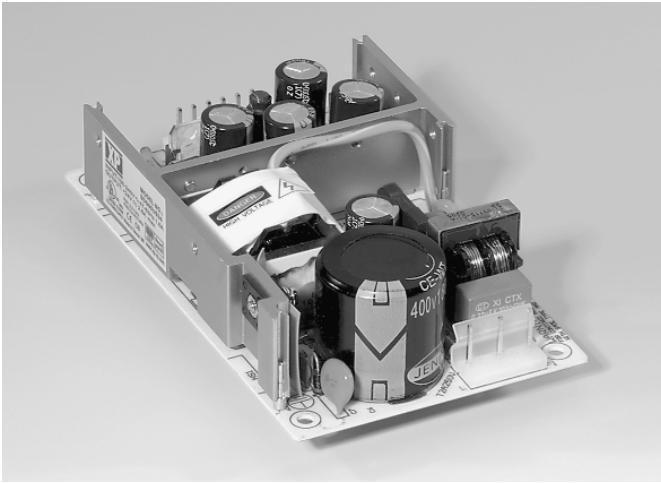


Single & Multi Output Switchers

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

AC Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Inrush Current	• <15 A at 115 VAC, <30A at 230 VAC
Input Current	• 1.6 A max at 115 VAC, 1.0 A max at 230 VAC

Output

Output Voltage	• See Table
Output Power	• 63 Watts, See Table
Minimum Load	• 10% required on V1 & V2 of multi output models, unit will start up with no load
Line Regulation	• $\pm 1\%$ from low line to high line
Load Regulation	• $\pm 3\%$ typical, $\pm 5\%$ max on multiple output models, ($\pm 10\%$ with no load)
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
Temperature Coefficient	• $\pm 0.04\%/^{\circ}\text{C}$
Hold Up Time	• 20 ms typical
Start Up Time	• 1 s typical
Overvoltage Protection	• 112% to 132%
Overcurrent Protection	• 110% to 150%

General

Efficiency	• >75% typical
Switching Frequency	• 60 kHz
Power Density	• 3.5 W/in ³
MTBF	• 100,000 hrs min to MIL-HDBK-217F
Leakage Current	• 0.45 mA max at 240 V AC
Isolation Voltage	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
LED Indicator	• Green DC OK LED
Size	• 3.0" x 5.0" x 1.2"
Weight	• 250 g

Environmental

Operating Temperature	• 0° C to +70 °C Derate from 100% load at +50 °C to 50% at +70 °C
Cooling	• Convection cooled
Humidity	• 5% to 95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C

EMC & Safety

Safety Approvals	• UL1950, CSA C22.2 No 234 EN60950, CE Mark LVD
EMI/EMC	• EN55022 (CISPR 22) Class B and FCC Part 15 Level B conducted

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

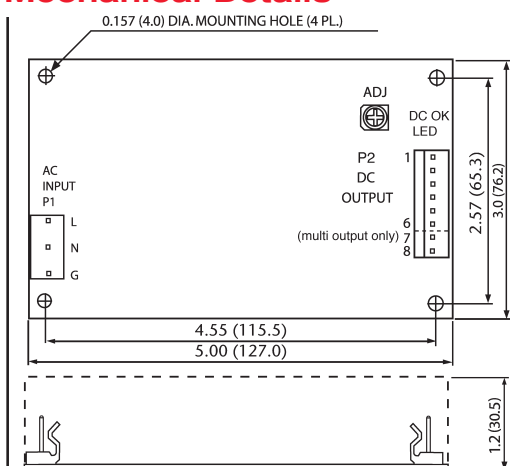
1. If an output voltage within the factory settable voltage range is required, a model number will be allocated at the time of order.

OUTPUT VOLTAGE & CURRENT RATINGS - MULTI OUTPUT MODELS						SDS60
Maximum Output Power	Output 1 ^(1,4)	Output 2 ^(2,4)	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/1.0 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 Technical Sales for more information.
3. For optional U bracket, add suffix '-B' to model number. For optional cover, add suffix '-C' to model number.
4. On multi output units V2 tracks V1, if V1 is adjusted by 5%, V2 changes by 5%.

Mechanical Details



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

Pin No.	PIN CONNECTIONS			
	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