Single Output General Purpose Power Supplies

Features

- Low Cost
- Active Power Factor Correction
- Universal Input (85 - 265VAC)
- Input Transient Protected IEC61000-4
- SEMI F47 Certified (208VAC Input)
- Global safety Approvals
- Level B EMI



Key Market Segments & Applications

Industrial Test COMM LED

RoHS

Specifications

Model		SWS300	SWS600
Input Voltage range (1)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC*	
Inrush Current (115 / 230VAC)	A	20 / 40 at 25°C, cold start	
Power Factor	-	Meets EN61000-3-2	
Input Current (100/200VAC)	A	3.6 / 1.8A	7.2 / 3.6A
Temperature Coefficient	-	<0.02%/°C	
Overcurrent Protection	-	>105%, Constant current style	
Overvoltage Protection	V	3.3V: 4.1-5.3V, 5V: 6.25-7.5V, 12V: 13.8-16.8V 15V: 19.3-24.2V, 24V: 30-34.8V, 36V: 41.4-50.4V, 48V: 60-69.6V	
Overtemperature Protection	-	Yes, cycle AC to reset	
Hold Up Time (Typ)	ms	20ms at 115/230VAC	
Leakage Current (max)	mA	SWS300: 0.75mA , SWS600: 1.5mA	
Remote Sense	-	None	Yes
Parallel Connection	-	None	Yes
Remote On/Off	-	None	Yes, >4.5V to shutdown
Power Fail Signal	-	None	Yes, open collector output
LED Indicator	-	Green LED = On	
Operating Temperature	°C	-10 to +65°C (See table for derating - model specific)	
Storage Temperature	°C	-30 to +85°C	
Humidity (non-condensing)	-	30 - 90% RH operating, 10 - 95%RH non operating	
Cooling	-	Internal fan	
Withstand Voltage	-	I/P to Grnd 2kVAC, I/P to O/P 3kVAC, O/P to Grnd 500VAC, O/P to CNT 100VAC for 1 min	
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz (sweep for 1 min)19.6m/s^2 constant X, Y, Z 1 hour each plane)	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11	
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, EN50178, CE Mark, SEMI F47 (208VAC)	
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC Class B	
Recommended EMI Filter	-	MC1206	MC1210
Weight (Typ)	g	950	2000
Size (WxHxD)	in	2.05 x 4.01 x 7.8”	3.62 x 4.72 x 7.48”
Warranty	yrs	Two Years	

Notes:(1) Derate linearly to 80% load from 115VAC to 85VAC input (derate to 90% load for SWS600-5, no derating SWS300, 600-3)

*Safety certified for AC input only

Not Recomended For New Designs

Model Selector

Model	Voltage	Adjust Range	Max Curr. (A)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Eff.(3) (typ)%
SWS300-3	3.3V	2.97-3.96V	55	40	20	120	67/70
SWS300-5	5V	4.5-6V	55	40	20	120	75/78
SWS300-12	12V	9.6-13.2V	26	96	48	120	77/80
SWS300-15	15V	13.2-18.6V	21	120	48	120	79/83
SWS300-24	24V	20-28.8V	13	120	48	150	80/84
SWS300-36	36V	28.8-40V	8.7	180	72	200	82/85
SWS300-48	48V	40-57.6V	6.7	240	96	240	82/85
SWS600-3	3.3V	2.97-3.96V	100 (2)	40	20	100	69/71
SWS600-5	5V	4.5-6V	100 (2)	40	20	100	74/77
SWS600-12	12V	9.6-13.2V	50	96	48	120	78/81
SWS600-15	15V	13.2-18.6V	40	120	48	120	80/83
SWS600-24	24V	20-28.8V	25	120	48	150	81/84
SWS600-36	36V	28.8-40V	16.7	180	72	200	81/85
SWS600-48	48V	40-57.6V	12.5	240	96	240	82/85

Derating

Model	50°C	55°C	60°C	65°C
SWS300	100%	91.6%	83.3%	50%
SWS600	100%	85%	70%	55%

Additional derating required when operating SWS600 with side ventilation holes blocked - see installation manual.

Options

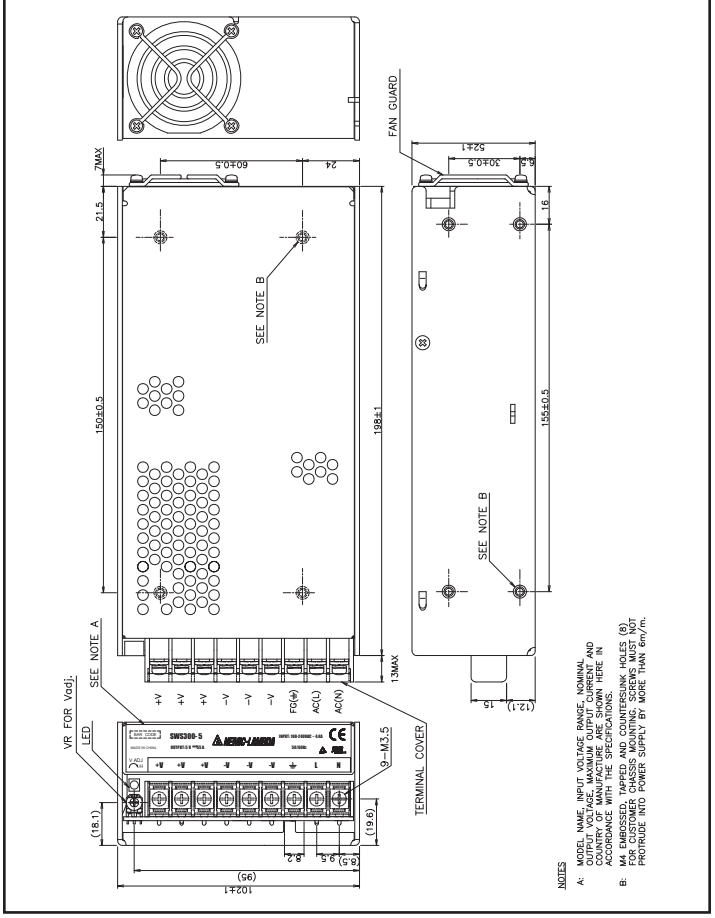
Suffix	Descriptor
/CO2	Double sided conformal coating

Other Industrial Products

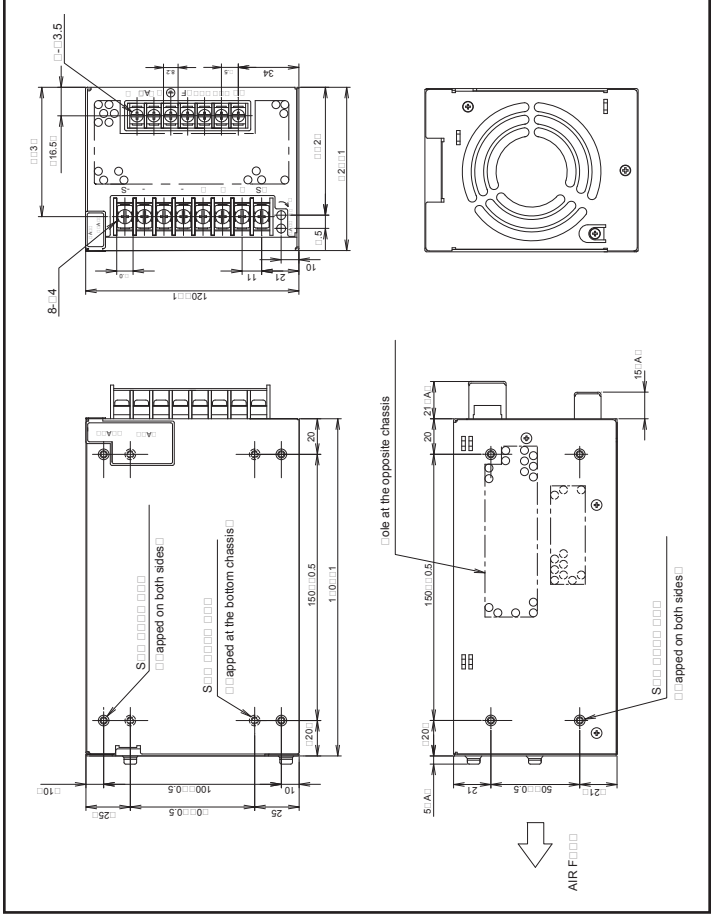
HWS	15-1500W Single Output, High Reliability
SWS	50-150W Single Output
ZWS	5-240W PCB style Single Output

Notes:
(2) Peak rating of 120A for 10s (3) 115/230VAC

SWS300 Outline Drawing



Outline Drawing



For Additional Information, please visit
us.tdk-lambda.com/lp/products/sws-series.htm

Not Recomended For New Designs

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TDK-Lambda:

SWS60012/CO2 SWS60015 SWS60015/CO2 SWS60024/CO2 SWS6003/CO2 SWS6005 SWS60048/CO2 SWS6003 SWS60036 SWS6005/CO2 SWS60036/CO2