



SWS300A&600 Series

Single Output

General Purpose Power Supplies

- Low Cost
- Active Power Factor Correction
- Input Transient Protected IEC61000-4
- Enclosed

Key Market Segments & Applications

Factory Automation	Process Control, NC-Machining, Automotive, Packaging Equipment, Materials Handling, Chemical Processing, Robots
Test & Measurement	Burn-in & Test, Automated, Detection Test, Instrumentation, Measurement
Automated Service	Vending Machines, Elevators, Video Gaming, Point of Sale Equipment

SWS300A&600 Features and Benefits

Features

- Meets IEC61000-4
- Global Safety Approvals
- Power Factor Corrected
- Level B EMI

Benefits

- Greater Reliability
- Supports Global Use
- Assists System Compliance

Specifications

MODEL		SWS300A	SWS600
ITEMS			
Input Voltage range (1)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC	
Inrush Current (115 / 230VAC)	A	20 / 40	
Power Factor	-	Meets EN61000-3-2	
Input Current (100/200VAC)	A	3.6 / 1.8 (3.3V: 2.5/1.3, 4V:2.8/1.4, 5V: 3.2/1.6)	7.2 / 3.6 (3.3V: 4.3/2.2, 5V: 6.6/3.3)
Temperature Coefficient	-	<0.02%/°C	
Overcurrent Protection	-	>105%, Constant current style	
Overvoltage Protection	V	3.3V: 4.1-5.3V, 4V: 5.0-6.0V, 5V: 6.25-7.5V, 7.5V: 9.4-11.2V, 12V: 13.8-16.8V 15V: 19.3-24.2V, 24V: 30-34.8V, 28V: 35-40.6V, 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	0.75	1.5
Remote Sense	-	None	Yes
Parallel Connection	-	None	Yes
Remote On/Off	-	None	Yes
DC Good Signal	-	None	Yes, open collector output
LED Indicator	-	Green LED = On	
Operating Temperature	°C	-10°C to +65°C (See table for derating - model specific)	
Storage Temperature	°C	-30°C to +85°C	
Operating Humidity	%RH	30 - 90 (non condensing)	
Storage Humidity	%RH	10 - 95 (non condensing)	
Cooling	-	Internal fan	
Withstand Voltage	-	I/P to Gnd 2kVAC, I/P to O/P 3kVAC, O/P to Gnd 500VAC, (O/P to CNT 100VAC for 1 min SWS600)	
Isolation Resistance	-	>100MΩ 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	
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC Class B	
Weight (Typ)	g	950	2000
Size (WxHxD)	mm	52 x 102 x 198	92 x 120 x 190
Warranty	yrs	2	

Notes: (1) Derate linearly to 85% load from 115VAC to 85VAC input (derate to 90% load for SWS600-5)

Model Selector							
Model	Voltage	Adjust Range (V)	Max Current (A)	Load Reg mV	Line Reg mV	Ripple Noise mV	Eff. (3) (typ)%
SWS300A-3	3.3	2.97-3.96	55	40	20	120	69/72
SWS300A-4	4	3.6-4.8	55	40	20	120	72/75
SWS300A-5	5	4.6-6.0	55	40	20	120	75/78
SWS300A-7R5	7.5	6.0-9.0	40	60	30	120	77/80
SWS300A-12	12	9.6-13.2	26	96	48	120	79/83
SWS300A-15	15	13.2-18.6	21	120	48	120	80/84
SWS300A-24	24	20-28.8	13	120	48	150	82/85
SWS300A-28	28	22.4-33.6	11	140	56	150	83/86
SWS300A-36	36	28.8-40	8.8	180	72	200	83/87
SWS300A-48	48	40-57.6	6.7	240	96	240	83/86
SWS600-3	3.3	2.97-3.96	100 (2)	40	20	100	69/71
SWS600-5	5	4.5-6	100 (2)	40	20	100	74/77
SWS600-12	12	9.6-13.2	50	96	48	120	78/81
SWS600-15	15	13.2-18.6	40	120	48	120	80/83
SWS600-24	24	20-28.8	25	120	48	150	81/84
SWS600-36	36	28.8-40	16.7	180	72	200	81/85
SWS600-48	48	40-57.6	12.5	240	96	240	82/85

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

Derating				
Model	50°C	55°C	60°C	65°C
SWS300A	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.				

[illegible]

Technical Drawing of SW5600-2 Power Supply Unit

Front View (Top Left): Shows the cooling fan and input/output terminals.

Top View (Top Right): Shows the overall dimensions and mounting holes. Key dimensions include:

- Overall width: 190 ± 1 mm
- Overall height: 120 ± 1 mm
- Mounting hole spacing: 70 ± 0.5 mm, 100 ± 0.5 mm
- Terminal block width: 72 mm

Side View (Bottom Left): Shows the unit's profile and airflow direction. Key dimensions include:

- Overall depth: 50 ± 0.5 mm
- Mounting hole spacing: 21 mm, 21 mm
- Terminal block depth: 15 MAX mm

DETAIL OF NAME PLATE (Bottom Right):

SW5600-2
 INPUT: 100-240VAC ~ 50/60Hz
 OUTPUT: 5V = 100A
 TDK-Lambda
 MADE IN CHINA

NOTES:

- Model name, nominal output voltage and maximum output current are shown here in accordance with the specifications.
- Country of manufacture will be shown here.
- M4 tapped holes (20) for customer chassis mounting. (Screws must not protrude into power supply by more than 6mm).

ACCESSORIES:

- Cover for barrier terminal strip (Mounted on terminal strip at time of shipment)
- Metal piece for shorting "+S" & "+", "-S" & "-" (Mounted on terminal strip at time of shipment)

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