

SILA180 SERIES

180W L-Bracket Type Power Supply for Industrial Equipment



- Wide Input Voltage 100 to 240 VAC, 47 to 63Hz, Molex housing 09-50-3051
- Output Voltage Available From 12VDC TO 48VDC, Molex housing 09-50-3131
- Internal EMI filter, Active Power Factor Correction
- **Operating Temperature: -20 ~ 70°C**
- Size: 3.13" x 5" x 1.54"
- Input Surge Current, Over Voltage and Over Load Protection
- Synchronous Rectification, Single Output, Class I Insulation

5 Year Warranty

Approvals:

Single Output

Part Number	Output Voltage	Max. Output Current	Total Regulation	Maximum Output Power
SILA180-S05	12 VDC	14.58 A	5%	175W
SILA180-S08	24 VDC	7.50 A	3%	180W
SILA180-S11	48 VDC	3.75 A	2%	180W

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	100		240	VAC
Input Frequency		47		63	Hz
Power Factor Correction	Io=Full load, Vin=90~260VAC	0.95	0.97	1.00	
Output Power Range	Vin= 90 to 264 VA C	0		180	W
Input Current (Low Line)	Io=Full load, Vin=115 VAC			2.3	A
Input Current (High Line)	Io=Full load, Vin= 230 VAC			0.9	A
Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		48	54	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		100	108	A
Efficiency	Io=Full Load, Vin=230VAC	85	88	90	%
Line Regulation	Io=Full Load		0.5	1	%
Load Regulation	Vin=230VAC		3	5	%
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	16			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/60Hz		0.5	0.75	mA
Temperature Coefficient	All output	-0.04		0.04	%/°C

Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		-20		70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1			M Hrs

De-rate linearly from 100% load at 50°C to 50% load at 70°C

Approvals and Compliances

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	2121	VDC
Isolation Resistance	Test Voltage = 2100VDC	50	MΩ
EMI requirements for CISPR-11	Vin=220VAC	B	CLASS
EMI requirements for FCC PART-18	Vin=110VAC	B	CLASS
Safety UL/c-UL, TUV/T-mark, CE	UL 60950-1, EN 60950-1	n/a	n/a
RoHS compliant		n/a	n/a

Mechanical and PIN out

PIN CHART

MODEL	PIN	1	2	3	4	5	6	7	8
SILA180-SXX		RTN	RTN	RTN	RTN	OUT	OUT	OUT	OUT

Note:

1. Dimensions are shown in mm.
2. Weight: 486gs approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp

