# **SILA180 SERIES**

# **180W L-Bracket Power Supply for Industrial Equipment**



- Wide Input Voltage 100 to 240 VAC, 47 to 63Hz
- Output Voltage Available From 12,24,48VDC
- Internal EMI filter
- Active Power Factor Correction
- Single Output
- Operating temperature -20~70°C
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal
- Size: 3.21"x5"x1.54"
- Input Surge Current, Over Voltage and Over Load Protection
- Synchronous Rectification
- Class I

## **3 Year Warranty**

Approvals: c SU CBC E RÓHS

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			

<sup>\*12</sup>V models are required to use DINKLE#DT-2N-B01W-04.

Electrical Characteristics							
Parameter	Test Conditions	Min.	Тур.	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	1.0			
Output Power Range	Vin=100 to 240VAC	0		180	W		
Input Current (Low Line)	Io=Full load, Vin=115VAC			2.3	Α		
Input Current (High Line)	Io=Full load, Vin=230VAC			0.9	Α		
Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC		48	54	А		
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC		100	108	Α		
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		0.5	0.75	mA		
Temperature Coefficient	All output	-0.04		0.04	%/°C		

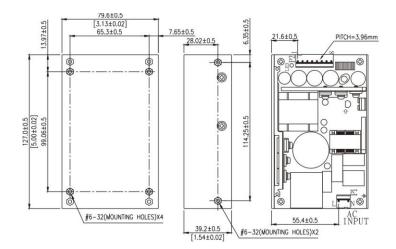
Conditions						
Parameter	Test Conditions	Min.	Тур.	Max.	Unit	
Operating Temperature		-20	50	70	°C	
Storage Temperature		-40		85	°C	
Relative Humidity		5		95	%	
Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs	
De-rate linearly from 100% load at 50°C to 5	0% load at 70°C					

Approvals and Compliance							
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=500VDC	50	ΜΩ				
EMI requirements for CISPR-22	Vin=220VAC	В	CLASS				
EMI requirements for FCC PART-15	Vin=110VAC	В	CLASS				

## Mechanical

#### **PIN CHART**

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



### Note:

- 1. Dimensions are shown in inches or mm.
- 2. Weight: 486gs approx.
- 3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3081and Molex 2478 series crimp terminal

(STLU180-S05 ONLY)
12V models are required to use screw terminal

