



Size: 7.05 x 3.90 x 1.18in (179 x 99 x 30mm)

FEATURES

- Universal AC Input/Full Range of 85~264VAC (120~370VDC)
- Built-In Active PFC Function
- Remote ON/OFF Control
- LED Indicator for Power On
- Built-In Constant Current Limiting Circuit
- 100% Full Load Burn-In Test
- Short Circuit, Over Load, Over Voltage, and Over Temperature Protection
- Over Voltage Category III
- Cooling by Free Air Convection
- 1U Low Profile 30mm
- UL60950-1, TUV EN60950-1, EN61558-1, EN61558-2-16, EAC TP TC 004, and CCC GB4943.1 Safety Approvals

DESCRIPTION

The PSCPF100 series of AC/DC power supplies offers up to 102.6 watts of output power in a 7.05" x 3.90" x 1.18" enclosed package. This series consists of single output models with a universal AC input of 85~264VAC (120~370VDC). Each model in this series features remote on/off control, built-in active PFC function and constant current limiting circuit, as well as an LED indicator for power on. This series also has protection against short circuit, over load, over voltage, and over temperature conditions and UL60950-1, TUV EN60950-1, EN61558-1, EN61558-2-16, EACH TP TC 004, and CCC GB4943.1 safety approvals.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise ⁽²⁾	Voltage Adj. Range	Rated Output Power	Over Voltage Protection	Efficiency
			Min Load	Max Load					
PSCPF100-3.3S	85~264VAC (120~370VDC)	3.3VDC	0A	20A	100mVp-p	3.14~3.63VDC	66W	3.63~4.46VDC	83%
PSCPF100-5S		5VDC	0A	20A	100mVp-p	4.75~5.5VDC	100W	5.5~6.75VDC	86%
PSCPF100-7.5S		7.5VDC	0A	13.5A	100mVp-p	7.13~8.25VDC	101.25W	8.25~10.13VDC	87%
PSCPF100-12S		12VDC	0A	8.5A	100mVp-p	11.4~13.2VDC	102W	13.2~16.2VDC	86%
PSCPF100-13.5S		13.5VDC	0A	7.5A	100mVp-p	12.8~14.9VDC	101.25W	14.85~18.23VDC	86.5%
PSCPF100-15S		15VDC	0A	6.7A	100mVp-p	14.3~16.5VDC	100.5W	16.5~20.25VDC	87%
PSCPF100-24S		24VDC	0A	4.2A	150mVp-p	22.8~26.4VDC	100.8W	26.4~32.4VDC	87%
PSCPF100-27S		27VDC	0A	3.8A	150mVp-p	25.7~29.7VDC	102.6W	29.7~36.45VDC	87%
PSCPF100-48S		48VDC	0A	2.1A	250mVp-p	45.6~52.8VDC	100.8W	52.8~64.8VDC	88%

SPECIFICATIONS

All specifications are based on 25°C Ambient Temperature, 230VAC Input, and Rated Load unless otherwise noted. We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range		85		264	VAC
		120		370	VDC
Frequency Range		47		63	Hz
AC Current	115VAC		1.1		A
	230VAC		0.55		A
Inrush Current	230VAC, Cold Start		30		A
Input Current					
Leakage Current	240VAC			2	mA
Power Factor	230VAC, Full Load		>0.93		
	115VAC, Full Load		>0.98		
OUTPUT SPECIFICATIONS					
Output Voltage			See Table		
Voltage Tolerance ⁽³⁾	3.3VDC, 5VDC, & 7.5VDC Models		±2.0		%
	Other Models		±1.0		%
Line Regulation			±0.5		%
Load Regulation	3.3VDC, 5VDC, & 7.5VDC Models		±1.0		%
	Other Models		±0.5		%
Output Power			See Table		
Output Current			See Table		
Ripple & Noise ⁽¹⁾			See Table		
Setup Time	Full Load		600		ms
Rise Time	Full Load		30		ms
Hold Up Time	Full Load		16		ms
Temperature Coefficient	0~50°C		±0.05		%/°C
Remote Control	CN1: <0~0.8VDC Power On, 4~10VDC Power Off				

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

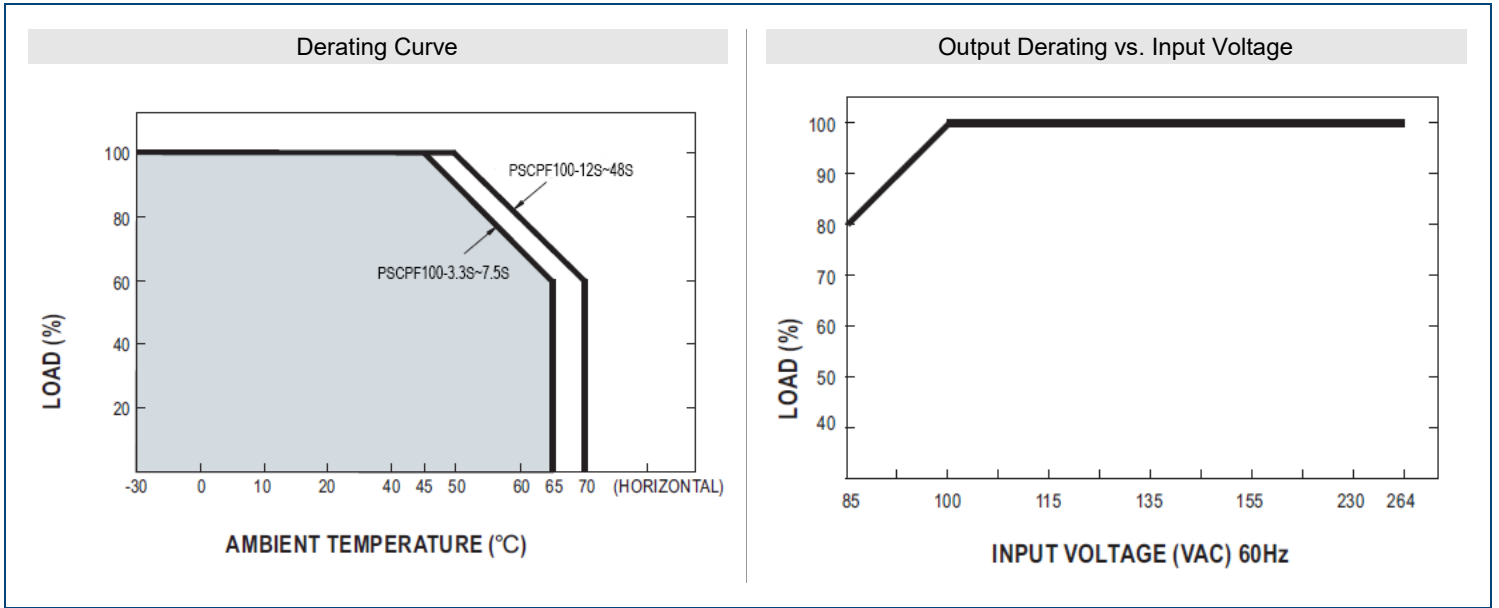
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit	
PROTECTION						
Short Circuit Protection				Yes		
Over Load Protection	Constant current limiting, recovers automatically after fault condition is removed	105		135	% Rated Output Power	
Over Voltage Protection	Shut down o/p voltage, re-power on to recover Over Voltage Category III; According to EN61558, EN50178, EN60664-1, EN62477-1, altitude up to 2000 meters	See Table for Ranges				
Over Temperature Protection	Shut down o/p voltage, recovers automatically after temperature goes down					
ENVIRONMENTAL SPECIFICATIONS						
Working Temperature	See Derating Curve	-30		+70	°C	
Storage Temperature		-40		+85	°C	
Working Humidity	Non-Condensing	20		90	%RH	
Storage Humidity		10		95	%RH	
Vibration	10~500Hz, 2G 10min/1cycle, 60min. each along X, Y, Z axes					
MTBF	MIL-HDBK-217F, 25°C	288.5			Khours	
GENERAL SPECIFICATIONS						
Efficiency				See Table		
Withstand Voltage	I/P-O/P			4KVAC		
	I/P-FG			2KVAC		
	O/P-FG			0.5KVAC		
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG			100MΩ/500VDC/25°C/70%RH		
PHYSICAL SPECIFICATIONS						
Weight				18.34oz (520g)		
Dimensions (L x W x H)				7.05in x 3.90in x 1.18in (179mm x 99mm x 30mm)		
Packing				24pcs/14.5kg/0.84CUFT		
SAFETY CHARACTERISTICS						
Safety Approvals		UL60950-1 TUV EN60950-1 EN61558-1 EN61558-2-16 EAC TP TC 004 CCC GB4943.1				
EMC Emission		EN55032 (CISPR32) EN61000-3-2,-3 EAC TP TC 020 GB9254 GB17625.1				Class B Class B
EMC Immunity		EN61000-4-2, 3, 4, 5, 6, 8, 11 EN55024 Light Industry Level Criteria A EAC TP TC 020				

NOTES

- Ripple & Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- Tolerance includes set up tolerance, line regulation, and load regulation.
- The power supply is considered a component which will be installed into final equipment. Final equipment must be re-confirmed that it still meets EMC directives.
- It is strongly recommended that external output capacitances should not exceed 5000uF (only for 3.3VDC, 5VDC, and 7.5VDC models)
- Ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m (6500ft).
- This product is listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES



BLOCK DIAGRAM

