



350ACPSL_SC3 series

350W - Single Output AC-DC Converter

AC-DC Converter

350 Watt

- ⊕ Full range of AC input voltage: 90~264VAC
- ⊕ Built-in power factor correction circuit with high power factor 0.95
- ⊕ LED indicator for power on
- ⊕ Fanless and conduction-cooled design

- ⊕ Support output remote voltage compensation and output ON/OFF control
- ⊕ Operating temperature -30~+70°C
- ⊕ Overload/short circuit/over temperature/over voltage

Introducing our new 350ACPSL_SC3 series, designed to deliver high performance and efficiency in a wide range of applications. With a full range of AC input voltage (90~264VAC), this unit offers exceptional flexibility and reliability for global use. Equipped with a built-in power factor correction circuit, it achieves a high power factor of 0.95, ensuring efficient energy use while minimizing losses. The integrated LED indicator provides a clear and easy visual cue for power status. Our fanless, conduction-cooled design ensures quiet operation and reduces maintenance needs, making it ideal for environments where noise and reliability are paramount. Additionally, this model supports remote voltage compensation and output ON/OFF control, giving you greater control and flexibility in your power management. With an operating temperature range from -30°C to +70°C, this unit is built to withstand a wide range of environmental conditions.



Common specifications	
Short circuit protection:	The output can be automatically restored after the short circuit is eliminated
Over load	105-150% hiccup mode, auto restore after eliminating overload
Over temperature	Shuts off output voltage; the output automatically restore after the temperature drops.
Over voltage	350ACPSL_12SC3 ≤16.8V 350ACPSL_24SC3 ≤33.6V 350ACPSL_36SC3 ≤50.4V 350ACPSL_48SC3 ≤67.2V Constant voltage. After the fault is removed, the power supply automatically returns to normal
Operating temperature	-30~+70°C (with derating)
Storage Temperature	-40~+80°C
Operating humidity	20%~95% RH, non condensing
Storage humidity	10%~95% RH, non condensing
Operating altitude	5000m (the ambient temperature derating of 0.5 °C /100m for operating altitude higher than 2000m)
Impact	20G, last 11mS, 3 impacts along X, y and Z axes
MTBF	Under 25°C: 300,000hrs, MIL-217 Method
Vibration	10~500Hz, 2G, 10min/1 cycle, 60min.each along X, Y, Z axes six sweep cycles
Standard	EN61000-4-2, 3, 4, 5, 6, 8, 11\GB17625.1\EN61000-3-2,-3\EN55032\GB4943\UL62368-1\ IEC62368-1
Safety specification	Refer to: GB4943/UL62368-1
Function	ON/OFF Control - RC+/RC-: Short-circuit power supply open; Open circuit power off (optional) Cooling mode - semi-glue process, fanless design, conduction cooled
Dimension:	220 x 62 x 31mm
Weight	270g

Input specifications					
Item	Operating condition	Min	Typ	Max	Units
Voltage range		90		264	VAC
Rated voltage		100		240	VAC
Current				≤5.0	A
Frequency range		47		63	Hz
Inrush current	230VAC		60		A
Leakage current	Input 240VAC - frequency 63Hz			≤1	mA

Output specifications					
Item	Operating condition	Min	Typ	Max	Units
Line regulation			±0.5		%
Load regulation	12V Others		±2.0 ±1.0		%
Setup rise time	50ms/220VAC loading 100%		2000		ms
Hold up time	220VAC loading 100%		16		ms
Output voltage accuracy	12V Others		±2.0 ±1.0		%
Temperature coefficient	0-50°C		±0.03		%

Isolation specifications					
Item	Operating Conditions	Min	Typ	Max	Units
Withstand voltage	Input—output I/P-O/P: 3kVAC/10mA; input—case I/P-CASE: 1.5kVAC/10mA; Output case O/P-CASE: 0.5kVAC/10mA 1min for each test				
Insulation impedance	500VDC: I/P-O/P: 10M ohms; I/P-Case: 10M ohms; O/P-Case: 10M ohms				

EMC specifications	
EMS	Refer to: EN61000-4-2,3,4,5,6,8,119
Harmonic current	Refer to: GB17625.1;EN61000-3-2 A
EMC	Refer to: EN55032(CISPR32) Class B

Example:
350ACPSL_12SC3
350 = 350 Watt; AC = AC-DC; PSL = Series; 12 = 12Vout; S = Single output; C = PFC (Power Factor Correction)

- In order to extend the service life, it is recommended to leave 30% more allowance when loading. For example, if the equipment needs 100W power, please choose the power supply over 130W.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- All electrical performance tests are performed at 25°C.
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. All our EMC tests are carried out by mounting samples on metal plates.

350ACPSL_SC3 series

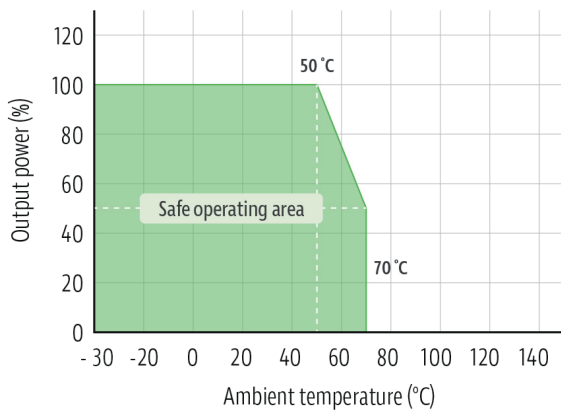
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Product Selection Guide

Certification	Part number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Voltage regulation Range (V)	Efficiency (Typ) (%)	Factory Voltage setting range (10% loading) (V)	Ripple & Noise (mVpk-pk)
	350ACPSL_12SC3	12	0~29.2	350.4	11.4-12.6	91	12.0-12.2	200
	350ACPSL_15SC3	15	0~23.36	350.4	14.2-15.8	91	12.0-12.2	220
	350ACPSL_24SC3	24	0~14.6	350.4	22.8-25.2	92	24-24.3	240
	350ACPSL_36SC3	36	0~9.75	351.0	34.2-37.8	92	36.0-36.4	240
	350ACPSL_48SC3	48	0~7.32	351.3	45.6-50.4	93	48.0-48.4	240

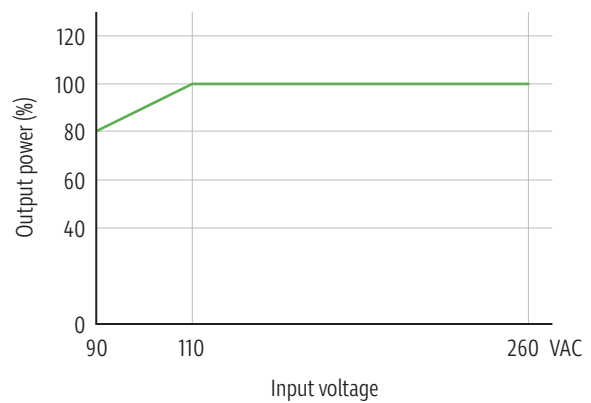
Product characteristic curve

Temperature derating graph

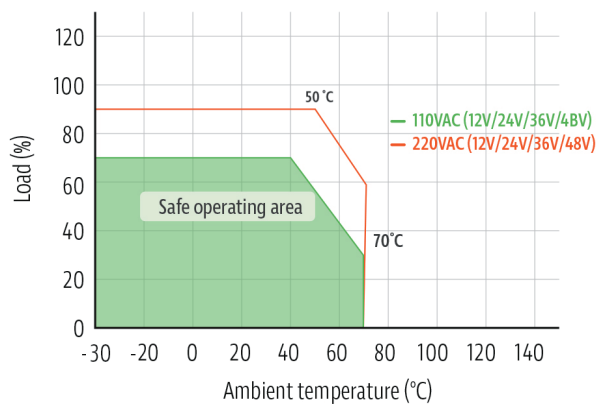


Aluminum plate heat dissipation

Input voltage derating curve

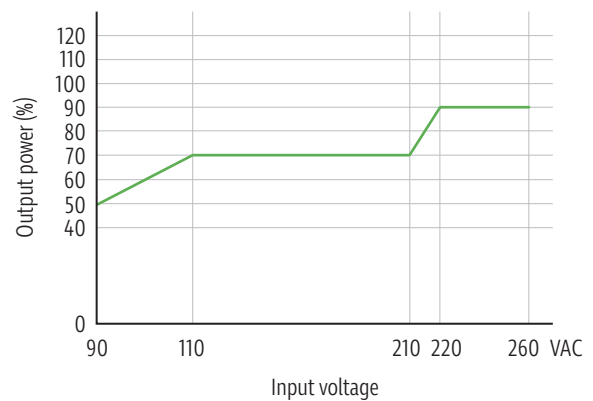


Temperature derating graph

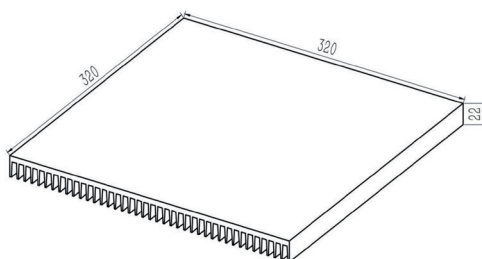


Without aluminum plate heat dissipation

Input voltage derating curve



Install

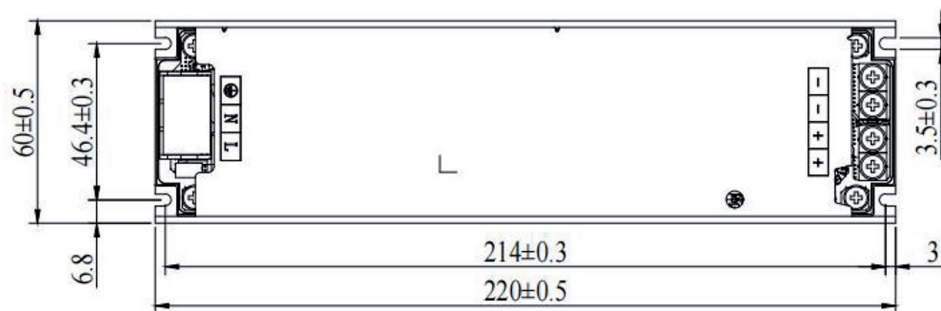
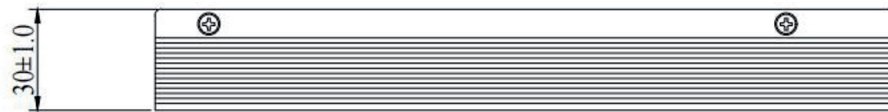
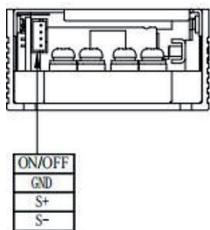


In order to ensure that the product meets the electrical performance requirements declared in the specification, the product must be installed on an aluminum plate or metal housing. The recommended size of the aluminum plate is shown in the following figure: At the same time, the product must be tightly installed in the center of the aluminum plate with screws and coated with thermal grease to help heat dissipation.

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Dimensions and recommended layout



Input/output terminal pin definition			
Pin No.	Pin function	Pin No.	Pin function
⊕	EARTH	V+	DC Vo+
N	AC NETURAL	V-	DC Vo-
L	AC LINE	NC	N/A
		NC	N/A
		RC+	control signal+
		RC-	control signal-

Instructions:

1. Please follow the installation instructions when use the power supply.
2. Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment.
3. Before power on, please use a multimeter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on.
4. Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.
5. In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#).
6. If the power supply fails, please do not repair it without permission. Please contact our customer service department as soon as possible,

Transport, storage:

1. Transport: The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof,loaded and unloaded gently.
2. Storage: When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.