

# HF150W-SC, 150W Single Output Power Supply with PFC

# PFC Active

CE





#### Features:

- Universal AC input / full range
- PF>0.98@115VAC; >0.94@230VAC
- Approvals: TÜV, CB, CE
- Protections: overload/ over voltage/ over temperature/ short circuit
- Japanese brand components for key parts
- Electrolytic capacitors all 105℃
- Dimensions: 212 x 99 x 50mm

### **Specifications:**

Input Current2.5AStorage Temperature-20°C ~+85°CInput Frequency47~63HzOperating Humidity20%~93%RH (non conInrush Currentcold start, 20A/115V, 40A/230VStorage Humidity20%~93%RH (non conInput Leakage Current< 1mA/230VACMTBF>100,000 hoursLine Regulation (full load)± 0.5%CoolingconvectionVoltage Adjust Range± 10%Safety StandardsGB4943, UL60950, ENOutput Overload105~150%, current limiting, auto recoveryEMC StandardsGB9254, EN55022 ClaOutput Over Voltage115~150%, shut off, re-power on to recoverEMC StandardsGB9254, EN55022 ClaProtectionon to recoverWithstand VoltageI/P -O/P: 3.0KVAC/1miShort Circuit Protectioncurrent limiting, auto recoveryVibration10~150Hz, 2G 10min/1 each along X, Y, Z axeMechanical FeatureenclosedConnection7P/9.5mm screw terminDimensions212 x 99 x 50mm (L x W x H)Packing0.71kgs, 22pcs: 17.5kg 0.045CBM per carton					
Input Frequency47~63HzOperating Humidity20%~93%RH (non con Storage HumidityInrush Currentcold start, 20A/115V, 40A/230VStorage Humidity20%~95%RH (non con Storage HumidityInput Leakage Current< 1mA/230VAC	Input Voltage	85~264VAC (120~370VDC)	Operating Temperature	-20℃ ~+70℃ (ref. derating curve)	
Inrush Currentcold start, 20A/115V, 40A/230VStorage Humidity20%~95%RH (non conInput Leakage Current< 1mA/230VAC	Input Current	2.5A	Storage Temperature	-20℃ ~+85℃	
Input Leakage Current< 1mA/230VACMTBF>100,000 hoursLine Regulation (full load)± 0.5%CoolingconvectionVoltage Adjust Range± 10%Safety StandardsGB4943, UL60950, ENOutput Overload105~150%, current limiting, auto recoveryEMC StandardsGB9254, EN55022 ClaOutput Over Voltage115~150%, shut off, re-power ProtectionEMC StandardsGB9254, EN55022 ClaOutput Over Voltage115~150%, shut off, re-power on to recoverWithstand VoltageI/P - O/P: 3.0KVAC/1miNort Circuit Protectioncurrent limiting, auto recovery Short Circuit ProtectionComs @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeHold up Time20ms @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeConnection7P/9.5mm screw terminDimensions212 x 99 x 50mm (L x W x H)0.045CBM per carton0.71kgs, 22pcs: 17.5kg	Input Frequency	47~63Hz	Operating Humidity	20%~93%RH (non condensing)	
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Voltage Adjust Range± 10%Safety StandardsGB4943, UL60950, ENOutput Overload105~150%, current limiting, auto recoveryEMC StandardsGB9254, EN55022 Cla EN55024, EN61000-3- EN61000-4-2,3,4,5,6,8Output Over Voltage115~150%, shut off, re-power on to recoverWithstand VoltageI/P -O/P: 3.0KVAC/1mi O/P-PE: 0.5KVAC/1miShort Circuit Protectioncurrent limiting, auto recovery Short Circuit ProtectionWithstand VoltageI/P - OP: 3.0KVAC/1mi O/P-PE: 0.5KVAC/1miHold up Time20ms @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeMechanical FeatureenclosedConnection7P/9.5mm screw termin 0.045CBM per carton	Input Leakage Current	< 1mA/230VAC	MTBF	>100,000 hours	
Output Overload105~150%, current limiting, auto recoveryEMC StandardsGB9254, EN55022 Cla EN55024, EN61000-3- EN61000-4-2,3,4,5,6,8Output Over Voltage115~150%, shut off, re-power on to recoverWithstand VoltageI/P -O/P: 3.0KVAC/1mi U/P - PE: 1.5KVAC/1mi O/P-PE: 0.5KVAC/1miShort Circuit Protectioncurrent limiting, auto recovery Soms @full load (typical)Withstand VoltageI/P -O/P: 3.0KVAC/1mi O/P-PE: 0.5KVAC/1mi O/P-PE: 0.5KVAC/1mi O/P-PE: 0.5KVAC/1mi O/P-PE: 0.5KVAC/1mi DimensionsMechanical FeatureenclosedConnection7P/9.5mm screw termin PackingDimensions212 x 99 x 50mm (L x W x H)Packing0.71kgs, 22pcs: 17.5kg 0.045CBM per carton	Line Regulation (full load)	± 0.5%	Cooling	convection	
Protectionauto recoveryEN55024, EN61000-3-Output Over Voltage115~150%, shut off, re-power on to recoverEN55024, EN61000-4-2,3,4,5,6,8Protectionon to recoverWithstand VoltageI/P - O/P: 3.0KVAC/1mi O/P-PE: 0.5KVAC/1miShort Circuit Protectioncurrent limiting, auto recoveryO/P-PE: 0.5KVAC/1mi O/P-PE: 0.5KVAC/1miHold up Time20ms @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeMechanical FeatureenclosedConnection7P/9.5mm screw termin 0.045CBM per carton	Voltage Adjust Range	± 10%	Safety Standards	GB4943, UL60950, EN60950	
Output Over Voltage115~150%, shut off, re-power on to recoverEN61000-4-2,3,4,5,6,8Protectionon to recoverWithstand VoltageI/P -O/P: 3.0KVAC/1mi I/P - PE: 1.5KVAC/1mi O/P-PE: 0.5KVAC/1miShort Circuit Protectioncurrent limiting, auto recoveryI/P - O/P: 3.0KVAC/1mi O/P-PE: 0.5KVAC/1miHold up Time20ms @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeMechanical FeatureenclosedConnection7P/9.5mm screw termin 0.71kgs, 22pcs: 17.5kg 0.045CBM per carton	Output Overload	105~150%, current limiting,	EMC Standards	GB9254, EN55022 Class B	
Protectionon to recoverWithstand VoltageI/P -O/P: 3.0KVAC/1miShort Circuit Protectioncurrent limiting, auto recoveryI/P - PE: 1.5KVAC/1miRise Time50ms @full load (typical)O/P-PE: 0.5KVAC/1miHold up Time20ms @full load (typical)VibrationMechanical FeatureenclosedConnectionDimensions212 x 99 x 50mmPacking0.71kgs, 22pcs: 17.5kg0.045CBM per carton	Protection	auto recovery		EN55024, EN61000-3-2,3	
Short Circuit Protection   current limiting, auto recovery     Rise Time   50ms @full load (typical)     Hold up Time   20ms @full load (typical)     Mechanical Feature   enclosed     Dimensions   212 x 99 x 50mm (L x W x H)	Output Over Voltage	115~150%, shut off, re-power		EN61000-4-2,3,4,5,6,8,11	
Rise Time   50ms @full load (typical)   O/P-PE: 0.5KVAC/1min     Hold up Time   20ms @full load (typical)   Vibration   10~150Hz, 2G 10min/1     Mechanical Feature   enclosed   Connection   7P/9.5mm screw termin     Dimensions   212 x 99 x 50mm   Packing   0.71kgs, 22pcs: 17.5kg     U   0.045CBM per carton   0.045CBM per carton	Protection	on to recover	Withstand Voltage	I/P -O/P: 3.0KVAC/1min	
Hold up Time20ms @full load (typical)Vibration10~150Hz, 2G 10min/1 each along X, Y, Z axeMechanical FeatureenclosedConnection7P/9.5mm screw termin DimensionsDimensions212 x 99 x 50mm (L x W x H)Packing0.71kgs, 22pcs: 17.5kg 	Short Circuit Protection	current limiting, auto recovery		I/P - PE: 1.5KVAC/1min	
Hold up Time 20ms @full load (typical) each along X, Y, Z axe   Mechanical Feature enclosed Connection 7P/9.5mm screw termin   Dimensions 212 x 99 x 50mm (L x W x H) Packing 0.71kgs, 22pcs: 17.5kg	Rise Time	50ms @full load (typical)		O/P-PE: 0.5KVAC/1min	
Mechanical Feature enclosed Connection 7P/9.5mm screw termin   Dimensions 212 x 99 x 50mm (L x W x H) Packing 0.71kgs, 22pcs: 17.5kg	Hold up Time	20ms @full load (typical)	Vibration	10~150Hz, 2G 10min/1cycle, 30min	
Dimensions     212 x 99 x 50mm (L x W x H)     Packing     0.71kgs, 22pcs: 17.5kg 0.045CBM per carton				each along X, Y, Z axes	
(L x W x H) 0.045CBM per carton	Mechanical Feature	enclosed	Connection	7P/9.5mm screw terminal block	
	Dimensions	212 x 99 x 50mm	Packing	0.71kgs, 22pcs: 17.5kgs/	
		(L x W x H)		0.045CBM per carton	
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Model No.	DC Output	Rated Power	Load Regulation	Voltage Tolerance	Ripple & Noise (max.)	Efficiency
HF150W-SC-5	5V 30.0A	150.0W	0.5%	± 2%	100mVp-p	79%
HF150W-SC-7.5	7.5V 20.0A	150.0W	0.5%	± 2%	100mVp-p	81%
HF150W-SC-12	12V 12.5A	150.0W	0.5%	± 1%	120mVp-p	84%
HF150W-SC-13.5	13.5V 11.2A	151.2W	0.5%	± 1%	120mVp-p	85%
HF150W-SC-15	15V 10.0A	150.0W	0.5%	± 1%	120mVp-p	85%
HF150W-SC-24	24V 6.3A	151.2W	0.5%	± 1%	150mVp-p	86%
HF150W-SC-36	36V 4.2A	151.2W	0.5%	± 1%	150mVp-p	86%
HF150W-SC-48	48V 3.2A	153.6W	0.5%	± 1%	150mVp-p	86%

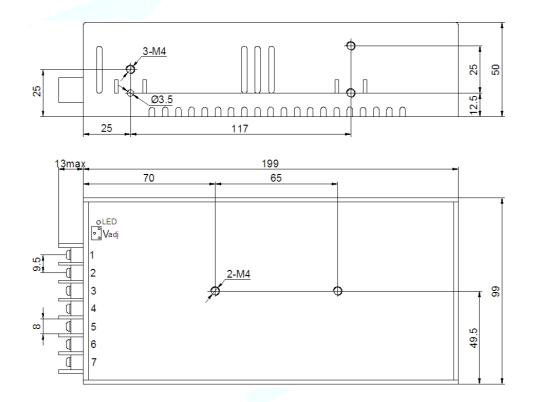
#### Notes:

- 1. All parameters are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. Line regulation is measured from low line to high line at rated load.
- 3. Load regulation is measured from 0% to 100% of rated load for single output models. For multi-output models, it is measured from 20% to 100% of rated load, and other output at 60% rated load.
- 4. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.
- 5. The power supply is regarded as a component which will be installed into a final equipment. The final equipment must be reconfirmed that it still meets EMC directives.



# HF150W-SC, 150W Single Output Power Supply with PFC

## **Mechanical Dimensions:**

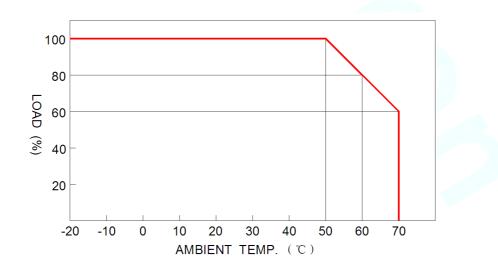


#### Length of assembly screw: max. 6mm

Terminal Pin assignment

Pin No.	Assignment	Pin No.	Assignment
1,2	DC OUTPUT +V	5	PE
3,4	DC OUTPUT –V	6	AC/N
		7	AC/L

## **Derating properties:**



Right of techn. modifications is reserved

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