

GENERAL DESCRIPTION:

The series provides a voltage range from 12V to 48V, delivering up to 120 watts of power, suitable for various applications and devices.

HPA120A
C14 Type AC Inlet



HPA120C
C6 Type AC Inlet

Dimensions (L × W × H): 142 × 60 × 32mm

**FEATURES:**

- Input Voltage Range 70-264VAC
- Operating Temperature: -40-70°C
- Suitable for BF Application
- Protection: OVP, OLP, OTP, SCP
- 2MOPP
- Meet DoE VII
- Extremely Low Leakage Current <0.1mA
- Operating Altitude: 5000M
- Designed to Meet ISN & 60335
- High Surge Immunity
- Built-In EMI Filter
- LED Indicator
- 3-Year Warranty
- IP22

**OPTIONAL FEATURES:** Please Contact Our Sales

- OVC III
- IP54
- Withstand 305VAC Surge Input for 1 Minute

APPLICATIONS:

- Medical Devices
- Telecommunication Devices
- Household Devices
- Consumer Electronics
- Office Electronics
- Industrial Equipment

GENERAL SPECIFICATION:

- **Waterproof and Dustproof Degree:** IP22
- **Protection Classes:** Class I
- **Safety:**
IEC 62368-1 Edition 2.0, IEC 62368-1 Edition 3.0, EN 62368-1, UL62368-1, CAN/CSA-C22.2 NO.62368-1-14, IEC 60601-1 Edition 3.2, EN60601-1, ANSI/AAMI ES60601-1: 2005 (R2012), CSA C22.2 NO. 60601-1:14

ELECTRICAL CHARACTERISTICS:

Characteristic	Condition	Min.	Typ.	Max.	Unit
Nominal Input Voltage	100-240VAC	100		240	VAC
Input Voltage Range	Derate Linearly from 100% load at 90VAC to 70% load at 70VAC	70		264	VAC
Input Frequency Range	Sine Wave	47		63	Hz
Power factor Correction		0.93	0.97		
Output Power	See Rating Chart			120	W
Low Line Input Current	Full Load, Vin=115VAC			1.2	A
High Line Input Current	Full Load, Vin=230VAC			0.6	A
Low Line Input Inrush Current	Full Load, 25°C, Cool Start, Vin=115VAC			50	A
High Line Input Inrush Current	Full Load, 25°C, Cool Start, Vin=230VAC			100	A
Earth Leakage Current	0.1mA @ 264VAC Normal Condition, 0.3mA @ 264VAC Single Fault Condition			0.1	mA
Average Efficiency	CoC v5 (Tier2), See Rating Chart	89	93		%
Line Regulation				0.5	%
Load Regulation	Vin=100-240VAC		2.5	4.5	%
Hold-Up Time	Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.	20			ms
Start-Up Time	Full Load: 100-240VAC. The product is designed to start optimally when powered within 100-240VAC.			1	s
Rise Time	At 115VAC & 230VAC			50	ms
Isolation	Input to Output		4000		VAC
	Input to PE		1500		VAC
	Output to PE (Option)		1500		VAC

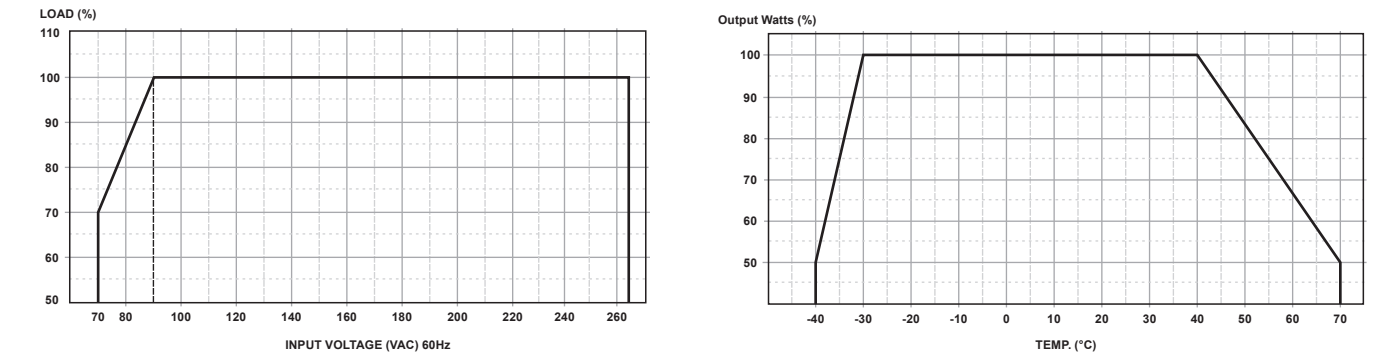
PROTECTION:

Characteristic	Condition	Min.	Typ.	Max.	Unit
Short Circuit	Hiccup Mode, (Non-Latching, Auto-Recovery)				
Over Temperature	Latch Mode				
Overvoltage	Latch Mode	110		150	%
Overload / Overcurrent	Hiccup Mode, (Non-Latching, Auto-Recovery)	110		180	%

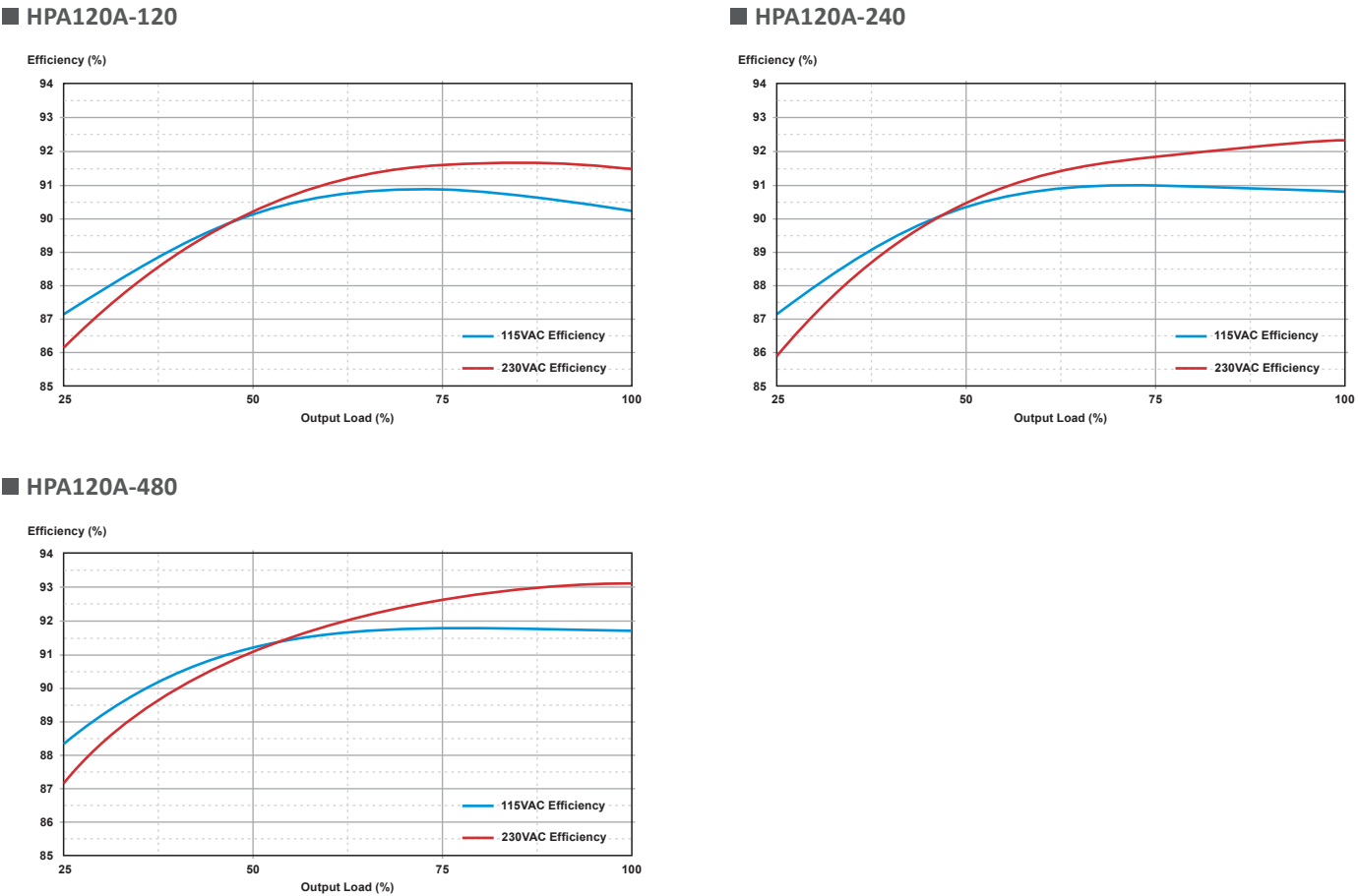
ENVIRONMENTAL:

Characteristic	Condition	Min.	Typ.	Max.	Unit
Operating Temperature	Derate Linearly From 100% Load at 40°C to 50% Load at 70°C	-40		70	°C
Storage Temperature	Surrounding Air Temperature	-40		85	°C
Temperature Coefficient	All Condition			±0.04	%/°C
Operating Humidity	10-95% RH (Non-Condensing)	10		95%	RH
Storage Humidity		0		95%	RH
Operating Altitude	Up to 5,000 meters	5000			m
Vibration	Non-Operating, 5-500 Hz, 2.09 Grms, 20 minute for Each Three Axis			2.09	G

STATIC CHARACTERISTICS & POWER DE-RATING CURVE:



EFFICIENCY VERSUS OUTPUT LOAD:



RATING CHART:

MODEL NO.	Rated Output Voltage	Rated Output Current	Maximum Output Power	Ripple & Noise	Total Regulation	10% Load Efficiency	AVG. Efficiency	Max.No Load Consumption	Hold-Up Time (typ.)
	(VDC)	(A)	(W)	(mVp-p)	(%)	(%)	(%)	(W)	(ms)
HPA120□-120	12.0	10.10	120	100	±4.5	83.0	89.0	0.15	25
HPA120□-150	15.0	8.00	120	120	±4.5	83.0	89.0	0.15	25
HPA120□-180	18.0	6.66	120	150	±4.5	83.0	89.0	0.15	25
HPA120□-190	19.0	6.31	120	150	±4.5	83.0	89.0	0.15	25
HPA120□-240	24.0	5.00	120	150	±3.0	83.0	89.0	0.15	25
HPA120□-480	48.0	2.50	120	150	±2.5	83.0	89.0	0.15	25

* 0-20% Load ripples2% Vo

PRODUCT CODING:

H

P

A

120

□

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X

X

X

Series Name

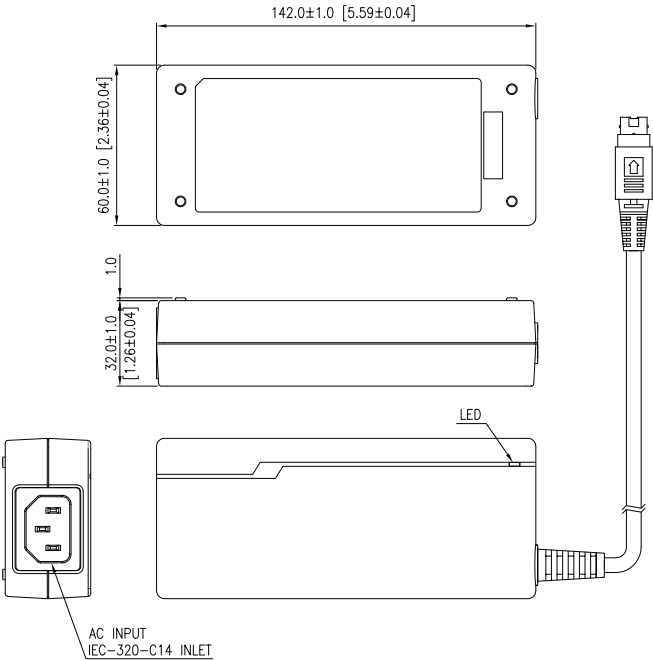
Max. Wattage in the Product

AC Inlet
A: C14 Type AC Inlet
C: C6 Type AC Inlet

Output Voltage
120: 12V 240: 24V
480: 48V

MECHANICAL DIMENSIONS: (UNIT: mm)

HPA120A



HPA120C

