

SPECIFICATIONS

A125-01-01B

Items	Model	HR-11F-2	HR-11F-5	HR-11F-6	HR-11F-9	HR-11F-12	HR-11F-15	HR-11F-18	HR-11F-20	HR-11F-24	HR-11F-28	HR-11F-30	HR-11F-36	HR-11F-48	
1	Nominal Output Voltage	V	2	5	6	9	12	15	18	20	24	28	30	36	48
2	Maximum Output Current	A	20	20	17	12	10	8	6.5	6	5	4	4	3	2.5
3	Maximum Output Power	W	40	100	102	108	120	120	117	120	120	112	120	108	120
4	Efficiency (typ)	(*) %	66	75	75	75	78	78	81	80	81	82	82	82	82
5	Input Voltage Range	(*2) —	90~132VAC(47~440Hz) or 115~180VDC												
6	Input Current (typ)	(*1) A	1.1	2.6	2.6	2.8	3.1	3.1	2.8	2.9	2.9	2.8	2.9	2.9	2.9
7	In-rush Current (typ)	(*3) A	25A at 100VAC												
8	Output Voltage range	%	±10%												
9	Maximum Ripple & Noise	mV	50	50	50	60	60	60	80	80	80	80	90	90	100
10	Maximum Line Regulation	(*4) mV	20	20	24	36	48	60	72	80	96	112	144	144	192
11	Maximum Load Regulation	(*5) mV	20	20	24	36	48	60	72	80	96	112	144	144	192
12	Over Current Protection	(*6) A	21.0 ~25.0	21.0 ~25.0	17.9 ~21.3	12.6 ~15.0	10.5 ~12.5	8.7 ~10.0	6.8 ~8.2	6.3 ~7.5	5.3 ~6.3	4.6 ~5.0	4.6 ~5.0	3.2 ~3.8	2.6 ~3.2
13	Over Voltage Protection	(*7) V	2.7 ~2.9	5.75 ~6.25	6.9 ~7.5	10.5 ~11.2	14.0 ~15.0	17.5 ~18.7	21.0 ~22.5	23.4 ~25.0	28.0 ~30.0	32.7 ~35.0	35.1 ~37.5	41.4 ~45.0	56.2 ~60.0
14	Hold-up time	(*8) —	More than 16ms												
15	Remote Sensing	—	Possible												
16	Remote ON/OFF Control	(*9) —	Possible												
17	Series Operation	—	Possible												
18	Parallel Operation	—	Possible												
19	Operating Temperature	(*10) °C	-10°C ~ +71°C												
20	Operating Humidity	%	30% ~ 90%RH (No dewdrop)												
21	Storage Temperature	°C	-30°C ~ +85°C												
22	Storage Humidity	%	10% ~ 95%RH (No dewdrop)												
23	Cooling	—	Convection cooled												
24	Temperature Coefficient	%	Less than 1% at -10°C ~ +71°C												
25	Withstand Voltage	—	Input-Output, Input-Chassis ... 2.0kVAC 1min. (20mA)												
26	Isolation Resistance	Ω	More than 100MΩ at 25°C and 70%RH, Output-Chassis ... 500VDC												
27	Vibration	—	At no operating, 10~55Hz (sweep for 1min) Less than 19.6m/s ² X,Y,Z 1h each												
28	Shock	—	Less than 196.1m/s ²												
29	Safety Standard	—	Conform to UL1950-D3												
30	Conducted Emission Noise	—	Conform to FCC-class A												
31	Weight	g	900g												
32	Size (W×H×D)	mm	65×115×183mm (Refer to Outline Drawing)												

NOTES

- *1 : At 100VAC & Maximum output power.
- *2 : For cases where conformance to various safety specs are required to be described as 100-120VAC, 50/60Hz on front panel.
- *3 : When resuming operation in less than 8 sec after power failure at no load, softstart circuit will not limit the in-rush current at turn-on.
- *4 : From 90~132VAC or 115~180VDC, constant load.
- *5 : From No load ~ Full load, constant input voltage.
- *6 : Constant current limiting with automatic recovery.
- *7 : Inverter shut-down method, manual reset.
OVP circuit will shut-down output.
- *8 : At 100VAC input, nominal output voltage & output power of 100W.
- *9 : TTL compatible input ; 2V~open for shutdown
0V~0.8V for power-on.
Supply voltage to CNT terminal must not exceed 7V.
- *10 : Ratings — Refer to Derating Curve on the right.
— Load(%) is percent of maximum output power or maximum output current, whichever is greater.
— +61~+71°C ; Forced air cooled by outer cooling method.
— Refer to instruction manual for further mounting details.

Derating curve (vertical mounting)

