

SPECIFICATIONS

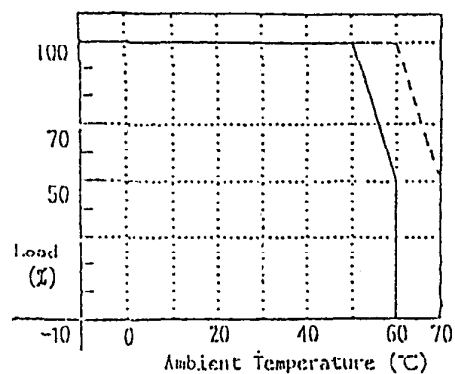
PA784-01-01E

ITEMS	MODEL	HK150A-3	HK150A-5	HK150A-12	HK150A-15	HK150A-24
1 Nominal Output Voltage	V	3.3	5	12	15	24
2 Maximum Output Current	A	30.0	30.0	12.5	10	6.5
3 Maximum Output Power	W	99	150	150	150	156
4 Efficiency (Typ) (*1)	%	75	80	81	81	82
5 Input Voltage Range (*2)	-	85-132VAC (47-440Hz) or 110-175VDC				
6 Input Current (Typ) (*1)	A	2.2	3.2			
7 Inrush Current (Typ)	-	15A at 100VAC				
8 Output Voltage Range (Typ)	-	±10%				
9 Maximum Ripple & Noise	mV	120	120	150	150	150
10 Maximum Line Regulation (*3)	mV	20	20	48	60	96
11 Maximum Load Regulation (*4)	mV	40	40	96	120	150
12 Over Current Protection (*5)	-	>105%				
13 Over Voltage Protection (*6)	-	115% ~ 135%				
14 Hold Up Time (Typ) (*1)	-	20 ms				
15 Remote Sensing	-	Possible				
16 Remote ON/OFF Control	-	-				
17 Parallel Operation	-	-				
18 Series Operation	-	Possible				
19 Operating Temperature (*8)	-	-10 ~ +50°C (100%), 60°C (50%)				
20 Operating Humidity	-	30% ~ 90% RH				
21 Storage Temperature	-	-30°C ~ +85°C				
22 Storage Humidity	-	10% ~ 95% RH				
23 Cooling	-	Convection cooled				
24 Temperature Coefficient	-	1% (Typ) at -10°C ~ +50°C				
25 Withstand Voltage (*7)	-	Input - Chassis, Input - Output : 2kVAC (20mA) Output - Chassis : 500VAC (100mA) for 1min				
26 Isolation Resistance	-	More than 100MΩ at 25°C and 70% RH Output-chassis ... 500VDC				
27 Vibration	-	Less than 19.6m/s ²				
28 Shock	-	Less than 196.1m/s ²				
29 Safety	-	Approved by UL1950 & CSA234, Built to meet DENAN				
30 Conducted Radio Noise	-	Build to meet FCC class B, VCCI-B				
31 Weight	-	650g				
32 Size (W.H.D)	-	43mm X 93mm X 170mm (Refer to Outline Drawing)				

NOTES :

- *1 : At 100VAC and Maximum Output Power, Ta = 25°C.
- *2 : For cases where conformance to various safety specs (UL, CSA, VDE) are required, to be described as 100-120VAC 50/60Hz on name plate.
- *3 : From 85 ~ 132VAC or 110 ~ 175VDC, constant load.
- *4 : From No load - Full load, Constant Input Voltage.
- *5 : Current limiting with automatic recovery.
(Refer to Instruction Manual for details)
- *6 : Inverter shutdown method, manual reset.
- *7 : Refer to Instruction Manual for testing procedure.
- *8 : Ratings - Refer to Derating Curve on the right.
- Load(%) is percent of Maximum Output Power or Maximum Output Current, whichever is greater.
- Refer to Instruction Manual for further mounting details.

Derating Curve
(Vertical Mounting)



————— Convection cooled

----- Forced air cooled

SPECIFICATIONS

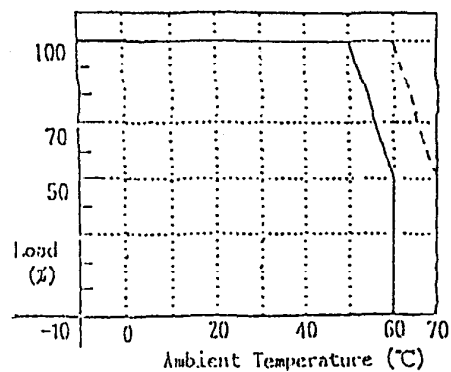
PA784-01-02C

ITEMS	MODEL	HK150A-18
1	Nominal Output Voltage	V 18
2	Maximum Output Current	A 8.5
3	Maximum Output Power	W 153
4	Efficiency (Typ)	(*1) - 81%
5	Input Voltage Range	(*2) - 85~132VAC (47~440Hz) or 110~175VDC
6	Input Current (Typ)	(*1) A 3.2
7	In-rush Current (Typ)	- 15A at 100VAC
8	Output Voltage Range (Typ)	- ±10%
9	Maximum Ripple & Noise	mV 150
10	Maximum Line Regulation	(*3) mV 72
11	Maximum Load Regulation	(*4) mV 140
12	Over Current Protection	(*5) - >105%
13	Over Voltage Protection	(*6) - 115% ~ 135%
14	Hold Up Time (Typ)	(*1) - 20ms
15	Remote Sensing	- Possible
16	Remote ON/OFF Control	- -
17	Parallel Operation	- -
18	Series Operation	- Possible
19	Operating Temperature	(*8) - -10 ~ +50°C (100%), 60°C (50%)
20	Operating Humidity	- 30% ~ 90% RH
21	Storage Temperature	- -30°C ~ +85°C
22	Storage Humidity	- 10% ~ 95% RH
23	Cooling	- Convection cooled
24	Temperature Coefficient	- 1% (Typ) at -10°C ~ +50°C
25	Withstand Voltage	(*7) - Input - Chassis , Input - Output : 2kVAC (20mA) Output - Chassis : 500VAC (100mA) for 1min
26	Isolation Resistance	- More than 100M ohm at 25°C and 70% RH Output-chassis ... 500VDC
27	Vibration	- Less than 19.6m/s ²
28	Shock	- Less than 196.1m/s ²
29	Safety	- Build to meet UL1950, CSA C22.2 No. 234 & DENAN
30	Conducted Radio Noise	- Build to meet FCC class B, VCCI-B
31	Weight	- 650g
32	Size (W.H.D)	- 43mm X 93mm X 170mm (Refer to Outline Drawing)

NOTES :

- *1 : At 100VAC and Maximum Output Power, Ta = 25°C.
- *2 : For cases where conformance to various safety specs (UL, CSA, VDE) are required, to be described as 100-120VAC 50/60Hz on name plate.
- *3 : From 85 ~ 132VAC or 110 ~ 175VDC, constant load.
- *4 : From No load - Full load, Constant Input Voltage.
- *5 : Constant current limiting with automatic recovery. (Refer to Instruction Manual for details)
- *6 : Inverter shutdown method, manual reset.
- *7 : Refer to Instruction Manual for testing procedure.
- *8 : Ratings - Refer to Derating Curve on the right.
 - Load(%) is percent of Maximum Output Power or Maximum Output Current, whichever is greater.
 - Refer to Instruction Manual for further mounting details.

Derating Curve
(Vertical Mounting)



————— Convection cooled

- - - - - Forced air cooled

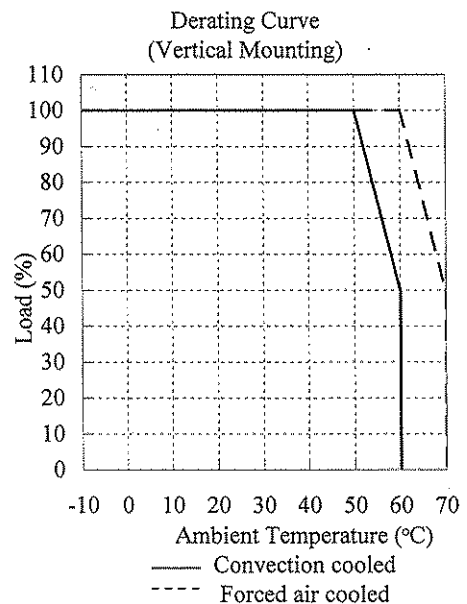
HK150A**SPECIFICATIONS**

PA784-01-03A

ITEMS		MODEL	HK150A-8
1	Nominal Output Voltage	-	8V
2	Maximum Output Current	-	18.7A
3	Maximum Output Power	-	149.6W
4	Efficiency (Typ.)	(*1) -	80%
5	Input Voltage Range	(*2) -	85 ~ 132VAC (47 ~ 440Hz) or 110 ~ 175VDC
6	Input Current (Typ.)	(*1) -	3.2A
7	In-rush Current (Typ.)	-	15A at 100VAC
8	Output Voltage Range (Typ.)	-	±10%
9	Maximum Ripple & Noise	-	150mV
10	Maximum Line Regulation	(*3) -	32mV
11	Maximum Load Regulation	(*4) -	64mV
12	Over Current Protection	(*5) -	>105%
13	Over Voltage Protection	(*6) -	115% ~ 135%
14	Hold-Up Time (Typ.)	(*1) -	20ms
15	Remote Sensing	-	Possible
16	Remote ON/OFF Control	-	-
17	Parallel Operation	-	-
18	Series Operation	-	Possible
19	Operating Temperature	(*8) -	-10°C ~ +50°C (100%), 60°C (50%)
20	Operating Humidity	-	30% ~ 90%RH
21	Storage Temperature	-	-30°C ~ +85°C
22	Storage Humidity	-	10% ~ 95%RH
23	Cooling	-	Convection cooled
24	Temperature Coefficient	-	1% (Typ.) at -10°C ~ +50°C
25	Withstand Voltage	(*7) -	Input - Chassis, Input - Output...2.0kVAC 1min Output - Chassis...500VAC 1min
26	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output - Chassis...500VDC
27	Vibration	-	Less than 19.6m/s ²
28	Shock	-	Less than 196.1m/s ²
29	Safety	-	Build to meet UL1950, CSA C22.2 No.234 & DENAN
30	Conducted Radio Noise	-	Build to meet FCC class B, VCCI-B
31	Weight	-	650g
32	Size (W.H.D)	-	43mm×93mm×170mm (Refer to Outline Drawing)

=NOTES=

- *1: At 100VAC and Maximum Output Power, Ta = 25°C.
- *2: For cases where conformance to various safety specs (UL, CAS, VDE) are required, to be described as 100 ~ 120VAC, 50/60Hz on name plate.
- *3: From 85 ~ 132VAC or 110 ~ 175VDC, constant load.
- *4: From No load ~ Full load, constant input voltage.
- *5: Constant current limiting with automatic recovery. (Refer to Instruction Manual for details)
- *6: Inverter shutdown method, manual reset.
- *7: Refer to Instruction Manual for testing procedure.
- *8: Ratings - Refer to Derating Curve on the right.
 - Load (%) is percent of Maximum Output Power or Maximum Output Current, whichever is greater.
 - Refer to Instruction Manual for further mounting details.



HK150A

OUTPUT DERATING

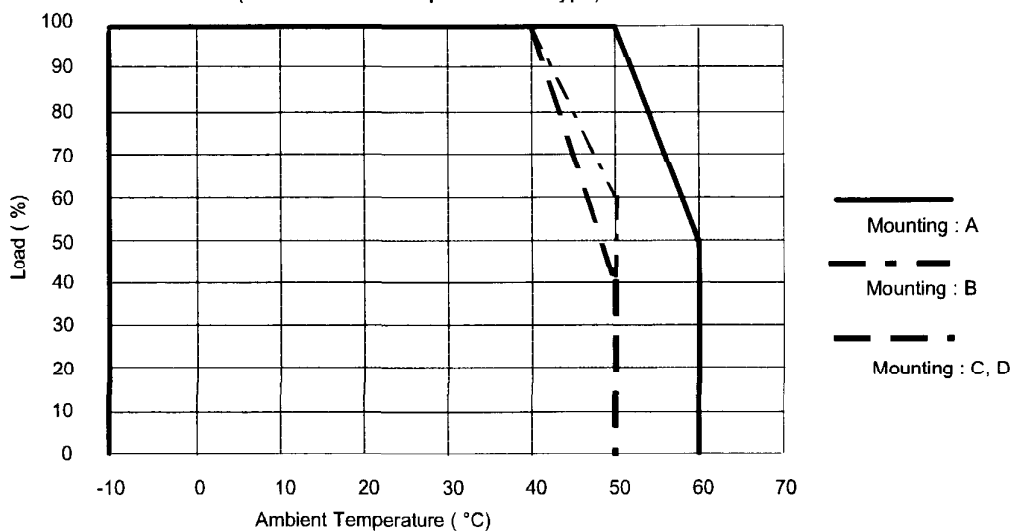
OPEN FLAME (NO COVER)

Ta(°C)	LOAD(%)			
	MOUNTING : A	MOUNTING : B	MOUNTING : C	MOUNTING : D
-10 ~ 20	100	100	100	100
30	100	100	100	100
40	100	100	100	100
50	100	60	40	40
60	50	-	-	-

WITH COVER (OPTION)

Ta(°C)	LOAD(%)			
	MOUNTING : A	MOUNTING : B	MOUNTING : C	MOUNTING : D
-10 ~ 20	100	100	100	100
30	100	100	100	100
40	100	50	40	40
50	50	-	-	-
60	-	-	-	-

Output Derating Curve
(Without Cover : Open Frame Type)



MOUNTING : A

MOUNTING : B

MOUNTING : C

MOUNTING : D

DON'T USE

(STANDARD MOUNTING)

