PAH150S48-48

PA564-01-01C

SPECIFICATIONS

	ITEMS / MODEL			PAH150S48-48
1	NOMINAL OUTPUT VOLTAGE		V	48
2	MINIMUM OUTPUT CURRENT		A	0
3	MAXIMUM OUTPUT CURRENT		A	3.2
4	MAXIMUM OUTPUT POWER		W	153.6
5	EFFICIENCY (TYP)	(*1)	%	88
6	INPUT VOLTAGE RANGE		V	36 ~ 76 VDC
7	INPUT CURRENT (TYP)	(*1)	A	3.64
8	OUTPUT VOLTAGE ACCURACY	(*1)	%	±1.6
9	OUTPUT VOLTAGE ADJUSTABLE RANGE	(*2)	%	±20
10	MAXIMUM OUTPUT RIPPLE & NOISE (*3)	-20 ~ +100°C	mV	250
		-40 ~ -20°C	mV	400
11	MAXIMUM LINE REGULATION	(*4)	mV	96
12	MAXIMUM LOAD REGULATION	(*5)	mV	96
13	OVER CURRENT PROTECTION (OCP)	(*6)	%	105 ~ 150
14	OVER VOLTAGE PROTECTION (OVP)		%	135 ~ 155
		(*7)		INVERTER SHUTDOWN (OPTION AVAILABLE : REFER TO OPTION TABLE)
15	OVER TEMPERATURE PROTECTION (OTP)		-	SHUTDOWN ; AUTO-RESTART WHEN UNIT COOL DOWN
16	REMOTE SENSING	(*10)	-	POSSIBLE (CONNECT +S AND -S TERMINALS TO LOAD)
17	REMOTE ON/OFF CONTROL	(*8)	-	NEGATIVE LOGIC (OPTION AVAILABLE:REFER TO OPTION TABLE)
18	PARALLEL OPERATION		-	----------
19	SERIES OPERATION		-	POSSIBLE
20	OPERATING TEMPERATURE		°C	-40°C ~ +100°C (BASEPLATE) AMBIENT TEMPERATURE MIN = -40°C
21	OPERATING HUMIDITY		%RH	30 ~ 95 (NO DEWDROP)
22	STORAGE TEMPERATURE		°C	-40°C ~ +100°C (BASEPLATE) AMBIENT TEMPERATURE MIN = -40°C
23	STORAGE HUMIDITY		%RH	30 ~ 95 (NO DEWDROP)
24	COOLING	(*9)	-	CONDUCTION COOLED
25	TEMPERATURE COEFFICIENT (%)		%/°C	0.02
26	WITHSTAND VOLTAGE		-	INPUT - OUTPUT : 1.5kVAC, INPUT - BASEPLATE : 1.5kVAC (20mA) FOR 1 MIN OUTPUT - BASEPLATE : .500VDC FOR 1 MIN
27	ISOLATION RESISTANCE		-	MORE THAN 100MOHM AT 25°C AND 70 %RH, OUTPUT - BASEPLATE : 500 VDC
28	VIBRATION		-	AT NO OPERATING, 10 ~ 55Hz AMPLITUDE (SWEEP 1 MIN) 0.825mm CONSTANT (MAXIMUM 49.0m/s²) X,Y,Z 1 HR EACH
29	SHOCK		m/s²	196.1
30	WEIGHT		g	80
31	SIZE (W x H x D)		mm	57.9 x 12.7 x 61 (REFER TO OUTLINE DRAWING)

NOTES :

*1 : AT 48 VDC, MAXIMUM OUTPUT POWER AND BASEPLATE TEMPERATURE = +25°C.

*2 : ADDITIONAL EXTERNAL COMPONENTS HAVE TO BE CONNECTED; REFER TO APPLICATION NOTES.

*3 : EXTERNAL COMPONENTS ARE NEEDED; REFER TO BASICAL CONNECTION DRAWING.

*4 : 36 ~ 76 VDC, CONSTANT LOAD.

*5 : NO LOAD ~ FULL LOAD, CONSTANT INPUT VOLTAGE.

*6 : CURRENT LIMITING WITH AUTOMATIC RECOVERY.

*7 : CNT RESET OR MANUAL RESET.

*8 : REFER TO APPLICATION NOTES.

*9 : HEATSINK HAS TO BE CHOSEN ACCORDING TO APPLICATION NOTES.

*10 : IF REMOTE SENSING IS NOT REQUIRED, CONNECT +S AND -S TO +V AND -V RESPECTIVELY (REFER TO BASICAL CONNECTION).

OPTION TABLE:

OPTION	ON/OFF LOGIC	OVP
STANDARD	NEGATIVE (H: OFF, L: ON)	SHUT-DOWN (ON/OFF CONTROL RESET OR MANUAL RESET)
/P	POSITIVE (H: ON, L: OFF)	
/V	NEGATIVE (H: OFF, L: ON)	AUTO RESTART
/PV	POSITIVE (H: ON, L: OFF)	

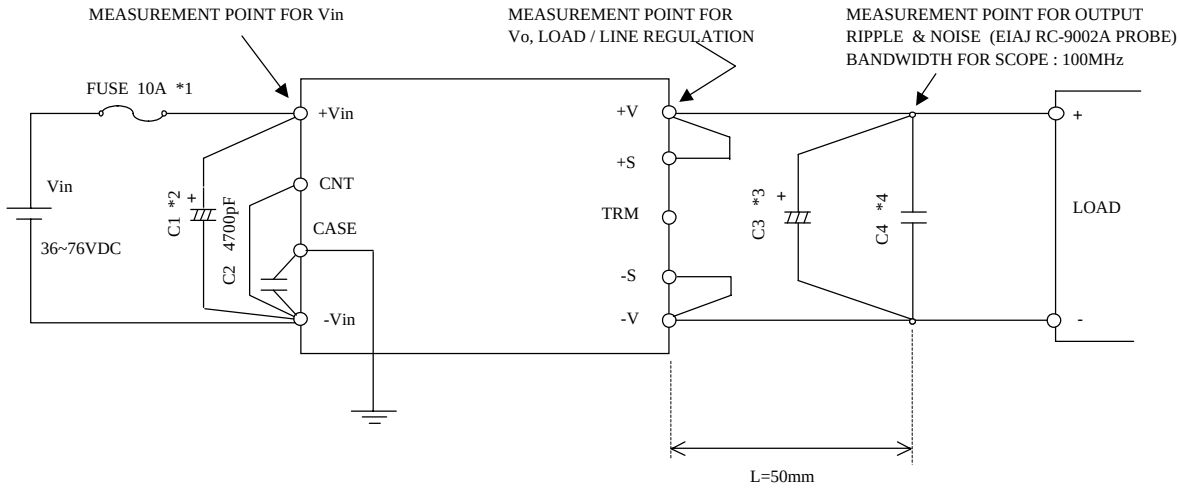
EXAMPLE: PAH150S48-48/V REPRESENT NEGATIVE LOGIC & OVP AUTO RESTART

BASICAL CONNECTION

PAH150S48-48

PA564-01-02

EX. NEGATIVE LOGIC BASIC CONNECTION



NOTES

*1 : USE AN EXTERNAL FUSE (FAST BLOW TYPE) FOR EACH UNIT.

*2 : RECOMMENDED INPUT CAPACITOR C1
-20 °C ~ +100°C : 33uF ELECTROLYTIC OR CERAMIC TYPE CAPACITOR.
-40 °C ~ +100°C : 33uF CERAMIC TYPE CAPACITOR OR EQUIVALENT SUCH AS 5 PARALLEL 6.8uF CERAMIC TYPE CAPACITOR.

*3 : RECOMMENDED OUTPUT CAPACITOR C3
-20 °C ~ +100°C : 330uF (ELECTROLYTIC CAPACITOR)
-40 °C ~ +100°C : FOR THIS TEMPERATURE RANGE, USE TWO PIECES OF THE RECOMMENDED CAPACITOR ABOVE.

*4 : RECOMMENDED OUTPUT CAPACITOR C4
-20 °C ~ +100°C : 1uF (CERAMIC CAPACITOR)
-40 °C ~ +100°C : 10uF (CERAMIC CAPACITOR)

OUTPUT DERATING CURVE: