PH150S280 Specifications

NEMIC-LAMBDA

* : For delivery, contact to our sales office.

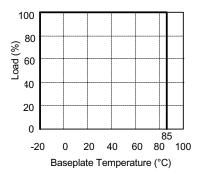
MODEL PH150S 280-12<	C095-01-01B * * * *									
$ \begin{array}{ $					PH150S	PH150S	PH150S	PH150S	PH150S	PH150S
2 Maximum Output Current A 30 30 12.5 10.0 6.3 5.4 3 Nominal Output Power W 99 150 150 150 151.2 <td colspan="3"></td> <td></td> <td></td> <td>280-5</td> <td>280-12</td> <td></td> <td></td> <td></td>						280-5	280-12			
3 Nominal Output Power W 99 150 150 150 151.2 151.2 151.2 4 Efficiency (Typ) (*1) % 72 82 85 85 88 88 5 Input Voltage Range - 200 ~ 400VDC - 86 0.63 0.63 0.61 0.61 6 Input Voltage Range (*1) % 1.04 0.37 0.51 0.49 0.49 0.48 0.48 7 Output Voltage Range (*1) % ± 1% -	1 Nominal Output Voltage			V	3.3	5	12	15	24	28
4 Efficiency (Typ) (*1) % 72 82 85 85 88 88 5 Input Voltage Range - 200 ~ 400VDC - 200 ~ 400VDC -	2	ļ			30	30	12.5	10.0	6.3	5.4
4 Efficiency (Typ) (*1) % 72 82 85 85 88 88 5 Input Voltage Range - 200 ~ 400VDC - 200 ~ 400VDC -	3	Nominal Output Powe	r	W	99	150	150	150	151.2	151.2
6 Input Current (Typ) (at full load) 280VDC input A 0.47 0.65 0.63 0.63 0.61 0.61 7 Output Voltage Accuracy (*1) % ± 1% 0.49 0.49 0.49 0.48 0.48 8 Output Voltage Range (*8) % ± 1% 0.00 150 150 240 280 9 Maximum Line Regulation (*2) mV 20 20 48 60 96 112 1 Maximum Load Regulation (*3) mV 40 40 96 120 192 224 12 Over Current Protection (*4) - 105% ~ 150% - 120 192 224 13 Over Voltage Protection (*5) - 165~240% 125% ~ 145% -				%	72	82	85	85	88	88
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	5	Input Voltage Range		-	200 ~ 400V	DC				•
7 Output Voltage Accuracy (*1) % ± 1% 8 Output Voltage Range (*8) % ± 10% (At 280VDC input) 9 Maximum Ripple & Noise (*9) mV 100 100 150 150 240 280 10 Maximum Lice Regulation (*2) mV 20 48 60 96 112 11 Maximum Load Regulation (*3) mV 40 40 96 120 192 224 12 Over Current Protection (*4) - 105% ~ 150% 125% ~ 145% 14 13 Over Voltage Protection (*5) - 165~240% 125% ~ 145% 14 14 Remote Sensing - Possible 105% ~ 150% 150% 150% 150% 150% 15 Remote Sensing - Possible 105% ~ 145% 16 Parallel Operation - 17 Series Operation (*8) - Possible 10 10 30 ~ 95% RH (No dewdrop) 21 Storage Temperature - <	6	Input Current (Typ)	280VDC input	Α	0.47	0.65	0.63	0.63	0.61	0.61
8 Output Voltage Range (*8) % ± 10% (At 280VDC input) 9 Maximum Ripple & Noise (*9) mV 100 100 150 150 240 280 10 Maximum Line Regulation (*2) mV 20 20 48 60 96 112 11 Maximum Line Regulation (*3) mV 40 40 96 120 192 224 12 Over Current Protection (*4) 105% ~ 150% 125% ~ 145% 125% ~ 145% 125% ~ 145% 13 Over Voltage Protection (*5) - 165~240% 125% ~ 145% 125% ~ 145% 14 Remote Sensing - Possible - - - - 15 Remote ON/OFF Control (*8) - Possible -		(at full load)	360VDC input	Α	0.37	0.51	0.49	0.49	0.48	0.48
8 Output Voltage Range (*8) % ± 10% (At 280VDC input) 9 Maximum Ripple & Noise (*9) mV 100 150 150 240 280 10 Maximum Line Regulation (*2) mV 20 20 48 60 96 112 11 Maximum Load Regulation (*3) mV 40 40 96 120 192 224 12 Over Current Protection (*4) 105% ~ 150% 125% ~ 145% 192 224 13 Over Voltage Protection (*5) - 165~240% 125% ~ 145% 125 192 224 14 Remote Sensing - Possible - <td< td=""><td>7</td><td>Output Voltage Accura</td><td>acy (*1)</td><td>%</td><td>±1%</td><td></td><td></td><td></td><td></td><td></td></td<>	7	Output Voltage Accura	acy (*1)	%	±1%					
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11 Maximum Load Regulation (*3) mV 40 40 96 120 192 224 12 Over Current Protection (*4) - 105% ~ 150%	9	Maximum Ripple & No	ise (*9)	mV				150	240	280
12 Over Current Protection (*4) - 105% ~ 150% 13 Over Voltage Protection (*5) - 165~240% 125% ~ 145% 14 Remote Sensing - Possible 15 Remote ON/OFF Control (*8) - Possible (Short : ON, Open : OFF) 16 Parallel Operation - 17 Series Operation (*8) - Possible 19 Operating Temperature (*6) - -20 ~ +85°C (Baseplate) Ambient Temperature min = -20°C 20 Operating Humidity - 30 ~ 95%RH (No dewdrop) 21 Storage Temperature - -40 ~ +85°C 22 Storage Temperature - -40 ~ +85°C 22 Storage Temperature Coefficient - 0.02% / °C 23 Cooling (*7) - Conduction Cooled - - 0.02% / °C 24 Temperature Coefficient - 0.02% / °C - Input - Baseplate : 2.5kVAC (20mA) for 1 minute. Input - Output : 3.0kVAC (20mA) for 1 minute. Output - Baseplate : 500VDC 20 27 Withstand Voltage -	10	Maximum Line Regula	tion (*2)	mV	20	20	48	60	96	112
13Over Voltage Protection(*5)-165~240%125% ~ 145%14Remote Sensing-Possible15Remote ON/OFF Control(*8)-Possible (Short : ON, Open : OFF)16Parallel Operation17Series Operation(*8)-Possible19Operating Temperature(*6)20 ~ +85°C (Baseplate)Ambient Temperature min = -20°C20Operating Humidity-30 ~ 95%RH (No dewdrop)-21Storage Temperature40 ~ +85°C22Storage Humidity-10 ~ 95%RH (No dewdrop)23Cooling(*7)-24Temperature Coefficient-0.02% / °C25Withstand Voltage-Input - Baseplate : 2.5kVAC (20mA) for 1 minute. Input - Output : 3.0kVAC (20mA) for 1 minute. Output - Baseplate : 500VDC for 1 minute. Output - Baseplate : 500VDC for 1 minute.26Isolation Resistance-More than 100M\Omega at 25°C and 70%RH Output - Baseplate : 500VDC27Vibration-At no operating, 10 ~ 55Hz amplitude (sweep for 1minute) 0.825mm constant (Maximum 5G) X,Y,Z 1hour each.28Shock-Less than 20G (In Package)29Safety StandardUL1950-29Safety StandardUL1950-30Weight (Typ)g150g	11	Maximum Load Regula	ation (*3)	mV	40	40	96	120	192	224
14 Remote Sensing - Possible 15 Remote ON/OFF Control (*8) - Possible (Short : ON, Open : OFF) 16 Parallel Operation - 17 Series Operation (*8) - Possible 19 Operating Temperature (*6) - 20 ~ +85°C (Baseplate) Ambient Temperature min = -20°C 20 Operating Humidity - 30 ~ 95%RH (No dewdrop) - 21 Storage Temperature - -40 ~ +85°C 22 Storage Humidity - 10 ~ 95%RH (No dewdrop) 23 Cooling (*7) - Conduction Cooled 24 Temperature Coefficient - 0.02% / °C 25 Withstand Voltage - Input - Baseplate : 2.5kVAC (20mA) for 1 minute. 10put - Output : 3.0kVAC (20mA) for 1 minute. Output - Baseplate : 500VDC for 1 minute. 26 Isolation Resistance - More than 100MΩ at 25°C and 70% RH Output - Baseplate : 500VDC 27 Vibration - At no operating, 10 ~ 55Hz amplitude (sweep for 1minute) 0.825mm constant (Maxium 5G) X,Y,Z 1hour each. Less tha	12	Over Current Protectio	on (*4)	-	105% ~ 150%					
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EN60950 - Approved by BSI (excluding PH150S280-3.3) 30 Weight (Typ) g 150g		-	CSA234	-	Approved b	y CSA (excl	uding PH1508	5280-3.3)		
30 Weight (Typ) g 150g			EN60950	-						
31 Size (WxHxD) mm 72 x 12.7 x 86 (Refer to Outline Drawing)	30	Weight (Typ)	-	g	°					
	31	Size (WxHxD)		mm	72 x 12.7 x	86 (Refer to C	Dutline Drawin	ıg)		

* Read instruction manual carefully, before using the power supply unit.

=NOTES=

- *1. At 280VDC and maximum output current.
- *2. 200 ~ 400VDC input, constant load.
- *3. No load ~ Full load, constant input voltage.
- *4. Constant current limiting with automatic recovery.
- *5. Inverter shut-down method, manual reset.
- *6. Ratings Refer to Derating Curve on the right.
 - Load (%) is percent of maximum output current.
- *7. Heatsink has to be chosen according to instruction manual.
- *8. Refer to instruction manual.
- *9. External components are needed for operation. (Refer to basic connection and instruction manual)

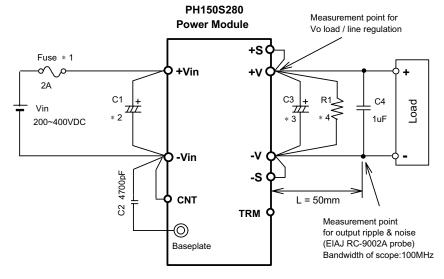
Derating Curve



PH150S280 Specifications

C095-01-02B

1. Basical Connection



= Note =

- *1. Use an external fuse of fast blow type for each unit.
- *2. When the input line impedance is high, insert input electrical capacitor. C1 : more than 22uF. (Refer to instruction manual)
- *3. Put an output capacitor C3. 3.3V, 5V : more than 1000uF 12V, 15V : more than 470uF
 - 24V : more than 220uF
 - 28V : more than 220uF
- *4. Set the minimum load current (more than 3% of rated current) in order to prevent recurrent output voltage dropout (due to continuous skip cycle) under dynamic load conditions.
- *5. Refer to instruction manual for further details.

