

SR60 Specifications

NEMIC-LAMBDA

* : For delivery, contact to our sales office.

A080-01-01C

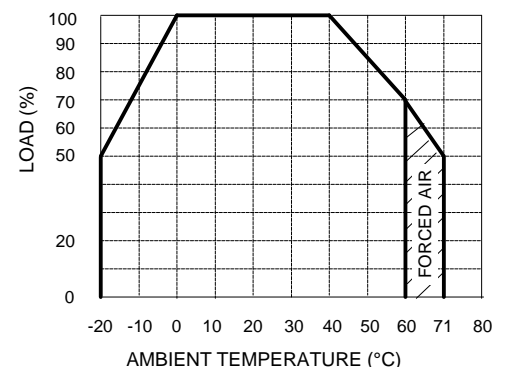
MODEL		SR60	SR60	SR60	SR60	SR60	SR60	SR60	SR60	SR60	SR60	SR60		
ITEMS		-2	-5	-6	-9	-12	-15	-18	-20	-24	-28	-48		
1	Nominal Output Voltage	V	2	5	6	9	12	15	18	20	24	28	48	
2	Maximum Output Current	A	12.0	12.0	10	6.7	5.5	4.4	3.9	3.9	3.3	2.8	1.5	
3	Maximum Output Power	W	24	60	60	60.3	66	66	70.2	78	79.2	78.4	72	
4	Efficiency (Typ) (*1)	%	60	75	75	75	78	78	78	78	80	80	80	
5	Input Voltage Range (*2)	-	85 ~ 132VAC / 170 ~ 265VAC(47 ~ 440Hz) selectable or 230 ~ 330VDC Input Voltage Range shown on Front Panel : 100 - 120 / 200 - 240VAC (50 / 60Hz).											
6	Input Current (Typ) (*1)	A	100V:0.7A	100VAC : 1.5A										
			200V:0.35A	200VAC : 0.75A										
7	Inrush Current(Typ) (*3)	-	6.8A at 100VAC, 13.5A at 200VAC (260VDC)											
8	Output Voltage Range (Typ)	%	±10%											
9	Maximum Ripple & Noise (*4)	mV	50			60			80			100		
10	Maximum Line Regulation (*5)	mV	20	20	24	36	48	60	72	80	96	112	192	
11	Maximum Load Regulation (*6)	mV	20	20	24	36	48	60	72	80	96	112	192	
12	Over Current Protection (*7)	A	12.5 ~ 15.7	12.5 ~ 15.7	10.5 ~ 13.0	7.0 ~ 8.7	5.7 ~ 7.2	4.6 ~ 5.8	4.0 ~ 5.1	4.0 ~ 5.1	3.4 ~ 4.3	2.9 ~ 3.7	1.6 ~ 2.0	
13	Over Voltage Protection (*8)	V	2.7 ~ 2.9	6.0 ~ 6.5	7.2 ~ 7.8	10.8 ~ 11.7	14.4 ~ 15.6	18.0 ~ 19.5	21.6 ~ 23.4	24.0 ~ 26.0	28.8 ~ 31.2	33.6 ~ 36.4	57.6 ~ 62.4	
14	Hold-up Time (Typ) (*9)	ms	20ms											
15	Remote Sensing	-	Possible											
16	Remote ON/OFF Control	-	Possible											
17	Parallel Operation	-	Possible											
18	Series Operation	-	Possible											
19	Operating Temperature (*10)	-	-20 ~ +71°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	-	Convection Cooled											
24	Temperature Coefficient	-	Less than 0.03% / °C											
25	Withstand Voltage (*11)	-	Input - Chassis : 2.5kVAC 1 min, Input - Output : 3.75kVAC 1 min, Output - Chassis : 500VAC 1 min.											
26	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output - Chassis : 500VDC											
27	Vibration	-	At no operating, 10 ~ 55Hz Amplitude (sweep for 1min) 0.825mm constant (Maxmum 5G) X, Y, Z 1hour each											
28	Shock	-	Less than 20G											
29	Safety Standard	UL1950	Approved by UL											
		CSA950	Approved by C-UL											
		EN60950	Approved by TUV (Approved model:SR60-5,SR60-6,SR60-12,SR60-15,SR60-24)											
30	Conducted Emission	-	Built to meet VCCI-Class A, FCC-Class A, VDE-Class A											
31	Weight	g	950											
32	Size (WxHxD)	mm	43 x 97 x 215 (Refer to Outline Drawing)											
33	Monitoring Signal	-	PF (Open Collector output)											

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

=NOTES=

- *1. At 100V/200VAC and maximum output power.
- *2. For cases where conformance to various safety specs (UL, CSA, etc) are required, input voltage range will be 100 - 120 / 200 - 240VAC (50 / 60Hz).
- *3. First in-rush current .
- *4. At 0 ~ +71°C : From No load ~ full load. At -20 ~ 0°C : From 10% load ~ full load.
- *5. From 85 ~ 132VAC or 170 ~ 265VAC, constant load.
- *6. From No load ~ Full load, constant input voltage.
- *7. Constant current limiting with automatic recovery. (The unit automatically shuts down the output when it is left for 5 seconds under the state that OCP is operating and the output voltage is less than PF detected level. The output recovers when the input voltage is turned on after brief turning off.)
- *8. Inverter shut-down method, manual reset. (OVP circuit will shut-down output)
- *9. At 100V/200VAC, nominal output voltage & maximum output current.
- *10. Ratings - For 5V model, refer to derating curve on the right.
For other Voltage models, refer to attached Derating Table.
- Load (%) is percent of maximum output power or maximum output current, whichever is greater.
- +61 ~ +71°C : Forced air cooled by outer cooling method.
- *11. Leacage current range used :
Input - Chassis greater than 20mA
Input - Output greater than 20mA (ACG - FG open)
Output - Chassis greater than 100mA

DERATING CURVE (5V TYPE)
MOUNTING A



SR 60 OUTPUT DERATING

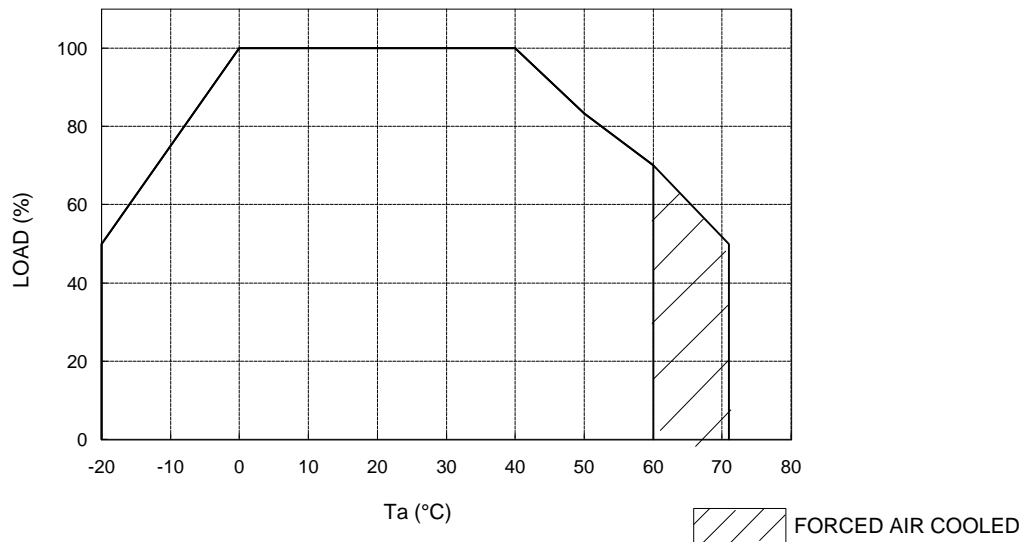
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MOUNTING (A)

MODEL \ Ta (°C)	Nominal Output Voltage	MAXIMUM OUTPUT CURRENT OR MAXIMUM OUTPUT POWER, WHICHEVER IS GREATER				
		-20°C	0 ~ 40°C	50°C	60°C	71°C (*)
SR60-2	2V	6A	12A	10A	8.4A	6A
		12W	24W	20W	16.8W	12W
SR60-5	5V	6A	12A	10A	8.4A	6A
		30W	60W	50W	42W	30W
SR60-6	6V	5A	10A	8.5A	7A	5A
		30W	60W	51W	42W	30W
SR60-9	9V	3.3A	6.7A	6A	4.6A	3.3A
		29.7W	60.3W	54W	41.4W	29.7W
SR60-12	12V	2.7A	5.5A	5A	3.8A	2.7A
		32.4W	66W	60W	45.6W	32.4W
SR60-15	15V	2.2A	4.4A	4A	3A	2.2A
		33W	66W	60W	45W	33W
SR60-18	18V	1.9A	3.9A	3.5A	2.7A	1.9A
		34.2W	70.2W	63W	48.6W	34.2W
SR60-20	20V	1.9A	3.9A	3.5A	2.7A	1.9A
		38W	78W	70W	54W	38W
SR60-24	24V	1.6A	3.3A	3A	2.3A	1.6A
		38.4W	79.2W	72W	55.2W	38.4W
SR60-28	28V	1.4A	2.8A	2.5A	1.9A	1.4A
		39.2W	78.4W	70W	53.2W	39.2W
SR60-48	48V	0.7A	1.5A	1.1A	1A	0.7A
		33.6W	72W	52.8W	48W	33.6W

* 61°C ~ 71°C Forced air cooling

OUTPUT DERATING CURVE
MOUNTING : A (5V)



MOUNTING : A

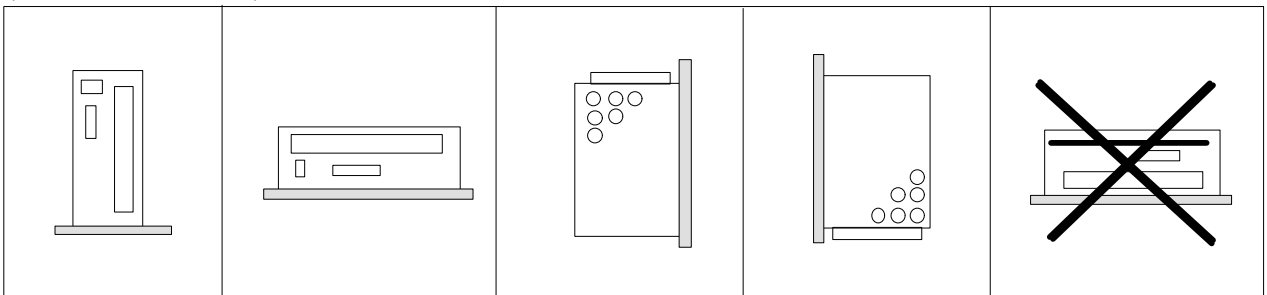
MOUNTING : B

MOUNTING : C

MOUNTING : D

DON'T USE

(STANDARD MOUNTING)



SR 60 OUTPUT DERATING

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MOUNTING (B)

MODEL \ Ta (°C)	Nominal Output Voltage	MAXIMUM OUTPUT CURRENT OR MAXIMUM OUTPUT POWER, WHICHEVER IS GREATER				
		-20°C	0 ~ 40°C	50°C	60°C	71°C (*)
SR60-2	2V	6.0	10.0	5.0	4.5	4.0
SR60-5	5V	6.0	10.0	5.0	4.5	4.0
SR60-6	6V	5.0	8.5	4.2	3.8	3.4
SR60-9	9V	3.3	6.0	3.0	2.7	2.4
SR60-12	12V	2.7	5.0	2.5	2.2	2.0
SR60-15	15V	2.2	4.0	2.0	1.8	1.6
SR60-18	18V	1.9	3.5	1.7	1.5	1.4
SR60-20	20V	1.9	3.5	1.7	1.5	1.4
SR60-24	24V	1.6	3.0	1.5	1.3	1.2
SR60-28	28V	1.4	2.5	1.2	1.1	1.0
SR60-48	48V	0.7	1.1	0.5	0.4	0.4

* 61°C ~ 71°C Forced air cooling

MOUNTING (C)

MODEL \ Ta (°C)	Nominal Output Voltage	MAXIMUM OUTPUT CURRENT OR MAXIMUM OUTPUT POWER, WHICHEVER IS GREATER				
		-20°C	0 ~ 40°C	50°C	60°C	71°C (*)
SR60-2	2V	6.0	10.0	8.0	6.0	4.0
SR60-5	5V	6.0	10.0	8.0	6.0	4.0
SR60-6	6V	5.0	8.5	6.8	5.0	3.4
SR60-9	9V	3.3	6.0	4.8	3.6	2.4
SR60-12	12V	2.7	5.0	4.0	3.0	2.0
SR60-15	15V	2.2	4.0	3.2	2.4	1.6
SR60-18	18V	1.9	3.5	2.8	2.1	1.4
SR60-20	20V	1.9	3.5	2.8	2.1	1.4
SR60-24	24V	1.6	3.0	2.4	1.8	1.2
SR60-28	28V	1.4	2.5	2.0	1.5	1.0
SR60-48	48V	0.7	1.1	0.8	0.6	0.4

* 61°C ~ 71°C Forced air cooling

MOUNTING (D)

MODEL \ Ta (°C)	Nominal Output Voltage	MAXIMUM OUTPUT CURRENT OR MAXIMUM OUTPUT POWER, WHICHEVER IS GREATER				
		-20°C	0 ~ 40°C	50°C	60°C	71°C (*)
SR60-2	2V	6.0	10.0	8.0	6.0	4.0
SR60-5	5V	6.0	10.0	8.0	6.0	4.0
SR60-6	6V	5.0	8.5	6.8	5.0	3.4
SR60-9	9V	3.3	6.0	4.8	3.6	2.4
SR60-12	12V	2.7	5.0	4.0	3.0	2.0
SR60-15	15V	2.2	4.0	3.2	2.4	1.6
SR60-18	18V	1.9	3.5	2.8	2.1	1.4
SR60-20	20V	1.9	3.5	2.8	2.1	1.4
SR60-24	24V	1.6	3.0	2.4	1.8	1.2
SR60-28	28V	1.4	2.5	2.0	1.5	1.0
SR60-48	48V	0.7	1.1	0.8	0.6	0.4

* 61°C ~ 71°C Forced air cooling