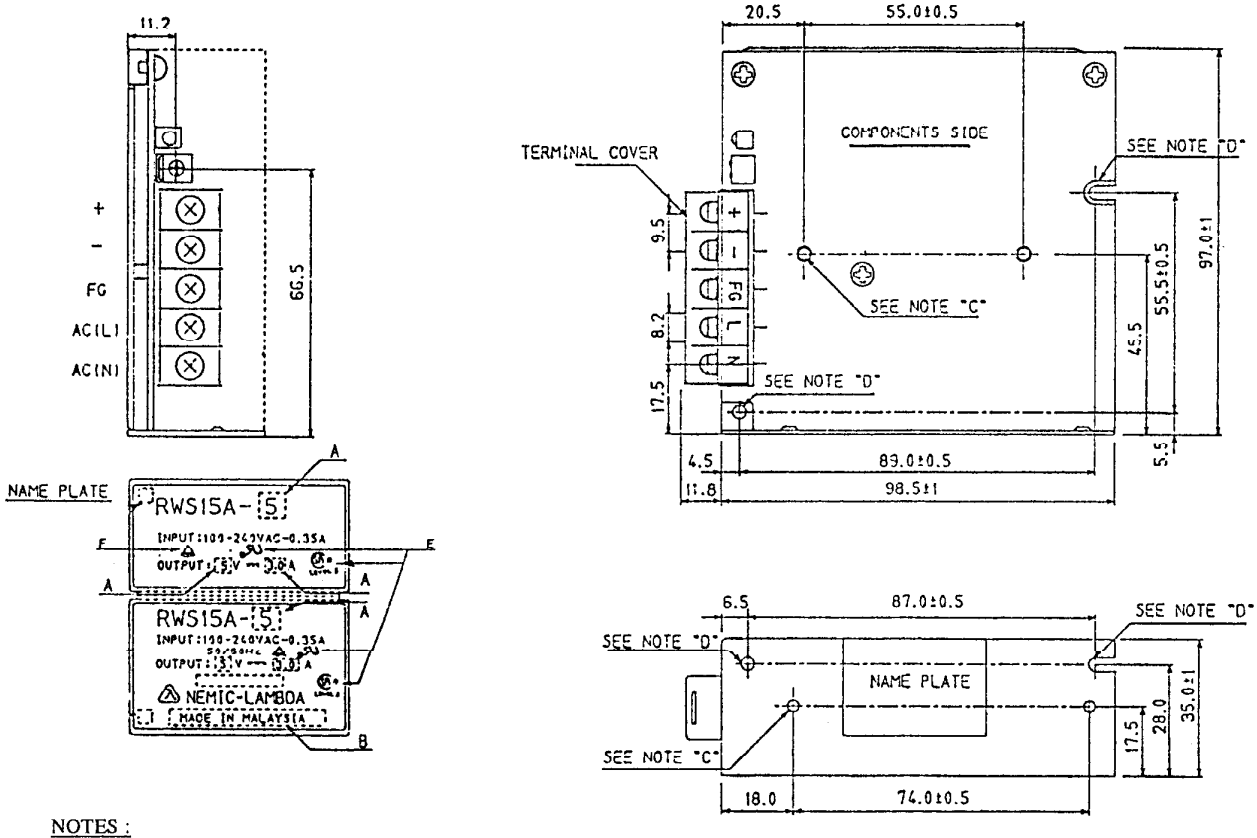
RWS15A SPECIFICATIONS

Items / Model				RWS15A-5	RWS15A-12	RWS15A-15	RWS15A-24	RWS15A-48
1	Nominal Output Voltage		V	5	12	15	24	48
2	Maximum Output Current		A	3.0	1.3	1.0	0.7	0.3
3	Maximum Output Power		W	15.0	15.6	15.0	16.8	14.4
4	Efficiency (Typ)	(*1)	%	71	75	77	78	78
5	Input Voltage Range	(*2)	-	85~265VAC (47~440Hz) or 110~330VDC				
6	Input Current (Typ)	(*3)	-	0.35A at 100VAC or 0.2A at 200VAC				
7	Inrush Current (Typ)	(*4)	-	20A at 100VAC or 40A at 200VAC				
8	Output Voltage Range		-	±10%				
9	Maximum Ripple & Noise		mV	120	150	150	200	300
10	Maximum Line Regulation	(*5)	mV	20	48	60	96	192
11	Maximum Load Regulation	(*6)	mV	40	100	120	150	250
12	Over Current Protection	(*7)	A	3.15~	1.36~	1.05~	0.73~	0.31~
13	Over Voltage Protection	(*8)	V	5.75~6.75	13.8~16.2	17.3~20.3	27.6~32.4	55.2~64.8
14	Hold-Up Time (Typ)	(*9)	-	20ms				
15	Remote Sensing		-	-				
16	Series Operation		-	Possible				
17	Operating Temperature	(*10)	-	0~+50°C (100%) , 60°C (60%)				
18	Operating Humidity		-	30%~90% RH				
19	Storage Temperature		-	-30~+85°C				
20	Storage Humidity		-	10%~95%RH				
21	Cooling		-	Convection Cooled				
22	Temperature Coefficient		-	1% (Typ) at 0°C~+50°C				
23	Withstand Voltage	(*11)	-	Input-Chassis : 2kVAC , Input-Output : 3kVAC Output-Chassis : 500VAC 1min				
24	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output-FG 500VDC				
25	Vibration		-	10~55Hz (sweep 1min) Less than 19.6m/s^2 X,Y,Z 1h each				
26	Shock		-	Less than 196.1m/s^2				
27	Safety		-	Built to meet UL1950-D3, CSA234, EN60950 & DENTORI				
28	Conducted Radio Noise		-	Built to meet FCC class B				
29	Weight		-	270g				
30	Size (W*H*D)		-	35mm x 97mm x 98.5mm (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 100~240VAC 50/60Hz on name plate.
*3 : At 100VAC or 200VAC & Maximum Output Power.
*4 : Typical value on cold start, Ta = 25°C.
*5 : From 85~265VAC or 110~330VDC, constant load.
*6 : From No-Load to Full Load, Constant Input Voltage.
*7 : Foldback current limiting with automatic recovery. Avoid to operate overload or dead short for 30 seconds.
*8 : Inverter shut-down method, manual reset.
*9 : At 100VAC, Nominal Output Voltage & Maximum Output Current, Ta = 25°C
*10 : At Vertical Mounting.
*11 : Refer to instruction manual for testing procedure.

OUTLINE & CONNECTION



NOTES :

A : Nominal output voltage and maximum output current are shown here in accordance with the specifications.

B : Country of manufacturer will be shown here.

C : M3 tapped holes (4) for customer chassis mounting. (Screws must not protrude into power supply by more than 6m/m).

D : 03.5 holes (4) for customer chassis mounting. (Use M3 mounting screws).

E : Product Safety logo (UL,CSA,TUV) shall be applied where applicable. Refer to manufacturer for more detail.

F : Input Terminals
N : Neutral
L : Life (connected to internal fuse).

G : FG (Frame ground) terminal marked & connected internally to the chassis is for protective earth connection. (refer to Installation, Page 3,2.1).

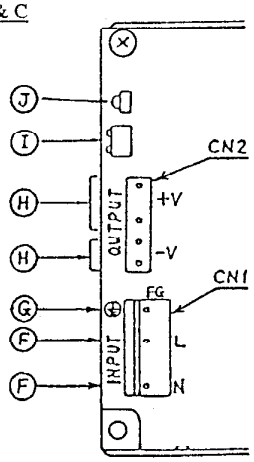
H : Output Terminals
+V : Positive output terminal.
-V : Negative output terminal.

I : VR1 is the volume for adjusting output voltage ±10%. Turning clockwise increases the voltage. Note that VR1 is preset as per name plate. Do not adjust unnecessary.

J : Output power-on lamp.

K : Standard models : With terminal block, without chassis cover.
Options are : A = With terminal block, with chassis cover.
B = With connector, without chassis cover
C = With connector, with chassis cover.

CONNECTIONS FOR OPTIONS B & C



CONNECTORS USED :

PART DESCRIPTION	PART NAME	MANUFACT.	QTY.
PIN HEADER(INPUT) CN1	5289-4A	MOLEX	1
PIN HEADER(OUTPUT) CN2	5287-4A	MOLEX	1

ACCESSORIES :

SOCKET HOUSING (FOR CN1,2)	5199-04	MOLEX	2
TERMINAL PINS	5194-PBT	MOLEX	7

HAND CRIMPING TOOL : JHTR 5904 MANUFACTURER : MOLEX

INSTALLATION

1 TO MEET SAFETY REQUIREMENTS, THE POWER SUPPLY TERMINALS MUST NOT BE USED DIRECTLY AS THE EXTERNAL TERMINATIONS OF ANY EQUIPMENT. Recommended screw torque is 5 Kg.cm.

2. GROUNDING :
For safety as well as improved noise, ensure secure connection of the FG terminal marked ⏚ (refer to Page 2, Note G) to the ground terminal of the equipment internally as the protective earth connection.

3. MOUNTING :
3.1 : M3 mounting screws (refer to Page 2, Note C) must not penetrate into the power supply more than 6mm from the external surface of the chassis.
3.2 : Whichever side of the chassis is used for mounting, all 4 positions of that side, 2 M3 tapped holes and 2 03.5 holes (refer to Page 2, Notes C, D), must be used in order to meet the vibration specification.
3.3 : Recommended screw torque is 5 Kg.cm.
3.4 : If a few units are used side-by-side, a minimum 15mm spacing in-between is required for sufficient ventilation.
3.5 : The power supply must be installed where equipment ventilation allows free convection cooling.

4. WIRING :
4.1 : AWG #22 #18 wires should be used for input & output connection to improve noise performance, input & output wires should be well separated, but each pair should be twisted together.
4.2 : To avoid excessive voltage drop and for improved noise, short and thick wires should be used to connect the load.

5. SERIES OPERATION :
The outputs of 2 units can be used in series in either of the following 2 ways Fig.(A), (B). For Fig.(A), the by-pass diodes should be selected with forward current greater than the load current and reverse volatge greater than the output voltage.

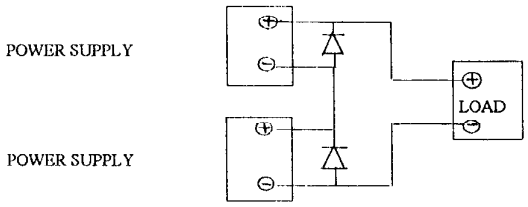


Fig. B

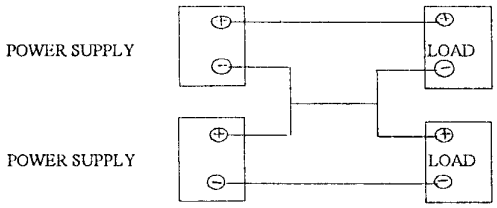
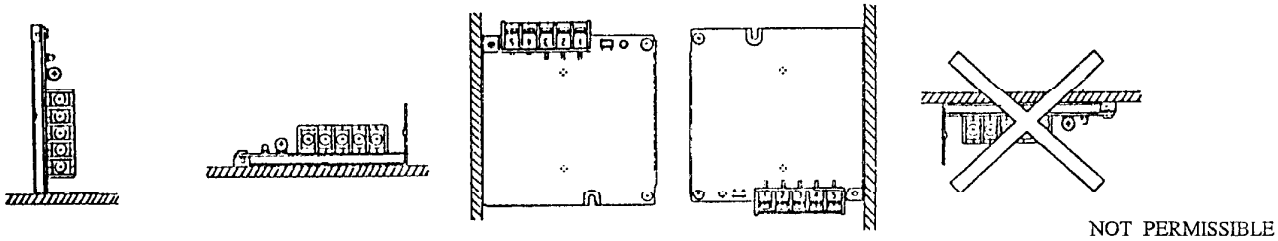


Fig. C

MOUNTING POSITION AND OUTPUT DERATING

MOUNTING A (STANDARD) MOUNTING B MOUNTING C MOUNTING D MOUNTING E



NOT PERMISSIBLE

OUTPUT DERATING

WITHOUT CHASSIS COVER

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

WITH CHASSIS COVER

	LOAD (%)				
Ta (°C)	MOUNTING:A	MOUNTING:B	MOUNTING:C	MOUNTING:D	MOUNTING:E
30	100	100	100	100	-
45	100	100	100	100	-
50	80	80	80	80	-
60	50	50	50	50	-

FUSE :

Rating : 250V 2A
Type : Time-lag
Avoid using fast-blow type.

CAUTION : Change of fuse is to be done by authorised service personnel only.

VORSICHT : UBERLASSEN SIE WARTUNGSARBEITEN STETS DEM VON ZUGELASSENEN FACHMANN.

CE MARKING : CE marking when applied to the unit, indicates compliance with the low voltage directive (73/23/EEC) as modeified by the CE marking directive (93/68/EEC) in that it complies with EN60950.