

NND - 30
INSTRUCTION MANUAL

Dwg. No.	IA 503 - 04 - 01F	F
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Items	Model		NND 30-1212	NND 30-1515		Rev
	1	Nominal Output Voltage	V	+/- 12	+/- 15	
2	Maximum Output Current	A	1.6	1.3		
3	Maximum Output Power	W	38.4	39		
4	Efficiency (Typ) (*1)	%	45	45		
5	Input Voltage Range (*2)	-	100: 85 ~ 115VAC 200: 170 ~ 230VAC	115: 98 ~ 132VAC 230: 195 ~ 265VAC	47 ~ 440Hz	
6	Input Current (Typ) (*1)	A	1.5	1.5		
7	In-rush Current (Typ)	A	20A @ 100VAC 10A @ 200VAC, cold start			C
8	Output Voltage Range	%	+/- 10 Adjustable for Each Output			
9	Maximum Ripple & Noise (*3)	mV	1mV RMS 3mV ptp Each Output			
10	Maximum Line Regulation	mV	1.2	1.5		
11	Maximum Load Regulation	mV	3.6	4.5		
12	Maximum Cross Regulation	mV	3.6	4.5		
13	Over Current Protection (*4)	A	1.68 ~ 2.10	1.37 ~ 1.70		
14	Over Voltage Protection Crowbar Type (*5)	V	14.5 ~ 17.2	18.1 ~ 21.5		
15	Remote Programming	-	NONE			
16	Remote Sensing	-	NONE			
17	Remote ON/OFF Control	-	NONE			
18	Parallel Operation	-	NONE			
19	Series Operation	-	NONE			
20	Operating Temperature	°C	-20 ~ 71°C, -20°C...60%, 0 ~ 50°C...100%, 60°C...60%, 71°C...40%			
21	Operating Humidity RH	%	30 ~ 95%			
22	Storage Temperature	°C	-40 ~ 85°C			B
23	Storage Humidity RH	%	10 ~ 95%			
24	Cooling	-	Convection Cooling			
25	Temperature Coefficient (*1)	-	0.02% / °C			
26	Withstand Voltage	-	Input - Output...3.75KVAC Input - Chassis...2.5KVAC for 1 min. @ 20mA			
27	Isolation Resistance	-	More than 100 MΩ at DC 500V @ 25°C and 70% RH for 1 min.			
28	Vibration	-	10 ~ 55Hz Amplitude (sweep 1 min.) less than 2G X,Y,Z 1h. each			B
29	Shock	-	Less than 20 G			B
30	Weight	gm	2750			D
31	Size (W.H.D.) (*6)	mm	80 x 113.5 x 164			
32	EMI	-	Designed to meet VDE 0871 class B , FCC 20780 class B , VCCI class 1			
33	Regulatory Agency	-	Meets IEC 950 , UL1950 , UL-C1950 , EN 60950, TUV			E
<p>NOTES</p> <p>*1 : At 100 VAC and maximum Output Power.</p> <p>*2 : For cases where conformance to various safety specs. (UL, UL-C, TUV, etc.) are required, input voltage will be 250VAC max. and frequency range 47 ~ 63Hz.</p> <p>*3 : Floating output or grounded +V or -V Terminal.</p> <p>*4 : Foldback current limit with automatic recovery for each output.</p> <p>*5 : For each output - OVP circuit will shut down output, manual reset. (Line recycle)</p> <p>*6 : See Outline Drawings.</p>						E

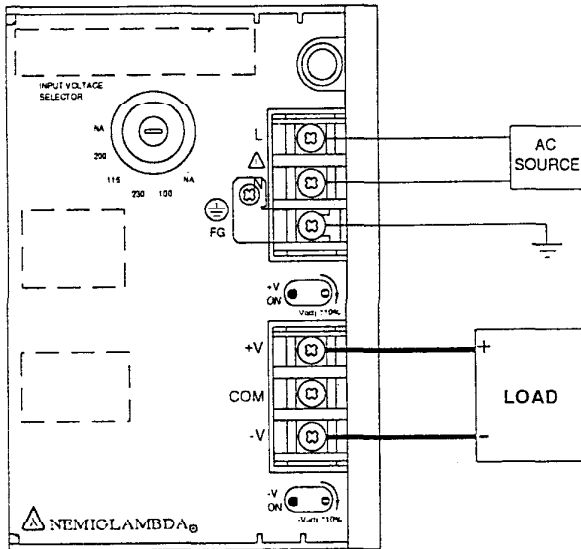
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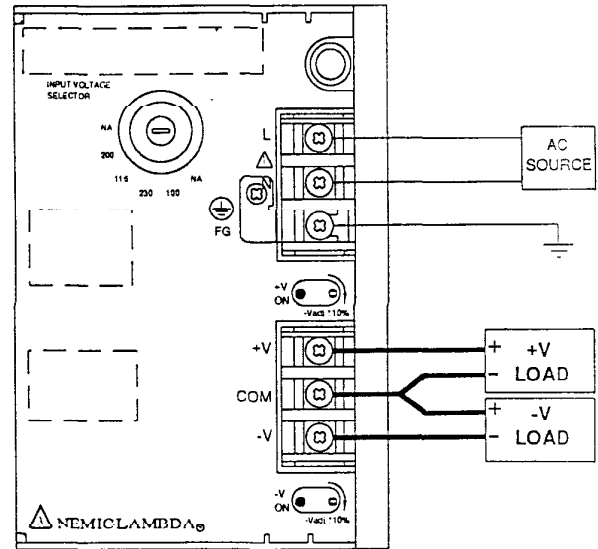
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CONNECTIONS DIAGRAM



A. SERIES OPERATION.



B. DUAL OUTPUT OPERATION.

SAFETY INSTRUCTIONS - NND30:

1. FUSES MUST BE CHANGED BY AUTHORIZED SERVICE PERSONNEL ONLY!

F1: T3.15A 250V FOR 100/115V~ ; 2A 250V FOR 200/230V~

F2: 7A 125V

F3: 7A 125V

2. THE POWER SUPPLY SHOULD BE INSTALLED IN SUCH A WAY THAT THE FUSE HOLDER IS NOT OPERATOR ACCESSIBLE.

3. POWER SUPPLY MUST BE SECURED TO THE CHASSIS OF THE END USE EQUIPMENT BY 4 SCREWS INSERTED INTO THREADED OPENINGS IN THE BOTTOM OF THE POWER SUPPLY ENCLOSURE (REFER TO OUTLINE DRWG.)

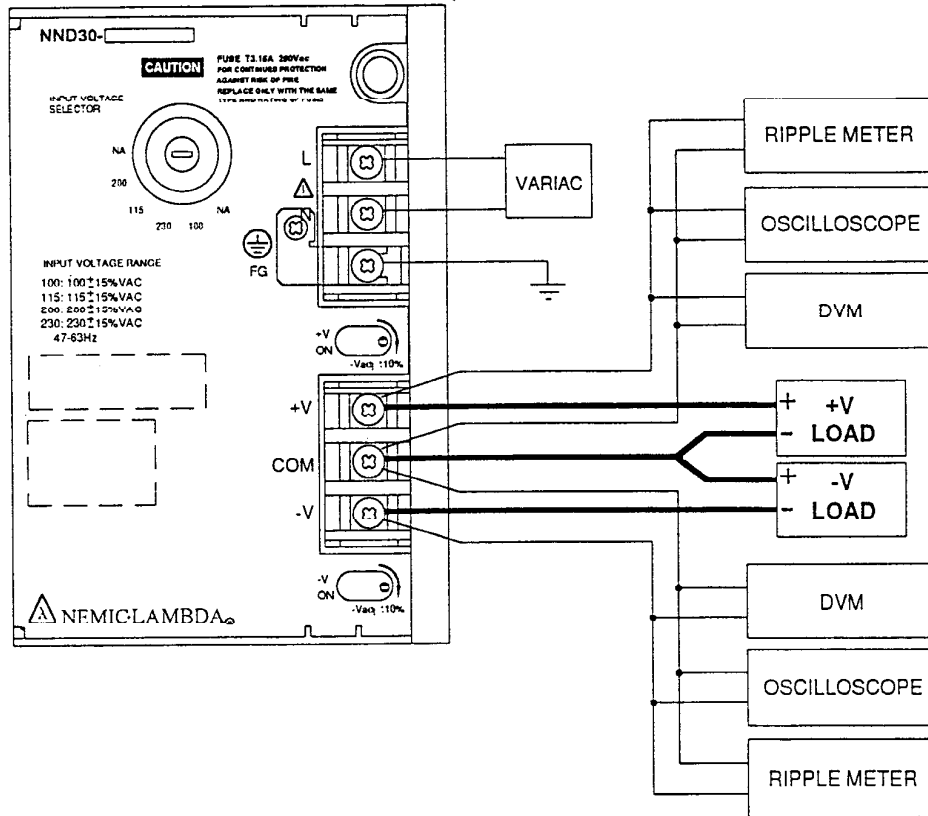
4. MAXIMUM LEAKAGE CURRENT OF END-USE EQUIPMENT SHOULD NOT EXCEED 3.5mA.

CE MARK:

1. NND30 SERIES IS INTENDED FOR PROFESSIONAL INSTALLATION WITHIN HOST EQUIPMENT AND MUST NOT BE USED AS A STAND ALONE PRODUCT.
2. CE MARKING WHEN APPLIED TO A PRODUCT COVERED BY THIS MANUAL INDICATES COMPLIANCE WITH THE LOW VOLTAGE DIRECTIVE ONLY.

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CONNECTIONS FOR PERFORMANCE CHECK



NOTES:

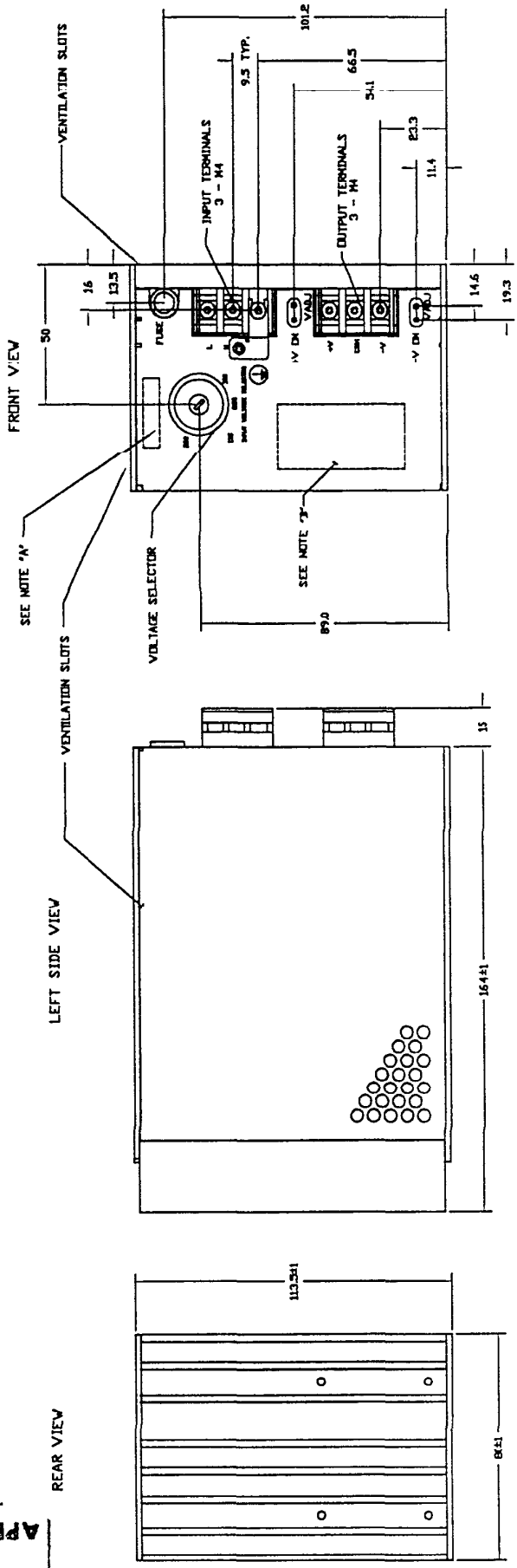
1. REGULATION AND RIPPLE METERS MUST NOT BE GROUNDED THROUGH THREE-WIRE LINE CORD TO GROUND.
2. PERFORM CHECKS WITH LOCAL SENSING CONNECTIONS ONLY.
3. NND30 MODEL IS NOT RECOMMENDED FOR CONSTANT CURRENT LOADS.
4. MAX. CAPACITIVE LOAD RECOMMENDED: 10,000uF EACH OUTPUT.

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APPR. *Charles*

OUTLINE DRAWING NND-30



NOTES:
A. NOMINAL OUTPUT VOLTAGE AND OUTPUT CURRENT WILL BE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
B. INPUT AND OUTPUT RATINGS WILL BE SHOWN HERE IN ACCORDANCE TO THE SPECIFICATIONS.
C. M4 TAPPED HOLE (4) FOR CHASSIS MOUNTING (SCREWS MUST NOT PROTRUDE INTO P.S. MORE THAN 6 mm)