

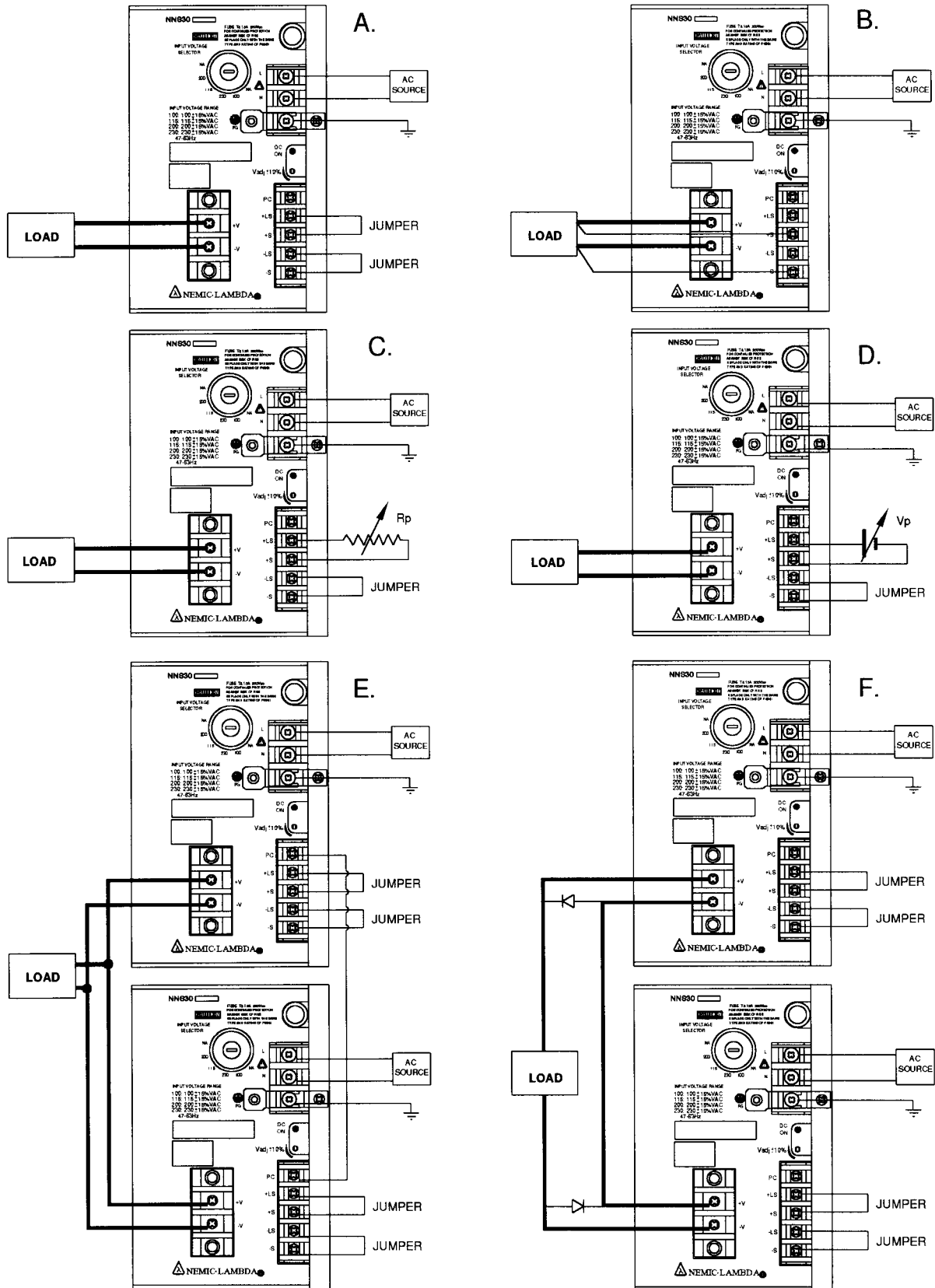
NNS - 30 INSTRUCTION MANUAL

Dwg. No.

IA 501 - 04 - 01F

F

Model			NNS 30 - 5	NNS 30 - 12	NNS 30 - 15	NNS 30 - 24	NNS 30 - 48	Rev
Items								
1	Nominal Output Voltage	V	5	12.0	15.0	24.0	48.0	
2	Maximum Output Current	A	6	4.0	3.4	2.3	1.1	
3	Maximum Output Power	W	30	48	51	55.2	52.8	
4	Efficiency (Typ) (*1)	%	35%	45%	46%	50%	54%	
5	Input Voltage Range (*2)	-	100: 85~115VAC 115: 98~132VAC 47~440Hz 200: 170~230VAC 230: 195~265VAC					
6	Input Current (Typ) (*1)	A	1.14	1.41	1.47	1.45	1.35	
7	In-rush Current (Typ)	A	20A @ 100VAC 10A @ 200VAC, cold start					C
8	Output Voltage Range	%	+/- 10					
9	Maximum Ripple & Noise (*3)	mV	1mV RMS 3mV ptp					
10	Maximum Line Regulation	mV	0.5mV	1.2mV	1.5mV	2.4mV	4.8mV	
11	Maximum Load Regulation	mV	1.5mV	3.6mV	4.5mV	7.2mV	14.4mV	
12	Over Current Protection (*4)	A	6.30~7.80	4.20~5.20	3.57~4.42	2.42~3.00	1.15~1.43	
13	Over Voltage Protection Crowbar Type (*6)	V	6.0~7.2V	14.5~17.2V	18.1~21.5V	29.0~34.3V	58.1~68.6V	B
14	Remote Programming	-	Volt / Volt, 1000 Ω / Volt typ. +S to +LS Terminals					
15	Remote Sensing	-	Possible, Via +S, -S Terminals					
16	Remote ON/OFF Control	-	N.A.					
17	Parallel Operation	-	Possible, current sharing with single connection VIA PC terminal					
18	Series Operation	-	Possible					
19	Operating Temperature	$^{\circ}\text{C}$	-20~71 $^{\circ}\text{C}$, -20 $^{\circ}\text{C}$...60%, 0~50 $^{\circ}\text{C}$...100%, 60 $^{\circ}\text{C}$...60%, 71 $^{\circ}\text{C}$...40%					
20	Operating Humidity RH	%	30~95%					
21	Storage Temperature	$^{\circ}\text{C}$	-40~85 $^{\circ}\text{C}$					B
22	Storage Humidity RH	%	10~95%					
23	Cooling	-	Convection Cooling					
24	Temperature Coefficient (*1)	-	0.02% / $^{\circ}\text{C}$					
25	Withstand Voltage	-	Input - Output...3.75KVAC Input - Chassis...2.5KVAC for 1 min. @ 20mA					
26	Isolation Resistance	-	More than 100M Ω at DC 500V @ 25 $^{\circ}\text{C}$ and 70% RH for 1 min.					
27	Vibration	-	10~55Hz Amplitude (sweep 1 min.) less than 2G X,Y,Z 1h. each					B
28	Shock	-	Less than 20 G					B
29	Weight	gm	2930					D
30	Size (W.H.D.) (*5)	mm	80 x 124 x 178					
31	EMI	-	Designed to meet VDE 0871 class B , FCC 20780 class B , VCCI class 1					
32	Regulatory Agency	-	Meets IEC 950 , UL 1950 , UL-C 1950 , EN 60950 , TUV					E
NOTES								
*1 : At 100 VAC and maximum Output Power.								
*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.								
*3 : Floating output or grounded +V or -V Terminal.								
*4 : Foldback current limit with automatic recovery for each output.								
*5 : See Outline Drawings.								
*6 : For each output - OVP circuit will shut down output, manual reset. (Line recycle)								
E								



CONNECTIONS DIAGRAM

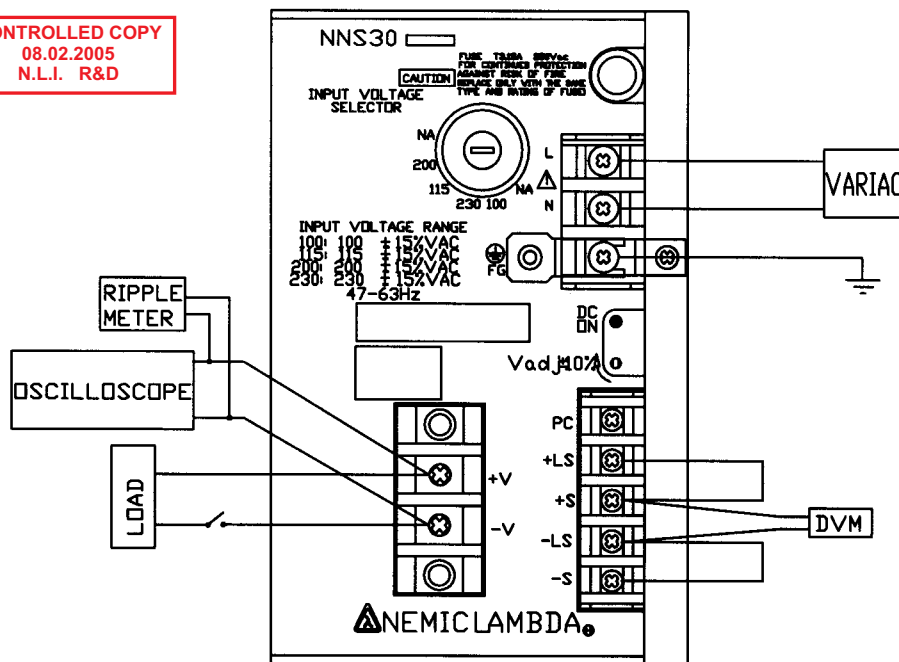
- A. LOCAL SENSING.
- B. REMOTE SENSING.
- C. RESISTIVE PROGRAMMING (LOCAL SENSE).
- D. VOLTAGE PROGRAMMING (LOCAL SENSE).
- E. PARALLEL OPERATION WITH CURRENT SHARE (LOCAL SENSE).
- F. SERIES OPERATION (LOCAL SENSE) EXTERNAL DIODES RATING: 3A, 50V.

NOTES:

1. NNS30 MODEL IS NOT RECOMMENDED FOR CONSTANT CURRENT LOADS.
2. MAX CAPACITIVE LOAD RECOMMENDED: NNS30-5: 15,000uF , NNS30-12: 8,200uF , NNS30-15: 8,200uF
NNS30-24: 3000uF , NNS30-48: 1500uF

CONNECTIONS FOR PERFORMANCE CHECKS

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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.

SAFETY INSTRUCTIONS - NNS30:

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

F1: T3.15A 250V FOR 100 / 115V~ (SUPPLIED IN THE PACKAGE)

2A 250V FOR 200 / 230V~ (ASSEMBLED IN THE POWER SUPPLY AT SHIPMENT)

F2: 5V 20A 125V

12V , 15V 15A 125V

24V , 48V 10A 125V

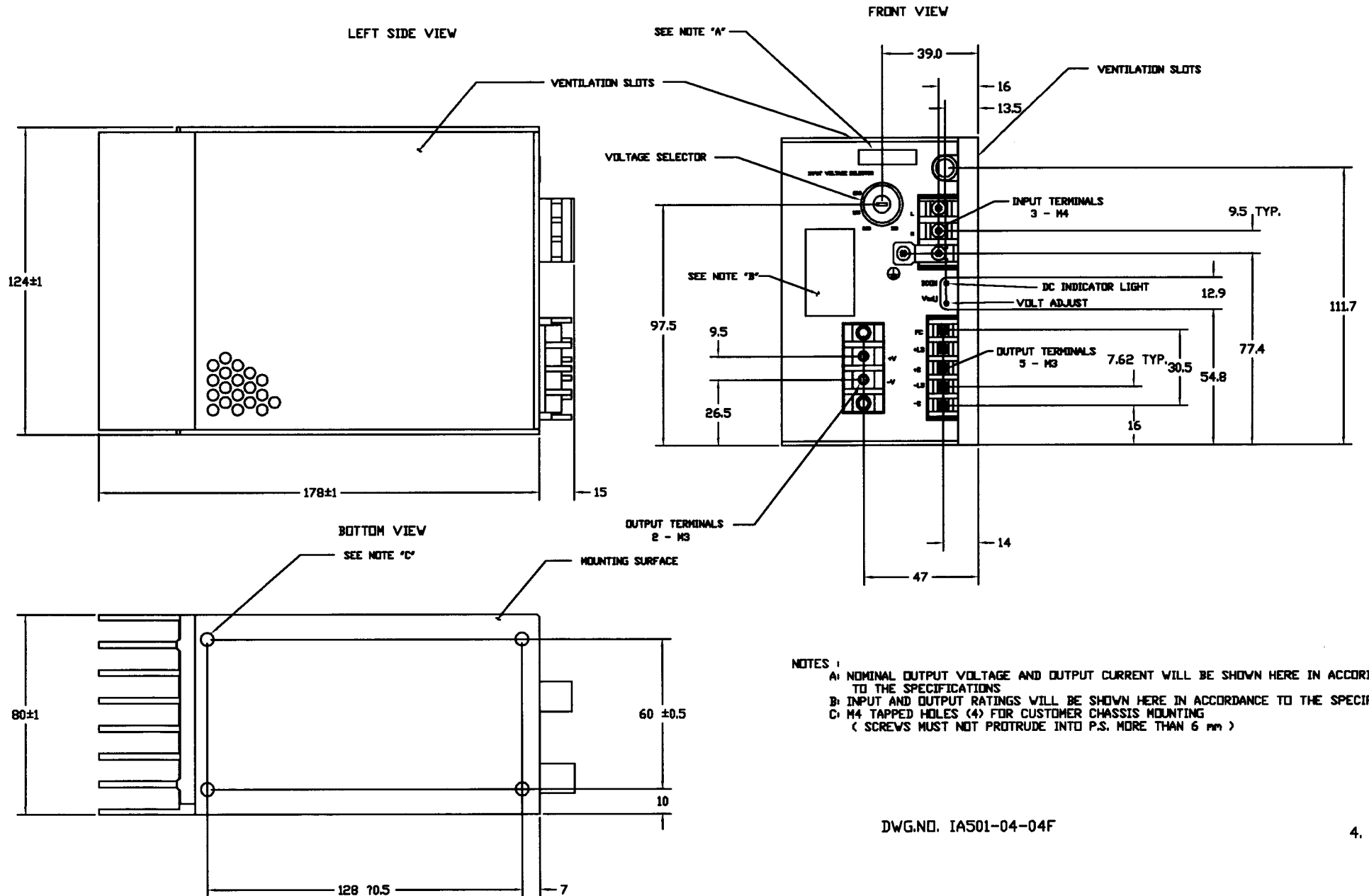
2. THE POWER SUPPLY SHOULD BE INSTALLED IN SUCH A WAY THAT THE FUSE HOLDER IS NOT OPERATOR ACCESSIBLE.
3. POWER SUPPLY MUST BE SECURED TO THE CHASSIS OF THE END USE EQUIPMENT BY 4 SCREWS INSERTED INTO THREADED OPENINGS IN THE BOTTOM OF THE POWER SUPPLY ENCLOSURE (REFER TO OUTLINE DRWG.)
4. MAXIMUM LEAKAGE CURRENT OF END-USE EQUIPMENT SHOULD NOT EXCEED 3.5 mA

CE MARK:

1. NNS30 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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OUTLINE DRAWING NNS 30



DWG.NO. IA501-04-04F