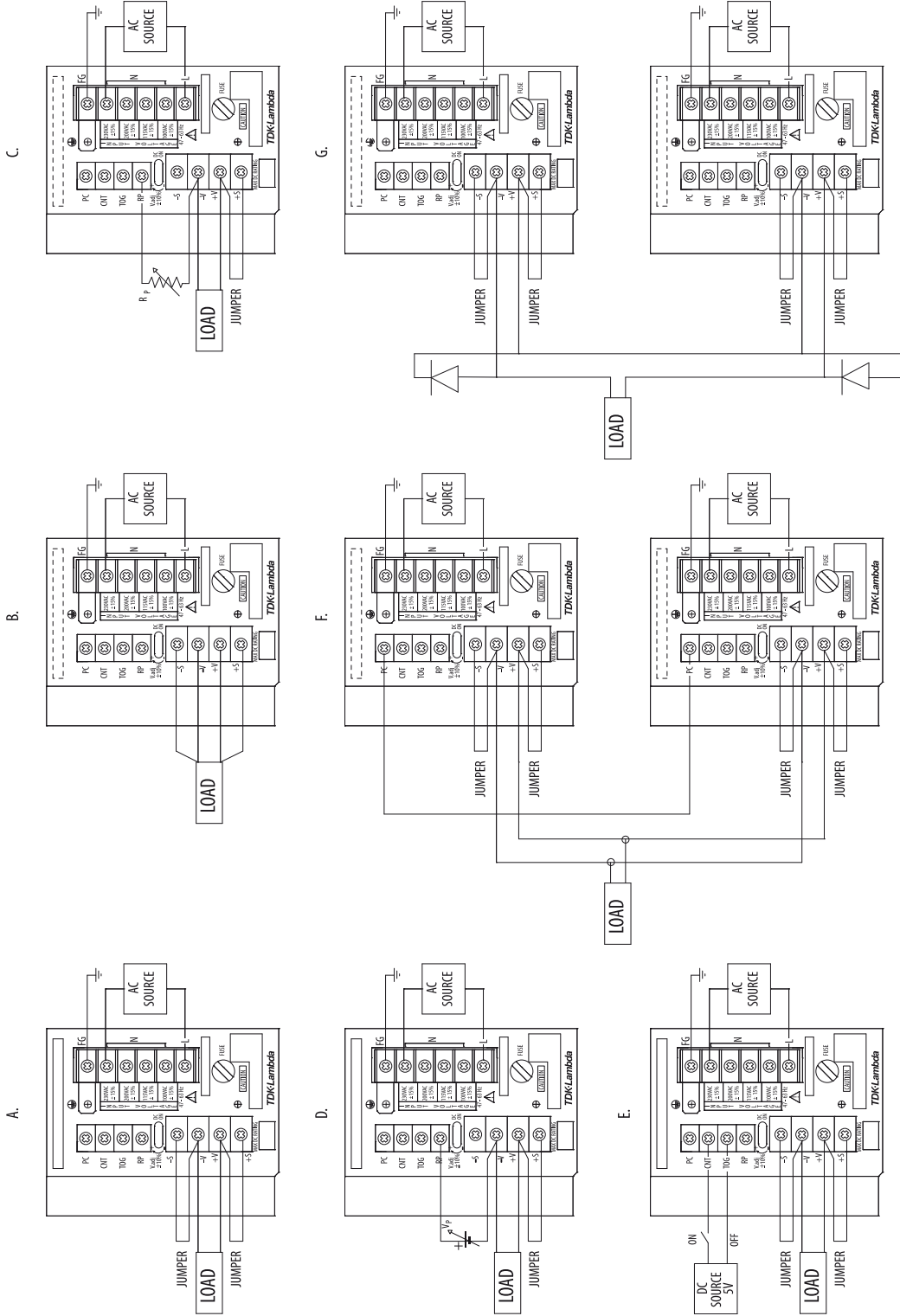


**NNS -50 Instruction Manual**

Dwg. No.	IA507-04-01D
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Items		Model	NNS 50-5	NNS 50-12	NNS 50-15	NNS 50-24
1	Nominal Output Voltage	V	5	12.0	15.0	24.0
2	Maximum Output Current	A	10	6.5	5.5	3.8
3	Maximum Output Power	W	50	78	82.5	91.2
4	Efficiency (Typ) (*1)	%	42	51	53	56
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	1.50	2.0	2.0	2.20
7	In-rush Current (Typ)	A	60A@ 100VAC 40A@ 200VAC, cold start			
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
11	Maximum Load Regulation	mV	1.5mV	3.6mV	4.5mV	7.2mV
12	Over Current Protection (*4)	A	10.5~13.0	6.8~8.45	5.8~7.15	4.0~4.94
13	Over Voltage Protection Crowbar Type (*6)	V	6.0~7.2V	14.5~17.2V	18.1~21.5V	29.0~34.3V
14	Remote Programming	-	Volt/Volt, 1000Ω / Volt typ. RP to -V Terminals			
15	Remote Sensing	-	POSSIBLE, via +S, -S Terminals			
16	Remote ON/OFF Control	-	POSSIBLE			
17	Parallel Operation	-	POSSIBLE, current sharing with single connection via PC terminal			
18	Series Operation	-	POSSIBLE			
19	Operating Temperature	°C	-20~71°C, -20°C...60%, 0~50°C...100%, 60°C...60%, 71°C...40%			
20	Operating Humidity RH	%	30~95%			
21	Storage Temperature	°C	-40~85°C			
22	Storage Humidity RH	%	10~95%			
23	Cooling	-	Convection Cooling			
24	Temperature Coefficient (*1)	-	0.02% / °C			
25	Withstand Voltage	-	Input-Output...3.75K VAC Input-Chassis...2.5K VAC for 1 min. @ 20mA			
26	Insulation Resistance	-	More than 100M Ω at DC 500V @25°C and 70% RH for 1 min.			
27	Vibration	-	10~55Hz Amplitude (sweep 1 min.) less than 2G X, Y, Z 1h. each			
28	Shock	-	Less than 20 G			
29	Weight	gm	4200			
30	Size (W*H*D) (*5)	mm	97 x 113 x 200			
31	EMI	-	Designed to meet EN55022-1, CISPR-22, FCC Part 15, VCCI-class B			
32	Regulatory Agency	-	Designed to meet IEC/EN/UL 60950-1 Ed.2			

IMPORTANT,  
See Installation Instructions Before Connecting to the Supply.



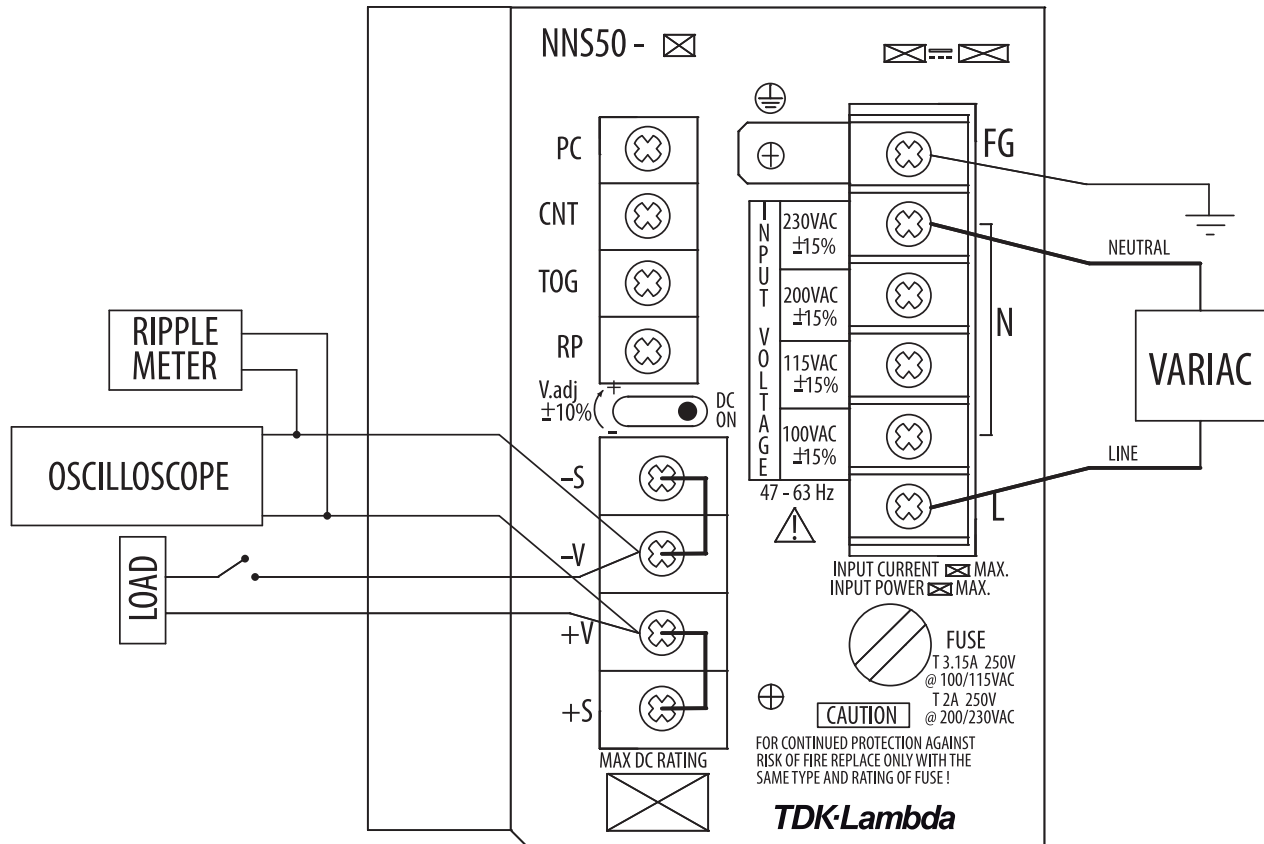
CONNECTIONS DIAGRAM:

- A. LOCAL SENSING
- B. REMOTE SENSING
- C. RESISTIVE PROGRAMMING (LOCAL SENSE)
- D. VOLTAGE PROGRAMMING (LOCAL SENSE)
- E. REMOTE CONTROL ON/OFF (LOCAL SENSE)
- F. PARALLEL OPERATION WITH CURRENT SHARE (LOCAL SENSE)
- G. SERIES OPERATION (LOCAL SENSE) EXTERNAL DIODES RATING: 10A, 50V

NOTES:

- 1. NNS50 MODEL IS NOT RECOMMENDED FOR CONSTANT CURRENT LOADS
- 2. MAX. CAPTIVATE LOAD RECOMMENDED:  
 NNS50-5: 27,000uF, NNS50-12:10,000uF, NNS50-15: 10,000uF, NNS50-24: 3,000uF
- 3. CONNECTIONS DIAGRAMS SHOWN HERE FOR 230VAC OPERATION  
 FOR OTHER INPUT VOLTAGES, CONNECT NEUTRAL LEAD TO THE APPROPRIATE "N"  
 CONNECTION ON THE INPUT TERMINAL

## CONNECTIONS FOR PERFORMANCE CHECKS



### 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. DIAGRAM IS SHOWN FOR 230VAC. FOR OTHER VOLTAGES, CONNECT THE NEUTRAL LEAD TO THE APPROPRIATE "N" CONNECTION ON THE INPUT TERMINAL.
4. POWER SUPPLY IS SUPPLIED WITH 3.15A FUSE FOR 85~132VAC OPERATION. 2A FUSE FOR 170~265VAC OPERATION IS SUPPLIED IN THE PACKAGE.

### SAFETY INSTRUCTIONS

1. FUSE RATING: T3.15A 250V@100/115VAC, T2A 250V@200/230VAC.
2. POWER SUPPLY MUST BE SECURED TO THE CHASSIS OF THE END USE EQUIPMENT BY 4 SCREWS, INSERTED INTO THREADED HOLES IN THE MOUNTING SURFACE OF THE POWER SUPPLY ENCLOSURE (REFER TO OUTLINE DRWG).
3. MAX. LEAKAGE CURRENT OF THE END USE EQUIPMENT SHOULD NOT EXCEED 3.5mA.

CAUTION: FUSE MUST BE REPLACED BY AUTHORIZED SERVICE PERSONNEL ONLY!

### CE MARK

1. NNS50 SERIES IS INTENDED FOR PROFESSIONAL WITH 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.

### SICHERHEITSHINWEISE

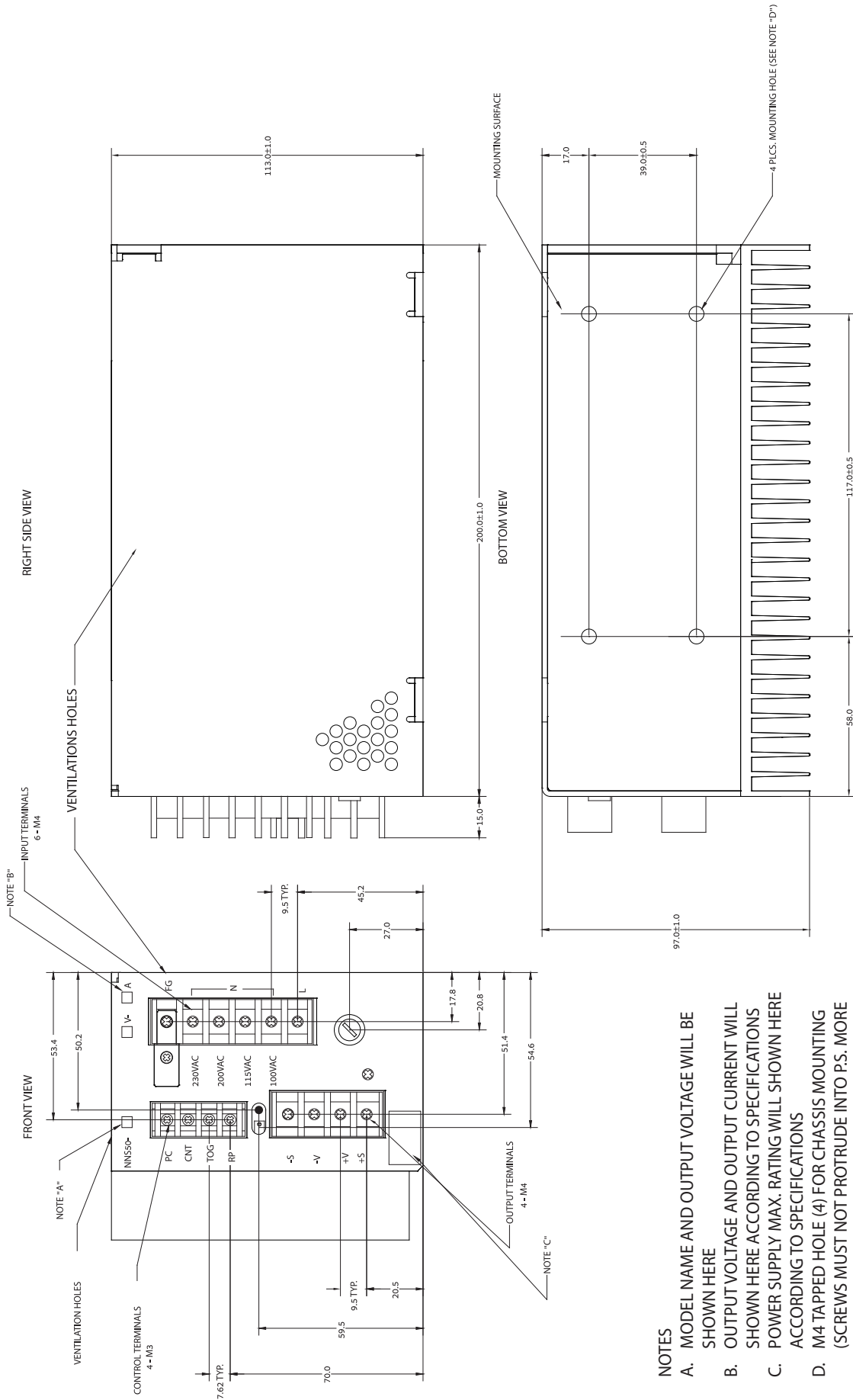
VOR ANSCHLUSS AN DAS NETZ AUFSTELLANLEITUNG BEACHTEN!

1. ABSICHERUNG: T3.15A 250V@ 100/115VAC, T2A 250V@200/230VAC.
2. DIE BEFESTIGUNG DES NETZGERAETES IN DER END-ANLAGE ERFOLGT DURCH 4 SCHRAUBEN. IM NETZTEIL EINGESetzte EINPRESSMUTTERN AUF DER BEFESTIGUNGSSEITE MUESSEN VERWENDET WERDEN. (SIEHE MASSZEICHNUNG).
3. DER MAXIMALE ABIEITSTROM DER END-ANLAGE DARF 3.5mA NICHT UEBERSCHREITEN.

### ACHTUNG

AUSTAUSCH DES SICHERUNGSEINSATZ NUR DURCH GESCHULTES FACHPERSONAL !

NNS50 OUTLINE



- NOTES**
- A. MODEL NAME AND OUTPUT VOLTAGE WILL BE SHOWN HERE
  - B. OUTPUT VOLTAGE AND OUTPUT CURRENT WILL SHOWN HERE ACCORDING TO SPECIFICATIONS
  - C. POWER SUPPLY MAX. RATING WILL SHOWN HERE ACCORDING TO SPECIFICATIONS
  - D. M4 TAPPED HOLE (4) FOR CHASSIS MOUNTING (SCREWS MUST NOT PROTRUDE INTO P.S. MORE THAN 6 mm)