

***NND -30 Instruction Manual***

Dwg. No.	IA503-04-01L	
----------	--------------	--

Items		Model	NND 30-1212	NND 30-1515		
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			
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	-	Non for different units. Possible for two output of same unit. Refer to connections diagram.			
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			
23	Storage Humidity RH	%	10~95%			
24	Cooling	-	Convection Cooling			
25	Temperature Coefficient (*1)	-	0.02% / °C			
26	Withstand Voltage	-	Input-Output...3.75K VAC Input-Chassis...2.5K VAC for 1 min. @ 20mA			
27	Isolation Resistance	-	More than 100M Ω 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			
29	Shock	-	Less than 20 G			
30	Weight	gm	2750			
31	Size (W*H*D) (*6)	mm	80 x 113.5 x 164			
32	EMC	-	Designed to meet EN55032, CISPR-32, FCC Part 15, VCCI-class B			
33	Safety	-	IEC/UL/CSA 60950-1, IEC/EN/UL/CSA 62368-1			

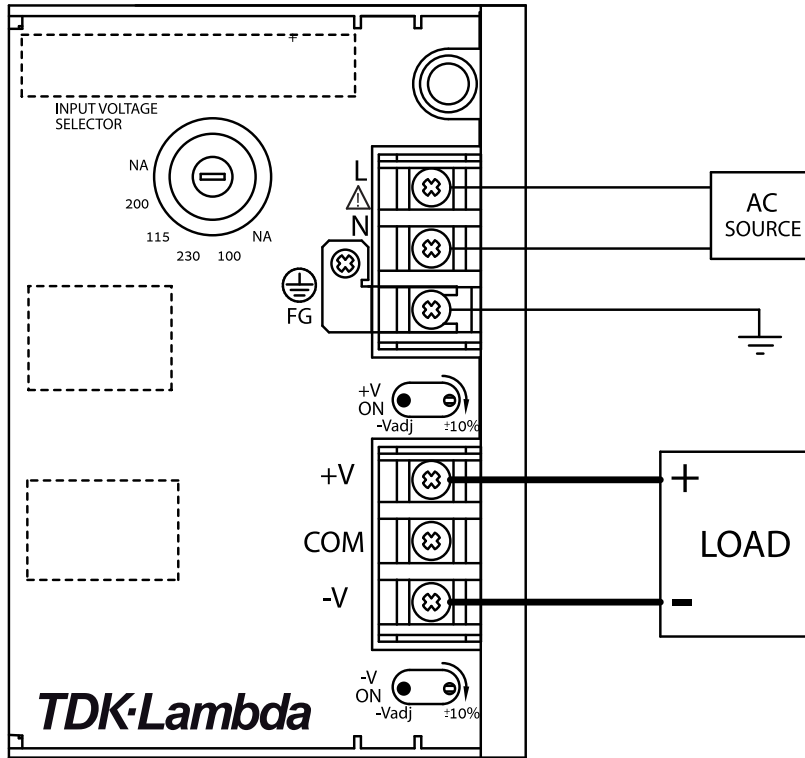
**NOTES**

- \* 1: At 100VAC and maximum Output Power.
- \* 2: For cases where conformance various safety specs. (UL, UL-C, 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 recover for each output.
- \* 5: For each output - OVP circuit will shut down output, manual reset. (Line recycle).
- \* 6: See Outline Drawings.

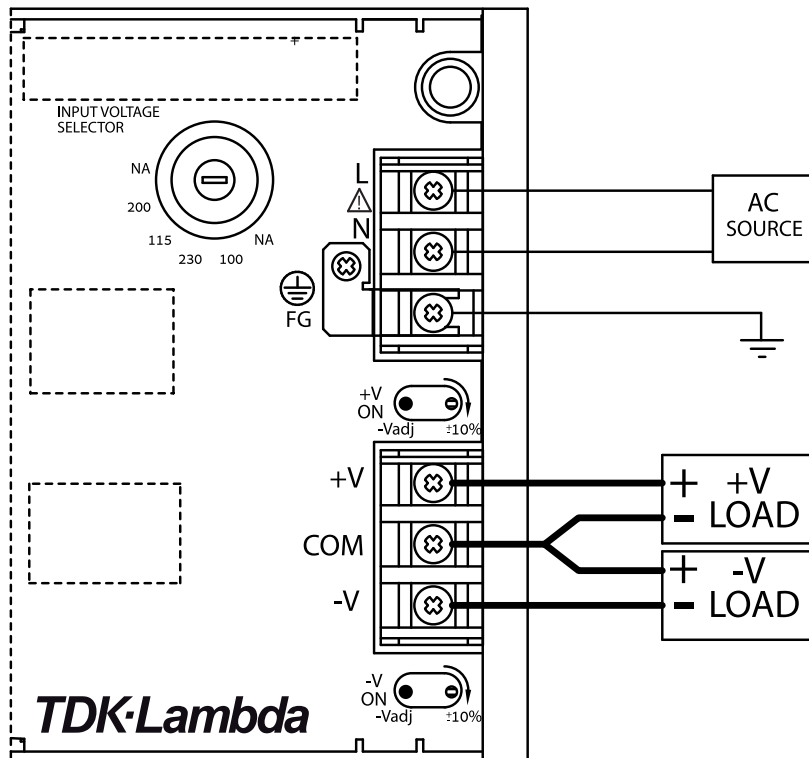
**IMPORTANT,**

See Installation Instructions Before Connecting to the Supply.

### CONNECTION DIAGRAM

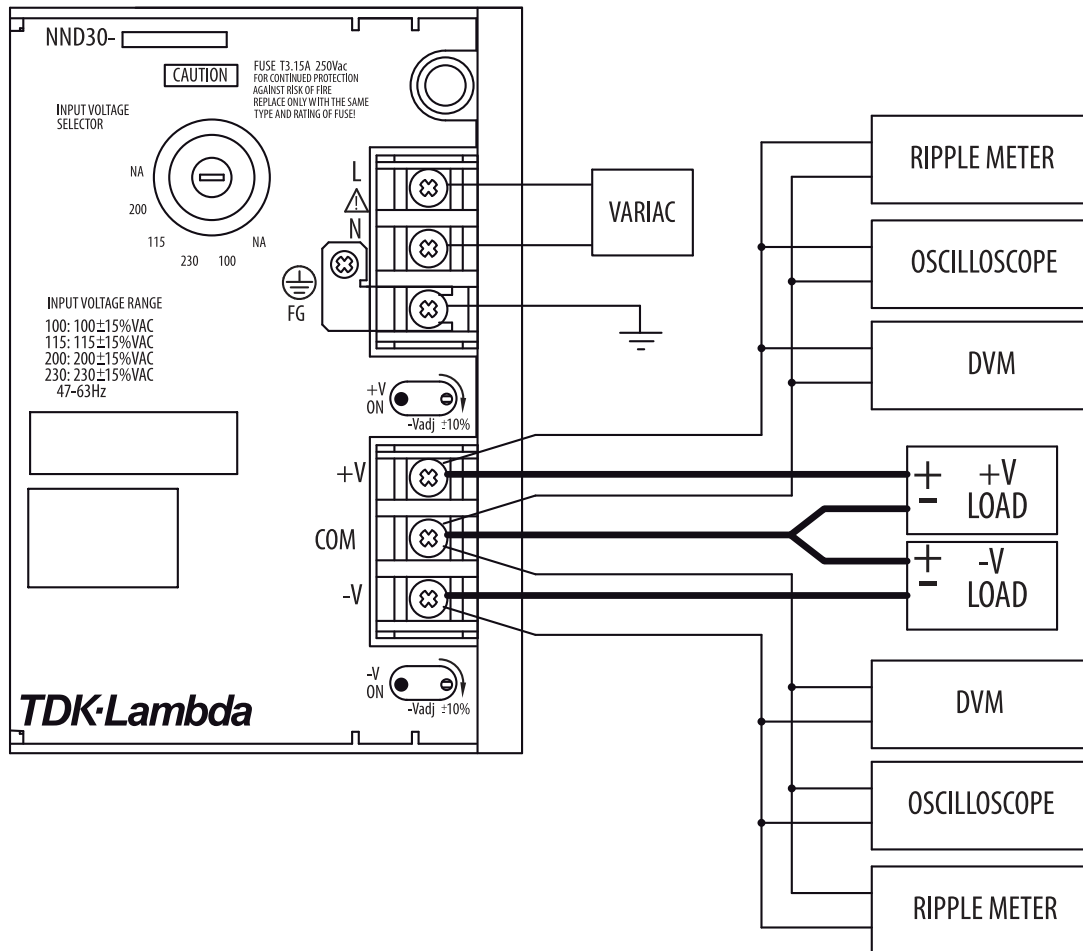


A. SERIES OPERATION.



B. DUAL OUTPUT OPERATION.

## 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. NND30 MODEL IS NOT RECOMMENDED FOR CONSTANT CURRENT LOADS.
4. MAX. CAPTIVATE LOAD RECOMMENDED: 10,000uF EACH OUTPUT.

### SAFETY INSTRUCTIONS - NND30:

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:	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 PDWER SUPPLY ENCLOSURE (REFER TO OUTLINE DRWG.)
4. MAXIMUM LEAKAGE CURRENT OF END-USE EQUIPMENT SHOULD NOT EXCEED 3.5mA

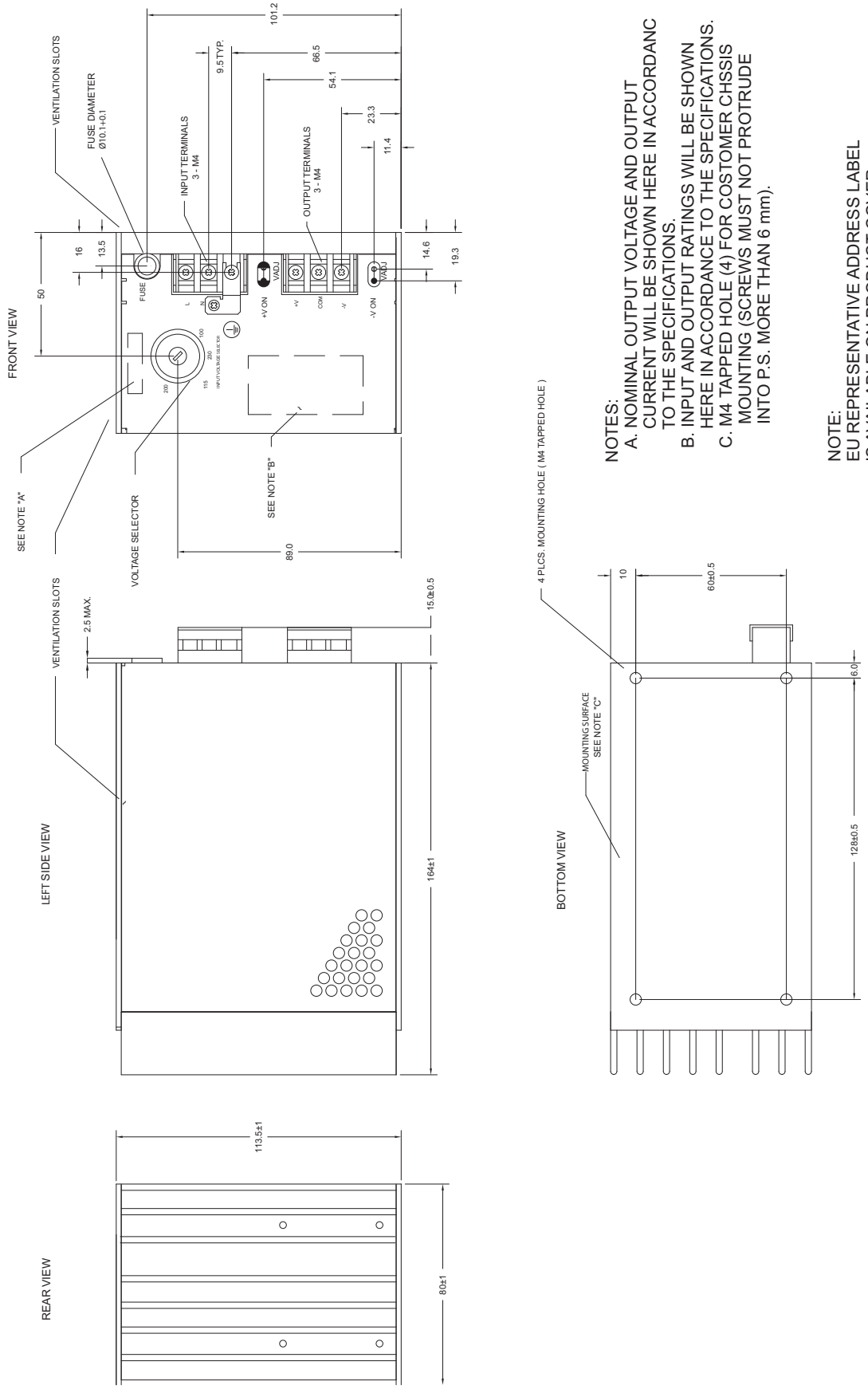
### CE MARK

CE Marking when applied to a product covered by this handbook indicates compliance with the Low Voltage Directive (LVD) of the European Union in that it complies with EN 62368-1.

A "Declaration of Conformity" in accordance with the preceding directive and standard has been made and is on file at our EU representative: TDK-LAMBDA Germany GmbH, Karl-Bold-Str. 40, D-77855 Achern.

The latest revision of EU Declaration of Conformity is available via company web site [www.emea.tdk-lambda.com/manual](http://www.emea.tdk-lambda.com/manual).

OUTLINE DRAWING NND30



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

**NOTE:**  
EU REPRESENTATIVE ADDRESS LABEL IS AVAILABLE ON PRODUCT COVER.