



15-90

W A T T S

POWER SUPPLY AC/DC

SINGLE OR DUAL OUTPUT

Front panel voltage selection

Low noise and ripple

Low leakage current

DC 'on' LED indicator

Guarantee 5 years

INPUT

Input voltage range	85-115V / 98-132V 170-230V / 195-265VAC
Selectable	front panel access
Input frequency	47-63Hz
Input protection	front panel fuse
Inrush current (typical)	10A at 100VAC 20A at 200VAC
Thermal protection	standard

OUTPUT

Power (convection cooled)	15 to 90 W
Voltage adjustment range	± 10%
Line regulation	± 0.01%
Load regulation (100% load charge)	± 0.05%
Ripple and noise	1mV RMS, 3mV peak to peak
Temperature coefficient	0.02%/°C
Remote programming voltage	volt for volt (NNS only)
Over current protection	current limit
Over voltage protection	standard
Remote sense	standard on NNS

GENERAL

MTBF	Consult with Technical Sales
Isolation voltage :	
Input-output	3kVAC
Input-ground	2.5kVAC
Output-ground	500VAC
Parallel operation	Possible with current sharing on NNS only
Series operation	Possible on NND only
DC 'on' indicator	Green LED

OUTLINE SPECIFICATION (continued)

ENVIRONMENTAL

Operating temperature	-20°C to +71°C	
Derating	-20°C :	60%
	0°C to +50°C :	100%
	+60°C :	60%
	+71°C :	40%
Storage temperature	- 40°C to + 85°C	
Operating humidity (non condensing)	30% to 95% RH	
Storage humidity (non condensing)	10% to 95% RH	
Shock	20G	
Vibration	5G. Amplitude 10-55Hz	
EMI	conforms to EN 55022, FCC 20780B, VCCI Class A	

Efficiency (type.) :

Model	Efficiency
NNS 15 / 30 - 5	35%
NNS 15 / 30 - 12	45%
NND 15 / 30 - 1212 or 1515	45%
NNS 50-5	45%
NNS 15 / 30 - 15	46%
NNS 15 / 30 - 24	50%
NNS 50-12	51%
NNS 50-15	52%
NNS 50-24	56%

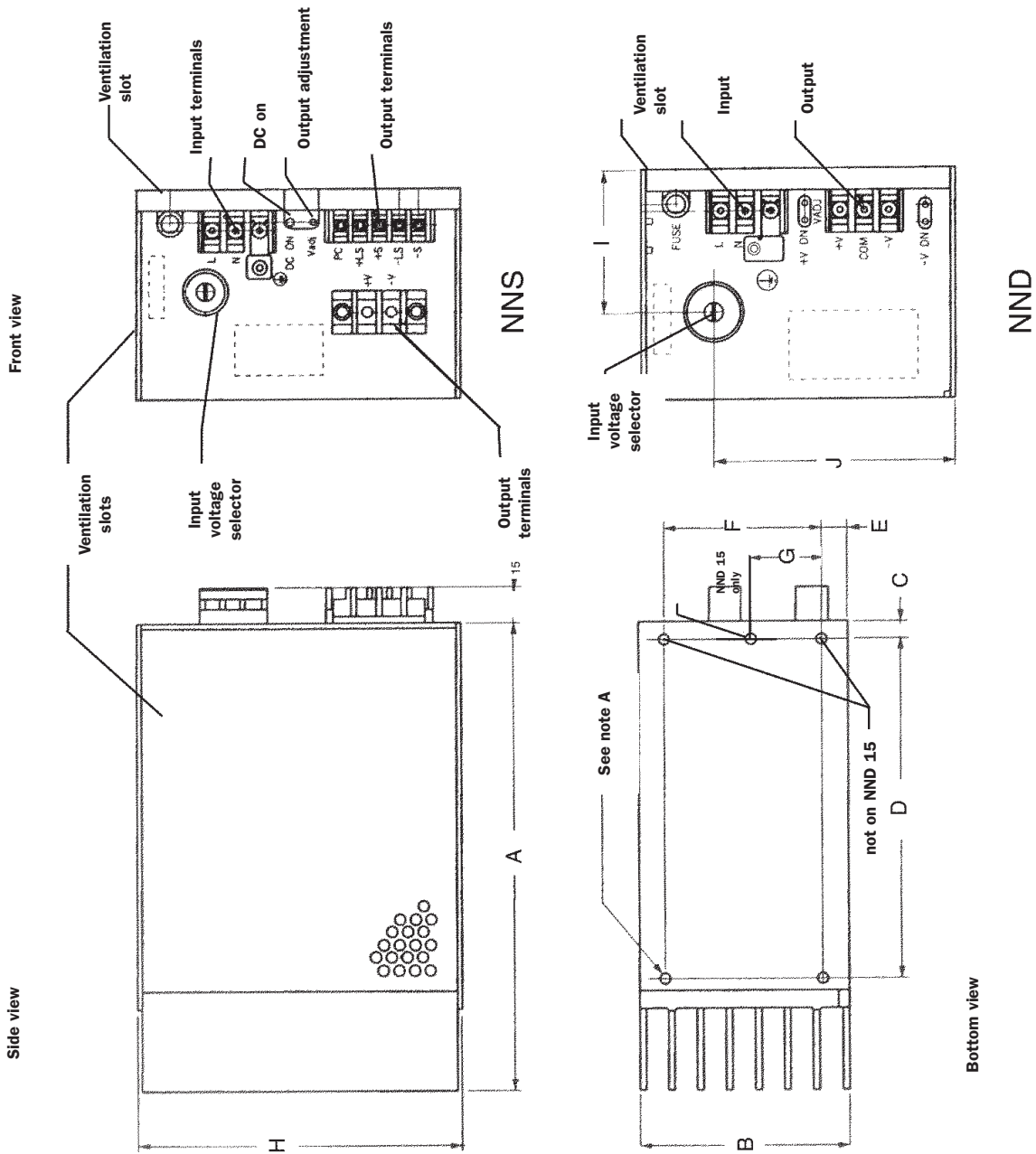
TABLE OF MODELS

Model	Case	Max. power Watts	Output 1		Output 2	
			Volts	Amp.	Volts	Amp.
NNS 15 5	15	15.0	5	3.0		
NNS 30 5	30	30.0		6.0		
NNS 50 5	50	50.0		10		
NNS 15 12	15	20.4	12	1.7		
NNS 30 12	30	48.0		4.0		
NNS 50 12	50	78.0		6.5		
NNS 15 15	15	21.0	15	1.4		
NNS 30 15	30	51.0		3.4		
NNS 50 15	50	82.5		5.5		
NNS 15 24	15	21.6	24	0.9		
NNS 30 24	30	55.2		2.3		
NNS 50 24	50	91.2		3.8		
NND 15 1212	15D	18.0	12	0.75	12	0.75
NND 30 1212	30D	38.4		1.6		1.6
NND 15 1515	15D	18.0	15	0.6	15	0.6
NND 30 1515	30D	39.0		1.3		1.3

PHYSICAL SPECIFICATION

CASES 15 - 30

Note A : mounting holes M4



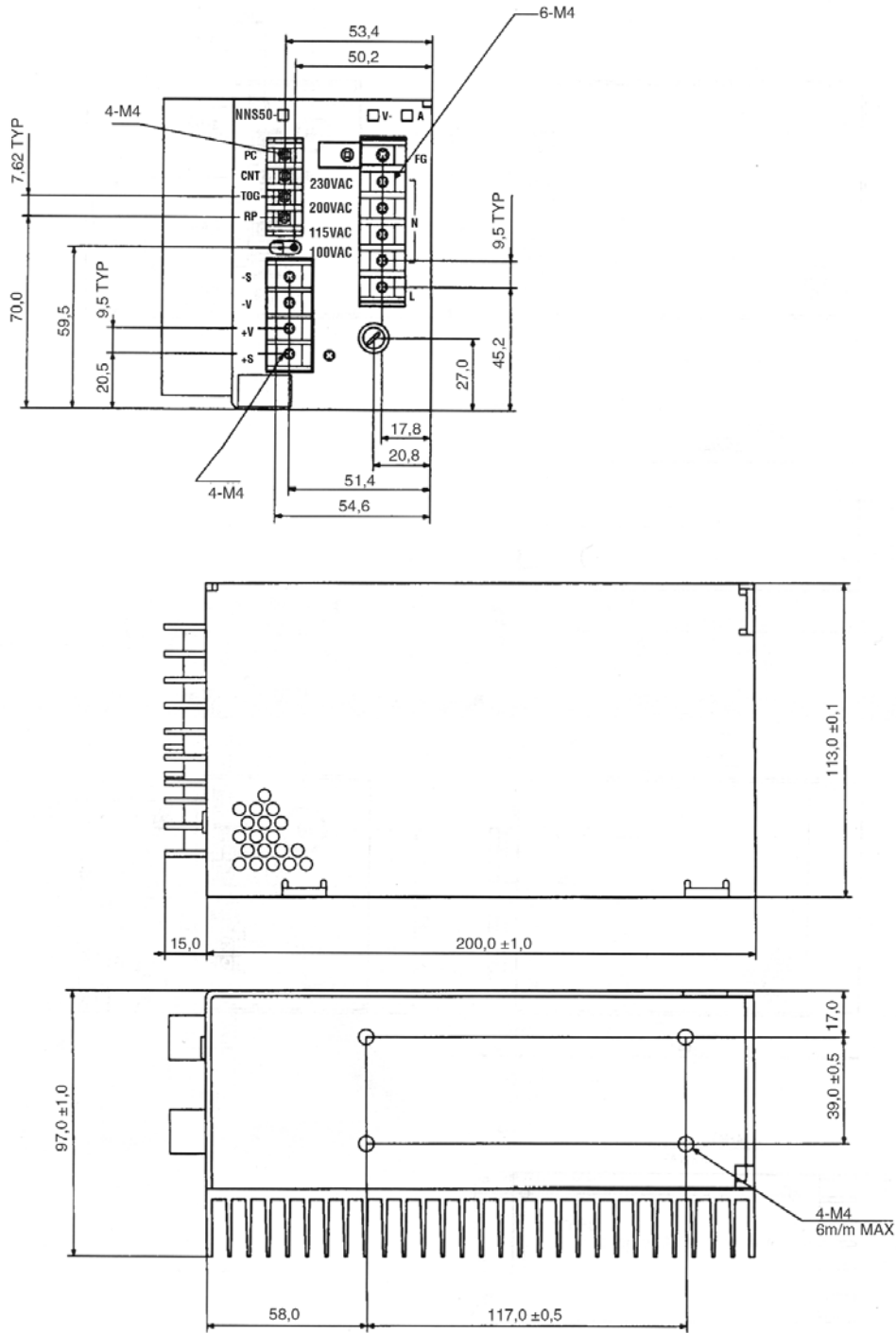
Case	Dimensions (mm)									
	A	B	C	D	E	F	G	H	I	J
NNS 15	124 ± 1	60 ± 1	19	83 ± 0.5	10	40.5	-	124 ± 1	-	-
NNS 30	178 ± 1	80 ± 1	7	128 ± 0.5	10	60 ± 0.5	-	124 ± 1	-	-
NND 15	150 ± 1	60 ± 1	15	127 ± 0.5	17.5	25 ± 0.5	12.5 ± 0.5	113.5 ± 1	39	87
NND 30	164 ± 1	80 ± 1	6	128 ± 0.5	10	60 ± 0.5	-	113.5 ± 1	50	89

Series NN

LAMBDA 

PHYSICAL SPECIFICATION (continued)

CASE 50



CONNECTIONS

Input and output	terminal blocks M4
Signals	terminal blocks M3
Format	fully enclosed