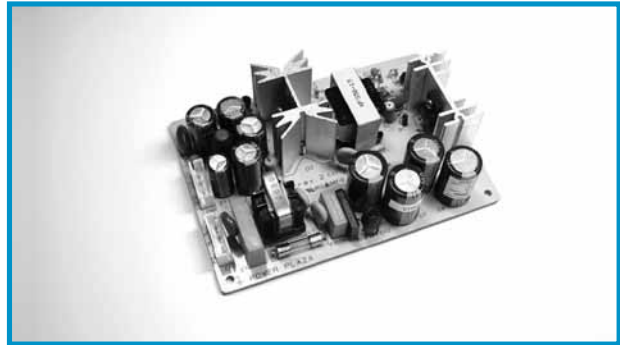


NF50

NF 50 Series AC/DC Converters

Total power 50 Watts
Input voltages AC85~132V (or DC110~170V)
 AC170~264V (or DC220~340V)
#of outputs Single, Dual output



SPECIAL FEATURES

- Cost effective unit
- Small, compact footprint
- High efficiency
- Dual input voltage range (selectable)
- Built - in EMI filter
- Inrush current limit
- Adjustable output voltage (Output1)
- Output over current protection
- Low output ripple & noise
- Isolated output
- 2 Years warranty

ENVIRONMENTAL

- Operating temperature range -10℃~60℃
- Storage temperature range -20℃~70℃
- Humidity 20%~90%RH
- Vibration 10~55Hz at 2G 3minutes period
- Impact 20G for 11ms, once on each X, Y and Z-axis
- Cooling method Natural air
- MTBF 1.6×10^5 hrs
- Safety CB standard design
- Noise Meets FCC class B

ELECTRICAL SPECIFICATIONS

INPUT

- Voltage AC85~132V (or DC 110~170V) / AC170~264V (or DC 220~340v)
- Current 1.2A max. @ 110VAC / 0.6A max. @ 220VAC
- Frequency 47~440Hz max. (50~60Hz typ.)
- Efficiency 70% min.
- Inrush current (at cold start) 30A max. @ 110VAC / 60A max. @ 220VAC
- Leakage current 0.5mA max. @ 110VAC / 0.75mA max. @ 220VAC

OUTPUT

- Voltage adj. Range $\pm 10\%$ typ. @ Output1
- Ripple and noise 1% max.
- Line regulation $\pm 1\%$ max.
- Load regulation $\pm 1\%$ max. @ Output1 / $\pm 2\%$ max. @ Output2
- Dynamic load regulation $\pm 3\%$ max. @ Output1
- Temperature drift $\pm 1\%$ typ.
- Rising time 100ms max.
- Holding time 10ms min.

PROTECTION CIRCUIT

- Over current protection Work at over 105% of rating & recovers automatically

ELECTRICALLY ISOLATED

- Input - Output AC 3kV, 1 minute, 10mA / DC 500V, 100MOhms min.
- Input - FG AC 2kV, 1 minute, 10mA / DC 500V, 100MOhms min.
- Output - FG AC 0.5kV, 1 minute, 10mA / DC 500V, 70MOhms min.

Ordering Information

Input	Output1	Output2	Maximum Power	Ripple&Noise max	Efficiency Typ.	model Number
Ac85~132V / 170~264V or DC110~170V / 220~340V	5V@10.0A		50.0W	80mVp-p	72%	NFS50-5 NFS50-12 NFS50-15 NFS50-24
	12V@4.2A		50.4W	120mVp-p	75%	
	15V@3.4A		51.0W	150mVp-p	76%	
	24V@2.1A		50.4W	200mVp-p	78%	
	5V@5.0A	+12V@2.0A	49.0W	80 / 120mVp-p	72%	
5V@5.0A	+15V@1.6A	49.0W	80 / 150mVp-p	72%		
5V@5.0A	+24V@1.0A	49.0W	80 / 200mVp-p	72%		

Mating connectors

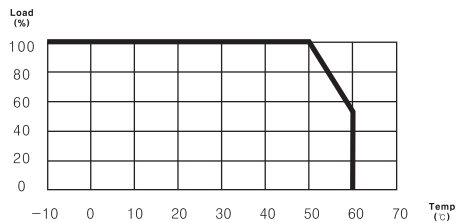
Output type	Name	I/O Connector	Mating Connector	Terminal
Single	CN 1	YPW500-03	YPH500-03	YLT-500
	CN 2	YW396-04	YH396-04	YLT-500
Dual	CN 1	YPW500-03	YPH500-03	YLT-500
	CN 2	YW396-06	YH396-06	YLT-500

Pin assignments

Connector	Input
CN 1 (input)	1. FG
	2. AC(N)
	3. AC(L)

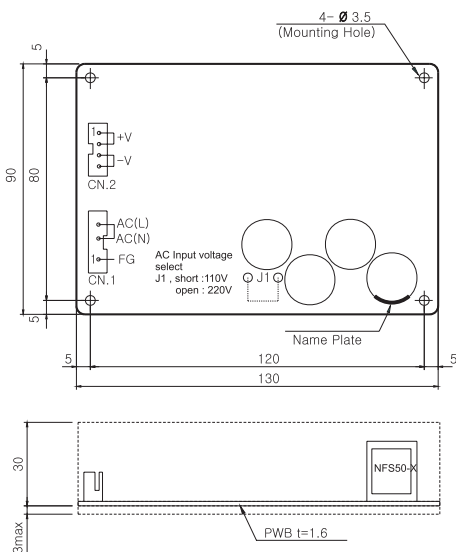
Connector	Single	Dual
CN 2 (output)	1. Output1	1. Output2
	2. Output1	2. Gnd
	3. GND	3. Gnd
	4. GND	4. Gnd
		5. Output1
		6. Output1

Derating curve

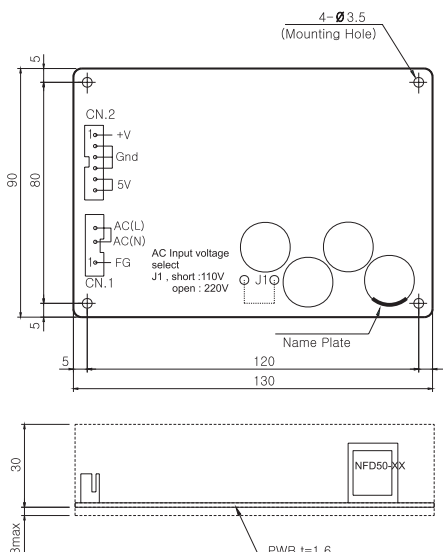


Dimensions

Single Output



Dual Output



NOTES

1. All dimensions are mm
2. Weight : 245g or less