Embedded Power for
Business-Critical Continuity

NPT40 Series

45 Watts

Total Power: 45 - 55 Watts
Input Voltage: 90 - 264 Vac
120 - 300 Vdc
# of Outputs: Triple

RoHS 2002/95/EC

Special Features

- Medical and ITE Safety Approvals
- Universal input
- Less than 1U high
- 2" x 4" footprint
- Overload and short circuit protection
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- 0˚C to +80˚C operation
- Input power < 74 watts
- Complies with EN61000-3-2
- Class I approved
- Class II approved (with Class A EMI)
- LPX50 enclosure kit available
- Dual AC fuses

Safety

- **TUV:** 60950, 60601-1, 3rd edition
- **UL:** 60950, 60601-1
- **CSA:** 60950, 60601-1
- **CB:** Certificate and report 3rd edition
- **CE:** Mark (LVD)
- **CQC:** Mark

Electrical Specifications

Input	
Input range:	90 - 264 Vac (wide range) 127 - 300 Vdc
Frequency:	47-440 Hz
Inrush current:	< 50 A peak @ 230 Vac, cold start @ 25 °C
Input power:	< 74 Watts
Efficiency:	75% average
EMI/RFI:	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted, VDE0878PT3 Class B conducted
Safety ground leakage current:	275uA @ 50/60 Hz; 264 VAC input
Output	
Maximum Power:	45 W for convection 55 W with 30CFM forced air
Hold-up time:	10/20 ms 115/230 Vac input line
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 110% to 145% above peak rating
Overvoltage protection:	5.7 to 6.7 Vdc on the main output

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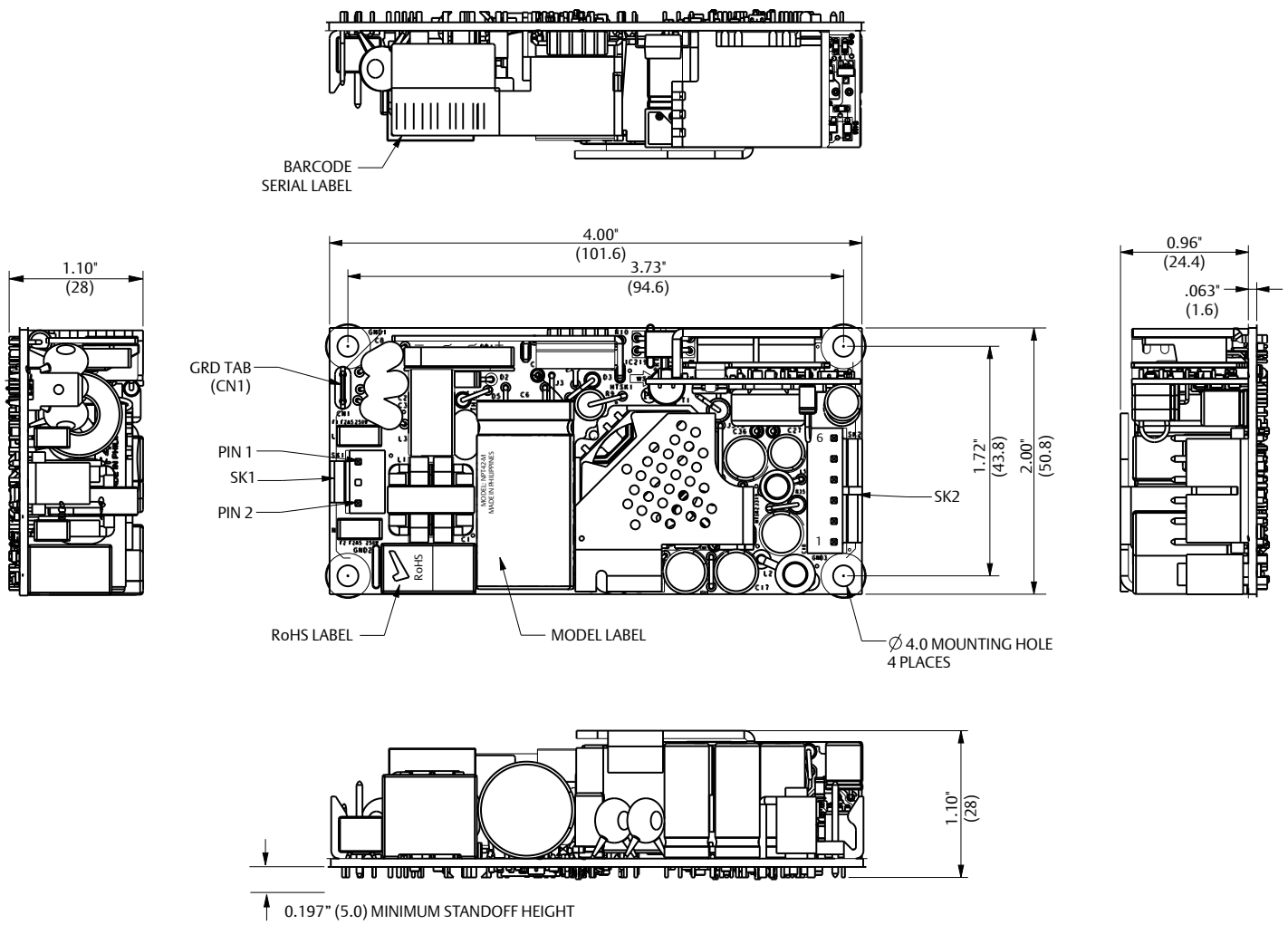
Environmental Specifications

Operating temperature:	0° to 50 °C ambient derate each output at 2.5% per degree from 50 °C to 80 °C. -20 °C start up
Storage temperature:	-45 °C to +85 °C
Electromagnetic susceptibility:	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 90% RH
Vibration:	IEC68-2-6 to the levels of IEC721-3-2
MTBF demonstrated:	> 550,000 hours at full load and 25 °C ambient conditions

Mechanical Drawing



Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection cooling	Maximum Load with 30CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
NPT42-M	+5V +12V -12V	0.5 A 0.1 A 0 A	5 A 2.5 A 0.5 A	8 A 3 A 0.7 A	9 A 4 A 0.7 A	± 2% ± 5% ± 5%	50 mV 120 mV 120 mV

1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. Minimum Loads are required.

Pin Assignments

Connector	NPT42-M
SK1-1	Line
SK1-3	Neutral
SK2-1	+5 V
SK2-2	+5 V
SK2-3	Common
SK2-4	Common
SK2-5	-12V
SK2-6	+12V

Mating Connectors

AC Input:	Molex 09-50-8031 (USA) 09-93-0300 (UK) PINS: 08-52-0113
DC Outputs:	Molex 09-50-8061 (USA) 09-93-0600 (UK) PINS: 08-52-0113

Emerson Network Power Connector Kit #70-841-006, includes all of the above

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02" (± 0.5 mm)
3. Mounting holes M1 and M2 should be grounded for EMI purposes.
4. Mounting hole M1 is safety ground connection.
5. Specifications are for convection rating at factory settings at 115 VAC input, 25 °C unless otherwise stated.
6. Warranty: 2 years
7. Weight: 0.3 lbs/.14 kg

Americas
5810 Van Allen Way
Carlsbad, CA 92008
USA
Telephone: +1 760 930 4600
Facsimile: +1 760 930 0698

Europe (UK)
Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom
Telephone: +44 (0) 1384 842 211
Facsimile: +44 (0) 1384 843 355

Asia (HK)
14/F, Lu Plaza
2 Wing Yip Street
Kwun Tong, Kowloon
Hong Kong
Telephone: +852 2176 3333
Facsimile: +852 2176 3888

For global contact, visit:
www.Emerson.com/EmbeddedPower
techsupport.embeddedpower@emerson.com

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