50 Watt

AC/DC - Desktop Power Supply

- **Universal Input 90-264 VAC**
- **Continuous Short Circuit Protection**
- **Over Voltage Protection**
- **Meets EN55022 Class B and CISPR/FCC Class B**
- **Meets CoC Tier 2 & DoE Level VI**
- **High Efficiency up to 89%**

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE [1]	VOLTAGE ACCURACY [2]	LINE REGULATION [3]	LOAD REGULATION [4]	%EFF MIN. [5]
HBACS50-12-C14	12 VDC	4200 mA	1%	±2%	±1%	±3%	89
HBACS50-15-C14	15 VDC	3360 mA					
HBACS50-18-C14	18 VDC	2800 mA				±2%	
HBACS50-19-C14	19 VDC	2650 mA					
HBACS50-24-C14	24 VDC	2100 mA					
HBACS50-28-C14	28 VDC	1800 mA					
HBACS50-36-C14	36 VDC	1400 mA					
HBACS50-48-C14	48 VDC	1050 mA					

NOTE:
1. Add a 0.1 µF ceramic capacitor and a 10 µF E.L. capacitor to output for ripple & noise measuring @ 20 MHz BW.
2. Voltage setpoint at 60% load.
3. Line regulation measured from 100 Vac to 240 Vac, full load.
4. Load regulation measured from 60% to 100% load and from 60% to 20% load (60% ± 40%load).
5. Average efficiency measured at 25%, 50%, 75%, 100% load and input voltage is 115/230 VAC.

last up-date 12.04.2016

SPECIFICATIONS

All Specifications Typical At Nominal Line, 75% Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS		
Input Voltage Range		90-264 VAC
Frequency		47 to 63 Hz
Input Current		1.5 A max.
Inrush Current	Cold Start, @25°C, @240 VAC	100 A max.
Leakage Current		3.5 mA max.
OUTPUT SPECIFICATIONS		
Holdup Time	@ 115 VAC @ 230 VAC	8 ms 60 ms
Short Circuit Protection		Continuous (Auto Recovery)
Over Voltage Protection		TVS Component to Clamp
Over Load Protection		Please refer to Short Circuit Protection*
Temperature Coefficient		±0.05%/°C

* Continuous use in Over Load condition is not recommended as it may cause damage of power supply.

SPECIFICATIONS

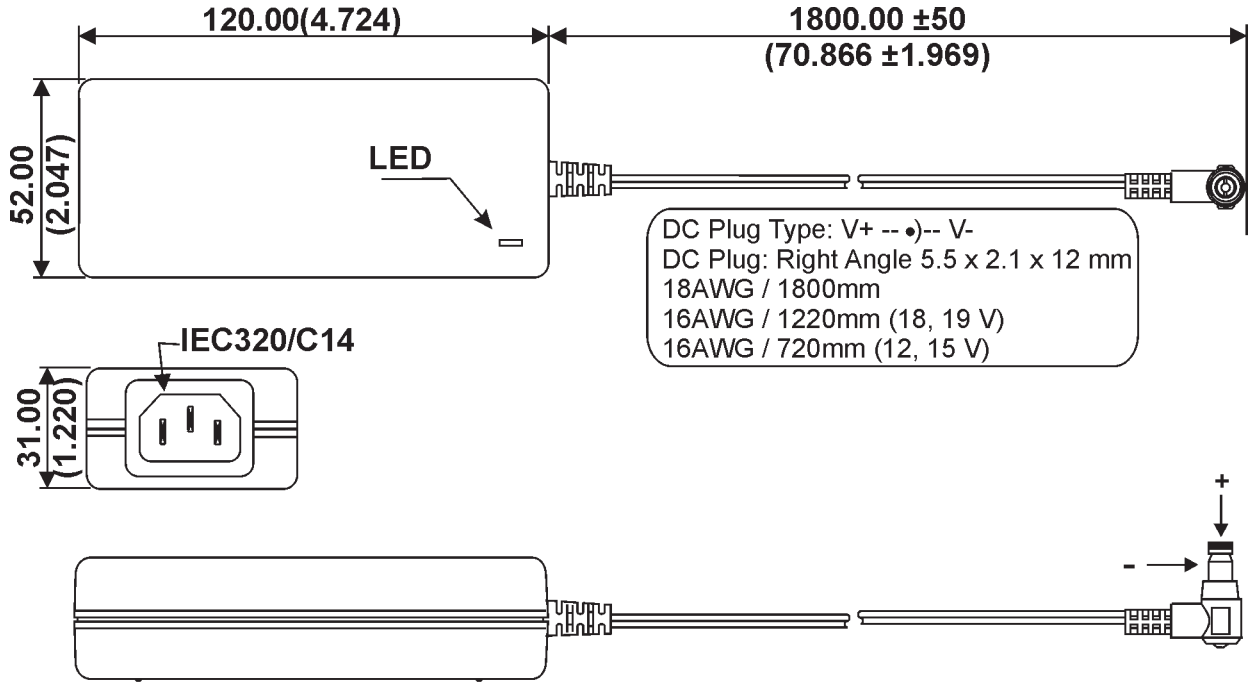
All Specifications Typical At Nominal Line, 75% Load, and 25°C Unless Otherwise Noted

GENERAL SPECIFICATIONS		
Power Consumption @ No Load		<0.150 W
Isolation	Input to Output	4242 VDC
Switching Frequency		65 kHz
Operating Temperature		-20°C to +70°C (see derating curve)
Storage Temperature		-20°C to +85°C
Cooling		Natural Convection
Humidity		93% RH max. Non condensing
MTBF (MIL-HDBK-217F), GB, @25°C/115 VAC		200 khrs min.
Altitude		5000 m
Safety Standards		Class I, IEC60950-1, EN60950-1, UL60950-1
EMI		EN55022 Class B, FCC Part 15 Class B, EN61000-6-3, EN61000-3-2, EN61000-3-3 EN55024, EN61204-3, EN61000-6-1
Dimensions		120.00 x 52.00 x 31.00 mm (4.724 x 2.047 x 1.220 Inches)
Weight		300 g
DC-Output Plug		Right Angle 5.5 x 2.1 x 12 mm Center+
DC-Cord	24, 28, 36, 48 VDC 18, 19 VDC 12, 15 VDC	18 AWG / 1800 mm 16 AWG / 1800 mm 16 AWG / 1220 mm
AC-Inlet		IEC320/C14

SPECIFICATIONS

All Specifications Typical At Nominal Line, 75% Load, and 25°C Unless Otherwise Noted

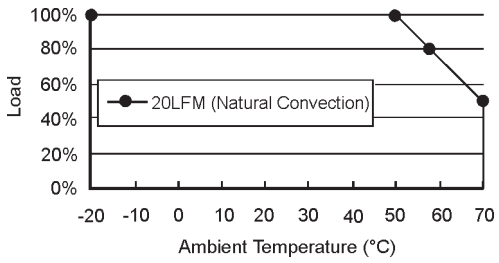
MECHANICAL SPECIFICATIONS



All Dimensions in mm (Inches)
Tolerance: x.xx=±0.5mm (x.xxx=±0.02)

DIAGRAMS

Derating Diagram



M + R Multitronik GmbH
Niels-Bohr-Ring 28 • 23568 Lübeck • Germany
Tel. (+49) 0451 - 60 99 50 • Fax (+49) 0451 - 60 46 95
www.multitronik.com
info@multitronik.com