ARTESYN AEE20W-M SERIES

20 Watts



The AEE20W-M series of 20 watt isolated DC-DC converters are designed for demanding instrumentation applications that require supplementary or reinforced insulation to comply with stringent industrial or medical safety standards.

DATA SHEET

Total Power:

20 Watts

Input Voltage:

12 V, 24 V or 48 V

# of Outputs:

Single, Dual

SPECIAL FEATURES

- 4200 Vac reinforced insulation
- Insulation rated for 300 Vac working voltage
- Medical safety certifications
- 2x MOPP rated
- Wide 2:1 input voltage range
- Low leakage current <5 µA
- Operating temperature range –40 °C to +85 °C (with derating)
- Input filter meets EN 55022, Class A and FCC, Level A
- Medical EMC Standard meets 4th Edition of EMI EN55011 and EMS EN60601-1-2
- 2”x 1” plastic package
- Three-year product warranty

SAFETY

- EN/IEC 60601-1 3rd Edition, ANSI/AAMI ES60601-1
- 2x MOPP
- CE Mark

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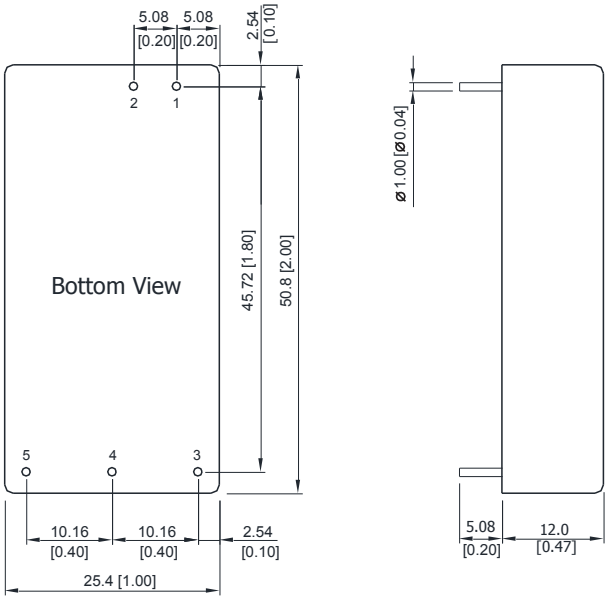
ELECTRICAL SPECIFICATIONS

Input	
Input range	9 - 18 Vdc; 18 - 36 Vdc; 36 - 75 Vdc
Efficiency	89%
Output	
Voltage tolerance	±1.0%
Line regulation	±0.5%
Load regulation	1.0%
Noise/ripple	150 mV
OCP and S/C protection	150%, Hiccup
Overvoltage protection	110%
Switching frequency	285 KHz
Temperature co-efficient	±0.02/°C
Isolation	
I/O isolation	4200 Vac rms
Insulation resistance	10 Gohm
Insulation capacitance	80 pF

ENVIRONMENTAL SPECIFICATIONS

Operating ambient temperature range	-40 °C to +80 °C
Storage temperature	-50 °C to +125 °C
Humidity	5% to 95% (non-condensing)
Calculated MTBF	1 MHrs

MECHANICAL DRAWINGS



Pin Connectors		
Pin No.	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

· All dimensions in mm (inches)
· Tolerance: X.X±0.5 (X.XX±0.02)
X.XX±0.25 (X.XXX±0.001)
· Pin diameter 1.0 ±0.5 (0.04±0.002)

PHYSICAL CHARACTERISTICS

Case Size	50.8 x 25.4 x 12 mm (2.0 x 1.0 x 0.47 inches)
Case Material	Non-Conductive Black Plastic (flammability to UL94V-0 rated)
Pin Material	Tinned Copper
Weight	30 g

ORDERING INFORMATION

Artesyn Part number	Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power
AEE04A12-M	9 - 18 V	5 V @ 4 A		20 W
AEE02B12-M	9 - 18 V	12 V @ 1.67 A		20 W
AEE02C12-M	9 - 18 V	15 V @ 1.33 A		20 W
AEE02H12-M	9 - 18 V	24 V @ 0.84 A		20 W
AEE02BB12-M	9 - 18 V	12 V @ 0.84 A	-12 V @ 0.84 A	20 W
AEE02CC12-M	9 - 18 V	15 V @ 0.67 A	-15 V @ 0.67 A	20 W
AEE04A24-M	18 - 36 V	5 V @ 4 A		20 W
AEE02B24-M	18 - 36 V	12 V @ 1.67 A		20 W
AEE02C24-M	18 - 36 V	15 V @ 1.33 A		20 W
AEE02H24-M	18 - 36 V	24 V @ 0.84 A		20 W
AEE02BB24-M	18 - 36 V	12 V @ 0.84 A	-12 V @ 0.84 A	20 W
AEE02CC24-M	18 - 36 V	15 V @ 0.67 A	-15 V @ 0.67 A	20 W
AEE04A48-M	36 - 75 V	5 V @ 4 A		20 W
AEE02B48-M	36 - 75 V	12 V @ 1.67 A		20 W
AEE02C48-M	36 - 75 V	15 V @ 1.33 A		20 W
AEE02H48-M	36 - 75 V	24 V@ 0.84 A		20 W
AEE02BB48-M	36 - 75 V	12 V @ 0.84 A	-12 V @ 0.84 A	20 W
AEE02CC48-M	36 - 75 V	15 V @ 0.67 A	-15 V @ 0.67 A	20 W

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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ENG-AEE20W-M-235-01 10.16