ARTESYN AXA SERIES

10 Watts



Advanced Energy's Artesyn AXA series of high-input isolated DC-DC converters that feature an ultra wide 4:1 input voltage range of 18–75 Vdc or 9-36Vdc respectively and are primarily designed for use with nominal 48V or 24V supplies. There is a choice of five single output models, offering single voltage versions of 3.3 V, 5 V, 12 V, 15 V or 24 V and dual output versions of +/-5V, +/-12V and +/-15V. The converters are fully encapsulated in a compact 1 x 1 inch (25.4 x 25.4 mm) metal case incorporating an isolated baseplate and have a height of just 0.4 inch (10.2 mm). An optional clip-on heatsink is available for convection cooling. Standard features include 1,500 Vdc input/output isolation, remote On/Off and hiccup mode short-circuit protection.

DATA SHEET

Total Power:

10 W

Input Voltage:

24 or 48 V

# of Outputs:

Single and Dual

RoHS 6/6 COMPLIANT

SPECIAL FEATURES

- Package size 1.0” x 1.0” x 0.4”
- Ultra-wide 4:1 input range: 9 - 36 Vin, 18 - 75 Vin
- Very high efficiency up to 87%
- Operating temperature range: -40 °C to +80 °C
- I/O isolation voltage 1500 VDC
- Remote ON/OFF control
- Metal case with isolated baseplate
- CSA/UL/IEC/EN 60950-1 Safety Approval

SAFETY

- UL/cUL/IEC/EN 62368-1 (60950-1) Safety Approval & CE Marking

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ELECTRICAL SPECIFICATIONS

Input	
Input range	9 - 36 Vdc, 18 - 75 Vdc
Efficiency	87% @ 12 Vo
Output	
Voltage tolerance	±2.0%
Line regulation	±0.3%
Load regulation	±0.5%
Noise/ripple	100 mV
Overload protection	150% typ of Io max, hiccup
Short circuit protection	Hiccup mode
Switching frequency	450 kHz
Isolation	
I/O isolation	I/O: 1500 Vdc
Insulation resistance	1000 Mohm
Insulation capacitance	1500 pF

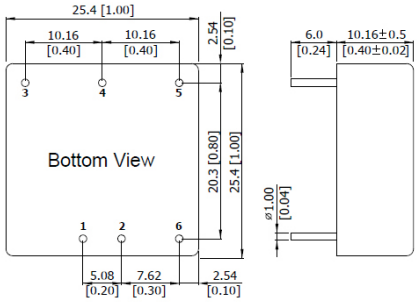
ENVIRONMENTAL SPECIFICATIONS

Operating ambient temperature range	-40 °C to +80 °C
Storage temperature	-50 °C to +125 °C
Humidity	5% to 95% non-condensing
MTBF	350 Khrs calculated

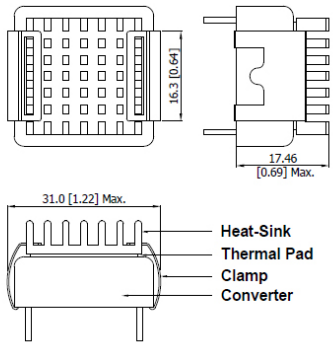
ORDERING INFORMATION

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Max Output Cap	Power
AXA02F18-L	9 - 36 Vdc	3.3 V	2.2 A	86%	560 µF	7.2 W
AXA02A18-L	9 - 36 Vdc	5 V	2 A	84%	560 µF	10 W
AXA00B18-L	9 - 36 Vdc	12 V	0.83 A	86%	150 µF	10 W
AXA00C18-L	9 - 36 Vdc	15 V	0.66 A	87%	150 µF	10 W
AXA000H18-L	9 - 36 Vdc	24 V	0.41 A	86%	68 µF	10 W
AXA00AA18-L	9 - 36 Vdc	±5 V	±1 A	84%	220 µF	10 W
AXA000BB18-L	9 - 36 Vdc	±12 V	±0.41 A	86%	100 µF	10 W
AXA000CC18-L	9 - 36 Vdc	±15 V	±0.33 A	87%	100 µF	10 W
AXA02F36-L	18 - 75 Vdc	3.3 V	2.2 A	85%	560 µF	7.2 W
AXA02A36-L	18 - 75 Vdc	5 V	2 A	84%	560 µF	10 W
AXA00B36-L	18 - 75 Vdc	12 V	0.83 A	86%	150 µF	10 W
AXA00C36-L	18 - 75 Vdc	15 V	0.66 A	87%	150 µF	10 W
AXA000H36-L	18 - 75 Vdc	24 V	0.41 A	86%	68 µF	10 W
AXA00AA36-L	18 - 75 Vdc	±5 V	±1 A	84%	220 µF	10 W
AXA000BB36-L	18 - 75 Vdc	±12 V	±0.41 A	86%	100 µF	10 W
AXA000CC36-L	18 - 75 Vdc	±15 V	±0.33 A	87%	100 µF	10 W

MECHANICAL DIMENSIONS



Heatsink (Option –HS)



· All dimensions in mm (inches)
· Tolerance: X.X±0.25 (X.XX±0.01)
X.XX±0.13 (X.XXX±0.005)
· Pin diameter Ø 1.0 ±0.05 (0.04±0.002)

Pin Connections		
Pin	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No pin	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

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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