

ARTESYN AXA SERIES

25 Watts



Advanced Energy's Artesyn AXA series of low-input isolated DC-DC converters features an ultra wide 4:1 input voltage range of 9–36 Vdc and is designed primarily for use with nominal 12 V or 24 V supplies. There is a choice of five single output models, offering voltages of 3.3 V, 5 V, 12 V, 15 V or 24 V, and two dual output models offering +12/-12 V or +15/-15 V. 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:

25 W

Input Voltage:

24 or 48 V

of Outputs:

Single and Dual

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 90%
- Operating temperature range: -40 °C
to +80 °C (with derating)
- Output voltage adjustable
- 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

ELECTRICAL SPECIFICATIONS

| Input | |
|--------------------------|----------------------------|
| Input range | 9 - 36 Vdc, 18 - 75 Vdc |
| Efficiency | 90% @ 12 Vo |
| Output | |
| Voltage tolerance | ±2.0% |
| Line regulation | ±0.2% |
| Load regulation | ±1.0% |
| Noise/ripple | 150 mV |
| Overload protection | 150% typ of Io max, hiccup |
| Short circuit protection | Hiccup mode |
| Switching frequency | 285 KHz |
| Isolation | |
| I/O isolation | I/O: 1500 Vdc |
| Insulation resistance | 1000 Mohm |
| Insulation capacitance | 2000 pF |

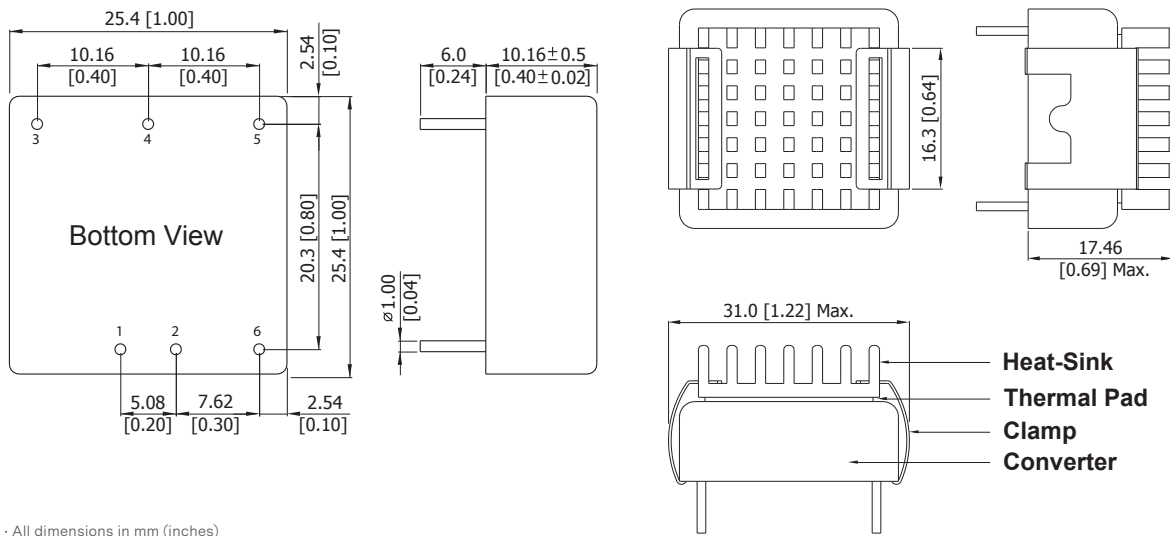
ENVIRONMENTAL SPECIFICATIONS

| | |
|-------------------------------------|--------------------------|
| Operating ambient temperature range | -40 °C to +80 °C |
| Storage temperature | -50 °C to +125 °C |
| Humidity | 5% to 95% non-condensing |
| MTBF | 444 Khrs calculated |

ORDERING INFORMATION

| Part Number | Input Voltage | Output Voltage | Output Current | Efficiency | Max Out Cap | Power |
|-------------|---------------|----------------|----------------|------------|---------------|--------|
| AXA06F18-L | 9 - 36 Vdc | 3.3 V | 6 A | 87% | 10300 μ F | 19.8 W |
| AXA05A18-L | 9 - 36 Vdc | 5 V | 5 A | 89% | 6800 μ F | 25 W |
| AXA02B18-L | 9 - 36 Vdc | 12 V | 2.09 A | 89% | 1200 μ F | 25 W |
| AXA02C18-L | 9 - 36 Vdc | 15 V | 1.67 A | 90% | 750 μ F | 25 W |
| AXA01BB18-L | 9 - 36 Vdc | \pm 12 V | \pm 1.04 A | 89% | 680 μ F | 25 W |
| AXA01CC18-L | 9 - 36 Vdc | \pm 15 V | \pm 0.84 A | 89% | 380 μ F | 25 W |
| AXA06F36-L | 18 - 75 Vdc | 3.3 V | 6 A | 88% | 10300 μ F | 19.8 W |
| AXA05A36-L | 18 - 75 Vdc | 5 V | 5 A | 90% | 6800 μ F | 25 W |
| AXA02B36-L | 18 - 75 Vdc | 12 V | 2.09 A | 90% | 1200 μ F | 25 W |
| AXA02C36-L | 18 - 75 Vdc | 15 V | 1.67 A | 90% | 750 μ F | 25 W |
| AXA01BB36-L | 18 - 75 Vdc | \pm 12 V | \pm 1.04 A | 89% | 680 μ F | 25 W |
| AXA01CC36-L | 18 - 75 Vdc | \pm 15 V | \pm 0.84 A | 89% | 380 μ F | 25 W |

MECHANICAL DIMENSIONS



- All dimensions in mm (inches)
- Tolerance: X.X±0.5 (X.XX±0.02)
X.XX±0.25 (X.XXX±0.01)
- Pin diameter \varnothing 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 | Trim | Common |
| 5 | -Vout | -Vout |
| 6 | Remote On/Off | Remote On/Off |



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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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