# 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 |

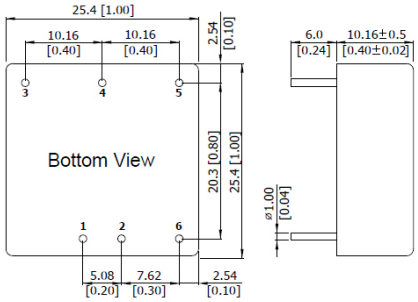
## ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| 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 |

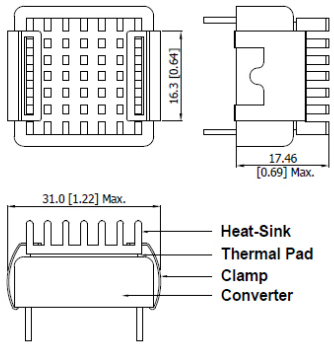
## ORDERING INFORMATION

| 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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