

ARTESYN AXA SERIES

10 Watts



The 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



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

| cUL/UL | 60950-1 |
|--------|---------|
| IEC/EN | 60950-1 |

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

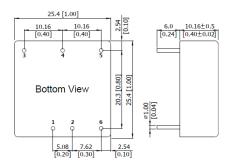
| Operating ambient temperature range | -40 °C to +80 °C |
|-------------------------------------|--------------------------|
| Storage temperature | -50 °C to +125 °C |
| Humidity | 5% to 95% non-condensing |
| MTBF | 350 Khrs calculated |



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 |

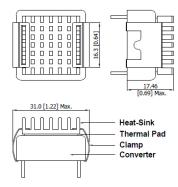
MECHANICAL DIMENSIONS



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)

Heatsink (Option -HS)



| 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 | | | | |





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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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AXA000H18-L AXA02F18-L AXA02A36-L AXA000CC18-L AXA02F36-L AXA00B18-L AXA00AA36-L AXA000CC36-L AXA00C18-L AXA00C36-L AXA00AA18-L AXA000BB18-L AXA02A18-L AXA000H36-L AXA00B36-L AXA000BB36-L