

ARTESYN ASA SERIES

10 Watts



This version of the ASA series of 10 watt isolated DC-DC converters features a wide 2:1 input voltage range of 18–36 Vdc and is primarily designed for use with nominal 24 V supplies. There is a choice of four single output models, offering voltages of 2.5 V, 3.3 V, 5 V, or 12 V. The converters are fully encapsulated in a compact 1.25 x 0.8 inch (31.7 x 20.3 mm) metal case and have a height of just 0.4 inch (10.2 mm). They are ideal for use ruggedized applications involving harsh environments.

DATA SHEET

Total Power:

10 Watts

Input Voltage:

24 V or 48 V

of Outputs:

Single

SPECIAL FEATURES

- Encapsulated
- Wide 2:1 input range
- 1.25" x 0.8" DIP package
- 1500 Vdc I/O isolation
- Single output

SAFETY

- UL/CSA 62368-1
- CE Mark



ELECTRICAL SPECIFICATIONS

| Input | | | | |
|---------------------------|--|--|--|--|
| Input range: | 18 to 36 VDC; 36 to 75 VDC | | | |
| Efficiency: | 83% @ 12 Vo | | | |
| Output | | | | |
| Voltage tolerance: | ±2.0% | | | |
| Line regulation: | ±0.8% | | | |
| Load regulation: | ±1.2% | | | |
| Noise/ripple: | 100 mV for 2.5 Vo, 3.3 Vo and 5.0 Vo 120 mV for 12 Vo | | | |
| Short circuit protection: | Auto-restart | | | |
| Switching frequency: | 350 KHz | | | |
| Temperature coefficient: | ±0.02 /°C | | | |
| Isolation | | | | |
| I/O isolation | 1500 VDC min. | | | |
| Insulation resistance: | 10 Mohm | | | |
| Insulation capacitance: | 1000 pF | | | |

ENVIRONMENTAL SPECIFICATIONS

| Operating ambient temperature range: | -40°C to +60°C (no derating) | |
|--------------------------------------|------------------------------|--|
| Storage temperature: | -55 °C to +105 °C | |
| Humidity: | 5% to 95% (non-condensing) | |
| MTBF: | 1 Mhrs demonstrated MTBF | |
| RoHS Compliant | | |

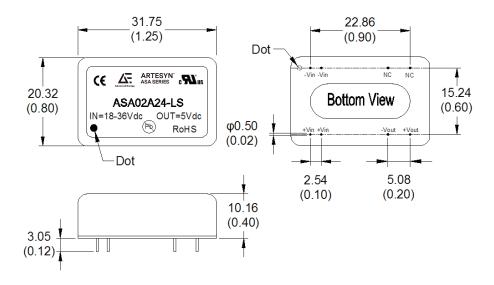


ORDERING INFORMATION

| Model Number | Input Voltage | Output 1 Voltage | Output 2 Voltage | Maximum Power |
|--------------|---------------|------------------|------------------|---------------|
| ASA03G24-LS | 18 - 36 V | 2.5 V @ 3 A | | 7.5 W |
| ASA03F24-LS | 18 - 36 V | 3.3 V @ 3 A | | 10 W |
| ASA02A24-LS | 18 - 36 V | 5.0 V @ 2 A | | 10 W |
| ASA00B24-LS | 18 - 36 V | 12 V @ 0.835 A | | 10 W |
| ASA03G48-LS | 36 - 75 V | 2.5 V @ 3 A | | 7.5 W |
| ASA03F48-LS | 36 - 75 V | 3.3 V @ 3 A | | 10 W |
| ASA02A48-LS | 36 - 75 V | 5.0 V @ 2 A | | 10 W |
| ASA00B48-LS | 36 - 75 V | 12 V @ 0.835 A | | 10 W |

Please contact Artesyn Embedded Power for information on other output voltages, power ranges and configurations. Available in RoHS 6 version only.

MECHANICAL DRAWINGS



Notes

- $1. \ \mathsf{AII} \ \mathsf{specifications} \ \mathsf{are} \ \mathsf{subject} \ \mathsf{to} \ \mathsf{change} \ \mathsf{without} \ \mathsf{notice}. \ \mathsf{Mechanical} \ \mathsf{drawings} \ \mathsf{are} \ \mathsf{for} \ \mathsf{reference} \ \mathsf{only}.$
- 2. Warranty: 1 y
- 3. Label and logo appearance may vary from what is shown on mechanical drawings.



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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