

ARTESYN AEE SERIES

40 Watts



Standard features include 1,500 Vdc input/output isolation, comprehensive protection against overvoltage, overcurrent and overtemperature conditions, and remote On/Off. These converters have an operating temperature range of -40 to 80°C without derating and a typical efficiency of 90%; an optional clip-on heatsink is available. They are ideal for ruggedized applications involving harsh environments. Typical areas of use include industrial automation, instrumentation, test and measurement, and telecommunications.

SPECIAL FEATURES

- Encapsulated
- Wide 4:1 input range
- 1" x 2" DIP package
- 1500 Vdc I/O isolation
- Single and Dual output
- OCP, OVP, OTP protection
- Remote On/Off
- High efficiency - 91%
- Operating temp. range -40°C to +85 °C (with derating)

SAFETY

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

DATA SHEET

Total Power:

40 Watts

Input Voltage:

12 V, 24 V or 48 V

of Outputs:

Single, Dual



RoHS

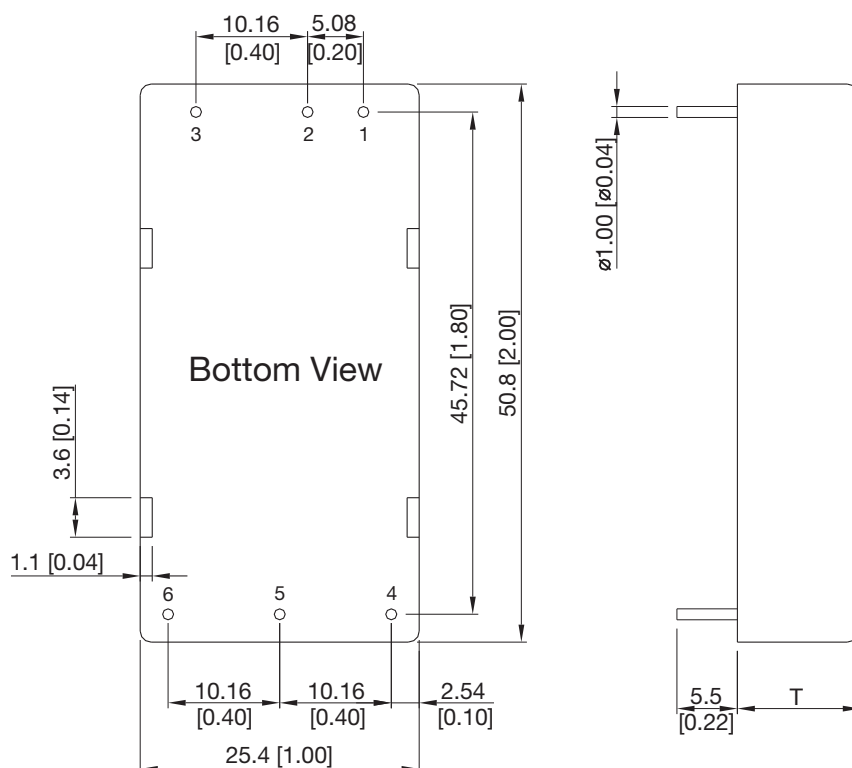
ELECTRICAL SPECIFICATIONS

Input	
Input range	9 to 36 Vdc; 18 to 75 Vdc
Efficiency ²	90% @ 5 Vo
Output	
Voltage tolerance	±1.0%
Line regulation	±0.5%
Load regulation	Single output: ±0.5% Dual output: ±1.0%
Noise/ripple	3.3 Vo, 5 Vo: 100 mV Others: 150 mV
OCP and S/C protection	Hiccup
Over voltage protection	Latched
OTP protection	Latched
Switching frequency	24 Vdc: 286 KHz Others: 320 KHz
Temperature coefficient	±0.02 /°C
Isolation	
I/O isolation	1500 Vdc min.
Insulation resistance	1000 Mohm
Insulation capacitance	1500 pF

ENVIRONMENTAL SPECIFICATIONS

Operating ambient temperature range	-40 °C to +85 °C
Storage temperature	-50 °C to +125 °C
Humidity	5% to 95% (non-condensing)
Calculated MTBF	328 Khrs

MECHANICAL DRAWINGS



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

T: 11.0 mm (0.43 inch) for 24 V Output Models
T: 10.2 mm (0.40 inch) for Other Output Models
· All dimensions in mm (inches)
· Tolerance: X.X±0.25 (X.XX±0.01)
X.XX±0.13 (X.XXX±0.005)
· Pin diameter $\varnothing 1.0 \pm 0.05$ (0.04±0.002)

PHYSICAL CHARACTERISTICS

Case Size (24 V Output)	50.8 x 25.4 x 11 mm (2.0 x 1.0 x 0.43 inches)
Case Size (Other Output)	50.8 x 25.4 x 10.2 mm (2.0 x 1.0 x 0.40 inches)
Case Material	Aluminium Alloy, Black Anodized Coating
Base Material	FR4 PCB (flammability to UL 94V-0 rated)
Pin Material	Copper Alloy with Gold Plate Over Nickel Subplate
Weight	30 g

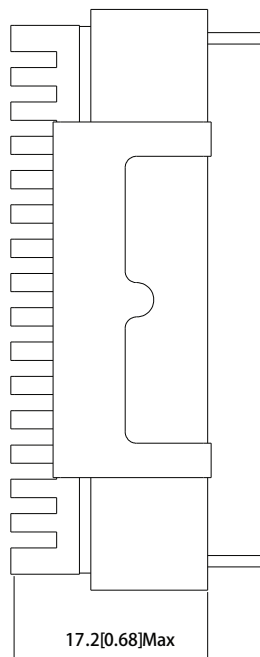
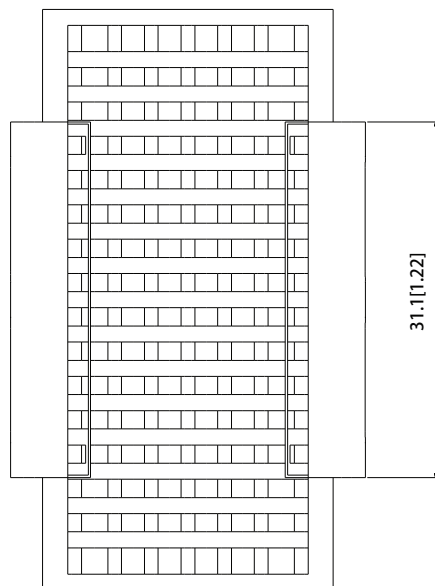
ORDERING INFORMATION

Model Number	Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power
AEE08F18-L	9 - 36 V	3.3 V @ 8 A		26.4 W
AEE08A18-L	9 - 36 V	5 V @ 8 A		40 W
AEE03B18-L	9 - 36 V	12 V @ 3.33 A		40 W
AEE02C18-L	9 - 36 V	15 V @ 2.67 A		40 W
AEE01H18-L	9 - 36 V	24 V @ 1.67 A		40 W
AEE01BB18-L	9 - 36 V	12 V @ 1.67 A	-12 V @ 1.67 A	40 W
AEE01CC18-L	9 - 36 V	15 V @ 1.33 A	-15 V @ 1.33 A	40 W
AEE08F36-L	18 - 75 V	3.3 V @ 8 A		26.4 W
AEE08A36-L	18 - 75 V	5 V @ 8 A		40 W
AEE03B36-L	18 - 75 V	12 V @ 3.33 A		40 W
AEE02C36-L	18 - 75 V	15 V @ 2.67 A		40 W
AEE01H36-L	18 - 75 V	24 V @ 1.67 A		40 W
AEE01BB36-L	18 - 75 V	12 V @ 1.67 A	-12 V @ 1.67 A	40 W
AEE01CC36-L	18 - 75 V	15 V @ 1.33 A	-15 V @ 1.33 A	40 W

To order the converter with heatsink, please add a suffix -HS (e.g. AEE08F18-LHS) to order code.

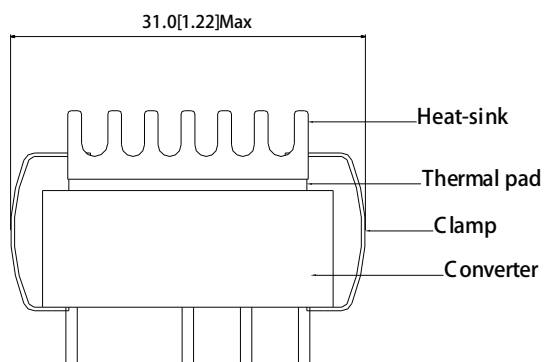
MECHANICAL DRAWINGS

Heatsink (Option –HS)



The advantages of adding a heatsink are:

1. To help heat dissipation and increase the stability and reliability of DC/DC converters at high operating temperature atmosphere.
2. To upgrade the operating temperature of DC/DC converters, please refer to Derating Curve.



PHYSICAL CHARACTERISTICS

Heatsink Material:	Aluminum
Finish:	Black Anodized Coating
Weight:	9 g

Notes:

1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 3 yr
3. Label and logo appearance may vary from what is shown on mechanical drawings.



For international contact information,
visit advancedenergy.com.

powersales@aei.com (Sales Support)
productsupport.ep@aei.com (Technical Support)
+1 888 412 7832

ABOUT ADVANCED ENERGY

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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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