

ARTESYN DP40

40 Watts



Advanced Energy's Artesyn DP40-M series of freestanding external 40 watt AC-DC power adapters carries both medical and safety approvals. These adapters provide a very flexible, pre-approved power solution for a wide variety of portable and desktop applications, including medical, instrumentation, telecommunications, computer peripheral and test and measurement systems. The adapters are available in both Class I and Class II configurations with a 2-pin or 3-pin AC input connector.

DATA SHEET

Total Power:

40 Watts

Input Voltage:

90 - 264 Vac 127 - 300 Vdc

of Outputs:

Single

SPECIAL FEATURES

- Medical and ITE safeties
- Universal AC input
- Fully regulated output
- Overload and short circuit protection
- Constant voltage
- High efficiency
- High MTBF
- IEC320 AC input receptacle 3 pin (type C14) Class I 2 pin (type C8) Class II
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- Input power <49 watts

- Complies with EN61000-3-2
- Meets Energy Star Efficiency Level V
- CE Mark EMC, LVD & ErP 2011
- Less than 300 mW No-Load power consumption

SAFETY

- UL
- 60950-1, 60601-1
- cUI 60950-1, 60601-1
- TUV 60950-1, 60601-1
- CE EMC, LVD & ErP 2011
- CB Certificate and report
- CCC China Approval



ELECTRICAL SPECIFICATIONS

| Input | | | |
|-------------------------------|--|--|--|
| Input range | 90 - 264 Vac (wide range) 127 - 300 Vdc | | |
| Frequency | 47 - 63 Hz | | |
| Inrush current | < 50 A @ 230 Vac, cold start @ 25 °C | | |
| Input current | < 0.5 A rms @ 115 Vac; < 0.25 A @ 230 Vac | | |
| Efficiency | 84% @ full load typical, @115 Vac | | |
| EMI/RFI | FCC Part 15, Subpart B Class B & EN55022 (CISPR 22) Class B | | |
| Safety ground leakage current | 300 μA @ 50/60 Hz, 264 Vac input for 3 pin model 100 μA @ 50/60 Hz, 264 Vac input for 2 pin model | | |
| Output | | | |
| Maximum power (Po) | 40 W | | |
| Hold-up time | 10 ms. typical at full load @ 115 Vac | | |
| Overvoltage protection | 20% - 45% above nominal output maximum Latching type, recycle AC to reset. | | |
| Overload protection | Output short circuit protection auto recover Overload protected @ 110 - 160% above peak rating | | |
| Cable/connector | 1.2 m DC cable with 2.5 mm I.D, 5.5 mm O.D center plug DC plug center +v DC plug outer -v | | |

ENVIRONMENTAL SPECIFICATIONS

| Operating temperature | 0 ° to +40 °C ambient. Derate each output as 2.5% per degree from 40 °C to 60 °C20 °C start up | |
|--------------------------------|--|--|
| Storage temperature | -40 °C to +85 °C | |
| Electromagnetic susceptibility | Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11, Level 3 | |
| Humidity | Operating; non-condensing 10% to 90% RH | |
| Vibration | Three orthogonal axes, 3 sweeps per axe at 1 oct/min. 2G peak 8 Hz to 500 Hz, operational | |
| MTBF demonstrated | > 550,000 hours at full load and 25 °C ambient conditions | |

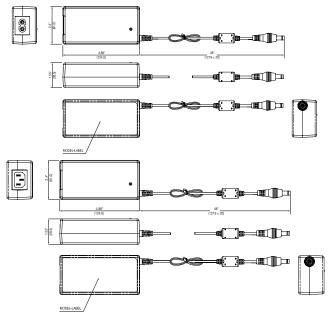


ORDERING INFORMATION

| Model Number | Output Voltage | Maximum Load | Peak Load¹ | Regulation ² | Ripple P/P (PARD) ³ |
|--------------|----------------|--------------|------------|-------------------------|--------------------------------|
| DP4009N2M | 9 V | 4.44 A | 5.4 A | ± 8% | 90 mV |
| DP4009N3M | 9 V | 4.44 A | 5.4 A | ± 8% | 90 mV |
| DP4012N2M | 12 V | 3.33 A | 4.4 A | ± 5% | 120 mV |
| DP4012N3M | 12 V | 3.33 A | 4.4 A | ± 5% | 120 mV |
| DP4015N2M | 15 V | 2.67 A | 3.5 A | ± 5% | 150 mV |
| DP4015N3M | 15 V | 2.67 A | 3.5 A | ± 5% | 150 mV |
| DP4018N2M | 18 V | 2.22 A | 3.0 A | ± 5% | 150 mV |
| DP4018N3M | 18 V | 2.22 A | 3.0 A | ± 5% | 150 mV |
| DP4024N2M | 24 V | 1.67 A | 2.2 A | ± 5% | 240 mV |
| DP4024N3M | 24 V | 1.67 A | 2.2 A | ± 5% | 240 mV |
| DP4048N2M | 48 V | 0.84 A | 1.2 A | ± 5% | 480 mV |
| DP4048N3M | 48 V | 0.84 A | 1.2 A | ± 5% | 480 mV |

- 1. Peak current lasting < 15 seconds with a maximum 10% duty cycle.
- $2.\ \mathsf{At\ 25\ °C\ including\ initial\ tolerance, line\ voltage,\ load\ currents\ and\ output\ voltages\ adjusted\ to\ factory\ settings.}$
- $3.\ Peak-to-peak\ with\ 20\ MHz\ bandwidth\ and\ 10\ \mu F\ (tantalum\ capacitor)\ in\ parallel\ with\ a\ 0.1\ \mu F\ capacitor\ at\ rated\ line\ voltage\ and\ load\ ranges.$

MECHANICAL DRAWING



Notes:

- Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is \pm 0.02" (\pm 0.5 mm)
- 3. Warranty: 2 year
- 4. Weight: 0.55 lb./.25 kg
- 5. AC input power cord sold separately.
- 6. Specifications are for convection rating at factory settings at 115 Vac input, 25 $^{\circ}\text{C}$ unless otherwise stated



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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