



Acme Electric

DM Series

Plastic Single Phase DIN Rail DC Switching Power Supplies

ULTRA SLIM SIZE AT AN ECONOMICAL PRICE

The DM Series plastic single phase DC power supplies provide optimal switching technology in a compact package. These highly efficient DIN Rail switching power supplies provide maximum uptime in a diverse range of manufacturing environments.

With their narrow profile, the plastic models consume limited space on the DIN Rail, making efficient use of control cabinet real estate. The supply's rugged plastic case and secure mounting clip ensure quick and easy installation on the DIN Rail. High-quality performance, long-life expectancy, and operation under a wide range of temperatures contribute great value to demanding applications.

Plastic single phase units are available in a variety of wattages (15-50) and voltages (5-48).



Features/Benefits:

- » Narrow width conserves valuable space on the DIN Rail
- » Universal input 90-264 VAC, 50/60 Hz without voltage gaps for full product application versatility
- » Adjustable output voltage compensates for voltage drop
- » "DC OK" LED indicator identifies local output status
- » Fully enclosed touch-safe enclosure and terminals
- » Certified to UL and CE safety standards for use worldwide
- » UL508 listed for use at full-rated power
- » All models capable of parallel connection to provide redundancy for critical load applications (use w/external diode)
- » Meets SEMI F47-200
- » RoHS compliant
- » 3 year warranty

Full Line Specifications:

| |
|---|
| Input voltage range 90-264 VAC |
| Input frequency 47-63 Hz |
| Inrush current < 25 Amp |
| Hold-up time \geq 16 mSec |
| Line regulation < \pm 0.5% |
| Load regulation drift < \pm 1% |
| Operating temp -10°C to +50°C |
| Storage temp -25°C to +85°C |
| Operating humidity 5% to 95% RH, non-condensing |
| Meets EN61000-3-2 Harmonic correction |
| Meets EMI standards EN55022-B, FCC15B, EN55024 |
| Meets vibration & shock standards IEC68-2-6, IEC68-2-27 |
| All models have internal fuse protection |

Applications:

- » Industrial networks and encoders
- » Industrial/Machine control
- » Process control
- » Conveying equipment
- » Material handling
- » Packaging
- » Robotics
- » Vending equipment
- » Instrumentation

When you want superior product performance and reliability, off-the-shelf availability, industry-leading technical support, and customer service that's rated second to none, choose Acme - the first name in power solutions.

Plastic Single Phase

| | DMP1-504 | DMP1-120125 | DMP1-12025 | DMP1-1204 | DMP1-1502 |
|---|---|---|---|---|---|
| Total Power | 20 W | 15 W | 30 W | 50 W | 30 W |
| Input Current | < 0.80 Amp | < 0.42 Amp | < 0.80 Amp | < 1.65 Amp | < 0.80 Amp |
| Efficiency - Typ. (1) | 75% | 78% | 84% | 83% | 84% |
| Output Voltage | 5 VDC | 12 VDC | 12 VDC | 12 VDC | 15 VDC |
| Output Voltage Adj. | 4.5-5.5 VDC | 10-14 VDC | 10-14 VDC | 10-14 VDC | 14-18 VDC |
| Output Current | 4.4 - 3.64 Amp | 1.25 - 1.07 Amp | 3.0 - 2.14 Amp | 5.0 - 3.57 Amp | 2.14 - 1.67 Amp |
| Ripple & Noise | < 1.6%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load |
| Overvoltage Protection | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (120% - 135%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) |
| Overcurrent Protection Short Circuit | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (110% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) |
| Reverse Volt Protection | < 6.3 V | < 25 V | < 25 V | < 25 V | < 25 V |
| Start-up Time | < 2 Sec | < 1 Sec | < 2 Sec | < 2 Sec | < 2 Sec |
| Safety Standard | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 |
| Connectors | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 |
| Weight | 0.35 lbs (0.16 Kg) | 0.29 lbs (0.13 Kg) | 0.35 lbs (0.16 Kg) | 0.51 lbs (0.23 Kg) | 0.35 lbs (0.16 Kg) |
| Dimensions H x W x D in. (mm) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) | 3.54 x 1.26 x 4.02 (90 x 32 x 102) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) |

| | DMP1-24006 | DMP1-240125 | DMP1-2402 | DMP1-4801 |
|---|---|---|---|---|
| Total Power | 15 W | 30 W | 50 W | 50 W |
| Input Current | < 0.42 Amp | < 0.80 Amp | < 1.65 Amp | < 1.65 Amp |
| Efficiency - Typ. (1) | 81% | 85% | 85% | 85% |
| Output Voltage | 24 VDC | 24 VDC | 24 VDC | 48 VDC |
| Output Voltage Adj. | 22-28 VDC | 22-28 VDC | 22-28 VDC | 46-52 VDC |
| Output Current | 0.68 - 0.54 Amp | 1.36 - 1.07 Amp | 2.27 - 1.79 Amp | 1.09 - 0.96 Amp |
| Ripple & Noise | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load | < 1%pk-pk 20MHz full load |
| Overvoltage Protection | Continuous Protection & Auto Recovery (120% - 135%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) |
| Overcurrent Protection Short Circuit | Continuous Protection & Auto Recovery (110% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) | Continuous Protection & Auto Recovery (105% - 150%) |
| Reverse Volt Protection | < 35 V | < 35 V | < 35 V | < 63 V |
| Start-up Time | < 1 Sec | < 2 Sec | < 2 Sec | < 2 Sec |
| Safety Standard | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 | UL508, CE, meets EN60950-1 |
| Connectors | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 | Screw terminal, Input AWG 14-22, Output AWG 12-14 |
| Weight | 0.29 lbs (0.13 Kg) | 0.35 lbs (0.16 Kg) | 0.51 lbs (0.23 Kg) | 0.51 lbs (0.23 Kg) |
| Dimensions H x W x D in. (mm) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) | 3.54 x 0.90 x 4.02 (90 x 22.8 x 102) | 3.54 x 1.26 x 4.02 (90 x 32 x 102) | 3.54 x 1.26 x 4.02 (90 x 32 x 102) |

1. Depends upon specific model selection, output voltage and/or upon 120 or 240 VAC operation.

Mounting instructions available on www.acmedinps.com



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