Acme Electric

DM Series

Slimline Single Phase

DIN Rail DC Switching Power Supplies

PROVEN POWER IN A SMALL FOOTPRINT

The DM Series slimline single phase DC power supplies provide optimal switching technology in a compact package. Through industrial design and rugged construction quality, the Slimline provides maximum uptime in a diverse range of manufacturing environments. These highly efficient DIN Rail switching power supplies ensure reliable startup of heavy loads.

The Slimline's narrow profile consumes limited space on the DIN Rail, making efficient use of control cabinet real estate. The supply's rugged metal 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.

The Slimline is available in a variety of wattages (72-480) and voltages (12-48).



GREEN POWER DESIGN

Features/Benefits:

- Narrow width conserves valuable space on the DIN Rail
- High peak power eliminates the need to oversize your power supply
- Universal input 90-264 VAC, 50/60 Hz without voltage gaps for full product application versatility
- Adjustable output voltage compensates for voltage drop
- Power Factor Correction – meets EN61000-3-2
- "DC OK" LED indicator identifies local output status
- Easy, snap-on mounting on DIN Rail
- Fully enclosed touch-safe enclosure and terminals
- Certified to UL, TUV and CE safety standards for use worldwide
- UL508 listed for use at full-rated power
- Most models capable of parallel connection to provide redundancy for critical load applications
- Industrial design
  - -20ºC to +60ºC operation without derating
  - Overload and short circuit protection
  - Rugged metal case
  - Power boosting circuitry
- Meets SEMI F47-200
- RoHS compliant
- 5 year warranty

Full Line Specifications:
Input voltage range 90-264 VAC
Nominal voltage 100-240 VAC
Input frequency 47-63 Hz
Load regulation drift +/- 1%
Short circuit automatic recovery
Storage temp -40ºC to +85ºC
Operating humidity 5% to 90% RH, non-condensing
Overcurrent protection: continuous protection and automatic recovery (110% - 130%)
Over/Undershoot < 500mV from 50%-100% load change @ 0.2A/µSec.
Hold-up Time ≥ 20 mSec
Start-up Time < 1 Sec
Meets EN61000-3-2 harmonic distortion
Meets EMI standards EN55022, FCC15B, EN55024
Meets vibration & shock standards IEC68-2-6, IEC68-2-27
All models have internal fuse protection

Applications:

- Industrial/Machine control
- Process control
- Conveying equipment
- Material handling
- Packaging
- Robotics
- Welding

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.

Slimline Single Phase

	DM 1-1206-S	DM 1-1208-S	DM 1-1215-S	DM 1-24033-S	DM 1-2405-S	DM 1-2410-S
Total Power	72 W	96 W	180 W	80 W	120 W	240 W
Input Current	2.7 - 1.0 Amp	2.0 - 0.7 Amp	3.7 - 1.3 Amp	3.0 - 1.1 Amp	2.4 - 0.8 Amp	4.9 - 1.7 Amp
Inrush Current	< 25 Amp	< 15 Amp	< 25 Amp	< 25 Amp	< 15 Amp	< 40 Amp
Efficiency - Typ. (1)	87%	89%	88%	90%	91%	92%
Output Voltage	12 VDC	12 VDC	12 VDC	24 VDC	24 VDC	24 VDC
Output Voltage Adj.	12-15 VDC	12-15 VDC	12-15 VDC	24-28 VDC	24-28 VDC	24-28 VDC
Output Current	6.0 - 4.8 Amp	8.0 - 6.4 Amp	15.0 Amp	3.4 - 2.8 Amp	5.0 - 4.3 Amp	10.0 Amp
Output Peak Power	150% of rated power for 4 sec max.	150% of rated power for 4 sec max.	150% of rated power for 4 sec max.	150% of rated power for 4 sec max.	150% of rated power for 4 sec max.	150% of rated power for 4 sec max.
Line Regulation	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Ripple & Noise	< 50 mV pk-pk	< 50 mV pk-pk	< 50 mV pk-pk	< 50 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk
Overvoltage Protection	Continuous Protection & Auto Recovery (125% - 135%)	Continuous Protection & Auto Recovery (110% - 130%)	Continuous Protection & Auto Recovery (125% - 135%)	Continuous Protection & Auto Recovery (125% - 135%)	Continuous Protection & Auto Recovery (110% - 130%)	Continuous Protection & Auto Recovery (125% - 135%)
Reverse Volt Protection	< 16 V	< 16 V	< 16 V	< 35 V	< 35 V	< 35 V
Operating Temp	-20˚C to +60˚C	-20˚C to +60˚C	-20˚C to +60˚C (1)	-20˚C to +60˚C	-20˚C to +60˚C	-20˚C to +60˚C (1)
Safety Standard	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1
Parallel Operation	Use with external diode	Use with external diode	Use with external diode	Use with external diode	Use with external diode	Use with external diode
Status Indicators	"DC OK" LED	"DC OK" LED and signal	"DC OK" LED and signal	"DC OK" LED	"DC OK" LED and signal	"DC OK" LED and signal
Connectors	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20
Weight	0.92 lbs (0.42 Kg)	1.37 lbs (0.62 Kg)	1.98 lbs (0.9 Kg)	0.92 lbs (0.42 Kg)	1.37 lbs (0.62 Kg)	1.98 lbs (0.9 Kg)
Dimensions H x W x D in. (mm)	4.88 x 1.26 x 4.02 (124 x 32 x 102)	4.88 x 1.57 x 4.45 (124 x 40 x 113)	4.88 x 2.36 x 4.45 (124 x 60 x 113)	4.88 x 1.26 x 4.02 (124 x 32 x 102)	4.88 x 1.57 x 4.45 (124 x 40 x 113)	4.88 x 2.36 x 4.45 (124 x 60 x 113)

	DM 1-2420-S	DM 1-48017-S	DM 1-48025-S	DM 1-4805-S	DM 1-4810-S
Total Power	480 W	80 W	120 W	240 W	480 W
Input Current	6.1 - 2.1 Amp	3.0 - 1.1 Amp	2.4 - 0.8 Amp	4.9 - 1.7 Amp	6.1 - 2.1 Amp
Inrush Current	Typ. < 42 Amp	< 25 Amp	< 15 Amp	< 40 Amp	Typ. < 42 Amp
Efficiency - Typ. (1)	91%	90%	91%	92%	92%
Output Voltage	24 VDC	48 VDC	48 VDC	48 VDC	48 VDC
Output Voltage Adj.	See manual	48-56 VDC	48-56 VDC	48-56 VDC	See manual
Output Current	20.0 Amp	1.7 - 1.4 Amp	2.5 - 2.1 Amp	5.0 Amp	10.0 Amp
Output Peak Power	130% of rated output current for 4 sec. max.	150% of rated power for 4 sec. max.	150% of rated power for 4 sec. max.	150% of rated power for 4 sec. max.	130% of rated output current for 4 sec. max.
Line Regulation	± 0.3%	± 0.5%	± 0.5%	± 0.5%	± 0.3%
Ripple & Noise	< 150 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk	< 240 mV pk-pk
Overvoltage Protection	See manual	Continuous Protection & Auto Recovery (125% - 135%)	Continuous Protection & Auto Recovery (110% - 130%)	Continuous Protection & Auto Recovery (125% - 135%)	See manual
Reverse Volt Protection	< 35 V	< 63 V	< 63 V	< 63 V	< 63 V
Operating Temp	-20˚C to +60˚C	-20˚C to +60˚C	-20˚C to +60˚C	-20˚C to +60˚C (1)	-20˚C to +60˚C
Safety Standard	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1
Parallel Operation	NO	Use with external diode	Use with external diode	Use with external diode	NO
Status Indicators	"DC OK" LED and signal	"DC OK" LED	"DC OK" LED and signal	"DC OK" LED and signal	"DC OK" LED and signal
Connectors	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-16, Output AWG 12-20	Screw terminal, Input AWG 10-18, Output AWG 12-18	Screw terminal, Input AWG 10-20, Output AWG 10-18	Screw terminal, Input AWG 10-16, Output AWG 10-16
Weight	4.4 lbs (2.0 Kg)	0.92 lbs (0.42 Kg)	1.37 lbs (0.62 Kg)	1.98 lbs (0.9 Kg)	4.4 lbs (2.0 Kg)
Dimensions H x W x D in. (mm)	5.12 x 4.02 x 5.70 (130 x 102 x 145)	4.88 x 1.26 x 4.02 (124 x 32 x 102)	4.88 x 1.57 x 4.45 (124 x 40 x 113)	4.88 x 2.36 x 4.45 (124 x 60 x 113)	5.12 x 4.02 x 5.70 (130 x 102 x 145)

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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