



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).



#### 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
  - -20°C to +60°C 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 -40°C to +85°C
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
<b>Total Power</b>	72 W	96 W	180 W	80 W	120 W	240 W
<b>Input Current</b>	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
<b>Inrush Current</b>	< 25 Amp	< 15 Amp	< 25 Amp	< 25 Amp	< 15 Amp	< 40 Amp
<b>Efficiency - Typ. (1)</b>	87%	89%	88%	90%	91%	92%
<b>Output Voltage</b>	12 VDC	12 VDC	12 VDC	24 VDC	24 VDC	24 VDC
<b>Output Voltage Adj.</b>	12-15 VDC	12-15 VDC	12-15 VDC	24-28 VDC	24-28 VDC	24-28 VDC
<b>Output Current</b>	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
<b>Output Peak Power</b>	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.
<b>Line Regulation</b>	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
<b>Ripple &amp; Noise</b>	< 50 mV pk-pk	< 50 mV pk-pk	< 50 mV pk-pk	< 50 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk
<b>Overvoltage Protection</b>	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%)
<b>Reverse Volt Protection</b>	< 16 V	< 16 V	< 16 V	< 35 V	< 35 V	< 35 V
<b>Operating Temp</b>	-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)
<b>Safety Standard</b>	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1
<b>Parallel Operation</b>	Use with external diode	Use with external diode	Use with external diode	Use with external diode	Use with external diode	Use with external diode
<b>Status Indicators</b>	"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
<b>Connectors</b>	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
<b>Weight</b>	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)
<b>Dimensions H x W x D in. (mm)</b>	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
<b>Total Power</b>	480 W	80 W	120 W	240 W	480 W
<b>Input Current</b>	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
<b>Inrush Current</b>	Typ. < 42 Amp	< 25 Amp	< 15 Amp	< 40 Amp	Typ. < 42 Amp
<b>Efficiency - Typ. (1)</b>	91%	90%	91%	92%	92%
<b>Output Voltage</b>	24 VDC	48 VDC	48 VDC	48 VDC	48 VDC
<b>Output Voltage Adj.</b>	See manual	48-56 VDC	48-56 VDC	48-56 VDC	See manual
<b>Output Current</b>	20.0 Amp	1.7 - 1.4 Amp	2.5 - 2.1 Amp	5.0 Amp	10.0 Amp
<b>Output Peak Power</b>	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.
<b>Line Regulation</b>	± 0.3%	± 0.5%	± 0.5%	± 0.5%	± 0.3%
<b>Ripple &amp; Noise</b>	< 150 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk	< 100 mV pk-pk	< 240 mV pk-pk
<b>Overvoltage Protection</b>	See manual	Continuous Protection & Auto Recovery (125% - 135%)	Continuous Protection & Auto Recovery (110% - 130%)	Continuous Protection & Auto Recovery (125% - 135%)	See manual
<b>Reverse Volt Protection</b>	< 35 V	< 63 V	< 63 V	< 63 V	< 63 V
<b>Operating Temp</b>	-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
<b>Safety Standard</b>	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1	UL508, CE, EN60950-1
<b>Parallel Operation</b>	NO	Use with external diode	Use with external diode	Use with external diode	NO
<b>Status Indicators</b>	"DC OK" LED and signal	"DC OK" LED	"DC OK" LED and signal	"DC OK" LED and signal	"DC OK" LED and signal
<b>Connectors</b>	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
<b>Weight</b>	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)
<b>Dimensions H x W x D in. (mm)</b>	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](http://www.acmedinps.com)



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