

DINergy™

By Micron Power Delivery

Advanced power supplies built for the industrial environment



Brochure:

PS-0916A- English

Supersedes: PS-0116C-English

Why Choose Micron?

Power Supplies and Converters: The *DINergy*™ product offering encompasses power supplies from 18 watt single phase through 960 watt three-phase in the most popular industrial output voltages (see the selection guide). The majority also operate as converters with 120 VDC input capability. Low profile, PCB and panel mount supplies and converters on special order. The *DINergy*™ product carries an average MTBF of 450,000 hours and is built to the same demanding design parameters that made our ImperviTRAN™ the preeminent 600 Volt class transformer in the marketplace for over 40 years.

POWER SUPPLY QUICK SELECTOR

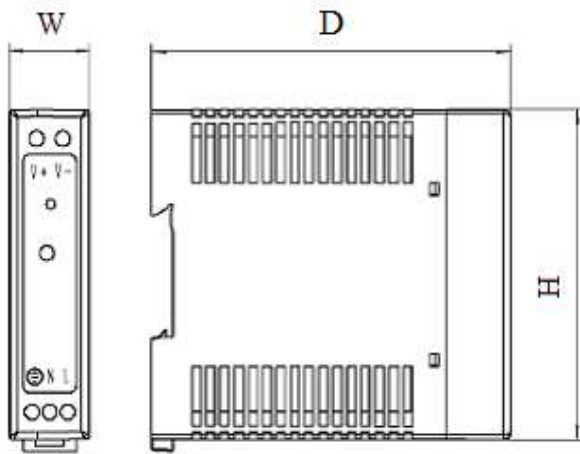
Plastic/Metal Cases	Case Material	Output Power	Output Voltage	Voltage Adj.	Output Current	Peak Current	Input Voltage	UL/CE/EN/ISA				S T O C K
Model								508/60950	UL 1604 ISA 12.12.01	1310	61000	
		(Watts)	(VDC)	Range	(A)	(A)	(VAC)					
SINGLE-PHASE INDUSTRIAL DIN-MOUNT POWER SUPPLIES												
MDP18-12A-1C	P	18	12	10.8 --13.8	1.67 – 1.30	1.80	90-264	X	X	X	X	X
MDP18-24A-1C	P	18	24	21.6 --28.8	0.83 – 0.63	0.94	90-264	X	X	X	X	X
MDP30-5-1	P	20	5	4.5 -- 5.5	4.44 – 3.64	4.44	90-255	X	X		X	X
MDP30-5A-1C	P	30	5	5.0 – 5.5	6.00 – 5.50	8.03	85-264	X	X		X	X
MDP30-5A-1CS	P	20	5	4.5 – 5.5	4.00 – 3.60	5.60	85-264	PROPOSED Q1 2017				
MDP30-12-1	P	30	12	10 -- 14	3.00 – 2.14	3.00	90-255	X	X		X	X
MDP30-12A-1C	P	30	12	12 -- 14	2.50 – 2.10	3.45	85-264	X	X	X	X	X
MDP30-12A-1CS	P	24	12	11.4 – 15.6	2.00 – 1.60	2.80	85-264	PROPOSED EQ1 2017				
MDP30-15-1	P	30	15	14 -- 18	2.14 – 1.67	2.14	90-255	X	X		X	X
MDP30-24A-1C	P	30	24	24 -- 28	1.25 – 1.05	1.71	85-264	X	X	X	X	X
MDP30-24A-1CS	P	30	24	22.5 – 28.5	1.25 – 1.00	1.75	85-264	X			X	X
MDP50-12-1	P	50	12	10 -- 14	5.00 - 3.57	5.00	90-255	X			X	X
MDP50-12A-1CS	P	48	12	11.4 – 15.6	4.00 – 3.20	6.00	85-264	PROPOSED Q1 2017				
MDP50-24-1	P	50	24	22 -- 28	2.27 – 1.79	2.27	90-255	X			X	C/F
MDP50-24A-1CS	P	50	24	22.5 – 28.5	2.10 – 1.70	3.15	85-264	X			X	X
MD60-12-1	P	60	12	10 -- 16	4.50 – 3.80	5.40	85-264	X	X		X	X
MDP60-12A-1C	P	60	12	12 – 14	5.00 – 4.25	5.85	85-264	X	X		X	X
MD60-24-1	M	60	24	22 -- 28	2.50 – 2.10	3.00	85-264	X	X		X	X
MDP60-24A-1C	P	60	24	24 -- 28	2.50 – 2.10	3.25	85-264	X	X	X	X	X
MDP70-24A-1CS	P	72	24	22.5 – 28.5	3.00 – 2.70	4.2	85-264	PROPOSED Q1 2017				
MD60-48-1	M	60	48	46 -- 52	1.25 – 1.15	1.50	85-264	X	X		X	X
MDP100-12A-1C	P	100	12	11.4 --14.5	8.40 – 6.90	10.42	90-264	X	X		X	X
MDP100-24AL-1C	P	91.2	24	22.5 --24.5	4.44 – 3.70	4.50	90-264	X	X	X	X	X
MD120-12-1	M	96	12	10 -- 16	8.00 – 6.00	9.60	85-264	X	X		X	X
MD120-12A-1C	M	120	12	11.4 --14.5	10.53 – 8.28	14.50	90-264	X	X		X	X
MD120-24A-1C	M	120	24	22.5 --28.5	5.33 – 4.21	6.85	90-264	X	X		X	X
MD120-48A-1C	M	120	48	45 -- 55	2.50 – 2.10	3.33	90-264	X	X		X	X
MD240-12A-1CS	M	190	12	11.4–14.5	16.00–13.00	23.75	88-264	X	X		X	X
MD240-24A-1C	M	240	24	22.5 – 28.5	10.00 – 8.40	13.50	90-264	X	X		X	X
MD240-24A-1CS	M	240	24	22.5 –28.5	10.67 - 8.42	14.50	88-264	X	X		X	X
MD240-48-1	M	240	48	46 – 52	5.00 – 4.60	6.00	85-264	X	X		X	X
MD240-48A-1C	M	240	48	47 – 56	5.00 – 4.20	6.90	90-264	X	X		X	2017
MD480-24-1	M	480	24	22 – 28	20.00 – 17.10	24.00	85-264	X			X	X
MD480-24A-1C	M	480	24	22.5 – 28.5	21.33 – 16.84	25.00	90-264	X	X		X	X
MD480-36-1	M	480	36	34 – 40	13.30 – 12.00	16.00	85-264	X			X	C/F
MD480-48A-1C	M	480	48	47 – 56	10.00 – 8.50	12.50	90-264	X	X		X	X
MDP-PDMA-C	P	REDUNDANCY DIODE MODULE				20.00	24Vdc	X			X	X

POWER SUPPLY QUICK SELECTOR

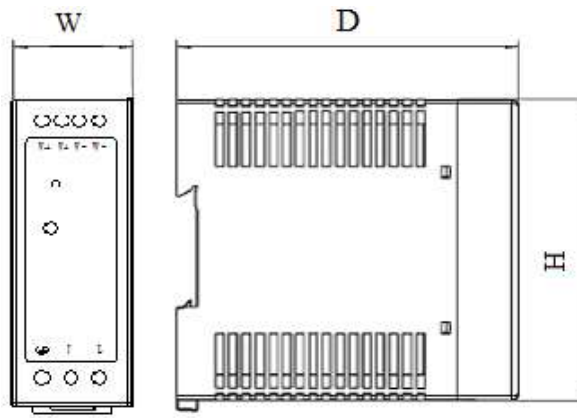
Plastic/Metal Cases	Case Material	Output Power	Output Voltage	Voltage Adj.	Output Current	Peak Current	Input Voltage	UL/CE/EN/ISA				S T O C K
Model								508/60950	UL 1604 ISA 12.12.01	1310	61000	
		(Watts)	(VDC)	Range	(A)	(A)	(VAC)					
PANEL MOUNT IP67 RATED POWER SUPPLIES												
PMIP67A50S24A (IP67)	P	50	24	N/A	2.10	2.70	90-264	X			X	C/F
PMIP67A75S24 (IP67)	P	72	24	N/A	3.00	3.90	90-264	X			X	C/F
PMIP67A100S24 (IP67)	P	96	24	N/A	4.17	5.40	90-264	X			X	C/F
600700-04512	CONNECTOR, 7/8" FEMALE-STRAIGHT											C/F
600700-04513	CONNECTOR, 7/8" MALE-STRAIGHT											C/F
600700-04514	CONNECTOR, 7/8" FEMALE-90°											C/F
600700-04515	CONNECTOR, 7/8" MALE-90°											C/F
TWO-PHASE & THREE-PHASE INDUSTRIAL DIN-MOUNT POWER SUPPLIES												
MDP100-24-2C (2-PH)	p	100.8	24	22.5 – 28.5	4.20 – 3.50	5.40	340-575	X	X		X	X
MDP100-12-2C (2-PH) VRH100-12	p	100.8	12	11.2 – 14.5	8.40 – 6.90	10.75	340-575	X	X		X	X
MD120-24-3C (3-PH)	M	120	24	22.5 – 28.5	5.00 – 4.20	6.50	340-575	X	X		X	X
MD240-24-3C (3-PH)	M	240	24	22.5 – 28.5	10.67 – 8.42	14.00	340-575	X	X		X	X
MD480-24-3C (3-PH)	M	480	24	22.5 – 28.5	21.33 – 16.84	27.00	340-575	X	X		X	X
MD960-24-3C (3-PH)	M	960	24	22.5 – 28.5	42.67 – 33.68	56.00	340-575	X	X		X	X
BUILDING AUTOMATION STYLE INDUSTRIAL DIN-MOUNT POWER SUPPLIES												
MDP10-5-1CBA	p	7.5	5	N/A	1.50	2.10	90-264	X	X	X	X	EVAL
MDP10-12-1CBA	p	10	12	N/A	0.83	1.16	90-264	X	X	X	X	EVAL
MDP10-15-1CBA	p	10	15	N/A	0.67	0.94	90-264	X	X	X	X	EVAL
MDP10-24-1CBA	p	10	24	N/A	0.42	0.59	90-264	X	X	X	X	EVAL
MDP24-5-1CBA	p	15	5	5.0 – 5.5	3.00 – 2.70	3.90	90-264	X	X	X	X	EVAL
MDP24-12-1CBA	p	24	12	12.0 – 14.0	2.00 – 1.70	2.60	90-264	X	X	X	X	EVAL
MDP24-15-1CBA	p	24	15	13.5 – 16.5	1.60 – 1.40	2.08	90-264	X	X	X	X	EVAL
MDP24-24-1CBA	p	24	24	24.0 – 28.0	1.00 – 0.85	1.30	90-264	X	X	X	X	X
MDP34-5-1CBA	p	22.5	5	5.0 – 5.5	4.50 – 4.00	5.85	90-264	X	X	X	X	EVAL
MDP34-12-1CBA	p	33	12	12.0 – 14.0	2.75 – 2.30	3.58	90-264	X	X	X	X	EVAL
MDP34-15-1CBA	p	36	15	13.5 – 16.5	2.40 – 2.10	3.12	90-264	X	X	X	X	EVAL
MDP34-24-1CBA	p	36	24	24.0 – 28.0	1.50 – 1.25	1.95	90-264	X	X	X	X	X
MDP60-5-1CBA	p	35	5	5.0 – 5.5	7.00 – 6.30	9.10	90-264	X	X	X	X	EVAL
MDP60-12-1CBA	p	54	12	12.0 – 14.0	4.50 – 3.80	5.85	90-264	X	X	X	X	EVAL
MDP60-15-1CBA	p	60	15	13.5 – 16.5	4.00 – 3.60	5.2	90-264	X	X	X	X	EVAL
MDP60-24-1CBA	p	60	24	24.0 – 28.0	2.50 – 2.10	3.25	90-264	X	X	X	X	X
MDP75-5-1CBA	p	60	5	5.0 – 5.5	12.00 – 10.50	15.25	90-264	X	X		X	EVAL
MDP75-12-1CBA	p	72	12	12.0 – 14.0	6.00 – 5.10	7.68	90-264	X	X		X	EVAL
MDP75-15-1CBA	p	75	15	13.5 – 16.5	5.00 – 4.50	6.40	90-264	X	X		X	EVAL
MDP75-24-1CBA	p	100.8	24	24.0 – 28.0	4.20 – 3.60	5.38	90-264	X	X		X	X
MDP100-24L-1CBA	p	91.2	24	20.0 – 24.2	3.80 – 3.70	4.10	90-264	X	X	X	X	EVAL
UPS DEVICES AND BATTERY HOLDERS												
MD-VSB240-24-1	M	240	24	24VDC/240WATT VOLTAGE SAG BUFFER/UPS				X			X	C/F
DRU30-12/MDPU30	p	360	12	12VDC/30A UPS MODULE				X			X	X
DRU30-24/MDPU30	p	720	24	24VDC/30A UPS MODULE				X			X	X
MD-DINBRKTA	M	DIN-MOUNT L.A.B. BRACKET. MAX BATTERY DIMENSION: 134x62x134MM										C/F
MD-DINBRKTB	M	DIN-MOUNT L.A.B. BRACKET. MAX BATTERY DIMENSION: 88x57x97MM										C/F

MDP SERIES - SINGLE PHASE/TWO PHASE

Plastic Case DIN Rail Power Supply Dimensions



(MDP18, MDP30, MDP30-1CS)



(MDP30-1C, MDP50, MDP50-1CS, MDP60, MDP70-1CS, MDP100-1C, MDP100-2C, MDP-PDMA-C, DRU30-xx/MDPU30)

Model Comparison

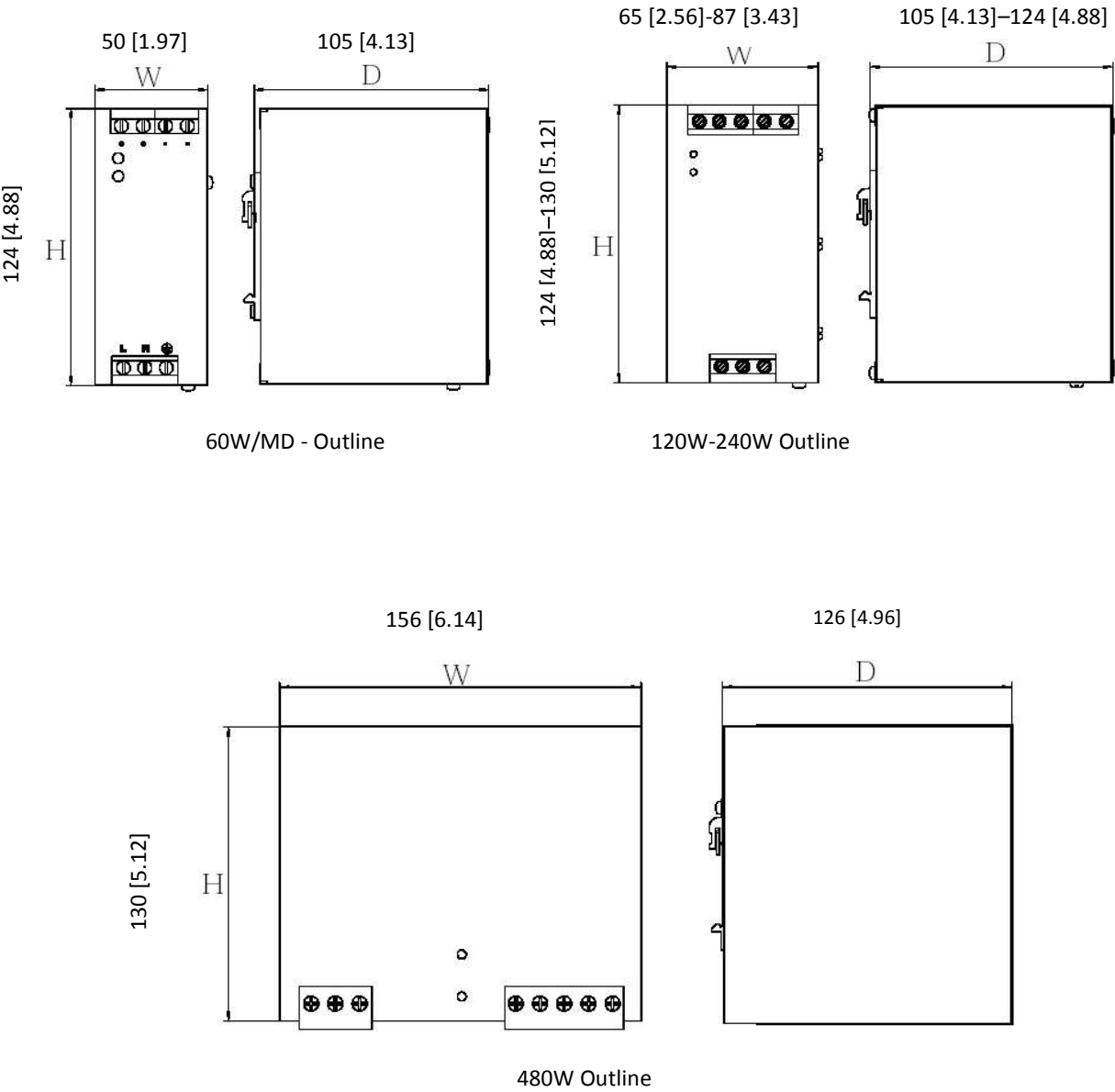
Model	W (Width)	D (Depth)	H (Height)	Weight	Connectors	Torque lb/in
MDP18	0.89"(22.5mm)	4.49"(114mm)	3.60" (90mm)	0.33lbs (150g)	IN/OUT: AWG 26-12	IN/OUT 5
MDP30	0.89"(22.5mm)	4.02"(102mm)	3.60" (90mm)	0.35lbs (160g)	IN/OUT: AWG 22-12	IN/OUT 5
MDP30-1C	1.59"(40.5mm)	4.49"(114mm)	3.60" (90mm)	0.60lbs (270g)	IN/OUT: AWG 26-12	IN/OUT 5
MDP30-1CS	0.89"(22.5mm)	3.94"(100mm)	3.60" (90mm)	0.30lbs(140g)	IN/OUT: AWG 24-14	IN/OUT 5
MDP50	1.26" (32mm)	4.02"(102mm)	3.60"(90mm)	0.51lbs (230g)	IN/OUT: AWG 22-12	IN/OUT 5
MDP50-1CS	1.18"(30mm)	3.94"(100mm)	3.60" (90mm)	0.44lbs(200g)	IN/OUT: AWG 24-14	IN/OUT 5
MDP60-1C	1.59 (40.5mm)	4.49"(114mm)	3.60" (90mm)	0.75lbs (340g)	IN/OUT: AWG 26-12	IN/OUT 5
MDP70-1CS	1.59"(40.5mm)	3.94"(100mm)	3.60" (90mm)	0.55lbs(250g)	IN/OUT: AWG 24-14	IN/OUT 5
MDP100-1C	2.13" (54mm)	4.49"(114mm)	3.60" (90mm)	0.95lbs (430g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MDP100-2C	2.13" (54mm)	4.49"(114mm)	3.60" (90mm)	1.10lbs (500g)	IN/OUT: AWG24-10	IN 9/OUT 5.5
MDP-PDMA-C	2.13" (54mm)	4.49"(114mm)	3.60" (90mm)	0.50lbs (210g)	IN/OUT AWG24-10	IN 9/OUT 5.5
DRU30-xx/ MDPU30	2.13" (54mm)	4.49"(114mm)	3.60" (90mm)	0.82lbs(370g)	IN/OUT AWG 18-8	IN 9/Relay 5

GENERAL TOLERANCE	
0.00[0.00] - 30.00[1.18]	±0.30[0.01]
30.00[1.18] - 120.00[4.72]	±0.50[0.02]

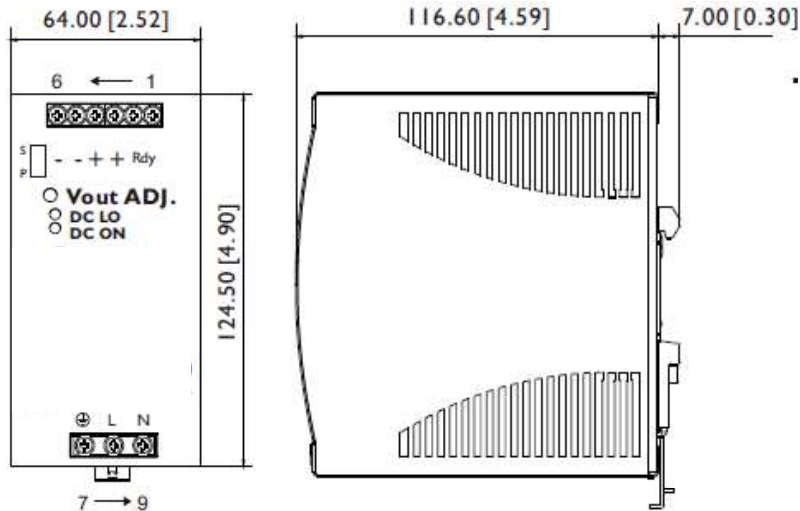
MD SERIES – SINGLE PHASE

Metal Case DIN Rail Power Supply Dimensions

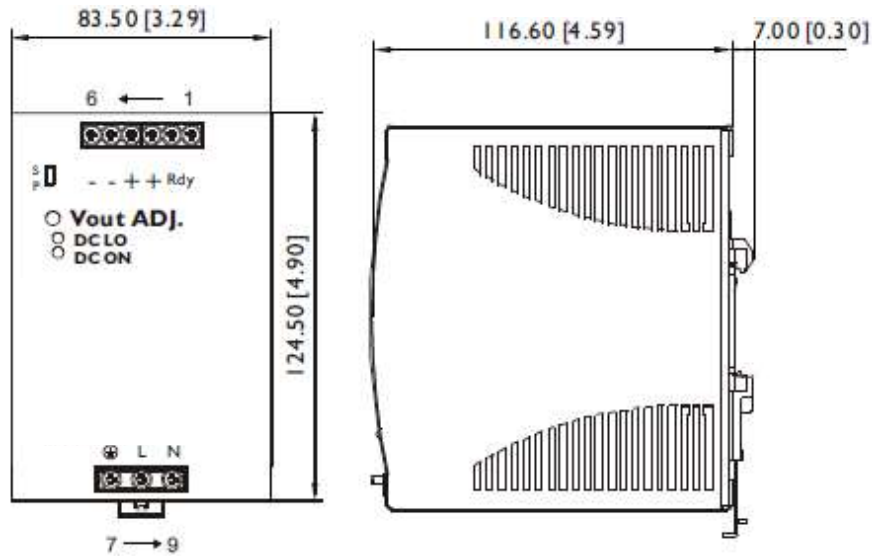
MD60-xx-1 – MD480-xx-1 Dimensions



MD120-xxA-1C and MD240-xxA-1CS Dimensions

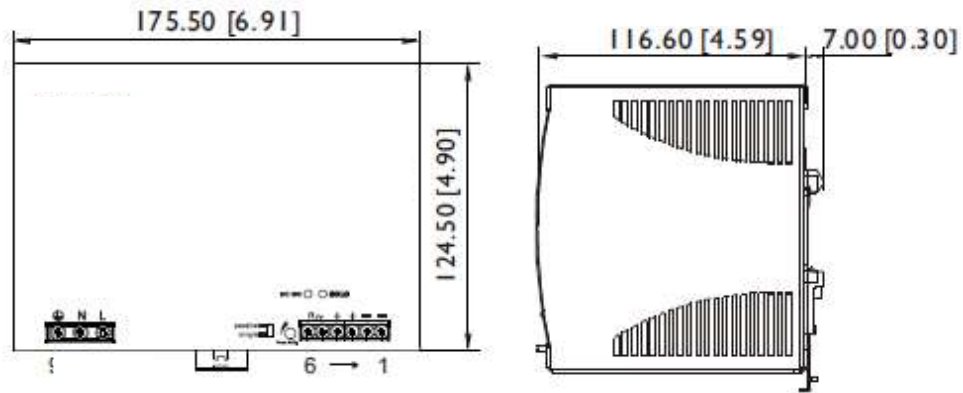


MD240-xxA-1C Dimensions



**MICRON ALSO OFFERS THE ImperviTRAN™ LINE OF CONTROL TRANSFORMERS
PLUS SINGLE, THREE PHASE LVGP AND BUCK-BOOST TRANSFORMERS PLUS SPECIALTY
CHOKES AND INDUCTORS**

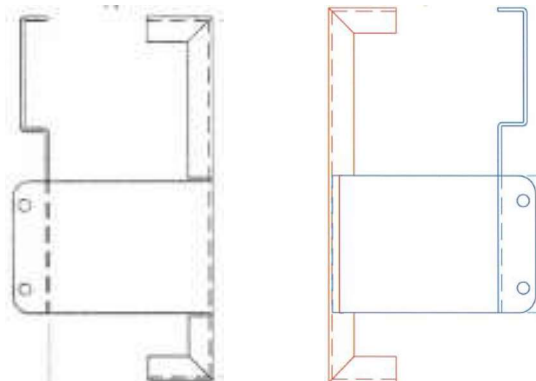
MD480-xxA-1C Dimensions



Model Comparison

Model	W (Width)	D (Depth)	H (Height)	Weight	Connectors	Torque lb/in
MD60	1.97" (50)	4.13" (105)	4.88" (124)	1.08lbs (490g)	IN/OUT: AWG 24-10	4.4
MD120	2.56" (65)	4.13" (105)	4.88" (124)	1.65lbs (750g)	IN/OUT: AWG 24-10	4.4
MD120-1C	2.52" (64)	4.59" (117)	4.90" (124.5)	2.03lbs (920g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD240	3.43" (87)	4.88" (124)	5.12" (130)	2.87lbs (1300g)	IN/OUT: AWG 21-12	4.4
MD240-1C	3.29" (83.5)	4.59" (117)	4.90" (124.5)	3.04lbs (1380g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD240-1CS	2.52" (64)	4.59" (117)	4.90" (124.5)	2.03lbs (920g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD480	6.14" (156)	4.96" (126)	5.12" (130)	4.96lbs (2250g)	IN/OUT: AWG 20-6	7.0
MD480-1C	6.91" (175.5)	4.59" (117)	4.90" (124.5)	4.23lbs (1920g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD-DINBRKTA	5.38" (135)	3.13 (80)	5.50 (140)	1.08lbs (490g)	IN/OUT: AWG 16	N/A
MD-DINBRKTB	3.56 (90)	3.19 (80)	4.00 (102)	0.75lbs (340g)	IN/OUT: AWG 16	N/A

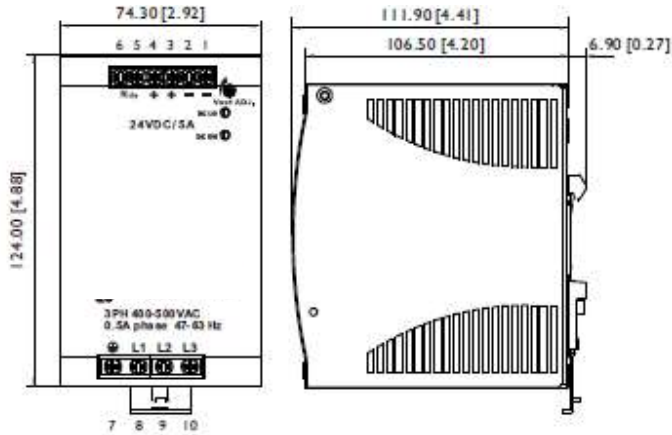
DIN-MOUNT BATTERY HOLDER KITS



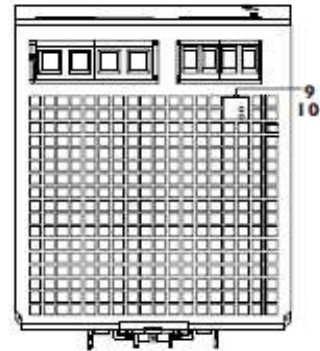
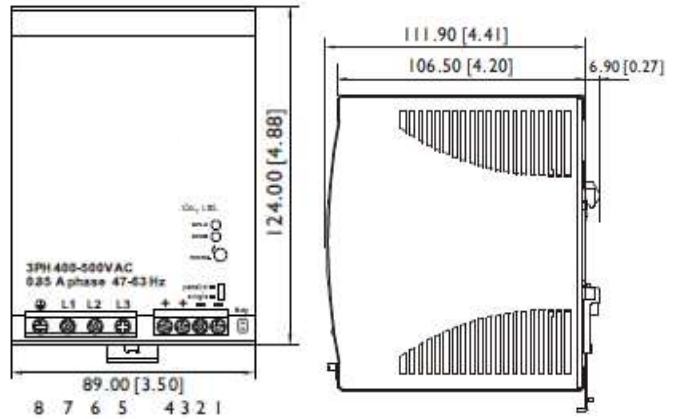
MD SERIES – THREE PHASE

MD120-xx-3C – MD960-xx-3C Dimensions

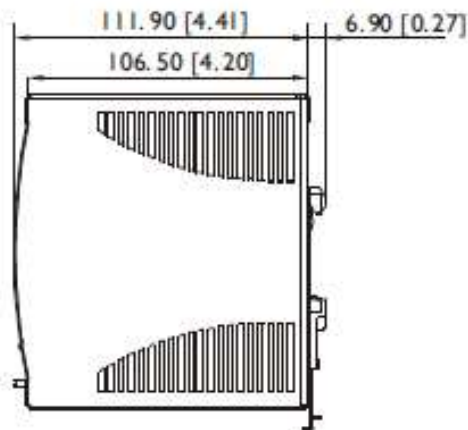
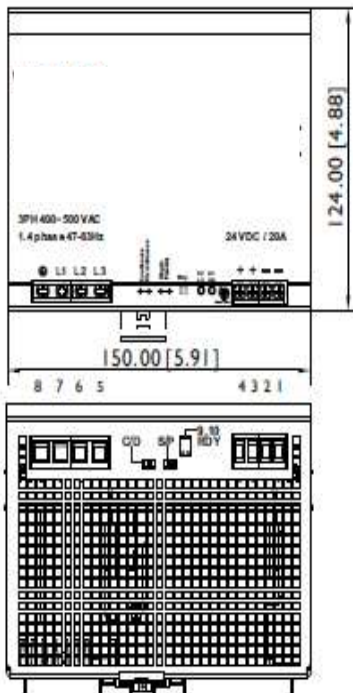
MD120-xx-3C



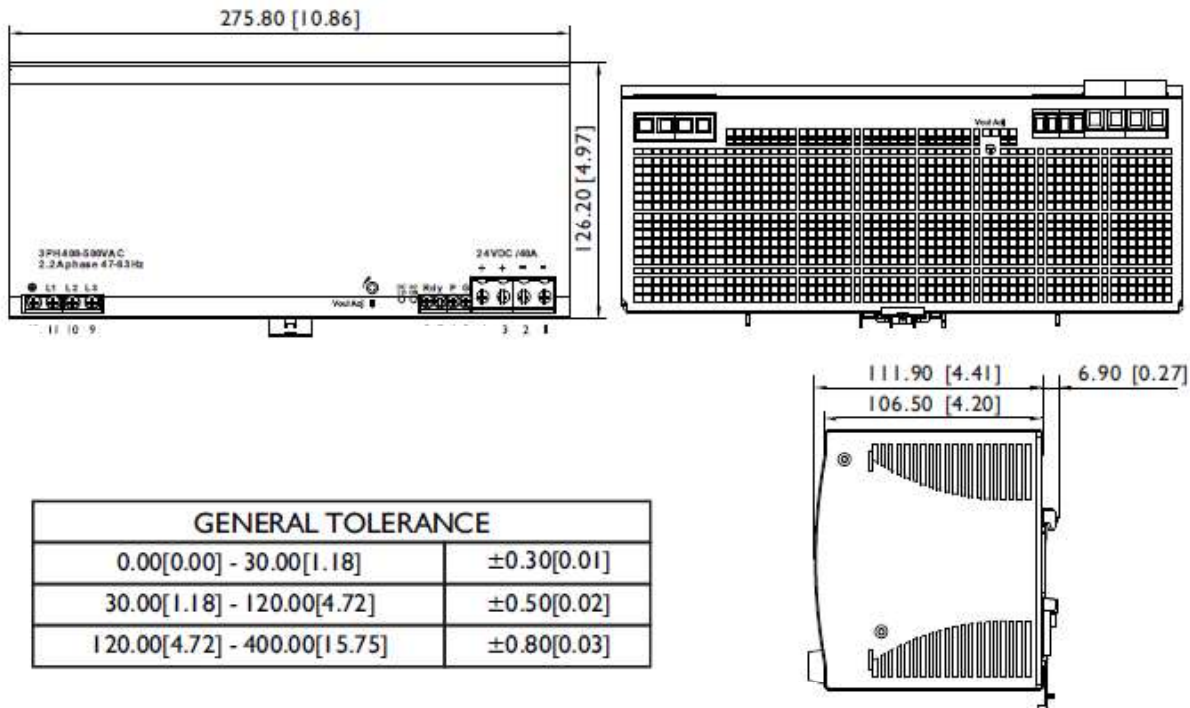
MD240-xx-3C



MD480-xx-3C



MD960-xx-3C Dimensions



Model Comparison

Model	W (Width)	D (Depth)	H (Height)	Weight	Connectors	Torque lb/in
MD120-3C	2.92" (74.3)	4.41" (112)	4.88" (124)	1.76lbs (800g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD240-3C	3.50" (89)	4.41" (112)	4.88" (124)	2.43lbs (1100g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD480-3C	5.91" (150)	4.41" (112)	4.88" (124)	3.80lbs (1720g)	IN/OUT: AWG 24-10	IN 9/OUT 5.5
MD960-3C	10.86 (276)	4.41" (112)	4.97" (126)	7.50lbs (3400g)	IN: AWG 24-10 OUT: AWG 20-6	IN 9/OUT 5.5

Basic Specifications

For individual product detail, please refer to the four-page PDF technical document for each power supply listing (Wattage & Single/Two/Three Phase). Contact Micron Industries Corporation, +1 630 516 1222 or www.micronpower.com.

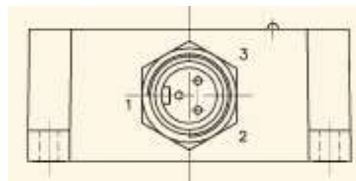
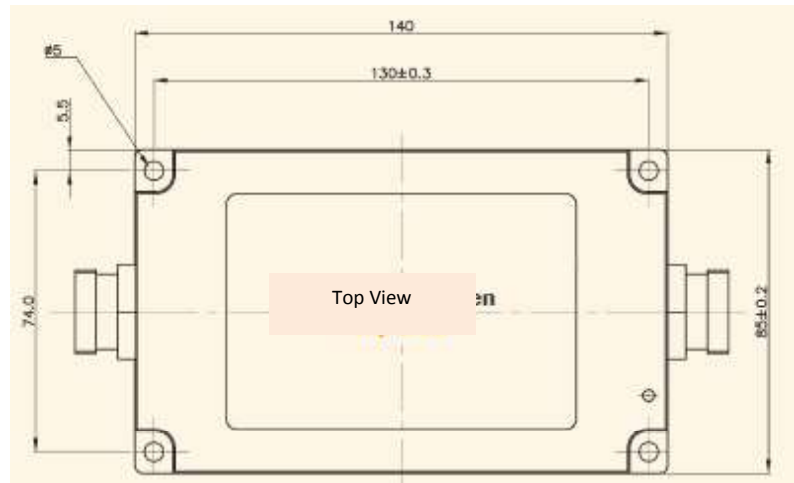
- All **DINergy** products are cUL Listed to UL508/60950-1 and CE Certified to EN 61000 specifications.
- Virtually all **DINergy** products qualify to UL 1604; Class 1, Division 2 requirements.
- Many **DINergy** products are classified to UL 1310; Class 2 – current limiting applications.
- All **DINergy** products, excepting UL 1310, are capable of at least 120% rated load.
- All **DINergy** products carry a 3-year warranty.

**Micron also offers engineered designs such as UPS Modules,
Power supplies for battery backup,
Encapsulated power supplies,
Open frame power supplies**
Individual four-page technical PDF's are available for all **DINergy** power supplies

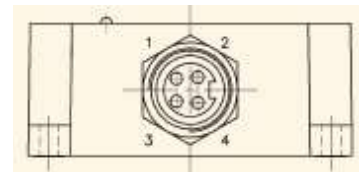
PM SERIES ENCAPSULATED

DIN-Mount, Non-Metallic Power Supplies

PM-IP67A50 S24, PM-IP67A75 S24 and PM-IP67A100 S24 Dimensions

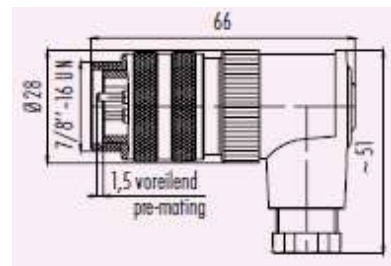
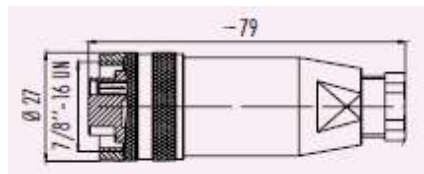


1	2	3
nc	AC _{In}	AC _{In}



1	2	3	4
+U ₁	+U ₁	GND	GND

CONNECTORS SOURCED SEPARATELY (Binder 820 Series) 7/8"



Part Number	Description
600700-04512	Connector, 7/8" Female-Straight
600700-04513	Connector, 7/8" Male-Straight
600700-04514	Connector, 7/8" Female-90°
600700-04515	Connector, 7/8" Male-90°

MICRON “CBA SERIES” LOW PROFILE POWER SUPPLIES

Small enclosure, big job?

You need a power supply with full features, plus a low profile.

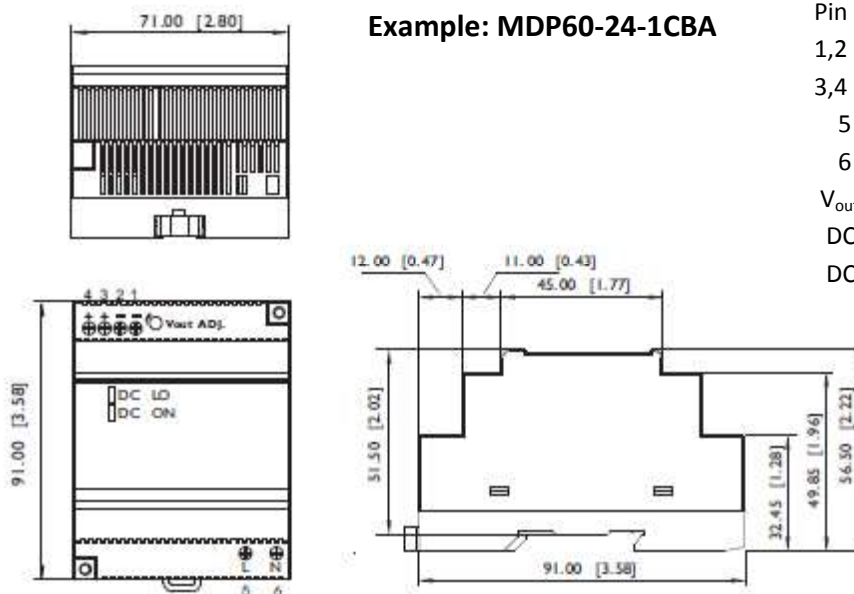
Look to the “CBA Series” of low profile building automation style power supply that is also UL508 Listed, UL1310 Recognized plus ISA 12.12.01 approved!

Choices from 7.5 – 100.8 watts; 5, 12, 15 and 24 Vdc in five frame sizes.



MECHANISM & PIN CONFIGURATION

mm [inch]



The full featured Micron “CBA Series” was designed for building automation but is fully functional in the industrial environment as well. Available five different frame sizes in wattages from 7.5 through 100.8 including a 91.2 watt/24Vdc Class 2 design.

FEATURES

- Agency approvals: UL 508 Listed, UL 1310 Class 2 Recognized and ISA 12.12.01 (UL1604) Approved
- Series available from 7.5 watts @ 5Vdc through 100.8 watts @ 24Vdc with DC output choices of 5V, 12V, 15V and 24Vdc
- Low Profile Design Only 52MM off the rail
- Full feature design
Wide input: AC: 90/264; DC: 120/375
Operational from -40° through +71°C
MTBF of up to 970,000 hrs
- Cost efficient design and pricing

BENEFITS

- Can be used for industrial control as well as building automation applications
- Serves a wide range of applications from logic control to building automation and industrial control and includes a UL 1310 Class 2, 24Vdc design at 91.2 watts
- 55% more headroom than comparable Industrial power supplies. Solves low clearance issues
- Both DC "OK" and DC "low" LEDs, adjustable output voltage and performance normally reserved for industrial power supplies
- Project problems solved within budget

SERIES "XX" = VOLTS OUT	VOLTS OUT	RATED WATTS	VOLTS OUT	RATED WATTS	VOLTS OUT	RATED WATTS	VOLTS OUT	RATED WATTS
MDP10-XX-1CBA	5*	7.5	12*	10	15*	10	24*	10
MDP24-XX-1CBA	5*	15	12*	24	15*	24	24*	24
MDP34-XX-1CBA	5*	22.5	12*	33	15*	36	24*	36
MDP60-XX-1CBA	5	35	12*	54	15*	60	24*	60
MDP75-XX-1CBA	5	60	12	72	15	75	24	100.8
MDP100-24L-1CBA							24*	91.2
Entire series is UL 508 Listed Entire series carries ISA 12.12.01; CL1, Div2 rating All marked "*" are UL 1310; Class 2 power limited Bold: stock								

DIMENSIONS	IN WIDTH MM		IN DEPTH MM		IN LENGTH MM	
MDP10-XX-1CBA	0.71	18	2.05	52	3.58	91
MDP24-XX-1CBA	1.38	35	2.05	52	3.58	91
MDP34-XX-1CBA	2.09	53	2.05	52	3.58	91
MDP60-XX-1CBA	2.80	71	2.05	52	3.58	91
MDP75-XX-1CBA	3.54	90	2.07	53	3.58	91