

Medical Power Supplies



| ABOUT DELTA

Delta was founded in 1971 and has been the global leader in switching power supply solutions since 2002 and DC brushless fans since 2006. Delta offers some of the most energy efficient power products in the industry, including switching power supplies with efficient over 90%, telecom power with up to 98%, and PV inverters with up to 98.8% efficient. We have also developed the world's first server power supply certified as 80 Plus Titanium with over 96% efficient. We regularly invest 6% to 7% of our annual sales revenues in R&D and have worldwide R&D facilities in Taiwan, China, Europe, India, Japan, Singapore, Thailand, and the U.S.

| BUSINESS CATEGORIES



Power Electronics

- Components
- Embedded Power
- Fan & Thermal Management
- Automotive Electronics
- Merchant & Mobile Power

Innervie



Automation

- Industrial Automation
- Building Automation



Infrastructure

- ICT Infrastructure
- Energy Infrastructure & Industrial Solutions

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 **DELTA**
Smarter. Greener. Together.



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| APPLICATIONS

Delta's medical power supplies are ideal for healthcare and medical applications because of their high quality, high output power, and high power density. This range includes AC adapters, open frame, enclosed, and configurable models for applications requiring high reliability and performance. All products in this series conform to major industrial safety standards.

The application examples below highlight some of the key power supply series suitable to meet the system requirements.

Applicable Series



MDS, MEB, MEU, MEG-A, MEA



MEB, MEU, MEG-A



MEB, MEU



MEB, MEU, MEG-A



Medical Equipment

- Medical Beds
- Portable Oxygen Concentrator
- Dialysis Equipment



Test & Measurement

- Spectrum Analyzers
- AC Power Source
- Oscillators



Factory Automation

- Packaging Machine
- Wave Soldering Machine
- Conveyor Systems



Machine Automation

- Robotic Arm
- Injection Molding Machine

| LATEST PRODUCTS

MEB

Panel Mount for Medical, ITE and Home Appliances

Output Voltage: 24V, 48V

Output Power: 750W

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MEU

U-Frame with Remote ON/OFF and Power Good Signal

Output Voltage: 24V

Output Power: 650W

PAGE 24



MEG-A

3 Slots Modules Configurable with Compact Size

Output Voltage: 2V-60V

Output Power: 700W

PAGE 28



MEG-A

9 Slots Modules Configurable with PC GUI

Output Voltage: 2V-60V

Output Power: 3,000W

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MEA

Compact Size Adapter for Medical and Industrial Applications

Output Voltage: 12V, 15V, 19V, 24V

Output Power: 90W

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PRODUCT SELECTION GUIDE

| Medical Power Supplies

New products are frequently introduced. Please visit www.DeltaPSU.com for latest product updates.

Product Type	Series	Model Name	CC Code	Input Terminal	Output Terminal	Output Voltage	Convection		Forced Air		Page
							Output Current	Output Power	Output Current	Output Power	
Enclosed Power Supply	MDS	MDS-200ADB12	AA	Molex 171813-9998	JST B4P-VH	12V	9.17A	110W	16.67A	200W	11
		MDS-250ADB12	AA	Molex 26-62-4030	M3 PCB terminal		11.25A	150W	20.84A	250W	
		MDS-250ADB12	AB				11.25A	150W	20.84A	250W	
		MDS-300ADB12	AA	Molex 26-62-4030	M3 PCB terminal		15.83A	190W	25.0A	300W	
		MDS-400ADB12	AA	Molex 171813-9998	M3 PCB terminal				33.33A	400W	
		MDS-300ADB18	AA	Molex 171813-9998	M3 PCB terminal	18V	10.55A	190W	16.66A	300W	
		MDS-300ADB18	AB				10.55A	190W	16.66A	300W	
		MDS-200ADB24	AA	Molex 171813-9998	JST B4P-VH	24V	5.0A	120W	8.33A	200W	12
		MDS-250ADB24	AA	Molex 171813-9998	M3 PCB terminal		5.62A	150W	10.41A	250W	
		MDS-300ADB24	AA	Molex 26-62-4030	M3 PCB terminal		8.75A	210W	12.5A	300W	
		MDS-300ADB24	AB				8.75A	210W	12.5A	300W	
		MDS-400ADB24	AA	Molex 71813-9998	M3 PCB terminal				16.67A	400W	
		MDS-400ADB24	AB						16.67A	400W	
		MDS-300ADB48	AA	Molex 26-62-4030	M3 PCB terminal	48V	4.375A	210W	6.25A	300W	
		MDS-300ADB48	AB				4.375A	210W	6.25A	300W	
	MEB • Intelligent Fan Speed Control	MEB-500A24F	AA	Deca T24-EO3103A302	Deca DT-65-C14W-02	24V			21.0A	500W	13
		MEB-750A24B	AAA	TECX TU-301-SP-SA-AD2(D)V0	M5 PCB terminal				31.25A	750W	
		MEB-750A24T	AAA	Dinkle DT-2G-B95W-03	M5 PCB terminal				31.25A	750W	
		MEB-750A48B	AAA	Dinkle DT-2G-B95W-03	M5 PCB terminal	48V			15.63A	750W	
		MEB-750A48T	AAA						15.63A	750W	14
		MEB-1K2A24T	ABA	Anytek YK50A0323009G	M5 PCB terminal	24V			50.0A	1,200W	
		MEB-1K2A42T	ABA	Anytek YK50A0323009G	M5 PCB terminal	42V			28.5A	1,200W	
		MEB-1K2A48T	ABA	Anytek YK50A0323009G	M5 PCB terminal	48V			25.0A	1,200W	

Medical Power Supply Model Numbering

MDS –	XXX	A	□	B	□	□□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	Input Connector Type	Output Voltage	CC Code ¹⁾
MDS-200A series MDS-250A series MDS-300A series MDS-400A series	200 - 200W 250 - 250W 300 - 300W 400 - 400W	A - Family A	D - Enclosed P - Open Frame	B - Class I 3-pin connector	12 - 12V 18 - 18V 24 - 24V 36 - 36V 48 - 48V	

ME	B –	XXX	A	□	□	□□□
Delta Medical Power Supply	B - Enclosed	Max power wattage in the product series. May be lower at some conditions.	Family Code	Output Voltage	Input Connector Type	CC Code
		500 - 500W	A - Family A	24 - 24V	F - Front Face	AA - With Remote ON/OFF, with conformal coating
		750 - 750W		24 - 24V 48 - 48V	B - C14 T - US Terminal	AAA - With Remote ON/OFF, with conformal coating
		1K2 - 1,200W		24 - 24V 42 - 42V 48 - 48V	T - US Terminal	ABA - With Remote ON/OFF, with conformal coating

1) Refer to technical datasheet

PRODUCT SELECTION GUIDE

| Medical Power Supplies

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Product Type	Series	Model Name	CC Code	Input Terminal	Output Terminal	Output Voltage	Convection		Forced Air		Page
							Output Current	Output Power	Output Current	Output Power	
Open Frame Power Supply	MDS	MDS-040APS12B	A	JST B2P3-VH	JST B4P-VH	12V	3.33A	40W			16
		MDS-065APS12B	A	JST B2P3-VH	JST B4P-VH		5.42A	65W			
		MDS-100APS12B	A	JST B2P3-VH	JST B8P-VH		8.33A	100W			
		MDS-100BPS12B	A	JST B2P3-VH	JST B4P-VH		6.67A	80W	8.33A	100W	17
		MDS-200APB12	AA	Molex 171813-9998	JST B4P-VH		10.83A	130W	16.67A	200W	
		MDS-250APB12	AA	Molex 26-62-4030	M3 PCB terminal		12.5A	150W	20.84A	250W	
		MDS-250APB12	AB	Molex 26-62-4030	M3 PCB terminal		12.5A	150W	20.84A	250W	
		MDS-300APB12	AA	Molex 26-62-4030	M3 PCB terminal		18.33A	220W	25.0A	300W	
		MDS-400APB12	AA	Molex 171813-9998	M3 PCB terminal		16.67A	200W	33.33A	400W	
		MDS-400APB12	AB	Molex 171813-9998	M3 PCB terminal		16.67A	200W	33.33A	400W	
		MDS-040APS15B	A	JST B2P3-VH	JST B4P-VH	15V	2.67A	40W			18
		MDS-065APS15B	A	JST B2P3-VH	JST B4P-VH		4.2A	63W			
		MDS-100APS15B	A	JST B2P3-VH	JST B8P-VH		6.67A	100W			
		MDS-100BPS15B	A	JST B2P3-VH	JST B4P-VH		5.3A	80W	6.7A	100W	
		MDS-040APS18B	A	JST B2P3-VH	JST B4P-VH	18V	2.22A	40W			19
		MDS-065APS18B	A	JST B2P3-VH	JST B4P-VH		3.61A	65W			
		MDS-100APS18B	A	JST B2P3-VH	JST B8P-VH		5.55A	100W			
		MDS-100BPS18B	A	JST B2P3-VH	JST B4P-VH		4.4A	80W	5.5A	100W	
		MDS-300APB18	AA	Molex 171813-9998	M3 PCB terminal		12.22A	220W	16.66A	300W	
		MDS-300APB18	AB	Molex 171813-9998	M3 PCB terminal		12.22A	220W	16.66A	300W	
		MDS-040APS24B	A	JST B2P3-VH	JST B4P-VH	24V	1.67A	40W			20
		MDS-065APS24B	A	JST B2P3-VH	JST B4P-VH		2.71A	65W			
		MDS-100APS24B	A	JST B2P3-VH	JST B8P-VH		4.17A	100W			
		MDS-100BPS24B	A	JST B2P3-VH	JST B4P-VH		3.3A	80W	4.2A	100W	
		MDS-200APB24	AA	Molex 171813-9998	JST B4P-VH		5.83A	140W	8.33A	200W	21
		MDS-250APB24	AA	Molex 171813-9998	M3 PCB terminal		6.25A	150W	10.41A	250W	
		MDS-250APB24	AB	Molex 171813-9998	M3 PCB terminal		6.25A	150W	10.41A	250W	
		MDS-300APB24	AA	Molex 26-62-4030	M3 PCB terminal		10.0A	240W	12.5A	300W	
		MDS-300APB24	AE	Molex 171813-9998	M3 PCB terminal		10.0A	240W	12.5A	300W	
		MDS-400APB24	AA	Molex 171813-9998	M3 PCB terminal		8.33A	200W	16.66A	400W	
		MDS-400APB24	AB	Molex 171813-9998	M3 PCB terminal		8.33A	200W	16.66A	400W	
		MDS-200APB36	AA	Molex 171813-9998	JST B4P-VH	36V	3.33A	120W	5.56A	200W	22
		MDS-300APB48	AA	Molex 26-62-4030	M3 PCB terminal	48V	5.0A	240W	6.25A	300W	
		MDS-300APB48	AB	Molex 26-62-4030	M3 PCB terminal	48V	5.0A	240W	6.25A	300W	
		MDS-400AUS19B	A	Deca T33-BM1103A301	Deca T33-BM1104A301	19V	15.8A	300W	21.1A	400W	23
		MDS-400AUS24B	A	Deca T33-BM1103A301	Deca T33-BM1104A301	24V	12.5A	300W	16.67A	400W	
		MDS-400AUS30B	A	Deca T33-BM1103A301	Deca T33-BM1104A301	30V	11.67A	350W	13.33A	400W	

Medical Power Supply Model Numbering

MDS –	XXX	□	□	S	□	B	□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	No. of Output	Output Voltage	Input Connector Type	CC Code ¹⁾
MDS-040APS series MDS-065APS series MDS-100APS series	040 - 40W 065 - 65W 100 - 100W	A - Family A	P - Open Frame	S - Single Output	12 - 12V 15 - 15V 18 - 18V 24 - 24V	B - Class I 3-pin connector	
MDS-100BPS series	100 - 100W	B - Family B	U - U Frame				
MDS-400AUS series	400 - 400W	A - Family A			19 - 19V 24 - 24V 30 - 30V		

1) Refer to technical datasheet

Medical Power Supplies

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Product Type	Series	Model Name	CC Code	Input Terminal	Output Terminal	Output Voltage	Convection		Forced Air		Page
							Output Current	Output Power	Output Current	Output Power	
Open Frame Power Supply	MEU • PMBus Ver 1.3 for selected models • Convection cooled	MEU-600C24T	AAA	Anytek YK4020323200G	M5 PCB terminal	24V	25.0A	600W			24
		MEU-650A24T	AAA	DG 128-7.5-03P-1Y	M4 PCB terminal		18.75A	450W	27.08A	650W	
		MEU-600C48T	AAA	Anytek YK4020323200G	M5 PCB terminal	48V	12.5A	600W			

Product Type	Series	Model Name	CC Code	Input Terminal	Output Terminal	Output Voltage	Output Current	Output Power	Page
ATX Power Supply	MDS	MDS-350AD701	AA	C14	Wire harness	+3.3V, +5V, +5V _{SB} , +12V ₁ , +12V ₂ , -12V, -5V	8.0A, 9.0A, 1.25A, 8.0A, 8.0A, 0.25A, 0.1A	350W	26

Product Type	Series	Model Name	Module Slots	Output Voltage	Output Power (Max)	Page
Configurable Power Supply	MEG-A • PMBus Ver 1.3 for selected models • IT & Medical safety approvals	MEG-700A3	3 Slots	Single Output Single Slot: 2V-60V Triple Slot: 8V-60V Dual Output Single Slot: 3.3V-30V	700W	28
		MEG-1K2A4	4 Slots		1,200W	29
		MEG-2K1A6	6 Slots		2,100W	
		MEG-3K0A9	9 Slots		3,000W	

Medical Power Supply Model Numbering

ME	U –	XXX	□	□	□	□□□
Delta Medical Power Supply	U - U Frame	Max power wattage in the product series. May be lower at some conditions.	Family Code	Output Voltage	Input Connector Type	CC Code
		600 - 600W	C - Family C	24 - 24V 48 - 48V	T - Terminal Block (Class I)	AAA - With Remote ON/OFF, with conformal coating
		650 - 650W	A - Family A	24 - 24V		

MDS –	XXX	A	D	701	□□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	Output Voltage	CC Code ¹⁾
	350 - 350W	A - Family A	D - Enclosed	701 - +3.3V, +5V, +5V _{SB} , +12V ₁ , +12V ₂ , -12V, -5V	

1) Refer to technical datasheet

ME	G –	XXX	A	□
Delta Medical Power Supply	G - Configurable	Max power wattage in the product series. May be lower at some conditions.	Family Code	Slot Number
		700 - 700W	A - Family A	3 - 3 Slots
		1K2 - 1,200W		4 - 4 Slots
		2K1 - 2,100W		6 - 6 Slots
		3K0 - 3,000W		9 - 9 Slots

PRODUCT SELECTION GUIDE

| Medical Power Supplies

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Product Type	Series	Model Name	CC Code	Output Voltage	Output Current	Output Power	Page
Adapter	MDS	MDS-005AAS05	AU	5V	1.0A	5W	31
		MDS-005AAS05	AV		1.0A	5W	
		MDS-005AAS05	BU		1.0A	5W	
		MDS-005AAS05	BV		1.0A	5W	
		MDS-005AAS05	CU		1.0A	5W	
		MDS-005AAS05	CV		1.0A	5W	
		MDS-030AAC05	AA		3.0A	15W	
		MDS-030AAC05	AB		3.0A	15W	
		MDS-030AAC05	AC		3.0A	15W	
		MDS-030AAC12	AA	12V	2.0A	24W	32
		MDS-030AAC12	AB		2.0A	24W	
		MDS-030AAC12	BB		2.0A	24W	
		MDS-060BAS12	AB		5.0A	60W	
		MDS-080AAS12	AB		6.67A	80W	
		MDS-150AAS12	BA		10.0A	120W	
		MDS-030AAC15	AA	15V	2.0A	30W	33
		MDS-030AAC15	AB		2.0A	30W	
		MDS-030AAC15	AC		2.0A	30W	
		MDS-090AAS15	BA		6.0A	90W	
		MDS-090AAS15	BE		6.0A	90W	
		MDS-090AAS15	FA		6.0A	90W	
		MDS-090AAS15	FE		6.0A	90W	
		MDS-060BAS19	AA	19V	3.15A	60W	34
		MDS-090AAS19	BA		4.73A	90W	
		MDS-090AAS19	BE		4.73A	90W	
		MDS-090AAS19	FA		4.73A	90W	
		MDS-090AAS19	FE		4.73A	90W	
		MDS-150AAS19	BA		7.89A	150W	
		MDS-150AAS19	FA		7.89A	150W	
		MDS-150CAB19	AA		7.9A	150W	

Medical Power Supply Model Numbering

						CC Code	
MDS –	XXX	□	A	S	□	□	□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	No. of Output	Output Voltage	Input Connector Type	Refer to technical datasheet
MDS-005AAS series	005 - 5W	A - Family A	A - Adapter	S - Single Output	05 - 5V	A - CN B - US C - EU	
MDS-060BAS series	060 - 60W	B - Family B			12 - 12V 19 - 19V 24 - 24V	A - C8	
MDS-080AAS series	080 - 80W	A - Family A			12 - 12V		

MDS –	XXX	AAC			□	□□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code			Output Voltage	CC Code ¹⁾
MDS-030AAC series	030 - 30W				05 - 5V 12 - 12V 15 - 15V 24 - 24V	

MDS –	XXX	C	A	B	19	□□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	Input Connector Type	Output Voltage	CC Code ¹⁾
	150 - 150W	C - Family C	A - Adapter	B - Class I C6	19 - 19V	

1) Refer to technical datasheet

Medical Power Supplies

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Product Type	Series	Model Name	CC Code	Output Voltage	Output Current	Output Power	Page
Adapter	MDS	MDS-030AAC24	AA	24V	1.25A	30W	35
		MDS-030AAC24	AC		1.25A	30W	
		MDS-060BAS24	AA		2.5A	60W	
		MDS-090AAS24	BA		3.75A	90W	
		MDS-090AAS24	BE		3.75A	90W	
		MDS-090AAS24	FA		3.75A	90W	
		MDS-090AAS24	FE		3.75A	90W	
		MDS-090BAS24	AB		3.75A	90W	36
		MDS-150AAS24	BA		6.25A	150W	
		MDS-150AAS24	BE		6.25A	150W	
		MDS-150AAS24	FA		6.25A	150W	
	MEA • Efficiency Level VI • 2 × MOPP	MEA-065A12C	A-A	12V	5.0A	60W	37
		MEA-090A12C	V-A		6.75A	81W	
		MEA-065A15C	A-A	15V	4.33A	65W	
		MEA-090A15C	V-A		6.0A	90W	
		MEA-065A19C	A-A	19V	3.42A	65W	38
		MEA-090A19C	V-A		4.74A	90W	
		MEA-065A24C	A-A	24V	2.71A	65W	
		MEA-090A24C	V-A		3.75A	90W	
		MEA-250A24C	H-A		10.42A	250W	

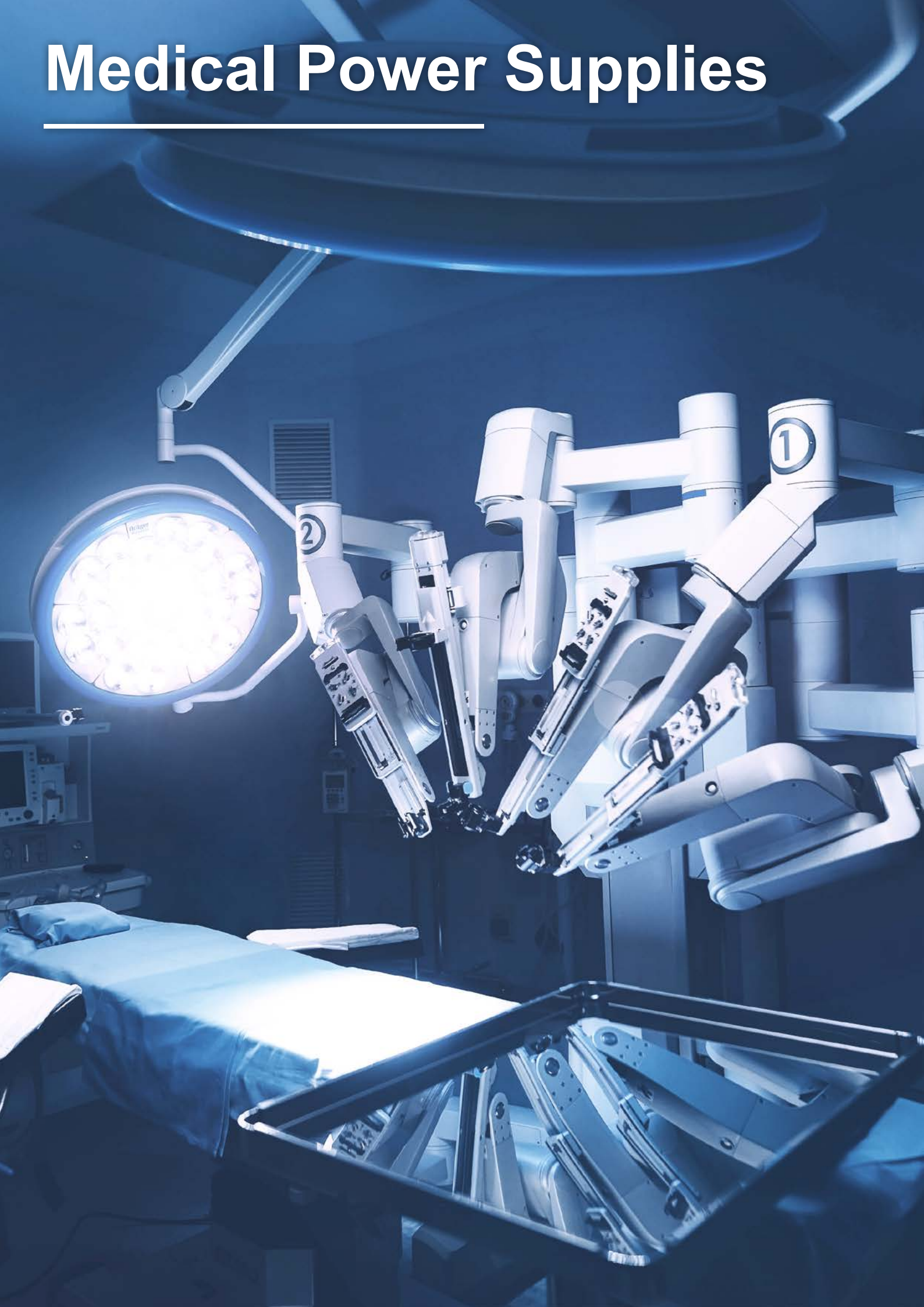
Medical Power Supply Model Numbering

MDS –	XXX	□	A	S	□	□□
Delta Medical Power Supply	Max power wattage in the product series. May be lower at some conditions.	Family Code	Product Type	No. of Output	Output Voltage	CC Code ¹⁾
MDS-090AAS series	090 - 90W	A - Family A	A - Adapter	S - Single Output	15 - 15V 19 - 19V 24 - 24V	
MDS-090BAS series	090 - 90W	B - Family B			24 - 24V	
MDS-150AAS series	150 - 150W	A - Family A			12 - 12V 19 - 19V 24 - 24V	

CC Code							
ME	A –	XXX	A	□	C	□-	A
Delta Medical Power Supply	A - Adapter	Max power wattage in the product series. May be lower at some conditions.	Family Code	Output Voltage	Input Connector Type	Output Plug Spec	Output Plug Type
		065 - 65W	A - Family A	12 - 12V 15 - 15V 19 - 19V 24 - 24V	C - Class I C14	A - 5.5 x 2.5 x 10mm, 180°, 1.2m	A - Barrel type / Tuning Fork / DIN type ¹⁾
		090 - 90W				V - 5.5 x 2.5 x 11mm, 90°, 1.2m	
		250 - 250W		24 - 24V		H - 6 pins mini-fit, 180°, 1.5m	

1) Refer to technical datasheet

Medical Power Supplies



PRODUCT OVERVIEW

Delta provides high quality power supplies for various healthcare and medical applications. The products are produced in factories certified to medical Quality Management System ISO 13485. Designs are compliant to medical IEC 60601-1-2 Ed. 4 requirements and are suitable for Type BF medical products.



Enclosed

Encased in strong metal casing, the Medical Enclosed power supplies can be used in a wide variety of equipment for medical and industrial applications.



Open Frame

The Medical Open Frame provides high performance and reliable solution as an internal power supply for various types of medical equipment.



ATX

Highly reliable design with ATX standard form factor and output cable pin-outs. Certified with medical standards and suitable for use in medical devices with Type BF classification.



Configurable

The MEG-A configurable power supply is designed for use in both medical and industrial applications. It supports up to 9 isolated output. The products can be configured for output voltages ranging from 2Vdc to 60Vdc.



Adapter

The Medical Adapter rides on Delta's market leading adapter technology to provide the same high quality external power supplies for medical systems and equipments.

MEDICAL POWER SUPPLIES

| Enclosed Power Supply



MDS

- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Suitable for type BF medical product
- Remote on/off control
- Power Good signal
- Safety approvals for medical and IT applications

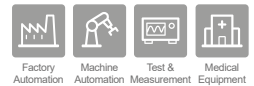


Medical Equipment



MEB

- 2 × MOPP isolation, Suitable for type BF medical products
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Intelligent fan speed control
- Safety approvals for medical and IT applications
- PMBus Ver 1.3 supported (selected models)



Factory Automation

Machine Automation

Test & Measurement

Medical Equipment

MDS

Features

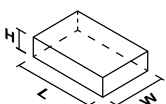
- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Class B Conducted and Radiated EMI
- Suitable for type BF medical product
- 2 × MOPP isolation
- Power Good signal



Specifications

OUTPUT		MDS-200ADB12 AA	MDS-250ADB12 A□	MDS-300ADB12 AA	MDS-400ADB12 AA	MDS-300ADB18 A□
Output Voltage		12V	12V	12V	12V	18V
Output Current (Max)		9.17A (Convection) 16.67A (with 8.5CFM Forced Air)	12.5A (Convection) 20.84A (with 10CFM Forced Air)	15.83A (Convection) 25.0A (with 10CFM Forced Air)	33.33A (with 20CFM Forced Air)	10.55A (Convection) 16.66A (with 10CFM Forced Air)
Output Power		110W (Convection) 200W (with 8.5CFM Forced Air)	150W (Convection) 250W (with 10CFM Forced Air)	190W (Convection) 300W (with 10CFM Forced Air)	400W (with 20CFM Forced Air)	190W (Convection) 300W (with 10CFM Forced Air)
Load Regulation		± 1%				
Ripple & Noise		1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	150mV pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load
INPUT						
Input Voltage Range		90-264Vac				
Input Frequency		47-63Hz				
Efficiency	115Vac (60Hz)	91.0% typ.	89.45% typ	91.3% typ.	89.5% typ.	92.5% typ.
	230Vac (50Hz)	93.0% typ.	90.5% typ.	92.6% typ.	91.5% typ.	93.5% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL						
Dimensions (L × W × H)	mm	113.9 × 64.7 × 44.7	140 × 88.9 × 44.4	140 × 88.9 × 44.4	140 × 88.9 × 44.4	140 × 88.9 × 44.4
	inch	4.48 × 2.55 × 1.76	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75
Unit Weight	kg	0.35	0.61	0.61	0.61	0.61
	lb	0.76	1.35	1.35	1.35	1.35
MTBF ²⁾		800,000 hrs	500,000 hrs	800,000 hrs	500,000 hrs	800,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B				
ENVIRONMENT						
Operating Temperature ³⁾		-10°C to +70°C				
Storage Temperature		-40°C to +85°C				
Operating Humidity		5 to 95% RH (Non-Condensing)				
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				
MEDICAL RATING						
Float Rating		BF				
MOPP		2 × MOPP				

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 35°C).
For MDS-400ADB12 A□, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load with 20CFM Forced Air, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

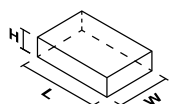
- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Class B Conducted and Radiated EMI
- Suitable for type BF medical product
- 2 × MOPP isolation
- Power Good signal



Specifications

OUTPUT		MDS-200ADB24 AA	MDS-250ADB24 AA	MDS-300ADB24 A□	MDS-400ADB24 A□	MDS-300ADB48 A□
Output Voltage		24V	24V	24V	24V	48V
Output Current (Max)		5.0A (Convection) 8.33A (with 5.5CFM Forced Air)	5.62A (Convection) 10.41A (with 10CFM Forced Air)	8.75A (Convection) 12.5A (with 10CFM Forced Air)	16.67A (with 16CFM Forced Air)	4.375A (Convection) 6.25A (with 10CFM Forced Air)
Output Power		120W (Convection) 200W (with 5.5CFM Forced Air)	150W (Convection) 250W (with 10CFM Forced Air)	210W (Convection) 300W (with 10CFM Forced Air)	400W (with 16CFM Forced Air)	210W (Convection) 300W (with 10CFM Forced Air)
Load Regulation		± 1%				
Ripple & Noise		1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load
INPUT						
Input Voltage Range		90-264Vac				
Input Frequency		47-63Hz				
Efficiency	115Vac (60Hz)	92.0% typ.	91.85% typ.	93.0% typ.	92.0% typ.	92.5% typ.
	230Vac (50Hz)	93.0% typ.	92.98% typ.	94.0% typ.	93.0% typ.	93.5% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL						
Dimensions (L × W × H)	mm	113.9 × 64.7 × 44.7	140 × 88.9 × 44.4	140 × 88.9 × 44.4	140 × 88.9 × 44.4	140 × 88.9 × 44.4
	inch	4.48 × 2.55 × 1.76	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75	5.51 × 3.50 × 1.75
Unit Weight	kg	0.35	0.61	0.61	0.61	0.61
	lb	0.76	1.35	1.35	1.35	1.35
MTBF ²⁾		800,000 hrs	500,000 hrs	800,000 hrs	500,000 hrs	800,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B				
ENVIRONMENT						
Operating Temperature ³⁾		-10°C to +70°C				
Storage Temperature		-40°C to +85°C				
Operating Humidity		5 to 95% RH (Non-Condensing)				
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				
MEDICAL RATING						
Float Rating		BF				
MOPP		2 × MOPP				

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 35°C).
For MDS-400ADB24 A□, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load with 10CFM Forced Air, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEB

Features

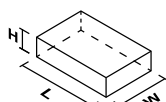
- High Power Density
- 2 × MOPP Isolation
- Safety Approvals to IEC 60601-1 Ed. 2 & 3.1
- Suitable for Type BF Medical Products
- Full Power up to 50°C Ambient
- Class B Conducted and Radiated EMI



Specifications

		NEW	
OUTPUT		MEB-500A24F AA	MEB-750A48□ AAA
Output Voltage		24V	48V
Output Current (Max)		21.0A	15.63A
Output Power		504W	750W
Load Regulation		< 150mV	< 2%
Ripple & Noise		< 300mVpp @ 0°C to +50°C	1% pk-pk Vrated @ rated load
INPUT			
Input Voltage Range		90-264Vac	85-264Vac
Input Frequency		47-63Hz	
Efficiency	230Vac (50Hz)	92.0% typ.	94.0% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: 0.3mA typ. @ NC, 1mA typ. @ SFC Output-PE: 0.1mA typ. @ NC, 0.5mA typ. @ SFC
MECHANICAL			
Dimensions (L × W × H)	mm	165.3 × 85.2 × 41	177.8 × 101.6 × 40
	inch	6.50 × 3.35 × 1.61	7.00 × 4.00 × 1.58
Unit Weight	kg	0.66	1.10
	lb	1.46	2.40
MTBF ²⁾		> 700,000 hrs	> 500,000 hrs
EMC & Emissions		EN 55011 & Compliant with EN 55032, FCC Title 47: Class B	EN 55011, EN 55032, FCC Title 47: Class B
ENVIRONMENT			
Operating Temperature ³⁾		-20°C to +70°C	
Storage Temperature		-30°C to +80°C	-40°C to +80°C
Operating Humidity		20 to 90% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)
Operating Altitude		IEC 60601-1: 0 to 3,000 m (0 to 9,840 ft) IEC 60950-1 & IEC 62368-1: 0 to 5,000 m (0 to 16,400 ft)	0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING			
Float Rating		BF	
MOPP		2 × MOPP	

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (MEB-500A24F: I/P: 115Vac, O/P: 100% load, Ta: 25°C; MEB-750A24□, MEB-750A48□: I/P: 115Vac, O/P: 100% load, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEB

Features

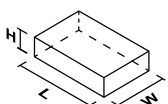


- Up to 1200W in 5" × 8.03" × 1.59" package
- Full power from 90Vac to 264Vac, up to 50°C ambient
- Up to 500K hours MTBF
- 2 × MOPP isolation, Suitable for type BF medical products
- Current sharing and 5V/2A standby output
- Class B Conducted and Radiated EMI
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- PMBus Ver 1.3 supported
- Intelligent fan speed control

Specifications

OUTPUT		MEB-1K2A24T ABA	MEB-1K2A42T ABA	MEB-1K2A48T ABA
Output Voltage		24V	42V	48V
Output Current (Max)		50.0A	28.5A	25.0A
Output Power		1200W	1200W	1200W
Load Regulation		2%		
Ripple & Noise		1% typ. pk-pk Vrated @ rated load	1% typ. pk-pk Vrated @ rated load	1% typ. pk-pk Vrated @ rated load
INPUT				
Input Voltage Range		85-264Vac		
Input Frequency		47-63Hz		
Efficiency	115Vac (60Hz)	90.0% typ.	90.9% typ.	91.5% typ.
	230Vac (50Hz)	93.0% typ.	93.2% typ.	94.0% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.3mA @ NC, < 1mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.3mA @ NC, < 1mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.3mA @ NC, < 1mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL				
Dimensions (L × W × H)	mm	204 × 127 × 40.5	204 × 127 × 40.5	204 × 127 × 40.5
	inch	8.03 × 5.0 × 1.59	8.03 × 5.0 × 1.59	8.03 × 5.0 × 1.59
Unit Weight	kg	1.50	1.50	1.50
	lb	3.30	3.30	3.30
MTBF ²⁾		> 500,000 hrs	> 500,000 hrs	> 500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B		
ENVIRONMENT				
Operating Temperature ³⁾		-20°C to +70°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)		
MEDICAL RATING				
Float Rating		BF		
MOPP		2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEDICAL POWER SUPPLIES

| Open Frame Power Supply



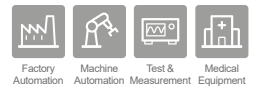
MDS



- Low touch current (< 0.1mA Normal & < 0.3mA Single Fault)
- 2 × MOPP isolation
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Power Good Signal, Remote Sense, Remote inhibit
- Safety approvals for medical and IT applications



MEU



- Convection cooled
- 2 × MOPP isolation
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Normal and Reversed Option for Remote On/Off and Power Good Signal
- Safety approvals for medical and IT applications

MDS

Features

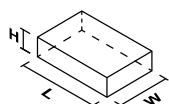


- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- 2 × MOPP isolation
- High MTBF

Specifications

OUTPUT		MDS-040APS12B A	MDS-065APS12B A	MDS-100APS12B A	MDS-100BPS12B A
Output Voltage		12V	12V	12V	12V
Output Current (Max)		3.33A	5.42A	8.33A	6.67A (Convection) 8.33A (with 10CFM Forced Air)
Output Power		40W	65W	100W	80W (Convection) 100W (with 10CFM Forced Air)
Load Regulation		± 1%			
Ripple & Noise		22.8mV pk-pk @ full load	21.6mV pk-pk @ full load	25mV pk-pk @ full load	76mV pk-pk @ full load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Efficiency	115Vac	86.5% typ.	87.5% typ.	89.2% typ.	87.0% typ.
	230Vac				
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	-	-	< 0.15mA @ NC, < 0.3mA @ SFC	< 0.15mA @ NC, < 0.3mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	76.2 × 50.8 × 23	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8
	inch	3.00 × 2.00 × 0.91	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25
Unit Weight	kg	0.08	0.13	0.21	0.15
	lb	0.18	0.29	0.46	0.33
MTBF ²⁾		3,000,000 hrs	2,500,000 hrs	3,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		10 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)		10 to 95% RH (Non-Condensing)
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)			0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
- 3) Refer power de-rating in the product datasheet.

MDS

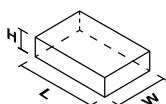
Features

- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Class B Conducted and Radiated EMI
- Enclosed cover design option available
- Suitable for type BF medical product
- 2 × MOPP isolation
- Power Good signal

Specifications

OUTPUT		MDS-200APB12 AA	MDS-250APB12 A□	MDS-300APB12 AA	MDS-400APB12 A□
Output Voltage		12V	12V	12V	12V
Output Current (Max)		10.83A (Convection) 16.67A (with 8.5CFM Forced Air)	12.5A (Convection) 20.84A (with 10CFM Forced Air)	18.33A (Convection) 25.0A (with 10CFM Forced Air)	16.67A (Convection) 33.33A (with 16CFM Forced Air)
Output Power		130W (Convection) 200W (with 8.5CFM Forced Air)	150W (Convection) 250W (with 10CFM Forced Air)	220W (Convection) 300W (with 10CFM Forced Air)	200W (Convection) 400W (with 16CFM Forced Air)
Load Regulation		± 2.5%			
Ripple & Noise		1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	150mV pk-pkV rated @ full load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Efficiency	115Vac (60Hz)	91.0% typ.	89.45% typ.	91.3% typ.	89.5% typ.
	230Vac (50Hz)	93.0% typ.	90.5% typ.	92.6% typ.	91.5% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	101.9 × 51.1 × 36.6	127.3 × 76.5 × 36.6	127.3 × 76.5 × 36.6	127.3 × 76.5 × 36.6
	inch	4.01 × 2.01 × 1.44	5.01 × 3.01 × 1.44	5.01 × 3.01 × 1.44	5.01 × 3.01 × 1.44
Unit Weight	kg	0.20	0.41	0.41	0.41
	lb	0.44	0.90	0.90	0.90
MTBF ²⁾		800,000 hrs	500,000 hrs	500,000 hrs	500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load for Convection, Ta: 35°C).
For MDS-400APB12 A□, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load with 16CFM Forced Air, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

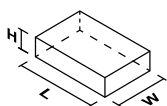


- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- $2 \times$ MOPP isolation
- High MTBF

Specifications

OUTPUT		MDS-040APS15B A	MDS-065APS15B A	MDS-100APS15B A	MDS-100BPS15B A
Output Voltage		15V	15V	15V	15V
Output Current (Max)		2.67A	4.2A	6.67A	5.3A (Convection) 6.7A (with 10CFM Forced Air)
Output Power		40W	63W	100W	80W (Convection) 100W (with 10CFM Forced Air)
Load Regulation		± 1%			
Ripple & Noise		16.4mV pk-pk @ full load	18mV pk-pk @ full load	35.2mV pk-pk @ full load	51.2mV pk-pk @ full load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Efficiency	115Vac	87.2% typ.	89.2% typ.	90.6% typ.	88.2% typ.
	230Vac				
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	-	-	< 0.15mA @ NC, < 0.3mA @ SFC	< 0.15mA @ NC, < 0.3mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	76.2 × 50.8 × 23	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8
	inch	3.00 × 2.00 × 0.91	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25
Unit Weight	kg	0.08	0.13	0.21	0.15
	lb	0.18	0.29	0.46	0.33
MTBF ²⁾		3,000,000 hrs	2,500,000 hrs	3,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		10 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)		10 to 95% RH (Non-Condensing)
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)			0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- ¹⁾ NC: normal condition, SFC: single fault condition.
- ²⁾ MTBF as per Telcordia SR-332.
- ³⁾ Refer power de-rating in the product datasheet.

MDS

Features

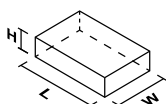
- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Power Good signal, Remote Sense, Remote Inhibit (only MDS-300APB18 A□)
- 2 × MOPP isolation



Specifications

OUTPUT		MDS-040APS18B A	MDS-065APS18B A	MDS-100APS18B A	MDS-100BPS18B A	MDS-300APB18 A □
Output Voltage		18V	18V	18V	18V	18V
Output Current (Max)		2.22A	3.61A	5.55A	4.4A (Convection) 5.5A (with 10CFM Forced Air)	12.22A (Convection) 16.66A (with 10CFM Forced Air)
Output Power		40W	65W	100W	80W (Convection) 100W (with 10CFM Forced Air)	220W (Convection) 300W (with 10CFM Forced Air)
Load Regulation		± 1%				
Ripple & Noise		14.8mV pk-pk @ full load	20.8mV pk-pk @ full load	28.8mV pk-pk @ full load	88mV pk-pk @ full load	1% typ. pk-pk Vrated @ full load
INPUT						
Input Voltage Range		90-264Vac				
Input Frequency		47-63Hz				
Efficiency	115Vac	86.9% typ.	87.7% typ.	91.24% typ.	87.6% typ.	92.5% typ.
	230Vac					93.5% typ.
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	-
Leakage Current ¹⁾	264Vac	-	-	< 0.15mA @ NC, < 0.3mA @ SFC	< 0.15mA @ NC, < 0.3mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC < 0.5mA @ SFC
MECHANICAL						
Dimensions L × W × H)	mm	76.2 × 50.8 × 23	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8	127.3 × 76.5 × 36.6
	inch	3.00 × 2.00 × 0.91	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25	5.01 × 3.01 × 1.44
Unit Weight	kg	0.08	0.13	0.21	0.15	0.41
	lb	0.18	0.29	0.46	0.33	0.90
MTBF ²⁾		3,000,000 hrs	2,500,000 hrs	3,000,000 hrs	1,000,000 hrs	800,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B				
ENVIRONMENT						
Operating Temperature ³⁾		-10°C to +70°C				
Storage Temperature		-40°C to +85°C				
Operating Humidity		10 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)		10 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)			0 to 5,000 m (0 to 16,400 ft)	
MEDICAL RATING						
Float Rating		BF				
MOPP		2 × MOPP				

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MDS-300APB18 A□, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load for Convection, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

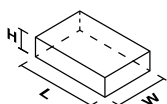
- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- $2 \times$ MOPP isolation
- High MTBF



Specifications

OUTPUT		MDS-040APS24B A	MDS-065APS24B A	MDS-100APS24B A	MDS-100BPS24B A
Output Voltage		24V	24V	24V	24V
Output Current (Max)		1.67A	2.71A	4.17A	3.3A (Convection) 4.2A (with 10CFM Forced Air)
Output Power		40W	65W	100W	80W (Convection) 100W (with 10CFM Forced Air)
Load Regulation		± 1%			
Ripple & Noise		34mV pk-pk @ full load	32.8mV pk-pk @ full load	55.2 mV pk-pk @ full load	58.4mV pk-pk @ full load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Efficiency	115Vac	86.3% typ.	88.4% typ.	91.08% typ.	89.3% typ.
	230Vac				
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	-	-	< 0.15mA @ NC, < 0.3mA @ SFC	< 0.15mA @ NC, < 0.3mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	76.2 × 50.8 × 23	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8
	inch	3.00 × 2.00 × 0.91	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25
Unit Weight	kg	0.08	0.13	0.21	0.15
	lb	0.18	0.29	0.46	0.33
MTBF ²⁾		3,000,000 hrs	2,500,000 hrs	3,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		10 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)		10 to 95% RH (Non-Condensing)
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)			0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- ¹⁾ NC: normal condition, SFC: single fault condition.
- ²⁾ MTBF as per Telcordia SR-332.
- ³⁾ Refer power de-rating in the product datasheet.

MDS

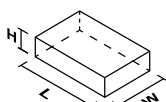
Features

- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Enclosed cover design option available
- Suitable for type BF medical product
- 2 × MOPP isolation
- Power Good signal

Specifications

OUTPUT		MDS-200APB24 AA	MDS-250APB24 A□	MDS-300APB24 A□	MDS-400APB24 A□
Output Voltage		24V	24V	24V	24V
Output Current (Max)		5.83A (Convection) 8.33A (with 5.5CFM Forced Air)	6.25A (Convection) 10.41A (with 10CFM Forced Air)	10.0A (Convection) 12.5A (with 10CFM Forced Air)	16.66A (with 10CFM Forced Air)
Output Power		140W (Convection) 200W (with 5.5CFM Forced Air)	150W (Convection) 250W (with 10CFM Forced Air)	240W (Convection) 300W (with 10CFM Forced Air)	400W (with 10CFM Forced Air)
Load Regulation		± 2.5%	± 1%		
Ripple & Noise		1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Efficiency	115Vac (60Hz)	92.0% typ.	91.85% typ.	93.0% typ.	92.0% typ.
	230Vac (50Hz)	93.0% typ.	92.98% typ.	94.0% typ.	93.0% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	101.9 × 51.1 × 36.6	127.3 × 76.5 × 36.6	127.3 × 76.5 × 36.6	127.3 x 76.5 x 36.6
	inch	4.01 × 2.01 × 1.44	5.01 × 3.01 × 1.44	5.01 × 3.01 × 1.44	5.01 × 3.01 × 1.44
Unit Weight	kg	0.20	0.41	0.41	0.41
	lb	0.44	0.90	0.90	0.90
MTBF ²⁾		800,000 hrs	500,000 hrs	800,000 hrs	500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load for Convection, Ta: 35°C).
For MDS-400APB24 A□, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load with 10CFM Forced Air, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

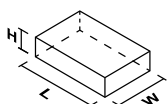


- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Enclosed cover design option available
- Suitable for type BF medical product
- 2 × MOPP isolation
- Power Good signal

Specifications

OUTPUT		MDS-200APB36 AA	MDS-300APB48 A□
Output Voltage		36V	48V
Output Current (Max)		3.33A (Convection) 5.56A (with 5.5CFM Forced Air)	5.0A (Convection) 6.25A (with 10CFM Forced Air)
Output Power		120W (Convection) 200W (with 5.5CFM Forced Air)	240W (Convection) 300W (with 10CFM Forced Air)
Load Regulation		± 2.5%	± 1%
Ripple & Noise		1% typ. pk-pk Vrated @ full load	1% typ. pk-pk Vrated @ full load
INPUT			
Input Voltage Range		90-264Vac	
Input Frequency		47-63Hz	
Efficiency	115Vac (60Hz)	91.5% typ.	92.5% typ.
	230Vac (50Hz)	94.0% typ.	93.5% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.1mA @ NC, < 0.3mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL			
Dimensions (L × W × H)	mm	101.9 × 51.1 × 36.6	127.3 × 76.5 × 36.6
	inch	4.01 × 2.01 × 1.44	5.01 × 3.01 × 1.44
Unit Weight	kg	0.20	0.41
	lb	0.44	0.90
MTBF ²⁾		800,000 hrs	800,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B	
ENVIRONMENT			
Operating Temperature ³⁾		-10°C to +70°C	
Storage Temperature		-40°C to +85°C	
Operating Humidity		5 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	
MEDICAL RATING			
Float Rating		BF	
MOPP		2 × MOPP	

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load for Convection, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

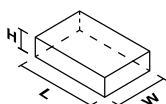
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- High MTBF
- $2 \times$ MOPP isolation
- Remote sense



Specifications

OUTPUT		MDS-400AUS19B A	MDS-400AUS24B A	MDS-400AUS30B A
Output Voltage		19V	24V	30V
Output Current (Max)		15.8A (Convection) 21.1A (with 200LFM Forced Air)	12.5A (Convection) 16.67A (with 200LFM Forced Air)	11.67A (Convection) 13.33A (with 200LFM Forced Air)
Output Power		300W (Convection) 400W (with 200LFM Forced Air)	300W (Convection) 400W (with 200LFM Forced Air)	350W (Convection) 400W (with 200LFM Forced Air)
Load Regulation		± 2%		
Ripple & Noise		±1% pk-pk @ full load	±1% pk-pk @ full load	±1.5% pk-pk @ full load
INPUT				
Input Voltage Range		90-264Vac		
Input Frequency		47-63Hz		
Efficiency	115Vac	91.38% typ.	91.94% typ.	92.51% typ.
	230Vac			
Leakage Current ¹⁾	240Vac	< 0.1mA @ NC	< 0.1mA @ NC	< 0.1mA @ NC
	264Vac	< 0.3mA @ SFC	< 0.3mA @ SFC	< 0.3mA @ SFC
MECHANICAL				
Dimensions (L × W × H)	mm	198 × 97 × 41.5	198 × 97 × 41.5	198 × 97 × 41.5
	inch	7.80 × 3.82 × 1.63	7.80 × 3.82 × 1.63	7.80 × 3.82 × 1.63
Unit Weight	kg	0.91	0.91	0.91
	lb	2.01	2.01	2.01
MTBF ²⁾		2,000,000 hrs	2,000,000 hrs	500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B		
ENVIRONMENT				
Operating Temperature ³⁾		-10°C to +70°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		10 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)		0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING				
Float Rating		B		
MOPP		2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
- 3) Refer power de-rating in the product datasheet.

MEU

Features

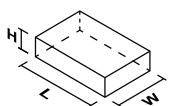
- Convection cooled
- Full Power up to 50°C Ambient
- 2 × MOPP isolation
- Suitable for type BF medical products
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- PMBus Ver 1.3 supported (for MEU-600C□T)
- Up to 500Khrs MTBF
- Normal and Reversed Option for Remote On/Off and Power Good Signal



Specifications

		NEW	
OUTPUT		MEU-600C24T AAA	MEU-600C48T AAA
Output Voltage		24V	48V
Output Current (Max)		25.0A	12.5A
Output Power		600W	600W
Load Regulation		2%	2%
Ripple & Noise		1% typ. pk-pk Vrated @ rated load	1% typ. pk-pk Vrated @ rated load
INPUT		MEU-650A24T AAA	
Input Voltage Range		85-264Vac	
Input Frequency		47-63Hz	
Efficiency	115Vac (60Hz)	92.5% typ.	93.5% typ.
	230Vac (50Hz)	94.0% typ.	94.5% typ.
Leakage Current ¹⁾	264Vac	Input-PE: < 0.3mA @ NC, < 1mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC	Input-PE: < 0.3mA @ NC, < 1mA @ SFC Output-PE: < 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL		MEU-650A24T AAA	MEU-600C48T AAA
Dimensions (L × W × H)	mm	203.2 × 127 × 40	203.2 × 127 × 40
	inch	8.00 × 5.00 × 1.57	8.00 × 5.00 × 1.57
Unit Weight	kg	1.30	1.30
	lb	2.87	2.87
MTBF ²⁾		500,000 hrs	500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B	
ENVIRONMENT			
Operating Temperature ³⁾		-20°C to +70°C	
Storage Temperature		-40°C to +85°C	
Operating Humidity		5 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	
MEDICAL RATING			
Float Rating		BF	
MOPP		2 × MOPP	

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
- 3) Refer power de-rating in the product datasheet.

MEDICAL POWER SUPPLIES

| ATX Power Supply



MDS

- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Suitable for type BF patient access applications
- ATX 12V standard function & form factor
- Maximum output power of 350 watts
- Built-in active PFC
- Safety approvals for medical and IT applications



MDS

Features

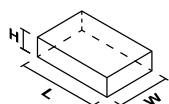
- Universal AC input voltage range
- Safety approvals for medical and IT applications
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Suitable for type BF patient access applications
- ATX 12V standard function & form factor
- Maximum output power of 350 watts
- Built-in active PFC



Specifications

OUTPUT		MDS-350AD701						
Output Voltage		+3.3V	+5V	+5V _{SB}	+12V ₁	+12V ₂	-12V	-5V
Output Current (Nom)		8.0A	9.0A	1.25A	8.0A	8.0A	0.25A	0.1A
Output Power		350W						
Load Regulation		± 5%					± 10%	
Ripple & Noise		< 50mVpp	< 50mVpp	< 150mVpp	< 120mVpp	< 120mVpp	< 120mVpp	< 50mVpp
INPUT								
Input Voltage Range		90-264Vac						
Input Frequency		47-63Hz						
Efficiency	115Vac (60Hz)	82% typ.						
	230Vac (50Hz)	85% typ.						
Leakage Current ¹⁾		< 0.1mA @ NC, < 0.3mA @ SFC						
MECHANICAL								
Dimensions (L × W × H)	mm	194 × 100 × 40.5						
	inch	7.64 × 3.94 × 1.59						
Unit Weight	kg	1.20						
	lb	2.65						
MTBF ²⁾		500,000 hrs						
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B						
ENVIRONMENT								
Operating Temperature ³⁾		0°C to +50°C						
Storage Temperature		-40°C to +85°C						
Operating Humidity		5 to 95% RH (Non-Condensing)						
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)						
MEDICAL RATING								
Float Rating		BF						
MOPP		2 × MOPP						

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEDICAL POWER SUPPLIES

| Configurable Power Supply



MEG-A

- 2 × MOPP isolation
- Output selectable from 2Vdc to 60Vdc
- Normal and Reversed Option for Global Remote On/Off
- Analog and Digital Voltage Trimming (except 700W)
- PMBus Ver 1.3 Supported (selected models)
- Safety approvals for medical and IT applications



MEG-A

Features

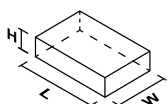
- Compact size and High Power Density
- 2 × MOPP isolation
- Output selectable from 2Vdc to 60Vdc
- Analog Voltage Trimming
- 3 Slots Modules Configurable
- Current sharing for single slot modules
- Compliant with IEC 60601-1-2 Ed. 4 requirements



Specifications

NEW	
OUTPUT	
Output Slots	3 Slots
Output Power	700W
Line Regulation	± 0.5%
Load Regulation	± 1%
Ripple & Noise	< 1% pk-pk Vrated or 100mV, which is larger
Hold-up Time	12ms @ rated load, with nominal input range
Dynamic Response	± 5% @ with 50-100% load change
Remote Sense	Up to 500mV compensation for voltage drop across
OUTPUT MODULE	
Output Numbers	Single Output / Dual Output
Output Voltage	<u>Single Output</u> : Single Slot: 2V-60V; Triple Slot: 8V-60V <u>Dual Output</u> : Single Slot: 3.3-30V
Output Power (Max)	<u>Single Output</u> : Single Slot: 300W; Triple Slot: 700W <u>Dual Output</u> : Single Slot: 180W
INPUT	
Input Voltage Range	90-264Vac
Input Frequency	47-63Hz
Input Current	< 8.5A
Input Surge Voltage (Max)	300Vac for 100ms
Efficiency	115Vac 91.0%
	230Vac 93.0%
Inrush Current (Cold Start)	230Vac 40A
Power Factor	115Vac > 0.95 @ full load
	230Vac
Patient Leakage Current ¹⁾	< 0.1mA @ NC, < 0.5mA @ SFC
Earth Leakage Current ¹⁾	< 0.3mA @ NC, < 1mA @ SFC
MECHANICAL	
Dimensions (L × W × H)	mm 215 × 88.9 × 41.5
	inch 8.50 × 3.50 × 1.63
Unit Weight	kg 0.80
	lb 1.76
MTBF ²⁾	500,000 hrs
EMC & Emissions	EN 55011/EN 55032, FCC Title 47: Class B
ENVIRONMENT	
Operating Temperature ³⁾	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5 to 95% RH (Non-Condensing)
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)
MEDICAL RATING	
Float Rating	B
MOPP	2 × MOPP

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 160Vac, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEG-A

Features

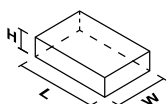


- Compact size and High Power Density
- 2 × MOPP isolation
- Output selectable from 2Vdc to 60Vdc
- Analog and Digital Voltage Trimming
- PMBus Ver 1.3 Supported
- Optional RS485/RS232/USB Communication Adapters
- PC GUI for easy parameter setting and monitoring
- Compliant with IEC 60601-1-2 Ed. 4 requirements

Specifications

			NEW
OUTPUT	MEG-1K2A4	MEG-2K1A6	MEG-3K0A9
Output Slots	4 Slots	6 Slots	9 Slots
Output Power	1,200W	2,100W	3,000W
Line Regulation	± 0.5%		
Load Regulation	± 1%		
Ripple & Noise	< 1% pk-pk Vrated or 100mV, which is larger		
Hold-up Time	12ms @ 115Vac	12ms @ 115Vac	12ms @ rated load, with nominal input range
Dynamic Response	± 5% @ with 50-100% load change		
Remote Sense	Up to 500mV compensation for voltage drop across		
OUTPUT MODULE			
Output Numbers	Single Output / Dual Output		
Output Voltage	<u>Single Output:</u> Single Slot: 2V-60V; Triple Slot: 8V-60V <u>Dual Output:</u> Single Slot: 3.3V-30V		
Output Power (Max)	<u>Single Output:</u> Single Slot: 300W; Triple Slot: 1200W <u>Dual Output:</u> Single Slot: 240W		
INPUT			
Input Voltage Range	90-264Vac		
Input Frequency	47-63Hz		
Input Current	< 8.5A	< 15A	< 20A
Input Surge Voltage (Max)	300Vac for 100ms	300Vac for 100ms	300Vac for 100ms
Efficiency	115Vac	90.0%	90.0%
	230Vac	93.0%	93.0%
Inrush Current (Cold Start)	230Vac	40A	40A
Power Factor	115Vac	> 0.95 @ full load	> 0.95 @ full load
	230Vac	> 0.95 @ full load	> 0.95 @ full load
Patient Leakage Current ¹⁾	< 0.1mA @ NC, < 0.5mA @ SFC		< 0.1mA @ NC, < 0.5mA @ SFC
Earth Leakage Current ¹⁾	< 0.3mA @ NC, < 1mA @ SFC		< 0.4mA @ NC, < 1mA @ SFC
MECHANICAL			
Dimensions (L × W × H)	mm	254 × 88.9 × 40.5	254 × 127 × 40.5
	inch	10.00 × 3.50 × 1.59	10.00 × 5.00 × 1.59
Unit Weight	kg	1.30	2.00
	lb	2.86	4.41
MTBF ²⁾	500,000 hrs		500,000 hrs
EMC & Emissions	EN 55011/EN 55032, FCC Title 47: Class B		
ENVIRONMENT			
Operating Temperature ³⁾	-20°C to +70°C		
Storage Temperature	-40°C to +85°C		
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)		
MEDICAL RATING			
Float Rating	B		
MOPP	2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (MEG-1K2A4: I/P: 150Vac, O/P: 1,200W, Ta: 35°C; MEG-2K1A6: I/P: 150Vac, O/P: 1,800W, Ta: 35°C; MEG-3K0A9: I/P: 180Vac, Ta: 35°C)
- 3) Refer power de-rating in the product datasheet.

MEDICAL POWER SUPPLIES

| Adapter



MDS



- Low touch current (< 0.1mA Normal & < 0.3mA Single Fault)
- 2 × MOPP isolation
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Safety approvals for medical and IT applications



MEA



- Compact Size and High Power Density
- High Efficiency meet DoE VI
- 2 × MOPP isolation
- High MTBF
- Safety approvals for medical and IT applications

MDS

Features

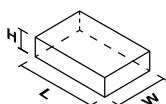


- Universal AC input voltage range
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- IP22 Ingress Protection Rating
- 2 × MOPP isolation

Specifications

OUTPUT		MDS-005AAS05 A□	MDS-005AAS05 B□	MDS-005AAS05 C□	MDS-030AAC05 A□
Output Voltage		5V	5V	5V	5V
Output Current (Max)		1.0A	1.0A	1.0A	3.0A
Output Power		5W	5W	5W	15W
Load Regulation		± 9%	± 9%	± 9%	± 5%
Ripple & Noise		88mV pk-pk @ full load	88mV pk-pk @ full load	88mV pk-pk @ full load	< 100mV pk-pk @ rated load
INPUT					
Input Voltage Range		90-264Vac			85-264Vac
Input Frequency		47-63Hz			
Average Efficiency	115Vac 230Vac	73.63%	73.63%	73.63%	81.4%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	-	-	-	< 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	56.5 × 39.5 × 28	56.5 × 39.5 × 28	56.5 × 39.5 × 28	88 × 53.5 × 27.5
	inch	2.22 × 1.56 × 1.10	2.22 × 1.56 × 1.10	2.22 × 1.56 × 1.10	3.46 × 2.11 × 1.08
Unit Weight	kg	0.10	0.10	0.10	0.15
	lb	0.22	0.22	0.22	0.33
Connector Type		<u>MDS-005AAS05 A□</u> : Input: Wall mount – CN; Output: A _V : Barrel type; A _U : Micro USB <u>MDS-005AAS05 B□</u> : Input: Wall mount – US; Output: B _V : Barrel type; B _U : Micro USB <u>MDS-005AAS05 C□</u> : Input: Wall mount – EU; Output: C _V : Barrel type; C _U : Micro USB <u>MDS-030AAC05 AA</u> : Input: Wall mount – CN; Output: Barrel type <u>MDS-030AAC05 AB</u> : Input: Wall mount – US; Output: Barrel type <u>MDS-030AAC05 AC</u> : Input: Wall mount – EU; Output: Barrel type			
MTBF ²⁾		1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	500,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		0°C to +40°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)			0 to 5,000 m (0 to 16,400 ft)
Degree of Protection		IP22			
Protection Against Shock		Class II			
MEDICAL RATING					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 100Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

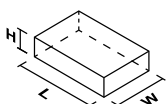
- Universal AC input voltage range
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- $2 \times$ MOPP isolation



Specifications

OUTPUT		MDS-030AAC12 □□	MDS-060BAS12 AB	MDS-080AAS12 AB	MDS-150AAS12 BA
Output Voltage		12V	12V	12V	12V
Output Current (Max)		2.0A	5.0A	6.67A	10.0A
Output Power		24W	60W	80W	120W
Load Regulation		± 5%	± 5%	± 4.5%	
Ripple & Noise		< 150mV pk-pk @ rated load	1% typ. pk-pk @ full load	118.4mV pk-pk @ full load	104mV pk-pk @ full load
INPUT					
Input Voltage Range		85-264Vac	90-264Vac		
Input Frequency		47-63Hz			
Average Efficiency	115Vac	86.21%	88.0%	83% typ.	88.0%
	230Vac				87.0%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.5mA @ SFC	-	-	-
MECHANICAL					
Dimensions (L × W × H)	mm	88 × 53.5 × 27.5	135 × 62 × 34.1	150 × 75 × 40	170 × 85 × 40
	inch	3.46 × 2.11 × 1.08	5.31 × 2.44 × 1.34	5.91 × 2.95 × 1.57	6.69 × 3.35 × 1.57
Unit Weight	kg	0.15	0.34	0.50	1.10
	lb	0.33	0.78	1.10	2.43
Connector Type		MDS-030AAC12 AA: Input: Wall mount – CN; Output: Barrel type MDS-030AAC12 AB: Input: Wall mount – US; Output: Barrel type MDS-030AAC12 BB: Input: Wall mount – US; Output: Barrel type MDS-060BAS12 AB, MDS-080AAS12 AB: Input: C8 socket; Output: 4-pin DIN MDS-150AAS12 BA: Input: C14 socket; Output: 4-pin DIN			
MTBF ²⁾		500,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		0°C to +40°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)		10 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			0 to 3,000 m (0 to 9,840 ft)
Degree of Protection		IP22			-
Protection Against Shock		Class II			Class II with functional earth
MEDICAL RATING					
Float Rating		BF			B
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MDS-030AAC12 □□, MTBF as per Telcordia SR-332 (I/P: 100Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

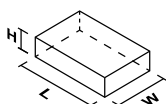
- Universal AC input voltage range
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- 2 × MOPP isolation



Specifications

OUTPUT		MDS-030AAC15 A□	MDS-090AAS15 B□	MDS-090AAS15 F□
Output Voltage		15V	15V	15V
Output Current (Max)		2.0A	6.0A	6.0A
Output Power		30W	90W	90W
Load Regulation		± 5%	± 4.5%	
Ripple & Noise		< 200mV pk-pk @ rated load	114mV pk-pk @ full load	114mV pk-pk @ full load
INPUT				
Input Voltage Range		85-264Vac	90-264Vac	
Input Frequency		47-63Hz		
Average Efficiency	115Vac 230Vac	87.0%	88.0%	88.0%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.5mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
MECHANICAL				
Dimensions (L × W × H)	mm	88 × 53.5 × 27.5	150 × 60 × 35	150 × 60 × 35
	inch	3.46 × 2.11 × 1.08	5.91 × 2.36 × 1.38	5.91 × 2.36 × 1.38
Unit Weight	kg	0.15	0.45	0.45
	lb	0.33	0.99	0.99
Connector Type		MDS-030AAC15 AA: Input: Wall mount – CN; Output: Barrel type MDS-030AAC15 AB: Input: Wall mount – US; Output: Barrel type MDS-030AAC15 AC: Input: Wall mount – EU; Output: Barrel type MDS-090AAS15 BA, MDS-090AAS15 FA: Input: C14 socket; Output: 4-pin DIN MDS-090AAS15 BE, MDS-090AAS15 FE: Input: C14 socket; Output: Tuning Fork type		
MTBF ²⁾		500,000 hrs	1,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B		
ENVIRONMENT				
Operating Temperature ³⁾		0°C to +40°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)	10 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)	
Degree of Protection		IP22	-	
Protection Against Shock		Class II	Class II with functional earth	Class I
MEDICAL RATING				
Float Rating		BF		B
MOPP		2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MDS-030AAC15 A□, MTBF as per Telcordia SR-332 (I/P: 100Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

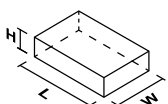
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- $2 \times$ MOPP isolation
- High MTBF



Specifications

OUTPUT		MDS-060BAS19 AA	MDS-090AAS19 B□	MDS-090AAS19 F□	MDS-150AAS19 BA	MDS-150AAS19 FA	MDS-150CAB19 AA
Output Voltage		19V	19V	19V	19V	19V	19V
Output Current (Max)		3.15A	4.73A	4.73A	7.89A	7.89A	7.9A
Output Power		60W	90W	90W	150W	150W	150W
Load Regulation		± 5%	± 4.5%				± 5%
Ripple & Noise		1% typ. pk-pk @ full load	91.2mV pk-pk @ full load	91.2mV pk-pk @ full load	94.4mV pk-pk @ full load	94.4mV pk-pk @ full load	109mV pk-pk @ full load
INPUT							
Input Voltage Range		90-264Vac					
Input Frequency		47-63Hz					
Average Efficiency	115Vac	88.0%	88.0%	88.0%	88.0%	88.0%	92.0% typ.
	230Vac	87.0%	-	-			
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
MECHANICAL							
Dimensions (L × W × H)	mm	135 × 62 × 34.1	150 × 60 × 35	150 × 60 × 35	170 × 85 × 40	170 × 85 × 40	150 × 65 × 32
	inch	5.31 × 2.44 × 1.34	5.91 × 2.36 × 1.38	5.91 × 2.36 × 1.38	6.69 × 3.35 × 1.57	6.69 × 3.35 × 1.57	5.91 × 2.56 × 1.26
Unit Weight	kg	0.34	0.45	0.45	1.10	1.10	0.52
	lb	0.75	0.99	0.99	2.43	2.43	1.15
Connector Type		MDS-060BAS19 AA: Input: C8 socket; Output: Tuning Fork type MDS-090AAS19 BA, MDS-090AAS19 FA: Input: C14 socket; Output: 4-pin DIN MDS-090AAS19 BE, MDS-090AAS19 FE: Input: C14 socket; Output: Tuning Fork type MDS-150AAS19 BA, MDS-150AAS19 FA: Input: C14 socket; Output: 4-pin DIN MDS-150CAB19 AA: Input: C6 socket; Output: 4-pin DIN					
MTBF ²⁾		1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	2,100,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B					
ENVIRONMENT							
Operating Temperature ³⁾		0°C to +40°C					
Storage Temperature		-40°C to +85°C					
Operating Humidity		5 to 95% RH (Non-Condensing)	10 to 95% RH (Non-Condensing)				
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)				0 to 5,000 m (0 to 16,400 ft)
Degree of Protection		IP22	-				IP22
Protection Against Shock		Class II	Class II with functional earth	Class I	Class II with functional earth	Class I	
MEDICAL RATING							
Float Rating		BF		B			
MOPP		2 × MOPP					

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
- 3) Refer power de-rating in the product datasheet.

MDS

Features

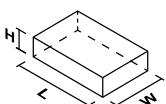
- Universal AC input voltage range
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- 2 × MOPP isolation
- High MTBF



Specifications

OUTPUT		MDS-030AAC24 A□	MDS-060BAS24 AA	MDS-090AAS24 B□	MDS-090AAS24 F□
Output Voltage		24V	24V	24V	24V
Output Current (Max)		1.25A	2.5A	3.75A	3.75A
Output Power		30W	60W	90W	90W
Load Regulation		± 5%	± 5%	± 4.5%	± 4.5%
Ripple & Noise		< 200mV pk-pk @ rated load	1% typ. pk-pk @ full load	94.4mV pk-pk @ full load	94.4mV pk-pk @ full load
INPUT					
Input Voltage Range		85-264Vac	90-264Vac		
Input Frequency		47-63Hz			
Average Efficiency	115Vac 230Vac	87.0%	87.0%	88.0% -	88.0% -
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.5mA @ SFC	-	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
MECHANICAL					
Dimensions	mm	88 × 53.5 × 27.5	135 × 62 × 34.1	150 × 60 × 35	150 × 60 × 35
(L × W × H)	inch	3.46 × 2.11 × 1.08	5.31 × 2.44 × 1.34	5.91 × 2.36 × 1.38	5.91 × 2.36 × 1.38
Unit Weight	kg	0.15	0.34	0.45	0.45
	lb	0.33	0.75	0.99	0.99
Connector Type		MDS-030AAC24 AA: Input: Wall mount – CN; Output: Barrel type MDS-030AAC24 AC: Input: Wall mount – EU; Output: Barrel type MDS-060BAS24 AA: Input: C8 socket; Output: 3-pin DIN MDS-090AAS24 BA, MDS-090AAS24 FA: Input: C14 socket; Output: 4-pin DIN MDS-090AAS24 BE, MDS-090AAS24 FE: Input: C14 socket; Output: Tuning Fork type			
MTBF ²⁾		500,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		0°C to +40°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)		0 to 3,000 m (0 to 9,840 ft)	
Degree of Protection		IP22		-	
Protection Against Shock		Class II		Class II with functional earth	Class I
MEDICAL RATING					
Float Rating		BF			B
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MDS-030AAC24 A□, MTBF as per Telcordia SR-332 (I/P: 100Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

MDS

Features

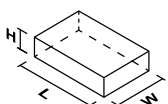
- Universal AC input voltage range
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current
($< 0.1\text{mA}$ Normal & $< 0.3\text{mA}$ Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications
- 2 × MOPP isolation
- High MTBF



Specifications

OUTPUT		MDS-090BAS24 AB	MDS-150AAS24 B□	MDS-150AAS24 FA
Output Voltage		24V	24V	24V
Output Current (Max)		3.75A	6.25A	6.25A
Output Power		90W	150W	150W
Load Regulation		± 4.5%		
Ripple & Noise		107.2mV pk-pk @ full load	83.2mV pk-pk @ full load	83.2mV pk-pk @ full load
INPUT				
Input Voltage Range		90-264Vac		
Input Frequency		47-63Hz		
Average Efficiency	115Vac	87.61% @ full load	88.0%	88.0%
	230Vac		87.0%	87.0%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	-	-	-
MECHANICAL				
Dimensions (L × W × H)	mm	150 × 75 × 40	170 × 85 × 40	170 × 85 × 40
	inch	5.91 × 2.95 × 1.57	6.69 × 3.35 × 1.57	6.69 × 3.35 × 1.57
Unit Weight	kg	0.50	1.10	1.10
	lb	1.10	2.43	2.43
Connector Type		MDS-090BAS24 AB: Input: C8 socket; Output: 4-pin DIN MDS-150AAS24 BA, MDS-150AAS24 FA: Input: C14 socket; Output: 4-pin DIN MDS-150AAS24 BE: Input: C14 socket; Output: Tuning Fork type		
MTBF ²⁾		1,000,000 hrs	1,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B		
ENVIRONMENT				
Operating Temperature ³⁾		0°C to +40°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		10 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)	
Degree of Protection		IP22	-	
Protection Against Shock		Class II	Class II with functional earth	Class I
MEDICAL RATING				
Float Rating		BF	B	
MOPP		2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
- 3) Refer power de-rating in the product datasheet.

MEA

Features

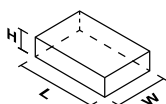
- Universal AC input voltage range
- High Efficiency meet DoE VI
- Low leakage current
- 2 × MOPP isolation
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications



Specifications

		NEW		NEW	
OUTPUT		MEA-065A12C A-A	MEA-090A12C V-A	MEA-065A15C A-A	MEA-090A15C V-A
Output Voltage		12V	12V	15V	15V
Output Current (Max)		5.0A	6.75A	4.33A	6A
Output Power		60W	81W	65W	90W
Load Regulation		± 4.5%			
Ripple & Noise		1%	1%	1%	1%
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Average Efficiency	115Vac	88.0%	88.0%	88.0%	88.0%
	230Vac		89.0%		89.0%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.5mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	115 × 50 × 29	135 × 62 × 32	115 × 50 × 29	135 × 62 × 32
	inch	4.52 × 1.97 × 1.14	5.31 × 2.44 × 1.26	4.52 × 1.97 × 1.14	5.31 × 2.44 × 1.26
Unit Weight	kg	0.25	0.31	0.25	0.31
	lb	0.55	0.68	0.55	0.68
Connector Type		MEA-065A12C A-A, MEA-065A15C A-A: Input: C14 socket; Output: Barrel type MEA-090A12C V-A, MEA-090A15C V-A: Input: C14 socket; Output: Tuning Fork type			
MTBF ²⁾		1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B			
ENVIRONMENT					
Operating Temperature ³⁾		-10°C to +60°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			
Degree of Protection		IP22			
Protection Against Shock		Class I			
MEDICAL RATING					
Float Rating		B			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MEA-065A□C A-A, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

MEA

Features

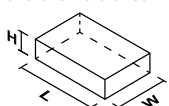
- Universal AC input voltage range
- High Efficiency meet DoE VI
- Low leakage current
- 2 × MOPP isolation
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- Safety approvals for medical and IT applications



Specifications

		NEW		NEW	
OUTPUT	MEA-065A19C A-A	MEA-090A19C V-A	MEA-065A24C A-A	MEA-090A24C V-A	MEA-250A24C H-A
Output Voltage	19V	19V	24V	24V	24V
Output Current (Max)	3.42A	4.74A	2.71A	3.75A	10.42A
Output Power	65W	90W	65W	90W	250W
Load Regulation	± 4.5%				
Ripple & Noise	1%	1%	1%	1%	< 240mV pk-pk @ rated load
INPUT					
Input Voltage Range		90-264Vac			
Input Frequency		47-63Hz			
Average Efficiency	115Vac	89.0%	88.0%	89.0%	89.0%
	230Vac		89.0%		90.0%
Touch Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC
Leakage Current ¹⁾	264Vac	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.5mA @ SFC	< 0.1mA @ NC, < 0.3mA @ SFC	< 0.1mA @ NC, < 0.5mA @ SFC
MECHANICAL					
Dimensions (L × W × H)	mm	115 × 50 × 29	135 × 62 × 32	115 × 50 × 29	135 × 62 × 32
	inch	4.52 × 1.97 × 1.14	5.31 × 2.44 × 1.26	4.52 × 1.97 × 1.14	5.31 × 2.44 × 1.26
Unit Weight	kg	0.25	0.31	0.25	0.31
	lb	0.55	0.68	0.55	0.68
Connector Type	MEA-065A19C A-A, MEA-065A24C A-A: Input: C14 socket; Output: Barrel type MEA-090A19C V-A, MEA-090A24C V-A: Input: C14 socket; Output: Tuning Fork type MEA-250A24C H-A: Input: C14 socket; Output: 6-pin mini-fit				
MTBF ²⁾	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	1,000,000 hrs	500,000 hrs
EMC & Emissions	EN 55011/EN 55032, FCC Title 47: Class B				
ENVIRONMENT					
Operating Temperature ³⁾	-10°C to +60°C				5°C to +60°C
Storage Temperature	-40°C to +85°C				-40°C to +70°C
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				
Degree of Protection	IP22				
Protection Against Shock	Class I				
MEDICAL RATING					
Float Rating	B				BF
MOPP	2 × MOPP				

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332.
For MEA-065A□C A-A and MEA-250A24C H-A, MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load, Ta: 25°C).
- 3) Refer power de-rating in the product datasheet.

| ALTERNATE MODEL LIST



MDS



- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current (< 0.1mA Normal & < 0.3mA Single Fault)
- Compliant with IEC 60601-1-2 Ed. 4 requirements
- 2 × MOPP isolation

Series	Model Name*	CC Code	Output Voltage	Output Current	Output Power	Recommended MEA Model Name	Page
MDS-060AAS	MDS-060AAS12	BA	12V	5.0A	60W	MEA-065A12C A-A	37
	MDS-060AAS15	BA	15V	4.0A	60W	MEA-065A15C A-A	
	MDS-060AAS19	BA	19V	3.2A	60W	MEA-065A19C A-A	38
	MDS-060AAS24	BA	24V	2.5A	60W	MEA-065A24C A-A	
MDS-090AAS	MDS-090AAS15	BE	15V	6.0A	90W	MEA-090A15C V-A	37
	MDS-090AAS15	FE		6.0A	90W	MEA-090A15C V-A	
	MDS-090AAS19	BE	19V	4.73A	90W	MEA-090A19C V-A	38
	MDS-090AAS19	FE		4.73A	90W	MEA-090A19C V-A	
	MDS-090AAS24	BE	24V	3.75A	90W	MEA-090A24C V-A	
	MDS-090AAS24	FE		3.75A	90W	MEA-090A24C V-A	

* Please visit www.DeltaPSU.com for product detail specifications.

STANDARDS & APPROVALS

| Medical Power Supplies

	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 62368-1	CB Scheme to IEC 60601-1	CB Scheme to IEC 60335-1	CB Scheme to IEC 61558-1, IEC 61558-2-16	TUV to EN 60950-1	TUV to EN 62368-1	TUV to EN 60601-1	TUV to EN 60335-1	UL 60950-1	UL 62368-1	UL 60601-1	CSA C22.2 No. 60601-1	CCC (China)	CQC (China)	PSE (Japan)	RCM (Australia)	UKCA (United Kingdom)	RoHS Directive 2011/65/EU	RoHS Directive (EU) 2015/863 Compliant (EN 50581)	EN 61000-3-3 (Flicker)	EN 55011 Class B (Emissions)	EN 55032 Class B (Emissions)	FCC Part 47 Class B (Emissions)
Enclosed Power Supply																									
MDS-200ADB12 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-250ADB12 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300ADB12 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-400ADB12 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300ADB18 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-200ADB24 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-250ADB24 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300ADB24 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-400ADB24 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300ADB48 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MEB-500A24F AA	●	●	●	●			●	●	●		●		●		●				○	●	●		●	●	
MEB-750A24□ AAA	●	●	●	●	●		●	●	●	●		●			●				○	●	●	●		●	
MEB-750A48□ AAA	●	●	●	●			●	●	●			●			●				○	●	●	●		●	
MEB-1K2A24T ABA	●	●	●	●			●		●		●	●	●		●				●	●	●		●	●	
MEB-1K2A42T ABA	●	●	●	●			●		●		●	●	●		●				●	●	●		●	●	
MEB-1K2A48T ABA	●	●	●	●			●		●		●	●	●		●				●	●	●		●	●	
Open Frame Power Supply																									
MDS-040APS12B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-065APS12B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100APS12B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100BPS12B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-200APB12 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-250APB12 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300APB12 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-400APB12 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-040APS15B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-065APS15B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100APS15B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100BPS15B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-040APS18B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-065APS18B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100APS18B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100BPS18B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-300APB18 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-040APS24B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-065APS24B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100APS24B A	●	●	●	●							●		●			●			○	●	●		●	●	
MDS-100BPS24B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-200APB24 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-250APB24 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300APB24 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-400APB24 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-200APB36 AA	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-300APB48 A□	●	●	●	●			●		●		●		●		●				○	●	●		●	●	
MDS-400AUS19B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-400AUS24B A	●	●	●	●							●		●		●				○	●	●		●	●	
MDS-400AUS30B A	●	●	●	●							●		●		●				○	●	●		●	●	

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- Certified
- Pending

	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 62368-1	CB Scheme to IEC 60601-1	CB Scheme to IEC 60335-1	CB Scheme to IEC 61558-1, IEC 61558-2-16	TUV to EN 60950-1	TUV to EN 62368-1	TUV or SIQ to EN 60601-1	TUV to EN 60335-1	UL 60950-1	UL 62368-1	UL 60601-1	CSA C22.2 No. 60601-1	CCC (China)	CQC (China)	PSE (Japan)	RCM (Australia)	UKCA (United Kingdom)	RoHS Directive 2011/65/EU	RoHS Directive (EU) 2015/863 Compliant (EN 50581)	EN 61000-3-3 (Flicker)	EN 55011 Class B (Emissions)	EN 55032 Class B (Emissions)	FCC Part 47 Class B (Emissions)
Open Frame Power Supply																									
MEU-600C24T AAA	●	●	●	●			●	●	●		●	●	●	●	●				●	●	●	●		●	
MEU-650A24T AAA	●	●	●	●	●	●		●	●	●		●	●						●	●	●	●		●	●
MEU-600C48T AAA	●	●	●	●			●	●	●		●	●	●	●	●				●	●	●	●		●	
ATX Power Supply																									
MDS-350AD701 AA	●	●	●	●			●				●		●		●				○	●	●		●	●	
Configurable Power Supply																									
MEG-700A3	●	●	●	●				●	●			●	●	●	●				○	●	●	●		●	●
MEG-1K2A4	●	●	●	●			●		●		●	●		●	●				○	●	●		●	●	●
MEG-2K1A6	●	●	●	●							●	●		●					○	●	●		●	●	●
MEG-3K0A9	●		●	●				●	●			●	●	●	●				○	●	●	●		●	●
Adapter																									
MDS-005AAS05 A□		●	●	●											●				○	●	●		●	●	
MDS-005AAS05 B□		●	●	●					●										○	●	●		●	●	
MDS-005AAS05 C□	●	●	●	●															●	●	●		●	●	
MDS-030AAC05 A□	●	●	●	●			●		●						●				●	●	●		●	●	
MDS-030AAC12 □□	●	●	●	●			●		●						●				●	●	●		●	●	
MDS-060BAS12 AB	●	●	●	●					●						●				●	●	●		●	●	
MDS-080AAS12 AB	●	●	●	●					●						●				●	●	●		●	●	
MDS-150AAS12 BA	●	●	●	●					●						●				●	●	●		●	●	
MDS-030AAC15 □□	●	●	●	●			●		●						●				●	●	●		●	●	
MDS-090AAS15 □□	●	●	●	●					●						●				●	●	●		●	●	
MDS-060BAS19 AA	●	●	●	●					●						●				●	●	●		●	●	
MDS-090AAS19 □□	●	●	●	●					●						●				●	●	●		●	●	
MDS-150AAS19 □A	●	●	●	●					●						●				●	●	●		●	●	
MDS-150CAB19 AA	●	●	●	●					●						●				●	●	●		●	●	
MDS-030AAC24 A□	●	●	●	●			●		●						●				●	●	●		●	●	
MDS-060BAS24 AA	●	●	●	●					●						●				●	●	●		●	●	
MDS-090AAS24 □□	●	●	●	●					●						●				●	●	●		●	●	
MDS-090BAS24 AB	●	●	●	●					●						●				●	●	●		●	●	
MDS-150AAS24 □□	●	●	●	●					●						●				●	●	●		●	●	
MEA-065A12C A-A	●	●	●	●					●				●		●				○	●	●		●	●	
MEA-090A12C V-A	○	○	○	○					○				○		○				○	○	○	○	○	○	
MEA-065A15C A-A	●	●	●	●					●				●		●				○	●	●		●	●	
MEA-090A15C V-A	○	○	○	○					○				○		○				○	○	○	○	○	○	
MEA-065A19C A-A	●	●	●	●					●				●		●				○	●	●		●	●	
MEA-090A19C V-A	○	○	○	○					○				○		○				○	○	○	○	○	○	
MEA-065A24C A-A	●	●	●	●					●				●		●				○	●	●		●	●	
MEA-090A24C V-A	○	○	○	○					○				○		○				○	○	○	○	○	○	
MEA-250A24C H-A	●	●		●									●		●		●	●	●	●	●		●	●	

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- Pending

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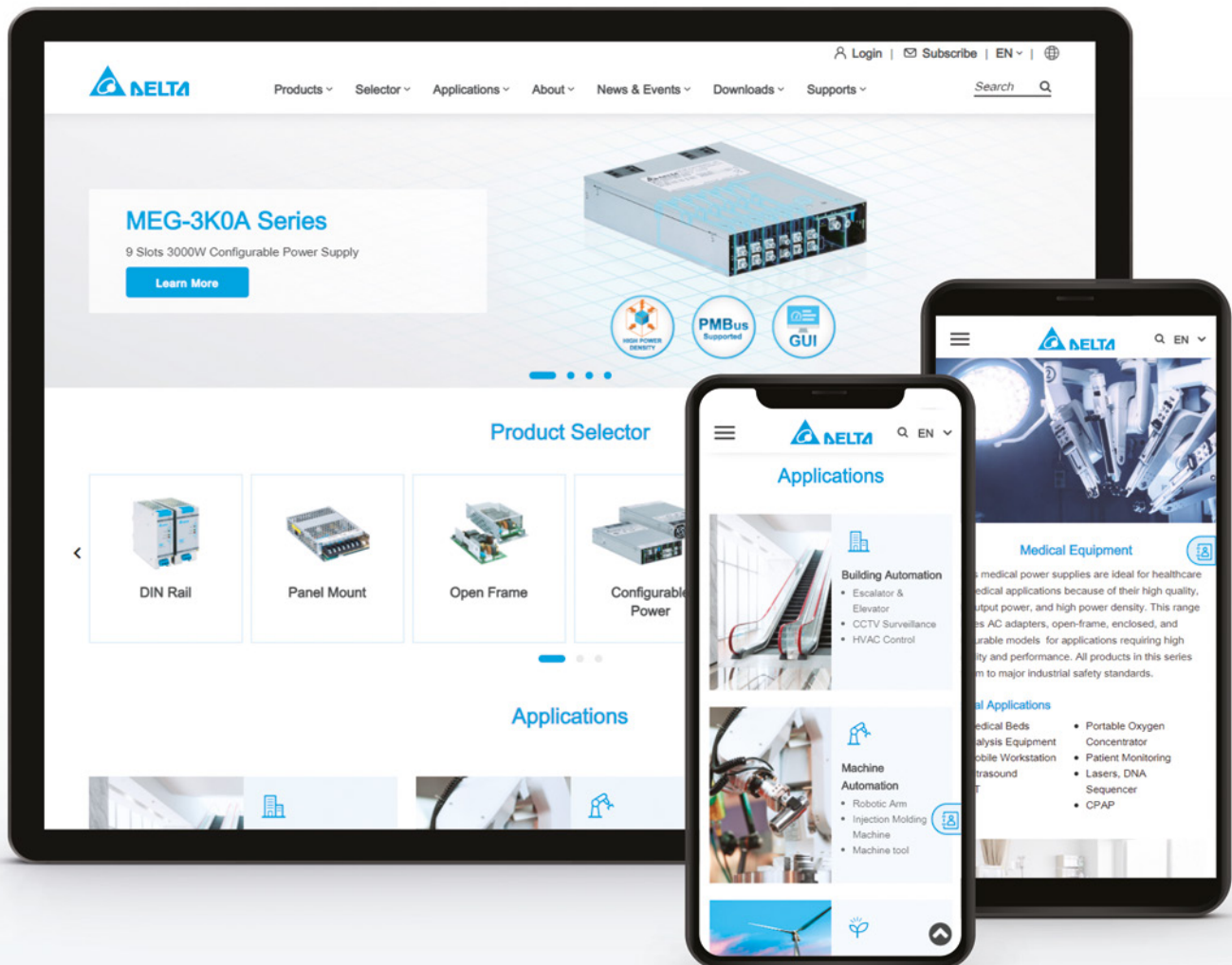
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Delta warrants that the products ("Products") sold in this catalog will be free of defects in material and workmanship within the warranty period. The warranty does not apply to Products which have been subjected to abuse, misuse, accident, neglect, unauthorized and/or improper installation, operation, use, maintenance, repair or alteration, or accident of unusual deterioration or degradation of the Products or parts thereof due to physical environment beyond the requirements of the Product specifications.

Attention

Delta provides all information in the catalog and datasheets on an "AS IS" basis and does not offer any kind of warranty through the information for using the product. In the event of any discrepancy between the information in the catalog and datasheets, the datasheets shall prevail (please refer to www.DeltaPSU.com for the latest datasheets information). Delta shall have no liability of indemnification for any claim or action arising from any error for the provided information in the catalog and datasheets. Customer shall take its responsibility for evaluation of using the product before placing an order with Delta.

Delta reserves the right to make changes to the information described in the catalog and datasheets without notice.

EMC Directives

At Delta, all of our products are designed to meet the highest quality standards. All national and international safety certifications including EMC directives are conducted by qualified and independent laboratories. For EMC directives' compliance, the power supplies are tested to ensure compliance as a stand-alone product. Power supplies like the panel mount and open frame types are typically considered component power supply. Therefore, Delta cannot guarantee the system which is installed with Delta's component power supply can meet the related EMC directives. Customers are advised to contact the system manufacturer for confirmation.

Availability

Products with "New" tab are slated for official release with immediate effect, while products with "Coming Soon" tab will be available within the next two months from this catalog's publication month (refer to back cover page). Kindly contact your local Delta distributor for availability, ordering and delivery details. You may also get in touch with us via the Feedback Form on www.DeltaPSU.com/feedback.

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