



# Medical Power Supply

From The World's No. 1\* Power Supply Company

May 2016

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# Company Profile

## Delta Electronics Group

### World's No.1\* Power Supply Company

Delta Group, founded by Mr. Bruce C.H. Cheng in 1971, is the global leader in power and thermal management solutions. Our mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," focuses our role in addressing key environmental issues such as global climate change. With our concern for the environment, we continue to develop innovative energy efficient products and solutions. We realize the more energy efficient Delta's products become, the greater our impact on reducing global warming.

In recent years Delta has transformed from a product provider toward a solution provider and our businesses now encompass power electronics, energy management, and smart green life. Delta's brand promise "Smarter. Greener. Together." encourages the development and broad application of smart, energy-efficient solutions. At Delta we believe that technology and collaboration can lead to a cleaner, greener tomorrow.

Delta is devoted to innovation and systematically developing new products and technologies, particularly those that are high efficiency and energy saving, and invests over 5% to 6% of our groups' annual sales revenue in R&D. We have worldwide R&D facilities in Taiwan, China, Thailand, Japan, the U.S., and Europe. Our national honors for innovation include the Taiwan National Industry Innovation Award (2008 and 2012) and the Thailand Prime Minister's Industry Award (1995, 2010, 2011, and 2012).

Throughout Delta Group's history we have received many global awards and recognition for our business, technology, and corporate social responsibility. In 2012 Delta was selected for two of the prestigious Dow Jones Sustainability Indexes — the DJSI World Index and the DJSI Asia/ Pacific Index — for the 2<sup>nd</sup> consecutive year. Delta was also ranked first among the 29 leading companies in the Electronic Equipment sector and named as "Sector Leader" for the first time. Since 2010, Delta has received 47 internationally recognized design awards including the iF, Reddot, CES Innovation, Computex Best Choice, and Taiwan Excellence awards.

Delta will continue its dedication to developing technologies and solutions that aim to reduce global warming and ensure mankind's sustainable future.

\*Based on global sales revenue from the Micro-Tech Consultants March 2016 report

# Latest Products

## Delta Standard Medical Power Supplies

### MDS-200ADB



**12/24V**  
**PAGE 18**

- 2.5" × 4.5" × 1.8" Package with enclosure
- Power Good Signal
- Up to 800K Hours MTBF
- Suited for type BF medical product
- IT & Medical Safety Approvals

### MDS-250ADB



**12/24V**  
**PAGE 19**

- 3.5" × 5.5" × 1.75" Package with enclosure
- Power Good Signal
- Remote on/off control
- Up to 500K Hours MTBF
- Suited for type BF medical product

### MDS-300ADB



**12/18/24/48V**  
**PAGE 20**

- 3.5" × 5.5" × 1.75" Package with enclosure
- Power Good Signal
- Remote on/off control
- Up to 800K Hours MTBF
- Suited for type BF medical product

### MDS-400ADB



**12/24V**  
**PAGE 21**

- 3.5" × 5.5" × 1.75" Package with enclosure
- Power Good Signal
- Remote on/off control
- Up to 500K Hours MTBF
- Suited for type BF medical product

### MDS-350AD701



**12V 1U**  
**PAGE 23**

- ATX 12V standard function & form factor
- IEC60601-1 3.1 ed.(Medical) & IEC 60950-1(ITE) approvals
- Suitable for type BF patient access applications
- Built-in active PFC
- Compliant with IEC 60601-1-2 4<sup>th</sup> Ed. requirements

COMING SOON

# Typical Applications

## Delta Standard Medical Power Supplies



- Blood pressure meter
- CPAP/Sleep therapy
- Healthcare information system
- Medical monitors/IT
- Nursing cart
- ECG/EKG
- Infusion pump
- Life Science
- Ophthalmology equipment
- Patient monitor
- Dental equipment
- In-Vitro diagnostic equipment
- Medical ventilator
- Oxygen condenser
- Ultrasound equipment

# Selection Guide

## Delta Standard Medical Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

| Product Type            | Model Name     | CC Code | Input Terminal | Output Voltage    | Output Current  | Output Power | Dimensions          | Safety Standards                                                                                                                                                                                                                                                     |
|-------------------------|----------------|---------|----------------|-------------------|-----------------|--------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Open Frame Power Supply | MDS-040APS12 B | A       | JST 2-pin      | 12V               | 3.33A           | 40W          | 2.0" × 3.0" × 0.9"  | CE                                                                                             |
|                         | MDS-065APS12 B | A       | JST 2-pin      |                   | 5.42A           | 65W          | 2.0" × 4.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100APS12 B | A       | JST 2-pin      |                   | 8.33A           | 100W         | 3.0" × 5.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100BPS12 B | A       | JST 2-pin      |                   | 8.33A           | 100W         | 2.0" × 4.0" × 1.25" | CE                                                                                             |
|                         | MDS-200APB12*  | AA      | Molex 2-pin    |                   | 16.67A          | 200W         | 2.0" × 4.0" × 1.4"  | CE          |
|                         | MDS-250APB12*  | AA      | Molex 2-pin    |                   | 20.84A          | 250W         | 3.0" × 5.0" × 1.4"  | CE          |
|                         | MDS-300APB12*  | AA      | Molex 2-pin    |                   | 25.00A          | 300W         | 3.0" × 5.0" × 1.4"  | CE          |
|                         | MDS-400APB12*  | AA      | Molex 2-pin    |                   | 33.33A          | 400W         | 3.0" × 5.0" × 1.4"  | CE          |
|                         | MDS-040APS15 B | A       | JST 2-pin      | 15V               | 2.67A           | 40W          | 2.0" × 3.0" × 0.9"  | CE                                                                                             |
|                         | MDS-065APS15 B | A       | JST 2-pin      |                   | 4.20A           | 65W          | 2.0" × 4.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100APS15 B | A       | JST 2-pin      |                   | 6.67A           | 100W         | 3.0" × 5.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100BPS15 B | A       | JST 2-pin      |                   | 6.70A           | 100W         | 2.0" × 4.0" × 1.25" | CE                                                                                             |
|                         | MDS-040APS18 B | A       | JST 2-pin      | 18V               | 2.22A           | 40W          | 2.0" × 3.0" × 0.9"  | CE                                                                                             |
|                         | MDS-065APS18 B | A       | JST 2-pin      |                   | 3.61A           | 65W          | 2.0" × 4.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100APS18 B | A       | JST 2-pin      |                   | 5.55A           | 100W         | 3.0" × 5.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100BPS18 B | A       | JST 2-pin      |                   | 5.50A           | 100W         | 2.0" × 4.0" × 1.25" | CE                                                                                             |
|                         | MDS-300APB18*  | AA      | Molex 2-pin    | 19V               | 16.66A          | 300W         | 3.0" × 5.0" × 1.4"  | CE          |
|                         | MDS-400AUS19 B | A       | DECA 3-pin     |                   | 21.10A          | 400W         | 3.8" × 7.8" × 1.6"  | CE                                                                                             |
|                         | MDS-040APS24 B | A       | JST 2-pin      | 24V               | 1.67A           | 40W          | 2.0" × 3.0" × 0.9"  | CE                                                                                             |
|                         | MDS-065APS24 B | A       | JST 2-pin      |                   | 2.71A           | 65W          | 2.0" × 4.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100APS24 B | A       | JST 2-pin      |                   | 4.17A           | 100W         | 3.0" × 5.0" × 1.2"  | CE                                                                                             |
|                         | MDS-100BPS24 B | A       | JST 2-pin      |                   | 4.20A           | 100W         | 2.0" × 4.0" × 1.25" | CE                                                                                           |
|                         | MDS-200APB24*  | AA      | Molex 2-pin    |                   | 8.33A           | 200W         | 2.0" × 4.0" × 1.4"  | CE       |
|                         | MDS-250APB24*  | AA      | Molex 2-pin    |                   | 10.41A          | 250W         | 3.0" × 5.0" × 1.4"  | CE    |
|                         | MDS-300APB24*  | AA      | Molex 2-pin    |                   | 12.50A          | 300W         | 3.0" × 5.0" × 1.4"  | CE    |
|                         | MDS-400APB24*  | AA      | Molex 2-pin    |                   | 16.66A          | 400W         | 3.0" × 5.0" × 1.4"  | CE    |
|                         | MDS-400AUS24 B | A       | DECA 3-pin     |                   | 16.67A          | 400W         | 3.8" × 7.8" × 1.6"  | CE                                                                                         |
|                         | MDS-100AP401 B | A       | Molex 2-pin    | 5.1V/12V/-15V/15V | 8A/3A/0.8A/0.8A | 100W         | 3.0" × 5.0" × 1.2"  | CE                                                                                         |
|                         | MDS-300APB48*  | AA      | Molex 2-pin    | 48V               | 6.25A           | 300W         | 3.0" × 5.0" × 1.4"  | CE    |
| Enclosed Power Supply   | MDS-200ADB12   | AA      | Molex 2-pin    | 12V               | 16.67A          | 200W         | 2.5" × 4.5" × 1.8"  | CE    |
|                         | MDS-250ADB12   | AA      | Molex 2-pin    |                   | 20.84A          | 250W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-300ADB12   | AA      | Molex 2-pin    |                   | 25.00A          | 300W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-400ADB12   | AA      | Molex 2-pin    |                   | 33.33A          | 400W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-300ADB18   | AA      | Molex 2-pin    | 18V               | 16.66A          | 300W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-200ADB24   | A       | Molex 2-pin    | 24V               | 8.33A           | 200W         | 2.5" × 4.5" × 1.8"  | CE    |
|                         | MDS-250ADB24   | AA      | Molex 2-pin    |                   | 10.41A          | 250W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-300ADB24   | AA      | Molex 2-pin    |                   | 12.50A          | 300W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-400ADB24   | AA      | Molex 2-pin    |                   | 16.67A          | 400W         | 3.5" × 5.5" × 1.75" | CE    |
|                         | MDS-300ADB48   | AA      | Molex 2-pin    | 48V               | 6.25A           | 300W         | 3.5" × 5.5" × 1.75" | CE    |

\* Product with options for enclosure or U-channel

### Medical Power Supply Model Numbering

| MDS                                                                                                             | - | XXX                                                                                            | <input type="checkbox"/> | <input type="checkbox"/>                    | <input type="checkbox"/>                                          | <input type="checkbox"/>             | <input type="checkbox"/>                                               | <input type="checkbox"/>                                                               |
|-----------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------|-------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Delta Medical Power Supply<br>040APS series<br>065APS series<br>100APS series<br>100BPS series<br>400AUS series |   | Max power wattage in the product series. May be lower at some voltage<br>060: 60W<br>100: 100W | Family Code<br>A-Z       | Product Type<br>P: Open Frame<br>U: U Frame | Input Type Code<br>S: Single Output<br>4: 4 Outputs <sup>1)</sup> | Output Voltage<br>12: 12V<br>24: 24V | Input Configuration<br>B: Class I 3-pin connector<br>A: Class II 2-pin | CC Code<br>Control code for DC connector, label, etc.<br>A: DC connector <sup>2)</sup> |

1) For MDS-100AP401B, 2) Refer to technical datasheet or product catalog

| MDS                                                                                                    | - | XXX                                                                                            | <input type="checkbox"/> | <input type="checkbox"/>                                    | <input type="checkbox"/>                                                                              | <input type="checkbox"/>             | <input type="checkbox"/>                                                            |
|--------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|
| Delta Medical Power Supply<br>MDS-200A series<br>MDS-250A series<br>MDS-300A series<br>MDS-400A series |   | Max power wattage in the product series. May be lower at some voltage<br>060: 60W<br>100: 100W | Family Code<br>A-Z       | Product Type<br>P: Open Frame<br>B: U-frame<br>D: Enclosure | Input Type Class II<br>2-pin connector:<br>A, C, E, G...<br>Class I 3-pin connector:<br>B, D, F, H... | Output Voltage<br>12: 12V<br>24: 24V | Control Code<br>For DC connector, label, etc.<br>A: DC connector type <sup>1)</sup> |

1) Refer to technical datasheet or product catalog

| Product Type         | Model Name     | CC Code | AC Inlet                   | Output Voltage                             | Output Current                     | Output Power | Dimensions         | Safety Standards                                                                                                                                                               |
|----------------------|----------------|---------|----------------------------|--------------------------------------------|------------------------------------|--------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ATX Power Supply     | MDS-350AD701   | AA      | C14                        | +3.3V, +5V, +5Vsb, +12V1, +12V2, -12V, -5V | 8A, 9A, 1.25A, 8A, 8A, 0.25A, 0.1A | 350W         | 3.9" × 7.6" × 1.6" | CE       |
| Adapter Power Supply | MDS-005AAS05 A | R       | Wall mount-China type      | 5V                                         | 1.00A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-005AAS05 B | R       | Wall mount-Japan, USA type |                                            | 1.00A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-005AAS05 C | R       | Wall mount-EU type         |                                            | 1.00A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-030AAC05*  |         | Duck Head                  |                                            | 3.00A                              | 15W          | 2.1" × 3.5" × 1.1" | CE       |
|                      | MDS-005AAS06 A | R       | Wall mount-China type      | 6V                                         | 0.83A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-005AAS06 B | R       | Wall mount-Japan, USA type |                                            | 0.83A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-005AAS06 C | R       | Wall mount-EU type         |                                            | 0.83A                              | 5W           | 1.6" × 2.2" × 1.1" | CE       |
|                      | MDS-030AAC07*  |         | Duck Head                  | 7V                                         | 3.00A                              | 21W          | 2.1" × 3.5" × 1.1" | CE       |
|                      | MDS-030AAC12*  |         | Duck Head                  | 12V                                        | 2.00A                              | 24W          | 2.1" × 3.5" × 1.1" | CE       |
|                      | MDS-060AAS12 B | A       | C14                        |                                            | 5.00A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-060BAS12 A | B       | C8                         |                                            | 5.00A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-080AAS12 A |         | C8                         |                                            | 6.66A                              | 80W          | 3.0" × 5.9" × 1.6" | CE       |
|                      | MDS-150AAS12 B | A       | C14                        |                                            | 10.00A                             | 120W         | 3.4" × 6.7" × 1.6" | CE       |
|                      | MDS-030AAC15*  |         | Duck Head                  | 15V                                        | 2.00A                              | 30W          | 2.1" × 3.5" × 1.1" | CE       |
|                      | MDS-060AAS15 B | A       | C14                        |                                            | 4.00A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-090AAS15 B | A       | C14                        |                                            | 6.00A                              | 90W          | 2.6" × 5.9" × 1.4" | CE       |
|                      | MDS-060AAS19 B | A       | C14                        | 19V                                        | 3.20A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-060BAS19 A | A       | C8                         |                                            | 3.15A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-090AAS19 B | A       | C14                        |                                            | 4.74A                              | 90W          | 2.6" × 5.9" × 1.4" | CE       |
|                      | MDS-150AAS19 B | A       | C14                        |                                            | 7.89A                              | 150W         | 3.4" × 6.7" × 1.6" | CE       |
|                      | MDS-150CAB19   | AA      | C6                         |                                            | 7.90A                              | 150W         | 2.6" × 5.9" × 1.3" | CE       |
|                      | MDS-030AAC24*  |         | Duck Head                  | 24V                                        | 1.25A                              | 30W          | 2.1" × 3.5" × 1.1" | CE       |
|                      | MDS-060AAS24 B | A       | C14                        |                                            | 2.50A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-060BAS24 A | A       | C8                         |                                            | 2.50A                              | 60W          | 2.4" × 5.3" × 1.3" | CE       |
|                      | MDS-090AAS24 B | A       | C14                        |                                            | 3.75A                              | 90W          | 2.6" × 5.9" × 1.4" | CE     |
|                      | MDS-090BAS24 A | B       | C8                         |                                            | 3.75A                              | 90W          | 3.0" × 5.9" × 1.6" | CE   |
|                      | MDS-150AAS24 B | A       | C14                        |                                            | 6.25A                              | 150W         | 3.4" × 6.7" × 1.6" | CE   |

## Medical Power Supply Model Numbering

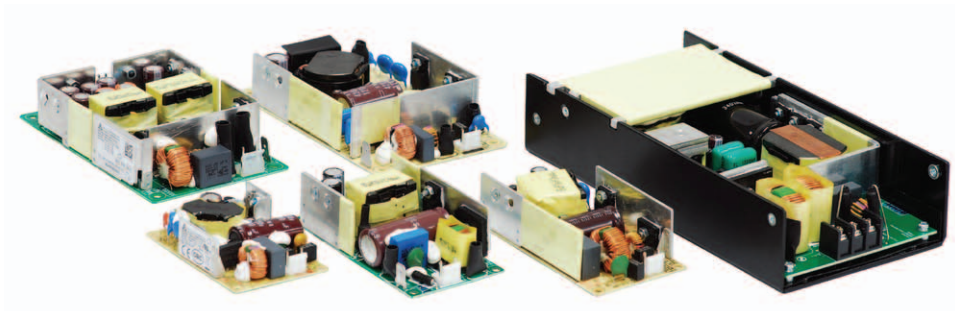
|                                                                                                                                                   |   |                                                                                                                  |                    |                              |                                                                                                                                                    |                                      |                                                                                               |                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| MDS                                                                                                                                               | - | XXX                                                                                                              | □                  | □                            | □□□                                                                                                                                                |                                      | □                                                                                             | □                                                             |
| Delta Medical Power Supply<br>MDS-350AD701                                                                                                        |   | Max power wattage in the product series. May be lower at some voltage<br>060 → 60W<br>150 → 150W<br>1K2 → 1,200W | Family Code<br>A-Z | Product Type<br>D: Enclosure | Output Voltage<br>701: +3.3V, +5V, +5Vsb, +12V1, +12V2, -12V, -5V                                                                                  |                                      | Revision Code                                                                                 | Revision Code                                                 |
| MDS                                                                                                                                               | - | XXX                                                                                                              | □                  | □                            | □                                                                                                                                                  | □□                                   | □                                                                                             | □                                                             |
| Delta Medical Power Supply<br>005AAS series<br>060AAS series<br>060BAS series<br>080AAS series<br>090AAS series<br>090BAS series<br>150AAS series |   | Max power wattage in the product series. May be lower at some voltage<br>060: 60W<br>100: 100W                   | Family Code<br>A-Z | Product Type<br>A: Adapter   | # of Output<br>S: Single<br>Output                                                                                                                 | Output Voltage<br>12: 12V<br>24: 24V | Input Con-figuration<br>A: C8<br>B: C14<br>C: NA<br><br>A: CN<br>B: US<br>C: EU<br>for 005AAS | CC Code<br>For DC plug, cable length, label, etc.             |
| MDS                                                                                                                                               | - | XXX                                                                                                              | □                  | □                            | □                                                                                                                                                  |                                      | □□                                                                                            | □□                                                            |
| Delta Medical Power Supply<br>MDS-150CAB19A                                                                                                       |   | Max power wattage in the product series. May be lower at some voltage<br>150: 150W                               | Family Code<br>A-Z | Product Type<br>A: Adapter   | Input Type<br>Class II C8/C18: A, C, E, G...<br>Class I C6/C14: B, D, F, H...                                                                      |                                      | Output Voltage<br>12: 12V<br>24: 24V                                                          | Control Code<br>AA-ZX<br>Power cord length, plug, label, etc. |
| MDS                                                                                                                                               | - | 030                                                                                                              |                    | AAC                          | □                                                                                                                                                  |                                      |                                                                                               | AA                                                            |
| Delta Medical Power Supply<br>MDS-030 Series                                                                                                      |   | Max wattage in the product series (may be lower at some voltage)                                                 |                    | Family Code                  | Output Voltage (Single Output)<br>05 for 5V                      12 for 12V<br>07 for 7V                      15 for 15V<br>08 for 7.5V 24 for 24V |                                      |                                                                                               | Revision Code <sup>1). 2)</sup>                               |

1) 1<sup>st</sup> digit: DC plug type and output cable length. A for 2.1 × 5.5 × 10 mm DC plug, and 1200 mm cable length.

2) 2<sup>nd</sup> digit: Country duck-head type (A\_China, B\_United States, C\_European, D\_United Kingdom, E\_Australia, G\_Korea, H\_India, J\_Argentina, K\_Brazil, M\_South Africa)

# Standard Products

## Open Frame Power Supply



The MDS Open Frame series provides high performance and reliable solution for internal power supply in a medical equipment or system.

### Typical Applications



### Notes:



All Delta Medical Power products conform to the European directive 2011/65/EU. RoHS is the abbreviation for “Restriction of the use of certain hazardous substances”.



Delta has been certified for meeting the requirements of ISO 13485: 2003 and EN ISO 13485: 2012 for the design and production of switching power supply and adaptor for medical devices.



In addition to the UL Total Certification Program (TCP) approved client laboratory for IEC60950 and IEC60065, Delta has also participated in the UL Client Test Data Program (CTDP) for IEC 60601.

# MDS 040APS Open Frame Power Supply

## 12/15/18/24V 40 WATTS



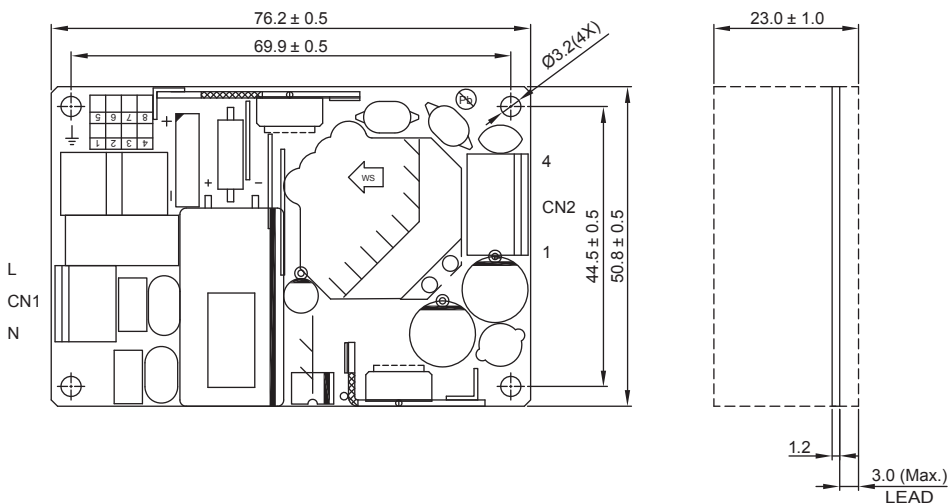
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 3 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 040APS12                                             | 040APS15 | 040APS18 | 040APS24 |
|-----------------------|------------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                  | 15V      | 18V      | 24V      |
| Output Current (Max)  | 3.33A                                                | 2.67A    | 2.22A    | 1.67A    |
| Efficiency            | 86%                                                  | 87%      | 87%      | 87%      |
| INPUT                 |                                                      |          |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |          |
| Load Regulation       | ±1%                                                  |          |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |          |
| MECHANICAL            |                                                      |          |          |          |
| Dimension (W × L × H) | 50.80 × 76.20 × 23.00 mm (2.0 × 3.0 × 0.9 in)        |          |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |          |
| Connector Type        | Input: JST 2P B2P3-VH (LF) (SN)                      |          |          |          |
|                       | Output: JST 4P B4P-VH (LF) (SN)                      |          |          |          |

unit: mm



# MDS 065APS Open Frame Power Supply

## 12/15/18/24V 65 WATTS



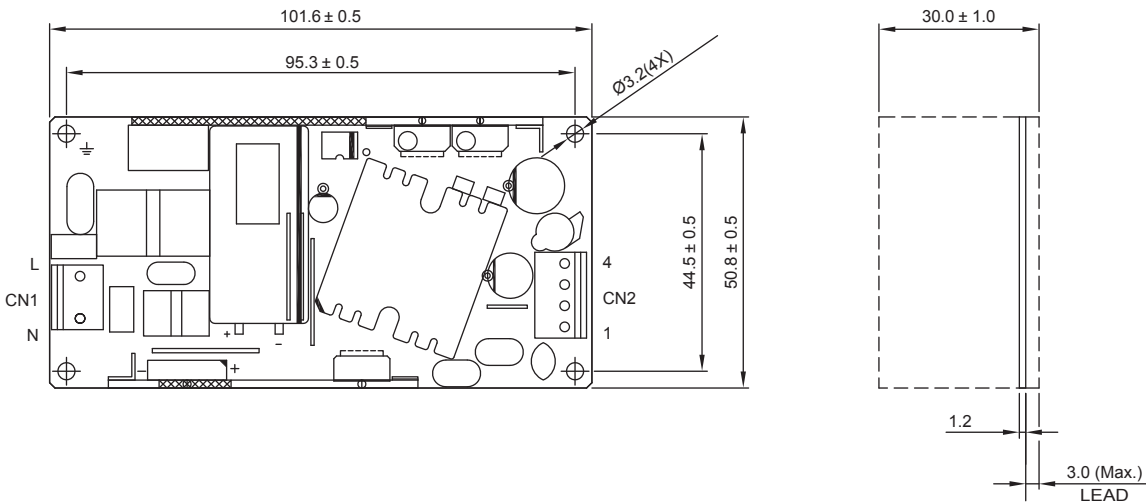
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 2.5 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 065APS12                                             | 065APS15 | 065APS18 | 065APS24 |
|-----------------------|------------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                  | 15V      | 18V      | 24V      |
| Output Current (Max)  | 5.42A                                                | 4.20A    | 3.61A    | 2.71A    |
| Efficiency            | 87%                                                  | 88%      | 88%      | 88%      |
| INPUT                 |                                                      |          |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |          |
| Load Regulation       | ±1%                                                  |          |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |          |
| MECHANICAL            |                                                      |          |          |          |
| Dimension (W × L × H) | 50.80 × 101.60 × 30.00 mm (2.0 × 4.0 × 1.2 in)       |          |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |          |
| Connector Type        | Input: JST 2P B2P3-VH (LF) (SN)                      |          |          |          |
|                       | Output: JST 4P B4P-VH (LF) (SN)                      |          |          |          |

unit: mm



# MDS 100APS Open Frame Power Supply

## 12/15/18/24V 100 WATTS



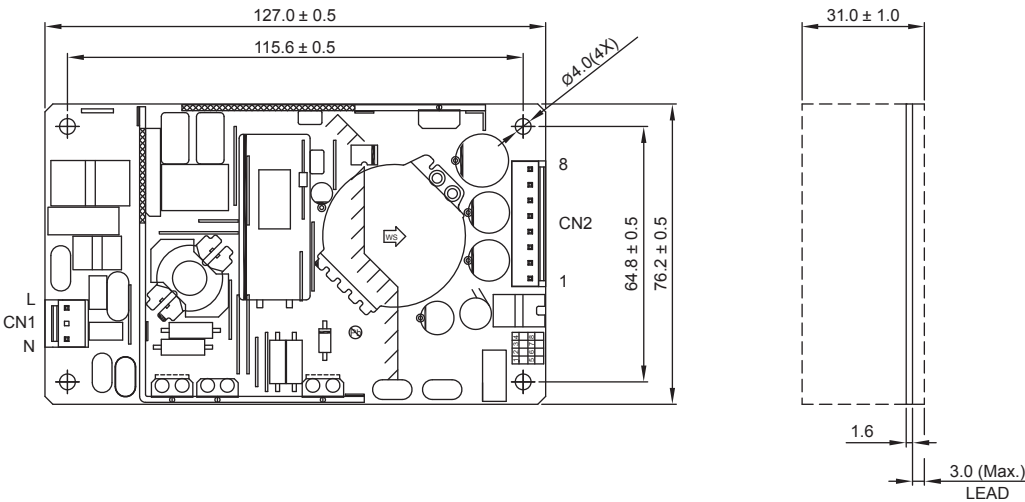
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- 1.528 (for 12V), 2.313 (for 15V), 2.442 (for 18V), 3.174 (for 24V) million hours MTBF
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 100APS12                                             | 100APS15 | 100APS18 | 100APS24 |
|-----------------------|------------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                  | 15V      | 18V      | 24V      |
| Output Current (Max)  | 8.33A                                                | 6.67A    | 5.55A    | 4.17A    |
| Efficiency            | 89%                                                  | 91%      | 91%      | 91%      |
| INPUT                 |                                                      |          |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |          |
| Load Regulation       | ±1%                                                  |          |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |          |
| MECHANICAL            |                                                      |          |          |          |
| Dimension (W × L × H) | 76.20 × 127.00 × 31.00 mm (3.0 × 5.0 × 1.2 in)       |          |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |          |
| Connector Type        | Input: JST 2P B2P3-VH (LF) (SN)                      |          |          |          |
|                       | Earth terminal: Kang Yang PC250                      |          |          |          |
|                       | Output: JST 8P B8P-VH (LF) (SN)                      |          |          |          |

unit: mm



# MDS 100BPS Open Frame Power Supply

## 12/15/18/24V 100 WATTS



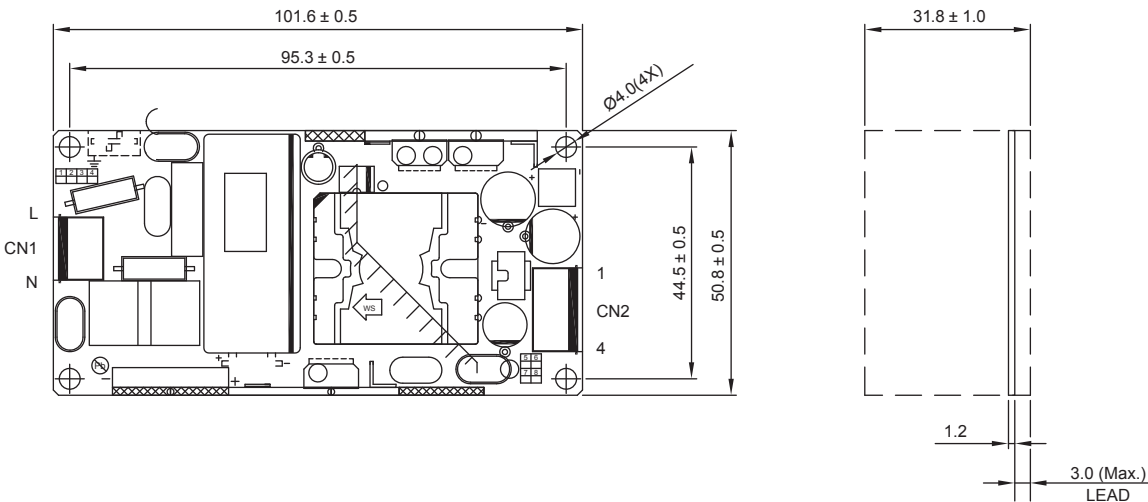
### HIGHLIGHTS & FEATURES

- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current (<0.1mA Normal & ,0.3mA single fault)
- 80W with convection cooling; 100W with forced air cooling
- Safety management report available
- 1 million hours MTBF
- Compact size 2" x 4"
- 2 x MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

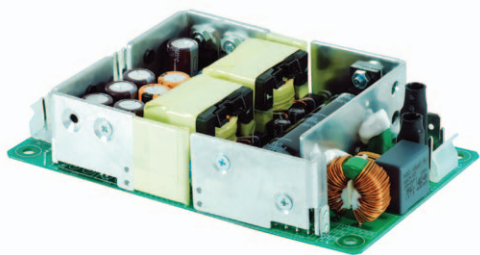
| OUTPUT                | 100BPS12                                             | 100BPS15 | 100BPS18 | 100BPS24 |
|-----------------------|------------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                  | 15V      | 18V      | 24V      |
| Output Current (Max)  | 8.33A                                                | 6.70A    | 5.50A    | 4.20A    |
| Efficiency            | 87%                                                  | 88%      | 88%      | 89%      |
| INPUT                 |                                                      |          |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |          |
| Load Regulation       | ±1%                                                  |          |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |          |
| MECHANICAL            |                                                      |          |          |          |
| Dimension (W × L × H) | 50.80 × 101.60 × 31.80 mm (2.0 × 4.0 × 1.25 in)      |          |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |          |
| Connector Type        | Input: JST 2P B2P3-VH (LF) (SN)                      |          |          |          |
|                       | Earth terminal: Kang Yang PCH250                     |          |          |          |
|                       | Output: JST 4P B4P-VH (LF) (SN)                      |          |          |          |

unit: mm



# MDS 100AP401 Open Frame Power Supply

## 5.1/12/-15/15V 100 WATTS



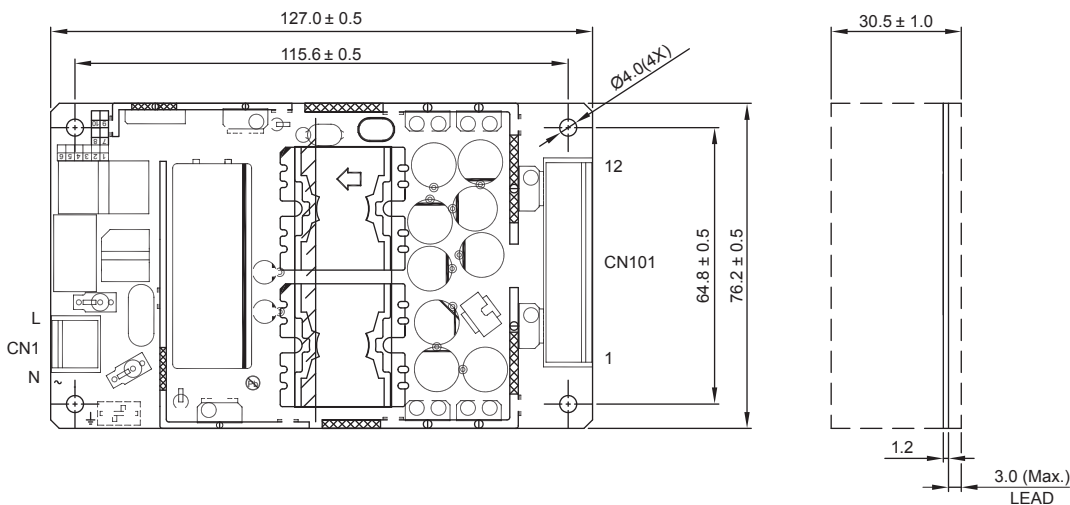
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

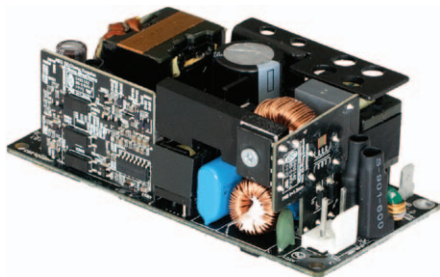
| OUTPUT                | 100AP401                                             |     |      |      |
|-----------------------|------------------------------------------------------|-----|------|------|
| Output Voltage        | 5.1V                                                 | 12V | -15V | 15V  |
| Output Current (Max)  | 8A                                                   | 3A  | 0.8A | 0.8A |
| Efficiency            | 75%                                                  |     |      |      |
| INPUT                 |                                                      |     |      |      |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |     |      |      |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |     |      |      |
| Load Regulation       | ±2%                                                  | ±1% | ±3%  | ±3%  |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |     |      |      |
| MECHANICAL            |                                                      |     |      |      |
| Dimension (W × L × H) | 76.20 × 127.00 × 30.50 mm (3.0 × 5.0 × 1.2 in)       |     |      |      |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |     |      |      |
| Connector Type        | Input: Molex 2P 09-65-2029                           |     |      |      |
|                       | Earth terminal: Kang Yang PCH250                     |     |      |      |
|                       | Output: Molex 12P 09-65-2128                         |     |      |      |

unit: mm



# MDS 200A Open Frame Power Supply

## 12/24V 200 WATTS



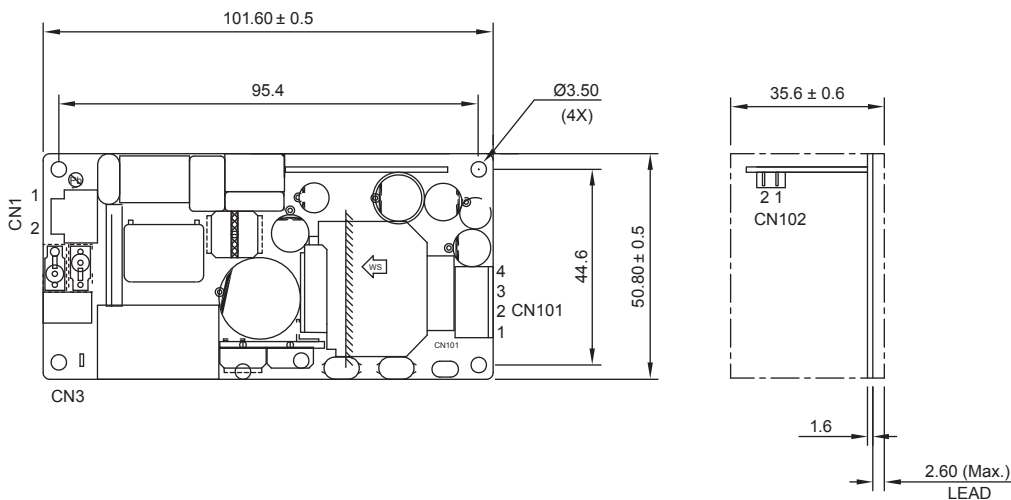
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Class B EMI (all models); 4<sup>th</sup> Edition Immunity Compliance (12V models only)
- Up to 140W with convection cooling; 200W with forced air cooling
- Suitable for type BF medical product
- Up to 800K hours MTBF
- 2" × 4" × 1.4" package
- Power Good signal

### GENERAL SPECIFICATIONS

| OUTPUT                | 200APB12                                           | 200APB24 |
|-----------------------|----------------------------------------------------|----------|
| Output Voltage        | 12V                                                | 24V      |
| Output Current (Max)  | 16.67A                                             | 8.33A    |
| Efficiency            | 91% @115V, 93% @230V                               | 94%      |
| INPUT                 |                                                    |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                 |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)     |          |
| Load Regulation       | ±1%                                                |          |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz |          |
| MECHANICAL            |                                                    |          |
| Dimension (W × L × H) | 50.80 × 101.60 × 35.60 mm (2.0 × 4.0 × 1.4 in)     |          |
| EMC & Emissions       | Class I model: EN55011, EN55022, FCC: class B      |          |
| Connector Type        | Input: Molex 171813-9998                           |          |
|                       | Earth terminal: PINGOOD JP-13T                     |          |
|                       | Output: JST B4P-VH(LF)(SN)                         |          |
|                       | Signal Connector: Molex 87438-0243                 |          |

unit: mm



# MDS 250A Open Frame Power Supply

## 12/24V 250 WATTS



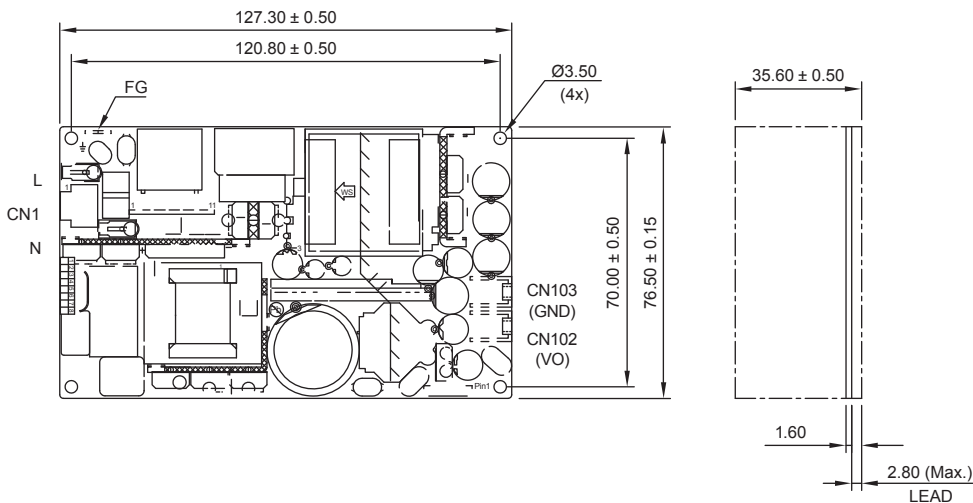
### HIGHLIGHTS & FEATURES

- Power Good signal, Remote Sense, Remote Inhibit
- Class B EMI; 4<sup>th</sup> Edition Immunity Compliance
- Safety rated for medical and IT applications
- Up to 150W with convection cooling; 250W with forced air cooling
- Enclosed cover design option available
- Suitable for type BF medical product
- Up to 500K hours MTBF
- 3" × 5" × 1.4" package

### GENERAL SPECIFICATIONS

| OUTPUT                | 250APB12                                                                                                                            | 250APB24 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------|
| Output Voltage        | 12V                                                                                                                                 | 24V      |
| Output Current (Max)  | 20.84A                                                                                                                              | 10.41A   |
| Efficiency            | 91%                                                                                                                                 |          |
| INPUT                 |                                                                                                                                     |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                                                                                                  |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)                                                                                      |          |
| Load Regulation       | ±1%                                                                                                                                 |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/60Hz                                                                                  |          |
| MECHANICAL            |                                                                                                                                     |          |
| Dimension (W × L × H) | 76.50 × 127.30 × 36.10 mm (3.0 × 5.0 × 1.4 in)                                                                                      |          |
| EMC & Emissions       | Class I model: EN55011, EN55022, FCC: class B<br>Class II model: EN55011, EN55022, FCC: class B for conducted, class A for radiated |          |
| Connector Type        | Input: Molex 26-62-4030 or Equivalent                                                                                               |          |
|                       | Earth terminal: PINGOOD JP-13T                                                                                                      |          |
|                       | Output: Kang Yang PCB-12<br>Signal Connector: Molex 104141-1010                                                                     |          |

unit: mm



# MDS 300A Open Frame Power Supply

## 12/18/24/48V 300 WATTS



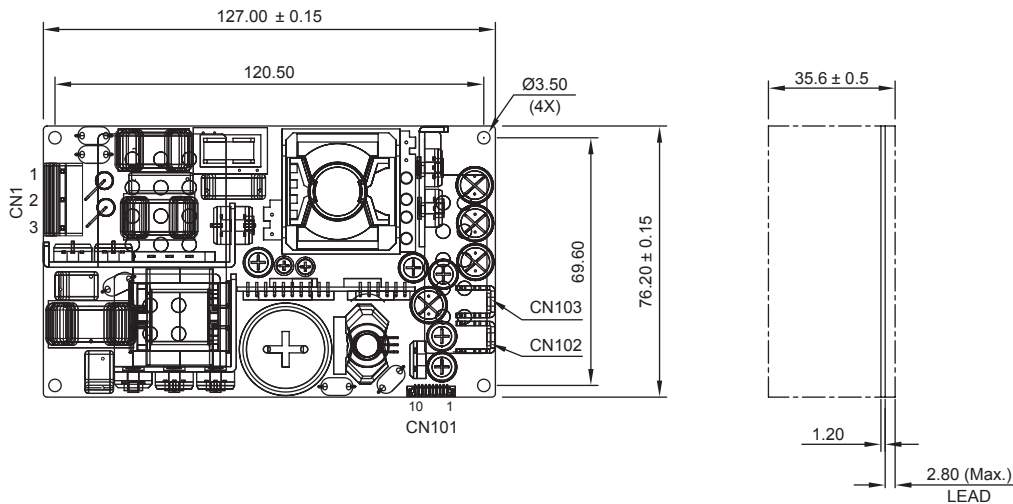
### HIGHLIGHTS & FEATURES

- Power Good signal, Remote Sense, Remote Inhibit
- Safety rated for medical and IT applications
- Class B EMI (all models); 4<sup>th</sup> Edition Immunity Compliance (12 & 24V models only)
- Up to 240W with convection cooling; 300W with forced air cooling
- Suitable for type BF medical products
- Enclosed cover kit design available
- Up to 800K hours MTBF
- 3" x 5" x 1.4" package

### GENERAL SPECIFICATIONS

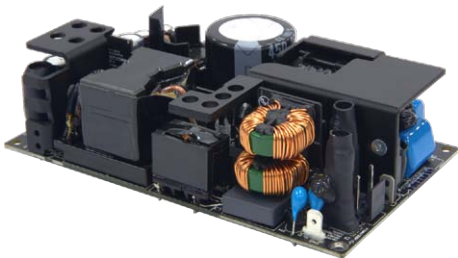
| OUTPUT                | 300APB12                                           | 300APB18 | 300APB24 | 300APB48 |
|-----------------------|----------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                | 18V      | 24V      | 48V      |
| Output Current (Max)  | 25.00A                                             | 16.66A   | 12.50A   | 6.25A    |
| Efficiency            | 94%                                                |          |          |          |
| INPUT                 |                                                    |          |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                 |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)     |          |          |          |
| Load Regulation       | ±1%                                                |          |          |          |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz |          |          |          |
| MECHANICAL            |                                                    |          |          |          |
| Dimension (W × L × H) | 76.20 × 127.00 × 35.60 mm (3.0 × 5.0 × 1.4 in)     |          |          |          |
| EMC & Emissions       | Class I model: EN55011, EN55022, FCC: class B      |          |          |          |
| Connector Type        | Input: Molex 26-62-4030 or Equivalent              |          |          |          |
|                       | Earth terminal: PINGOOD JP-13T                     |          |          |          |
|                       | Output: Kang Yang PCB-12                           |          |          |          |
|                       | Signal connector: Molex 104141-1010                |          |          |          |

unit: mm



# MDS 400A Open Frame Power Supply

## 12/24V 400 WATTS



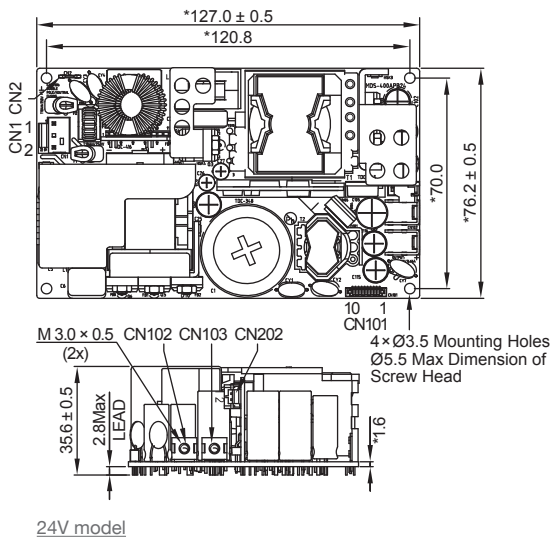
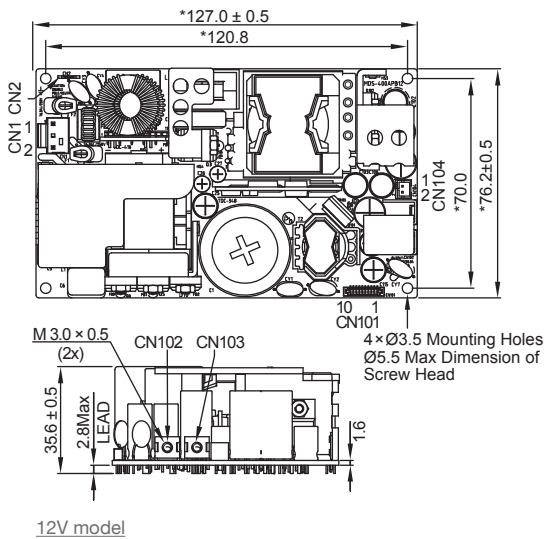
### HIGHLIGHTS & FEATURES

- Class B EMI (all models); 4<sup>th</sup> Edition Immunity (12V models only)
- Power Good signal, Remote Sense, Remote Inhibit
- Safety rated for medical and IT applications
- Up to 200W with convection cooling; 400W with forced air cooling
- Suitable for type BF medical product
- 5V standby and 12V fan outputs
- Up to 800K hours MTBF
- 3" x 5" x 1.4" package

### GENERAL SPECIFICATIONS

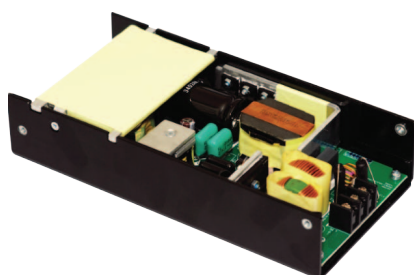
| OUTPUT                | 400APB12                                           | 400APB24                                        |
|-----------------------|----------------------------------------------------|-------------------------------------------------|
| Output Voltage        | 12V                                                | 24V                                             |
| Output Current (Max)  | 33.33A                                             | 16.66A                                          |
| Efficiency            | 89.5% @115V, 91.5% @230V                           | 92% @115V, 93% @230V                            |
| INPUT                 |                                                    |                                                 |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                 |                                                 |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)     |                                                 |
| Load Regulation       | ±1%                                                |                                                 |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz |                                                 |
| MECHANICAL            |                                                    |                                                 |
| Dimension (W x L x H) | 76.20 x 127.00 x 35.60 mm (3.0 x 5.0 x 1.4 in)     |                                                 |
| EMC & Emissions       | Class I model: EN55011, EN55022, FCC: class B      |                                                 |
| Connector Type        | Input: Molex 171813-9998                           | Input: Molex 171813-9998                        |
|                       | Earth terminal: PINGOOD JP-13T                     | Earth terminal: PINGOOD JP-13T                  |
|                       | Output: Kang Yang PCB-12                           | Output: Kang Yang PCB-12                        |
|                       | Signal connector: Molex 104141-1010                | Signal connector: Molex 104141-1010             |
|                       | Fan output connector: JST B2B-PH-K-S(LF)(SN)       | Fan output connector: JST S2B-PH-SM4-TB(LF)(SN) |

unit: mm



# MDS 400AUS Open Frame Power Supply

## 19/24V 400 WATTS



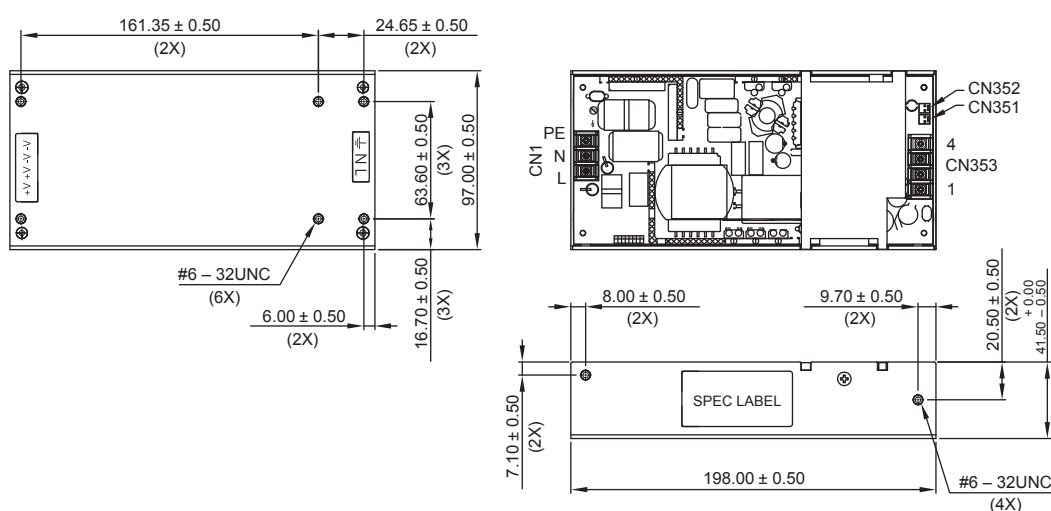
## HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 2 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

## GENERAL SPECIFICATIONS

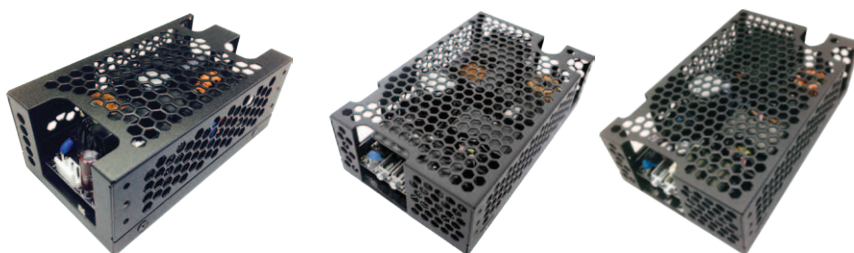
| OUTPUT                | 400AUS19                                             | 400AUS24 |
|-----------------------|------------------------------------------------------|----------|
| Output Voltage        | 19V                                                  | 24V      |
| Output Current (Max)  | 21.10A                                               | 16.67A   |
| Efficiency            | 91%                                                  | 92%      |
| INPUT                 |                                                      |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |
| Load Regulation       | ±2%                                                  |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |
| MECHANICAL            |                                                      |          |
| Dimension (W × L × H) | 97.00 × 198.00 × 41.50 mm (3.8 × 7.8 × 1.6 in)       |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |
| Connector Type        | Input: DECA 3P T33-BM1103A301                        |          |
|                       | Output: DECA 4P T33-BM1104A301                       |          |
|                       | Output: JWT 2P A2508WV0-2P                           |          |

unit: mm



# Standard Products

## Enclosed Power Supply



Most of the MDS series of enclosed power supplies are certified with both medical and ITE safety approvals. Encased in strong metal casing, the series of versatile products can be used in a wide variety of equipment for medical and ITE applications.

### Typical Applications



### Notes:



All Delta Medical Power products conform to the European directive 2011/65/EU. RoHS is the abbreviation for "Restriction of the use of certain hazardous substances".



Delta has been certified for meeting the requirements of ISO 13485: 2003 and EN ISO 13485: 2012 for the design and production of switching power supply and adaptor for medical devices.



In addition to the UL Total Certification Program (TCP) approved client laboratory for IEC60950 and IEC60065, Delta has also participated in the UL Client Test Data Program (CTDP) for IEC 60601.

# MDS 200ADB Enclosed Power Supply

## 12/24V 200 WATTS



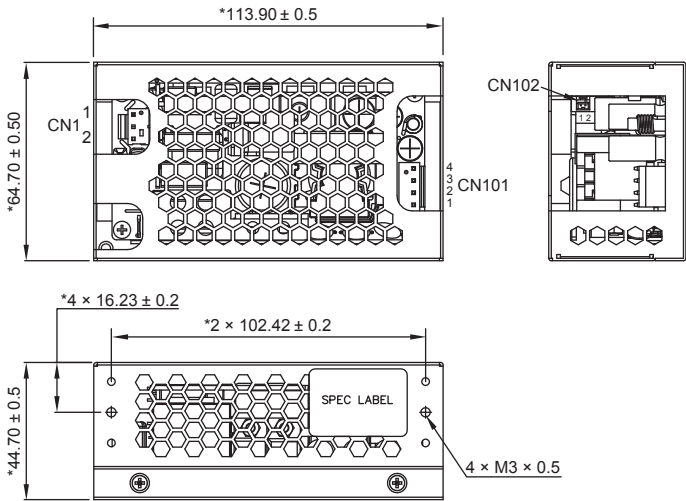
### HIGHLIGHTS & FEATURES

- 2.5" × 4.5" × 1.8" Package with enclosure
- IEC60601-1-2 4<sup>th</sup> edition EMC compliance
- Up to 110W with convection cooling; 200W with forced air cooling
- Suitable for type BF medical product
- IT & Medical Safety Approvals
- Up to 800K Hours MTBF
- Power Good signal

### GENERAL SPECIFICATIONS

| OUTPUT                | 200ADB12                                              | 200ADB24                         |
|-----------------------|-------------------------------------------------------|----------------------------------|
| Output Voltage        | 12V                                                   | 24V                              |
| Output Current (Max)  | 16.67A with 8.5 CFM forced air                        | 8.33A with 5.5 CFM forced air    |
| Efficiency            | 91% @ 115V/60Hz, 93% @ 230V/50Hz                      | 92% @ 115V/60Hz, 93% @ 230V/50Hz |
| INPUT                 |                                                       |                                  |
| Input Voltage Range   | 90-264V                                               |                                  |
| Ripple & Noise        | 1%pk-pkVrated @ Full load                             |                                  |
| Load Regulation       | ±1%                                                   |                                  |
| Leakage Current       | 0.1mA @ NC, 0.3mA @ SFC                               |                                  |
| MECHANICAL            |                                                       |                                  |
| Dimension (W × L × H) | 64.70 × 113.90 × 44.70 mm (2.5 × 4.5 × 1.8 in)        |                                  |
| EMC & Emissions       | Class I model: EN55011/EN55022, FCC Title 47: Class B |                                  |
| Connector Type        | Input: Molex 171813-9998                              |                                  |
|                       | Earth terminal: PINGOOD JP-13T                        |                                  |
|                       | Output: JST B4P-VH(LF)(SN)                            |                                  |
|                       | Signal connector: Molex 87438-0243                    |                                  |

unit: mm



# MDS 250ADB Enclosed Power Supply

## 12/24V 250 WATTS



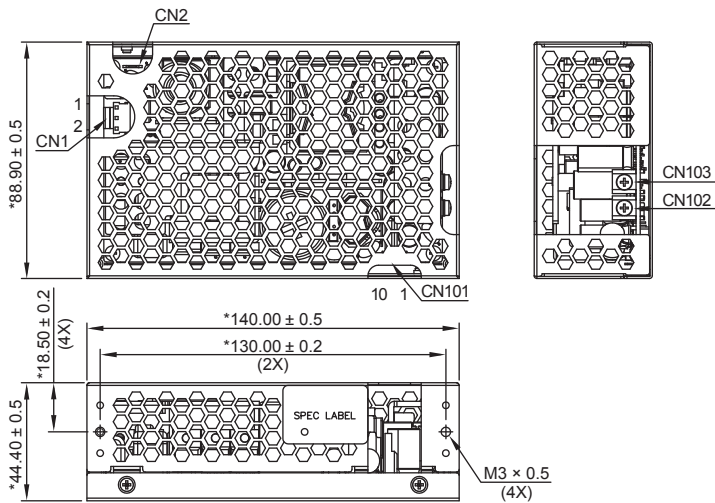
### HIGHLIGHTS & FEATURES

- 3.5" × 5.5" × 1.75" Package with enclosure
- IEC60601-1-2 4<sup>th</sup> edition EMC compliance
- Up to 135W with convection cooling;  
250W with forced air cooling
- Suitable for type BF medical product
- IT & Medical Safety Approvals
- Up to 500K Hours MTBF
- Remote on/off control
- Power Good signal

### GENERAL SPECIFICATIONS

| OUTPUT                | 250ADB12                                         | 250ADB24                      |
|-----------------------|--------------------------------------------------|-------------------------------|
| Output Voltage        | 12V                                              | 24V                           |
| Output Current (Max)  | 20.84A with 10 CFM forced air                    | 10.41A with 10 CFM forced air |
| Efficiency            | 89.45% @ 115V, 90.50% @ 230V                     | 91.85% @ 115V, 92.98% @ 230V  |
| INPUT                 |                                                  |                               |
| Input Voltage Range   | 90-264Vac, 47-63Hz                               |                               |
| Ripple & Noise        | 1% pk-pk Vrated @ 250W load                      |                               |
| Load Regulation       | ±1%                                              |                               |
| Leakage Current       | 0.1mA @ NC, 0.3mA @ SFC, 0.1mA @ NC, 0.5mA @ SFC |                               |
| MECHANICAL            |                                                  |                               |
| Dimension (W × L × H) | 88.90 × 140.00 × 44.40 mm (3.5 × 5.5 × 1.75 in)  |                               |
| EMC & Emissions       | EN55011, EN55022, FCC title 47: class B          |                               |
|                       | Input: Molex: 26-62-4030 or Equivalent           |                               |
| Connector Type        | Earth terminal: PINGOOD JP-13T                   |                               |
|                       | Output: Kang Yang PCB-12                         |                               |
|                       | Signal connector: Molex 104141-1010              |                               |

unit: mm



# MDS 300ADB Enclosed Power Supply

## 12/18/24/48V 300 WATTS



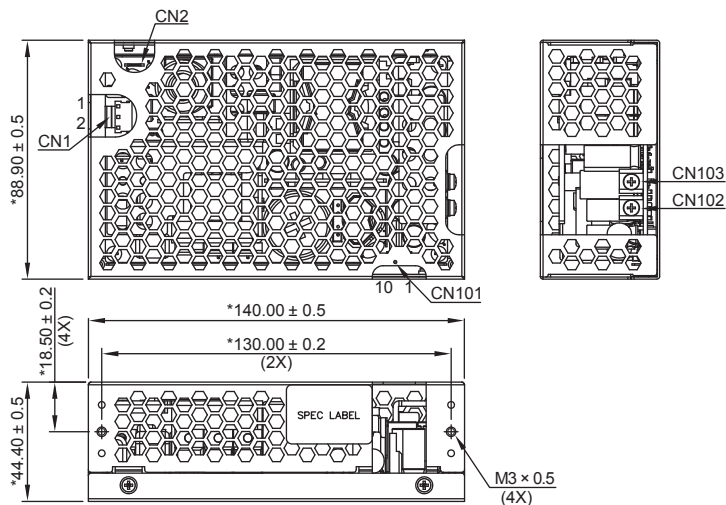
### HIGHLIGHTS & FEATURES

- 3.5" × 5.5" × 1.75" Package with enclosure
- IEC60601-1-2 4<sup>th</sup> edition EMC compliance
- Up to 210W with convection cooling; 300W with forced air cooling
- Suitable for type BF medical product
- IT & Medical Safety Approvals
- Up to 800K Hours MTBF
- Remote on/off control
- Power Good signal

### GENERAL SPECIFICATIONS

| OUTPUT                | 300ADB12                                           | 300ADB18                      | 300ADB24                      | 300ADB48                     |
|-----------------------|----------------------------------------------------|-------------------------------|-------------------------------|------------------------------|
| Output Voltage        | 12V                                                | 18V                           | 24V                           | 48V                          |
| Output Current (Max)  | 25.00A with 10 CFM forced air                      | 16.66A with 10 CFM forced air | 12.50A with 10 CFM forced air | 6.25A with 10 CFM forced air |
| Efficiency            | 91.3% @ 115V, 92.6% @230V                          | 92.5% @ 115V, 93.5% @230V     | 93% @ 115V, 94% @230V         | 92.5% @ 115V, 93.5% @230V    |
| INPUT                 |                                                    |                               |                               |                              |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                 |                               |                               |                              |
| Ripple & Noise        | 1% pk-pk Vrated @ 300W load                        |                               |                               |                              |
| Load Regulation       | ±1%                                                |                               |                               |                              |
| Leakage Current       | <0.1mA @ NC, 0.3mA @ SFC, <0.1mA @ NC, 0.5mA @ SFC |                               |                               |                              |
| MECHANICAL            |                                                    |                               |                               |                              |
| Dimension (W x L x H) | 88.90 x 140.00 x 45.00 mm (3.5 x 5.5 x 1.75 in)    |                               |                               |                              |
| EMC & Emissions       | EN55011, EN55022, FCC Title 47: class B            |                               |                               |                              |
|                       | Input: Molex: 26-62-4030 or Equivalent             |                               |                               |                              |
| Connector Type        | Earth terminal: PINGOOD JP-13T                     |                               |                               |                              |
|                       | Output: Kang Yang PCB-12                           |                               |                               |                              |
|                       | Signal connector: Molex 104141-1010                |                               |                               |                              |

unit: mm



# MDS 400ADB Enclosed Power Supply

## 12/24V 400 WATTS



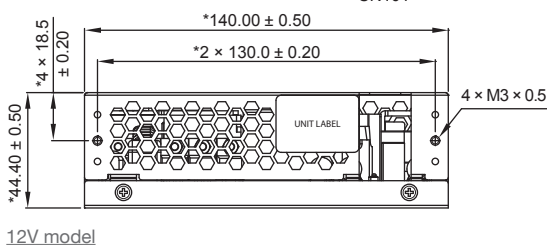
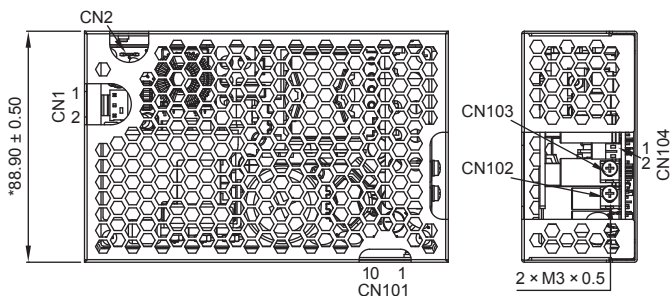
### HIGHLIGHTS & FEATURES

- 3.5" × 5.5" × 1.75" Package with enclosure
- IEC60601-1-2 4<sup>th</sup> edition EMC compliance
- Suitable for type BF medical product
- IT & Medical Safety Approvals
- Up to 500K Hours MTBF
- Remote on/off control
- Up to 400W with forced air cooling
- Power Good signal
- 12V Fan output

### GENERAL SPECIFICATIONS

| OUTPUT                | 400ADB12                                        | 400ADB24                                 |
|-----------------------|-------------------------------------------------|------------------------------------------|
| Output Voltage        | 12V                                             | 24V                                      |
| Output Current (Max)  | 33.33A with 16 CFM forced air                   | 16.67A with 12 CFM forced air            |
| Efficiency            | 89.5% @ 115V/60Hz, 91.5% @ 230V/50Hz            | 92% @ 115V/60Hz, 93% @ 230V/50Hz         |
| INPUT                 |                                                 |                                          |
| Input Voltage Range   | 90-264V                                         |                                          |
| Ripple & Noise        | 150mVpk-pkVrated @ Full load                    | 1%pk-pkVrated @ Full load                |
| Load Regulation       | ±1%                                             |                                          |
| Leakage Current       | 0.1mA @ NC, 0.3mA @ SFC                         |                                          |
| MECHANICAL            |                                                 |                                          |
| Dimension (W × L × H) | 88.90 × 140.00 × 44.40 mm (3.5 × 5.5 × 1.75 in) |                                          |
| EMC & Emissions       | EN55011/EN55022, FCC Title 47: Class B          |                                          |
| Connector Type        | Input: Molex 171813-9998                        |                                          |
|                       | Earth terminal: PINGOOD JP-13T                  |                                          |
|                       | Output: Kang Yang PCB-12                        |                                          |
|                       | Signal connector: Molex 104141-1010             |                                          |
|                       | Fan connector: JST B2B-PH-K-S(LF)(SN)           | Fan connector: JST S2B-PH-SM4-TB(LF)(SN) |

unit: mm



# Standard Products

## ATX Power Supply



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.

### Typical Applications



### Notes:



All Delta Medical Power products conform to the European directive 2011/65/EU. RoHS is the abbreviation for "Restriction of the use of certain hazardous substances".



Delta has been certified for meeting the requirements of ISO 13485: 2003 and EN ISO 13485: 2012 for the design and production of switching power supply and adaptor for medical devices.



In addition to the UL Total Certification Program (TCP) approved client laboratory for IEC60950 and IEC60065, Delta has also participated in the UL Client Test Data Program (CTDP) for IEC 60601.

# MDS 350AD701 ATX Power Supply

## ATX 12V 1U



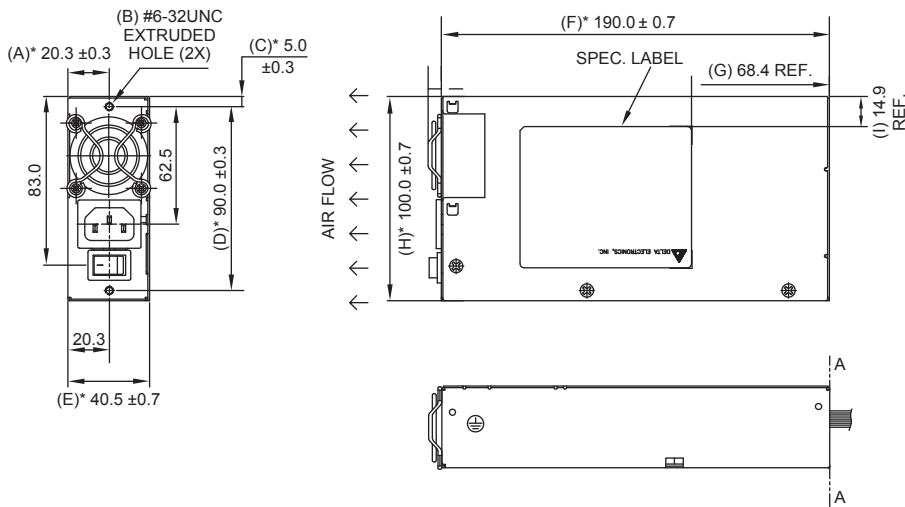
### HIGHLIGHTS & FEATURES

- ATX 12V standard function & form factor
- IEC60601-1 3.1 ed.(Medical) & IEC 60950-1(ITE) approvals
- Compliant with IEC 60601-1-2 4<sup>th</sup> Ed. requirements
- Suitable for type BF patient access applications
- Maximum output power of 350 watts
- Built-in active PFC

### GENERAL SPECIFICATIONS

| OUTPUT                | 350AD701                                        |       |         |         |       |        |        |
|-----------------------|-------------------------------------------------|-------|---------|---------|-------|--------|--------|
| Output Voltage        | +3.3V                                           | +5V   | +5Vsb   | +12V1   | +12V2 | -12V   | -5V    |
| Output Current        | 8.00A                                           | 9.00A | 1.25A   | 8.00A   | 8.00A | 0.25A  | 0.10A  |
| Efficiency            | 82% @ 115Vac/60Hz, 85% @ 230Vac/50Hz            |       |         |         |       |        |        |
| INPUT                 |                                                 |       |         |         |       |        |        |
| Input Voltage Range   | 90-264Vac                                       |       |         |         |       |        |        |
| Ripple & Noise        | 50mVpp                                          |       | 150mVpp | 120mVpp |       |        | 50mVpp |
| Load Regulation       | +/-5%                                           |       |         |         |       | +/-10% |        |
| Leakage Current       | 0.1mA @ NC, 0.3mA @ SFC <sup>1)</sup>           |       |         |         |       |        |        |
| MECHANICAL            |                                                 |       |         |         |       |        |        |
| Dimension (W × L × H) | 100.00 × 194.00 × 40.50 mm (3.9 × 7.6 × 1.6 in) |       |         |         |       |        |        |
| EMC & Emissions       | EN55011/EN55022, FCC Title 47: Class B          |       |         |         |       |        |        |
| Connector Type        | P1: Molex 39-01-2240 or EQUIV.                  |       |         |         |       |        |        |
|                       | P2: Molex 39-01-2080 or EQUIV.                  |       |         |         |       |        |        |
|                       | P3: Molex 39-01-2040 or EQUIV.                  |       |         |         |       |        |        |

unit: mm



Open Frame Power Supply

Enclosed Power Supply

ATX Power Supply

Adapter Power Supply

# Standard Products

## Adapter Power Supply



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

### Typical Applications



### Notes:



All Delta Medical Power products conform to the European directive 2011/65/EU. RoHS is the abbreviation for "Restriction of the use of certain hazardous substances".



Delta has been certified for meeting the requirements of ISO 13485: 2003 and EN ISO 13485: 2012 for the design and production of switching power supply and adaptor for medical devices.



In addition to the UL Total Certification Program (TCP) approved client laboratory for IEC60950 and IEC60065, Delta has also participated in the UL Client Test Data Program (CTDP) for IEC 60601.

# MDS 005AAS Adapter Power Supply

## 5/6V 5 WATTS



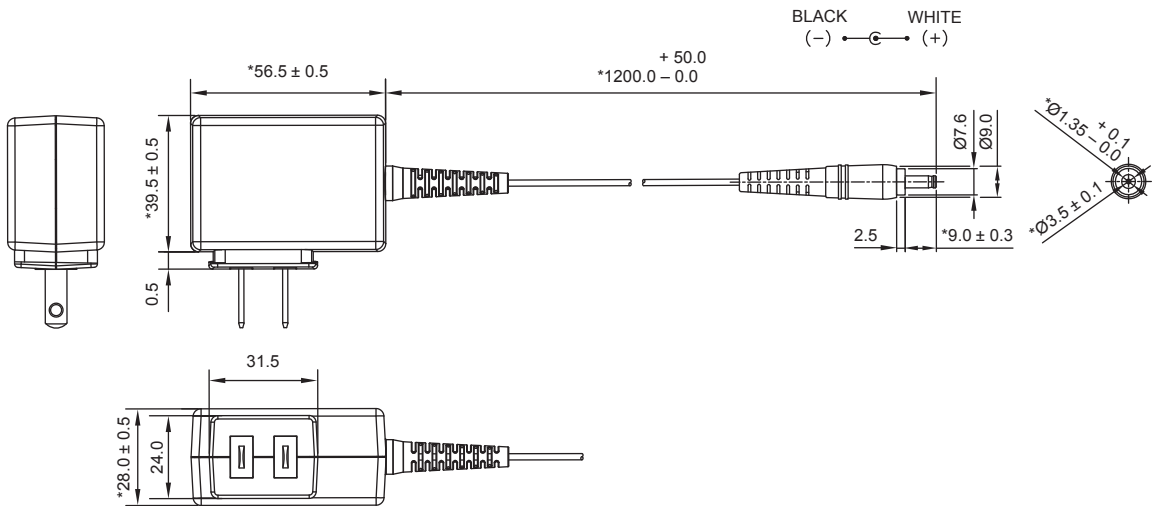
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Up to energy star level VI requirement
- Risk management report available
- Small size and low weight
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 005AAS05                                             | 005AAS06 |
|-----------------------|------------------------------------------------------|----------|
| Output Voltage        | 5V                                                   | 6V       |
| Output Current (Max)  | 1.00A                                                | 0.83A    |
| Efficiency            | 71%                                                  | 73%      |
| INPUT                 |                                                      |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |
| Ripple & Noise        | <200mV (25°C at 10uF/0.47uF with 20MHz bandwidth)    |          |
| Load Regulation       | ±10%                                                 |          |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |
| MECHANICAL            |                                                      |          |
| Dimension (W × L × H) | 39.50 × 56.50 × 28.00 mm (1.6 × 2.2 × 1.1 in)        |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |
| Connector Type        | Input: Wall mount – US & EU & CN type                |          |
|                       | Output: Barrel & Micro USB-B type                    |          |

unit: mm



# MDS 030AAC Adapter Power Supply

## 5/7/12/15/24V 30 WATTS



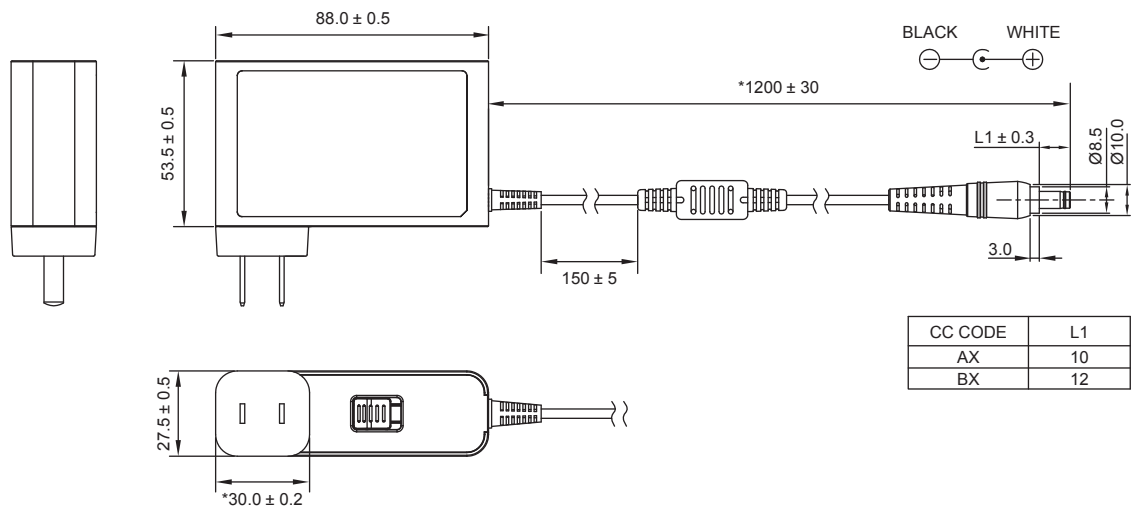
### HIGHLIGHTS & FEATURES

- MDS-030AAC05, 12, 15, 24 Meet DOE Level VI & ErP 2017
- Low touch current. Suitable for type BF applications
- Detachable AC plug with multiple country options
- Class B EMI; 4<sup>th</sup> Edition Immunity Compliance
- Safety rated for medical and IT applications
- IP22 ingress protection rating
- 2 × MOPP isolation
- 500K hours MTBF
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 030AAC05                                                           | 030AAC07 | 030AAC12   | 030AAC15   | 030AAC24 |
|-----------------------|--------------------------------------------------------------------|----------|------------|------------|----------|
| Output Voltage        | 5V                                                                 | 7V       | 12V        | 15V        | 24V      |
| Output Current (Max)  | 3.00A                                                              | 3.00A    | 2.00A      | 2.00A      | 1.25A    |
| Efficiency            | 81.4%                                                              | 81.4%    | 86.21%     | 87.0%      | 87.0%    |
| INPUT                 |                                                                    |          |            |            |          |
| Input Voltage Range   | 85-264Vac, 47-63Hz                                                 |          |            |            |          |
| Ripple & Noise        | 100mVpk-pk                                                         |          | 150mVpk-pk | 200mVpk-pk |          |
| Load Regulation       | ±5%                                                                |          |            |            |          |
| Touch Current         | 0.1mA @ 264Vac NC <sup>1)</sup> , 0.3mA @ 264Vac SFC <sup>2)</sup> |          |            |            |          |
| MECHANICAL            |                                                                    |          |            |            |          |
| Dimension (W × L × H) | 53.50 × 88.0 × 27.50 mm (2.1 × 3.5 × 1.1 in)                       |          |            |            |          |
| EMC & Emissions       | EN55011/EN55022, FCC Title 47: Class B                             |          |            |            |          |
| Connector Type        | Input: Wall mount-CN/US/EU/UK/AU/KR/IN/AR/BZ/SA                    |          |            |            |          |
|                       | Output: Barrel                                                     |          |            |            |          |

unit: mm



# MDS 060AAS Adapter Power Supply

## 12/15/19/24V 60 WATTS



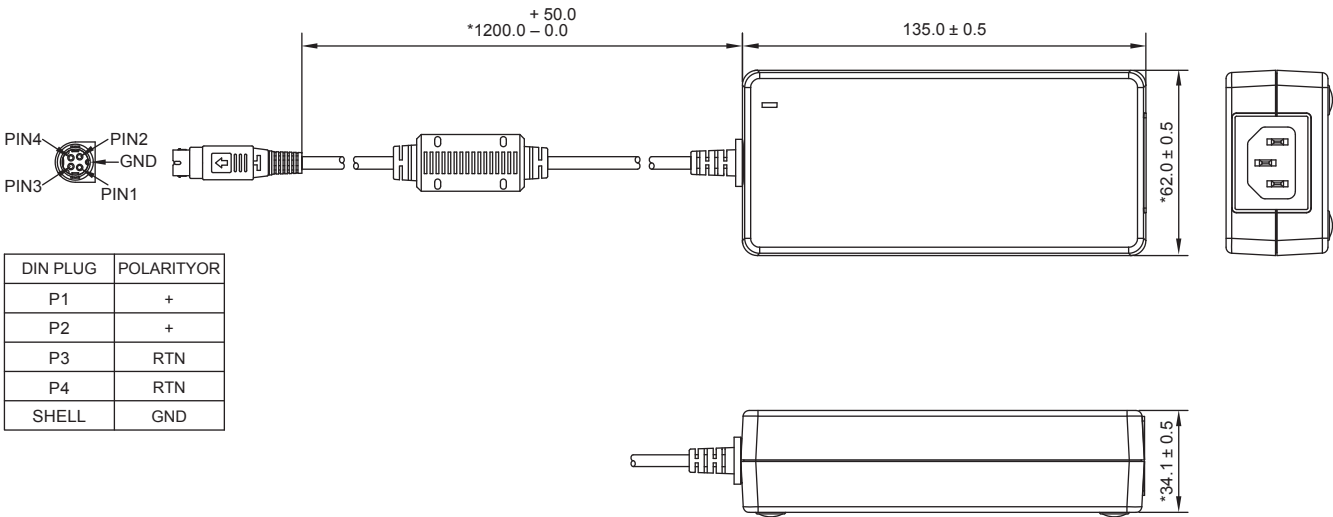
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 060AAS12                                             | 060AAS15 | 060AAS19 | 060AAS24 |
|-----------------------|------------------------------------------------------|----------|----------|----------|
| Output Voltage        | 12V                                                  | 15V      | 19V      | 24V      |
| Output Current (Max)  | 5.00A                                                | 4.00A    | 3.20A    | 2.50A    |
| Efficiency            | 88%                                                  | 88%      | 88%      | 88%      |
| INPUT                 |                                                      |          |          |          |
| Input Voltage Range   | 90-275Vac, 47-63Hz                                   |          |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |          |
| Load Regulation       | ±5%                                                  |          |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |          |
| MECHANICAL            |                                                      |          |          |          |
| Dimension (W × L × H) | 62.00 × 135.00 × 34.10 mm (2.4 × 5.3 × 1.3 in)       |          |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |          |
| Connector Type        | Input: C14 socket                                    |          |          |          |
|                       | Output: 4-pin DIN/Barrel type/Tuning fork type       |          |          |          |

unit: mm



Open Frame Power Supply

Enclosed Power Supply

ATX Power Supply

Adapter Power Supply

# MDS 060BAS Adapter Power Supply

## 12/19/24V 60 WATTS



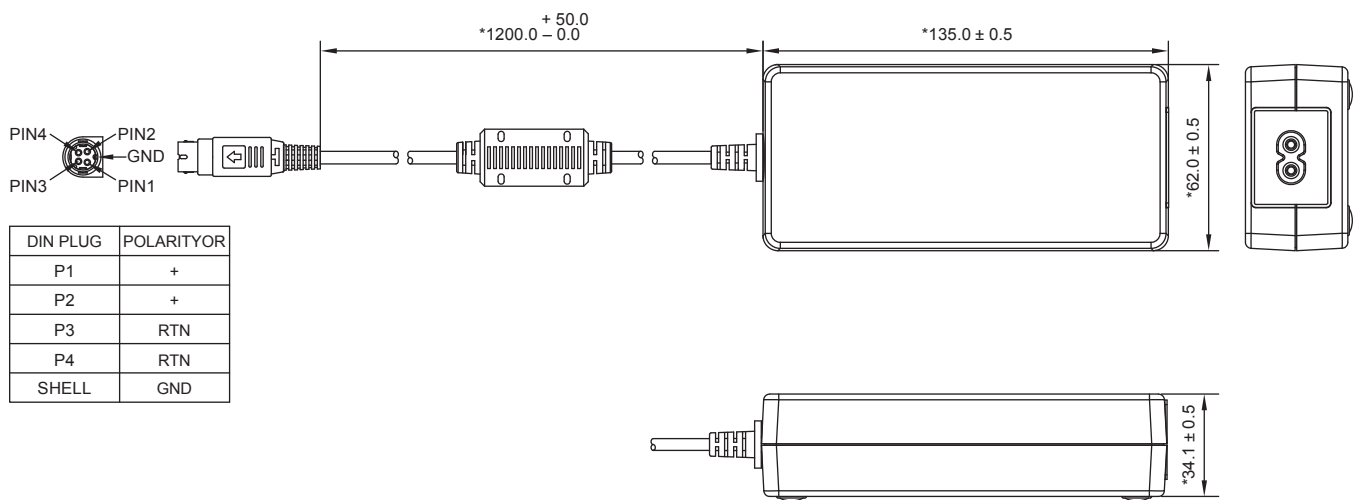
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Risk management report available
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 060BAS12                                             | 060BAS19 | 060BAS24 |
|-----------------------|------------------------------------------------------|----------|----------|
| Output Voltage        | 12V                                                  | 19V      | 24V      |
| Output Current (Max)  | 5.00A                                                | 3.15A    | 2.50A    |
| Efficiency            | 87%                                                  | 88%      | 88%      |
| INPUT                 |                                                      |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |
| Load Regulation       | ±5%                                                  |          |          |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |
| MECHANICAL            |                                                      |          |          |
| Dimension (W × L × H) | 62.00 × 135.00 × 34.10 mm (2.4 × 5.3 × 1.3 in)       |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |
| Connector Type        | Input: C8 socket                                     |          |          |
|                       | Output: 4-pin DIN/Barrel type/Tuning fork type       |          |          |

unit: mm



# MDS 080AAS Adapter Power Supply

## 12V 80 WATTS



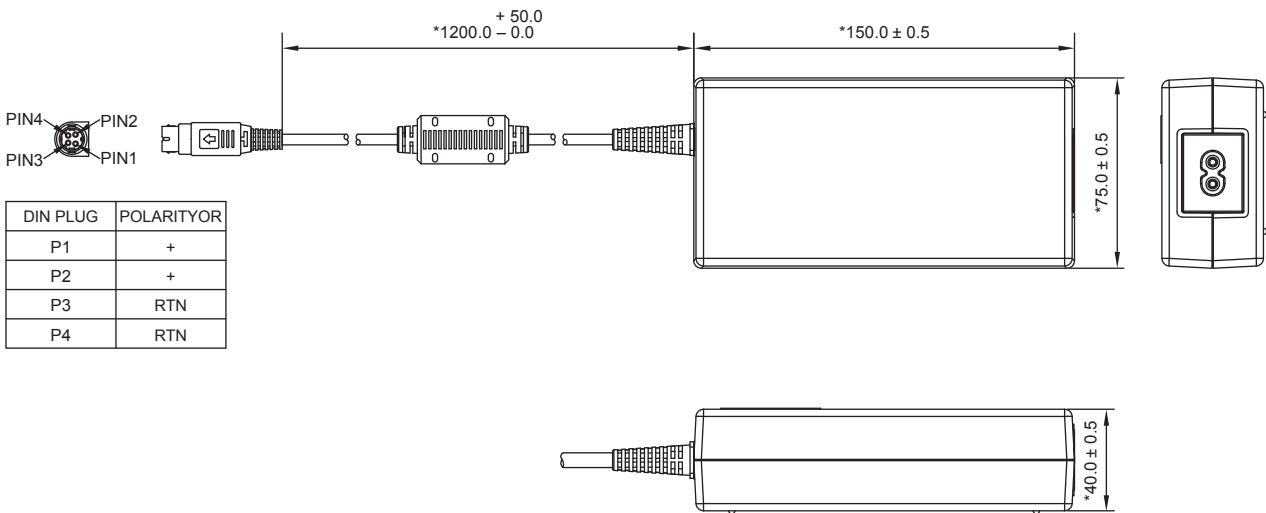
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Class II input with C8 AC inlet
- IP22 ingress protection rating
- Universal input 90-264Vac
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 080AAS12                                               |
|-----------------------|--------------------------------------------------------|
| Output Voltage        | 12V                                                    |
| Output Current (Max)  | 6.66A                                                  |
| Efficiency            | 83%                                                    |
| INPUT                 |                                                        |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                     |
| Ripple & Noise        | 118.4 mVpk-pk @ Rated Load                             |
| Load Regulation       | ±5%                                                    |
| Touch Current         | 81.6uA normal condition, 87.4uA single fault condition |
| MECHANICAL            |                                                        |
| Dimension (W × L × H) | 75.00 × 150.00 × 40.00 mm (3.0 × 5.9 × 1.6 in)         |
| EMC & Emissions       | EN55011/EN55022, FCC Title 47: Class B                 |
| Connector Type        | Output: 4-pin DIN/Barrel type/Tuning fork type         |

unit: mm



Open Frame Power Supply

Enclosed Power Supply

ATX Power Supply

Adapter Power Supply

# MDS 090AAS Adapter Power Supply

## 15/19/24V 90 WATTS



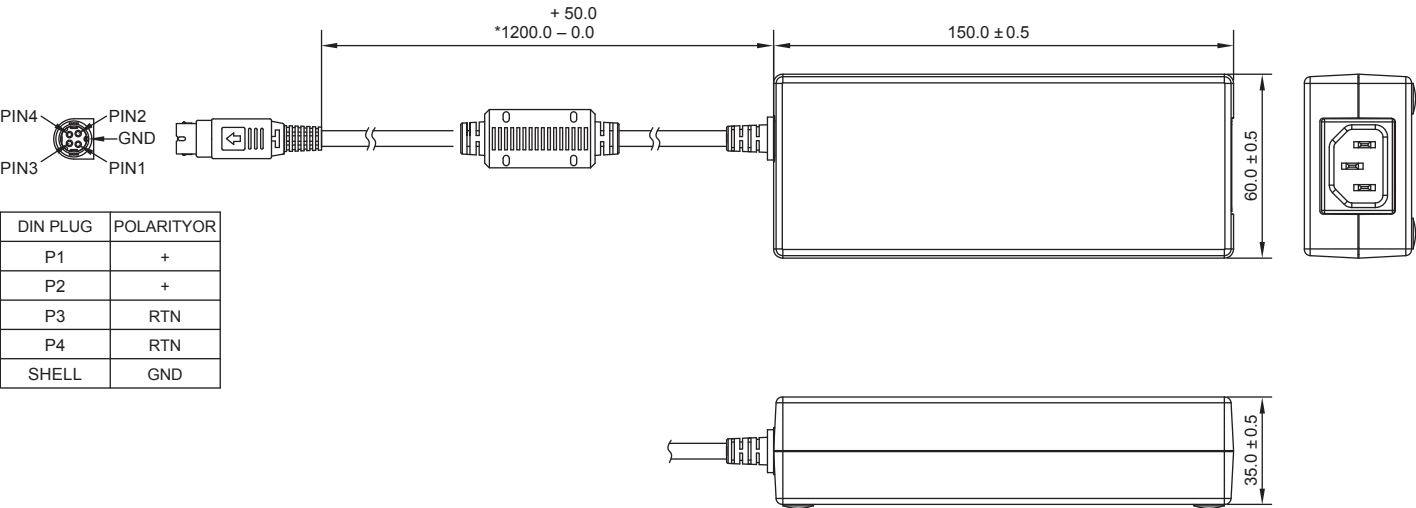
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 090AAS15                                             | 090AAS19 | 090AAS24 |
|-----------------------|------------------------------------------------------|----------|----------|
| Output Voltage        | 15V                                                  | 19V      | 24V      |
| Output Current (Max)  | 6.00A                                                | 4.74A    | 3.75A    |
| Efficiency            | 89%                                                  | 91%      | 91%      |
| INPUT                 |                                                      |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |
| Load Regulation       | ±5%                                                  |          |          |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |
| MECHANICAL            |                                                      |          |          |
| Dimension (W × L × H) | 65.00 × 150.00 × 35.00 mm (2.6 × 5.9 × 1.4 in)       |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |
| Connector Type        | Input: C14 socket                                    |          |          |
|                       | Output: 4-pin DIN/Barrel type/Tuning fork type       |          |          |

unit: mm



# MDS 090BAS24 Adapter Power Supply

## 24V 90 WATTS



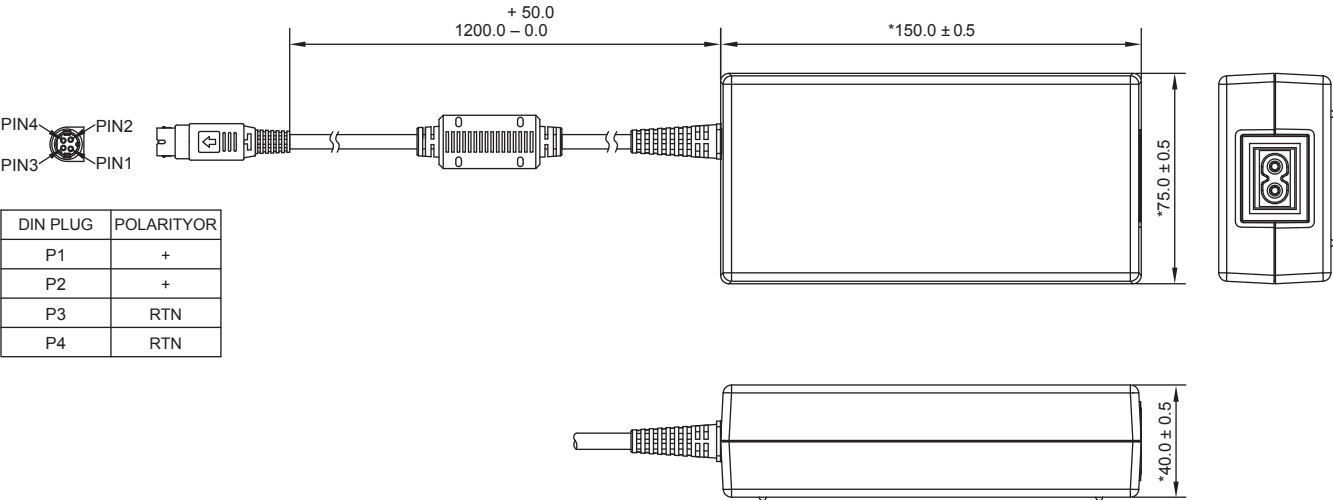
### HIGHLIGHTS & FEATURES

- Over-Voltage/Load/Temperature & Short Circuit Protections
- Low touch current (<0.1mA Normal & ,0.3mA single fault)
- Safety rated for medical and IT applications
- Risk management report available
- High isolation: 2 × MOPP
- 1 million hours MTBF
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 090BAS24                                                           |
|-----------------------|--------------------------------------------------------------------|
| Output Voltage        | 24V                                                                |
| Output Current (Max)  | 3.75A                                                              |
| Efficiency            | 88%                                                                |
| INPUT                 |                                                                    |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                                 |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)                     |
| Load Regulation       | ±5%                                                                |
| Touch Current         | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz                 |
| MECHANICAL            |                                                                    |
| Dimension (W × L × H) | 75.00 × 150.00 × 40.00 mm (3.0 × 5.9 × 1.6 in)                     |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B               |
| Connector Type        | Input: C8 socket<br>Output: 4-pin DIN/Barrel type/Tuning fork type |

unit: mm



# MDS 150AAS Adapter Power Supply

## 12/19/24V 150 WATTS



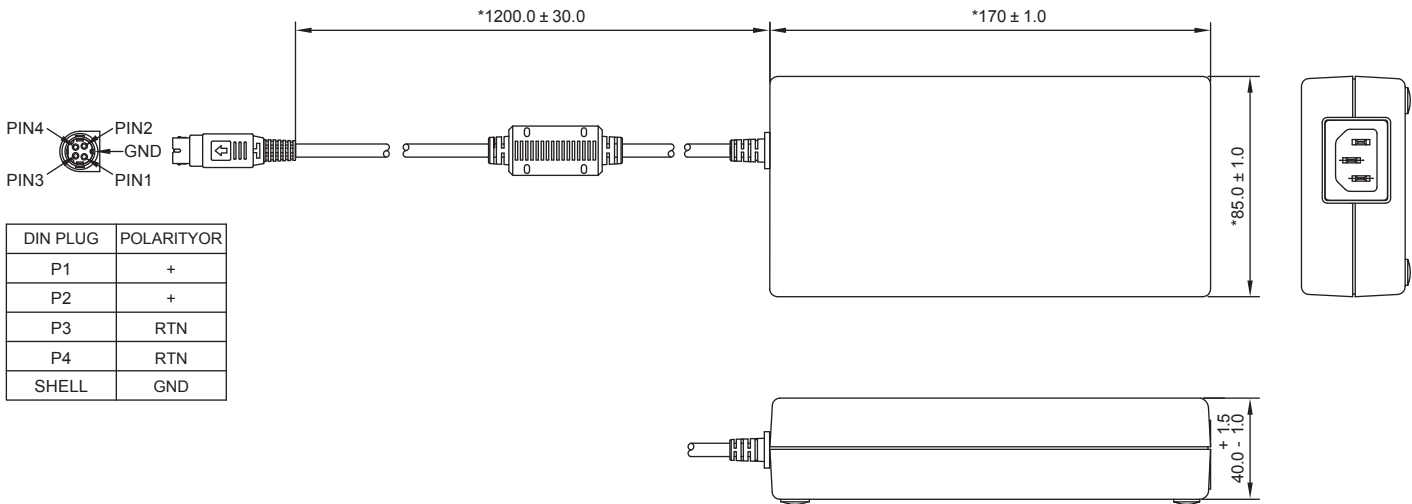
### HIGHLIGHTS & FEATURES

- Safety approvals for medical and IT applications
- Low leakage current (<0.1mA Normal & ,0.3mA single fault)
- Over-Voltage/Load/Temperature & Short Circuit Protections
- 90-264 Vac universal input
- 1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 150AAS12                                             | 150AAS19 | 150AAS24 |
|-----------------------|------------------------------------------------------|----------|----------|
| Output Voltage        | 12V                                                  | 19V      | 24V      |
| Output Current (Max)  | 10.00A                                               | 7.89A    | 6.25A    |
| Efficiency            | 88%                                                  | 91%      | 91%      |
| INPUT                 |                                                      |          |          |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                   |          |          |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)       |          |          |
| Load Regulation       | ±5%                                                  |          |          |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz   |          |          |
| MECHANICAL            |                                                      |          |          |
| Dimension (W × L × H) | 85.00 × 170.00 × 40.00 mm (3.4 × 6.7 × 1.6 in)       |          |          |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B |          |          |
| Connector Type        | Input: C14 socket                                    |          |          |
|                       | Output: 4-pin DIN/Barrel type/Tuning fork type       |          |          |

unit: mm



# MDS 150CAB19 Adapter Power Supply

## 19V 150 WATTS



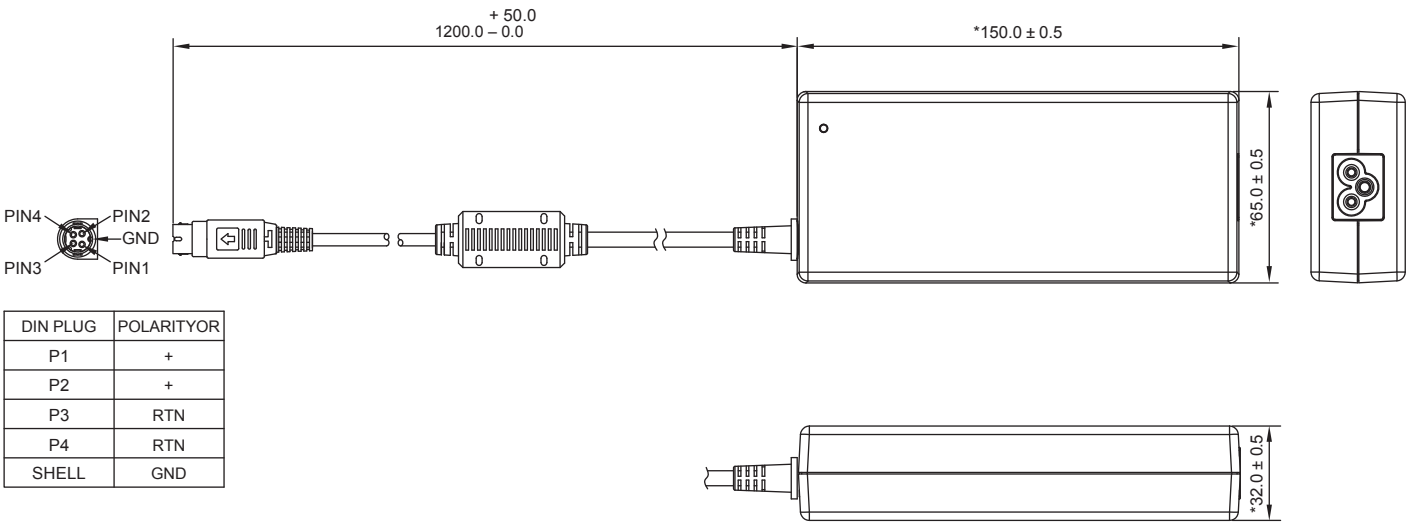
### HIGHLIGHTS & FEATURES

- Over-Voltage/Load/Temperature & Short Circuit Protections
- Safety rated for medical and IT applications
- 90-264 Vac universal input
- 2.1 million hours MTBF
- 2 × MOPP isolation
- 3 years warranty

### GENERAL SPECIFICATIONS

| OUTPUT                | 150CAB19                                                           |
|-----------------------|--------------------------------------------------------------------|
| Output Voltage        | 19V                                                                |
| Output Current (Max)  | 7.90A                                                              |
| Efficiency            | 92%                                                                |
| INPUT                 |                                                                    |
| Input Voltage Range   | 90-264Vac, 47-63Hz                                                 |
| Ripple & Noise        | <1% (25°C at 10uF/0.47uF with 20MHz bandwidth)                     |
| Load Regulation       | ±5%                                                                |
| Leakage Current       | <0.1mA normal condition, <0.3mA SFC at 264Vac/63Hz                 |
| MECHANICAL            |                                                                    |
| Dimension (W × L × H) | 65.00 × 150.00 × 32.00 mm (2.6 × 5.9 × 1.3 in)                     |
| EMC & Emissions       | EN55011 & EN55022 & FCC conducted & radiated class B               |
| Connector Type        | Input: C6 socket<br>Output: 4-pin DIN/Barrel type/Tuning fork type |

unit: mm



# Standards & Approvals

## Delta Standard Medical Power Supplies

|                         | CE | CB Scheme to IEC 60601-1 | CB Scheme to IEC 60950-1 | UL 60601-1 | UL 60950-1 | CQC (China) | CCC (China) | TUV to EN 60601-1 | TUV to EN 60950-1 | EN 55011 Class B (Emissions) | EN 55022 Class B (Emissions) |
|-------------------------|----|--------------------------|--------------------------|------------|------------|-------------|-------------|-------------------|-------------------|------------------------------|------------------------------|
| Open Frame Power Supply |    |                          |                          |            |            |             |             |                   |                   |                              |                              |
| MDS-040APS12 B          | •  | •                        | •                        | •          | •          | •           | •           |                   |                   | •                            | •                            |
| MDS-040APS15 B          | •  | •                        | •                        | •          | •          | •           | •           |                   |                   | •                            | •                            |
| MDS-040APS18 B          | •  | •                        | •                        | •          | •          | •           | •           |                   |                   | •                            | •                            |
| MDS-040APS24 B          | •  | •                        | •                        | •          | •          | •           | •           |                   |                   | •                            | •                            |
| MDS-065APS12 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-065APS15 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-065APS18 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-065APS24 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100AP401 B          | •  | •                        | •                        | •          |            | •           |             |                   |                   | •                            | •                            |
| MDS-100APS12 B          | •  | •                        | •                        | •          | •          | •           |             |                   | •                 | •                            | •                            |
| MDS-100APS15 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100APS18 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100APS24 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100BPS12 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100BPS15 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100BPS18 B          | •  | •                        | •                        | •          | •          | •           |             |                   |                   | •                            | •                            |
| MDS-100BPS24 B          | •  | •                        | •                        | •          |            | •           |             |                   |                   | •                            | •                            |
| MDS-200APB12*           | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-200APB24*           | •  | •                        | •                        | •          |            |             | •           | •                 | •                 | •                            | •                            |
| MDS-250APB12*           | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-250APB24*           | •  | •                        | •                        | •          |            |             | •           | •                 | •                 | •                            | •                            |
| MDS-300APB12*           | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300APB18*           | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300APB24*           | •  | •                        | •                        | •          |            |             | •           | •                 | •                 | •                            | •                            |
| MDS-300APB48*           | •  | •                        | •                        | •          |            |             | •           | •                 | •                 | •                            | •                            |
| MDS-400APB12*           | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-400APB24*           | •  | •                        | •                        | •          |            |             | •           | •                 | •                 | •                            | •                            |
| MDS-400AUS19 B          | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-400AUS24 B          | •  | •                        | •                        | •          |            |             | •           | •                 |                   | •                            | •                            |
| Enclosed Power Supply   |    |                          |                          |            |            |             |             |                   |                   |                              |                              |
| MDS-200ADB12            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-200ADB24            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-250ADB12            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-250ADB24            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300ADB12            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300ADB18            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300ADB24            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-400ADB12            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-400ADB24            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |
| MDS-300ADB48            | •  | •                        | •                        | •          | •          |             | •           | •                 | •                 | •                            | •                            |

|                      | CE | CB Scheme to IEC 60601-1 | CB Scheme to IEC 60950-1 | UL 60601-1 | UL 60950-1 | CQC (China) | CCC (China) | TUV to EN 60601-1 | TUV to EN 60950-1 | EN 55011 Class B (Emissions) | EN 55022 Class B (Emissions) |
|----------------------|----|--------------------------|--------------------------|------------|------------|-------------|-------------|-------------------|-------------------|------------------------------|------------------------------|
| ATX Power Supply     |    |                          |                          |            |            |             |             |                   |                   |                              |                              |
| MDS-350AD701         | ●  | ●                        | ●                        | ●          | ●          |             | ●           |                   |                   |                              |                              |
| Adapter Power Supply |    |                          |                          |            |            |             |             |                   |                   |                              |                              |
| MDS-005AAS05 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-005AAS05 B       | ●  | ●                        |                          | ●          |            |             |             |                   |                   | ●                            | ●                            |
| MDS-005AAS05 C       | ●  | ●                        |                          |            |            |             |             |                   |                   | ●                            | ●                            |
| MDS-005AAS06 A       | ●  | ●                        |                          |            |            |             | ●           |                   |                   |                              |                              |
| MDS-005AAS06 B       | ●  | ●                        |                          | ●          |            |             |             |                   |                   | ●                            | ●                            |
| MDS-005AAS06 C       | ●  | ●                        |                          |            |            |             |             |                   |                   | ●                            | ●                            |
| MDS-030AAC05*        | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-030AAC07*        | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-030AAC12*        | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-030AAC15*        | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-030AAC24*        | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060AAS12 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060AAS15 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060AAS19 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060AAS24 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060BAS12 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060BAS19 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-060BAS24 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-080AAS12 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-090AAS15 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-090AAS19 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-090AAS24 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-090BAS24 A       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-150AAS12 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-150AAS19 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-150AAS24 B       | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |
| MDS-150CAB19         | ●  | ●                        |                          | ●          |            |             | ●           |                   |                   | ●                            | ●                            |

## Warranty

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.

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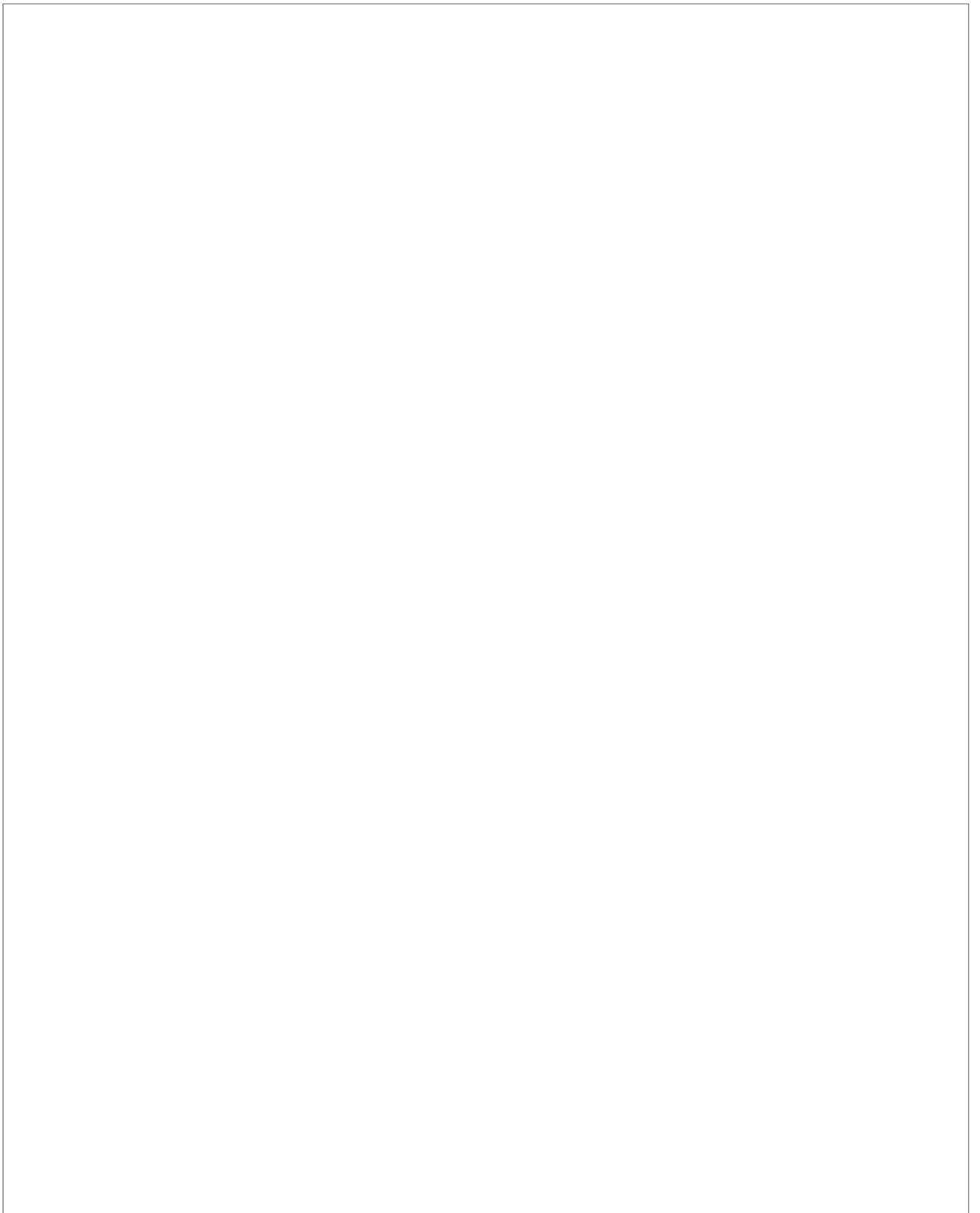
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## EMC Directives

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 open frame and adapter 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 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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