



# Cabinet Thermal Solutions

With industry leading DC brushless fan technology, Delta provides high quality, reliable and energy-efficient cabinet thermal management solutions for a range of industries and applications. With 38 manufacturing facilities, 60 R&D labs and 7,000 R&D engineers worldwide, Delta offers products that maximize operating performance while reducing downtime and assuring the best thermal protection for enclosed electronics and equipment. Delta's operations are ISO-9001, ISO-14001, ISO-14064, OHSAS-18001 and TS-16949 certified.

- Heat Exchangers
- Air Conditioners
- Thermoelectric Coolers
- Heaters

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# Why Delta?

Fan technology is pivotal to the performance of any cabinet thermal management solution. As the world's number one provider of DC brushless fans and blowers, Delta engineers products for increased reliability, efficiency and low noise.

Delta fans and thermal management products are used in applications where precision is paramount – from sensitive electronics and computing devices to outdoor enclosures and equipment that support our developing infrastructure.

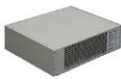
A frequent recipient of international awards and recognition for innovation, design and corporate social responsibility, Delta is committed to its mission of “providing innovative, clean, and energy-efficient solutions for a better tomorrow.”

## Heat Exchangers



Delta air-to-air heat exchangers are a closed-loop system with advanced fan and core technology to bring internal enclosure temperatures to ambient. Delta heat exchangers feature Delta DC brushless fans engineered to run continuously for 80,000 hours, or nine years. Standard and custom designs are available.

- High quality Delta DC brushless fan component for reduced energy consumption and low noise
- Intelligent core design for effective thermal transfer
- Easy installation and maintenance access

|                       | 48VDC External Mount                                                              |                                                                                   |                                                                                   | 48VDC Roof Mount                                                                  |                                                                                     | 24VDC Internal Mount                                                                |                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |  |
| Model                 | HEX100PC                                                                          | HEX150PC                                                                          | HEX200PC                                                                          | HEX050QA                                                                          | HEX080QA                                                                            | HEX010VA                                                                            | HEX020VA                                                                            |
| Cooling Capacity      | 90 W/K                                                                            | 135 W/K                                                                           | 185 W/K                                                                           | 50 W/K                                                                            | 80 W/K                                                                              | 10 W/°C                                                                             | 20 W/°C                                                                             |
| Dimensions (inch)     | 27.2H x 14.2W x 9.5D                                                              | 27.2H x 21.7W x 9.5D                                                              | 27.2H x 27.6W x 9.5D                                                              | 6.1H x 21.7W x 17.0D                                                              | 10.4H x 21.9W x 19.7D                                                               | 16.3H x 10.8W x 2.6D                                                                | 23.2H x 11.1W x 3.9D                                                                |
| Dimensions (mm)       | 690H x 360W x 242D                                                                | 690H x 550W x 242D                                                                | 690H x 700W x 242D                                                                | 155H x 550W x 434D                                                                | 265H x 555W x 500D                                                                  | 415H x 275W x 65D                                                                   | 590H x 283W x 99D                                                                   |
| Rated Voltage         | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                               | 24VDC                                                                               | 24VDC                                                                               |
| Operating Current (A) | 3.6                                                                               | 5.8                                                                               | 6.6                                                                               | 1.4                                                                               | 1.5                                                                                 | 1.2                                                                                 | 0.9                                                                                 |
| Noise (dB-A) @1.5M    | 70                                                                                | 73                                                                                | 74                                                                                | 64                                                                                | 64                                                                                  | 61                                                                                  | 54                                                                                  |
| Weight (lbs / Kg)     | 28.7 / 13.0                                                                       | 44.1 / 20.0                                                                       | 52.9 / 24.0                                                                       | 19.8 / 9.0                                                                        | 33.1 / 15.0                                                                         | 8.8 / 4.0                                                                           | 15.4 / 7.0                                                                          |

|                       | 48VDC Internal Mount                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |  |  |  |  |
| Model                 | HEX050PA                                                                            | HEX100PB                                                                            | HEX150PB                                                                            | HEX200PB                                                                            | HEX060PA                                                                            | HEX080PD                                                                             | HEX120PA                                                                              | HEX160PA                                                                              | HEX200PA                                                                              | HEX260PA-A                                                                            |
| Cooling Capacity      | 45 W/°C                                                                             | 100 W/°C                                                                            | 150 W/°C                                                                            | 200 W/°C                                                                            | 60 W/°C                                                                             | 80 W/°C                                                                              | 120 W/°C                                                                              | 160 W/°C                                                                              | 200 W/K                                                                               | 230 W/K                                                                               |
| Dimension (inch)      | 19.7H x 17.5W x 6.0D                                                                | 25H x 14W x 11D                                                                     | 25.2H x 21.7W x 10.9D                                                               | 25.2H x 27.6W x 10.9D                                                               | 33.5H x 19.7W x 5.8D                                                                | 37.4H x 17.7W x 5.9D                                                                 | 45.3H x 18.5W x 7.6D                                                                  | 50.9H x 22.3W x 9.6D                                                                  | 43.3H x 19.7W x 7.9D                                                                  | 55.1H x 25.6W x 10.2D                                                                 |
| Dimension (mm)        | 500H x 445W x 152D                                                                  | 640H x 360W x 278D                                                                  | 640H x 550W x 278D                                                                  | 640H x 700W x 278D                                                                  | 850H x 500W x 148D                                                                  | 950H x 450W x 150D                                                                   | 1151H x 471W x 193D                                                                   | 1294H x 567W x 243D                                                                   | 1100H x 500W x 200D                                                                   | 1400H x 650W x 260D                                                                   |
| Rated Voltage         | 48VDC                                                                               | 48VDC                                                                               | 48VDC                                                                               | 48VDC                                                                               | 48VDC                                                                               | 48VDC                                                                                | 48VDC                                                                                 | 48VDC                                                                                 | 48VDC                                                                                 | 48VDC                                                                                 |
| Operating Current (A) | 1.2                                                                                 | 3.6                                                                                 | 5.8                                                                                 | 7.9                                                                                 | 0.6                                                                                 | 2.2                                                                                  | 4.1                                                                                   | 3.1                                                                                   | 6.6                                                                                   | 10.0                                                                                  |
| Noise (dB-A) @1.5M    | 65                                                                                  | 70                                                                                  | 73                                                                                  | 74                                                                                  | 62                                                                                  | 65                                                                                   | 64                                                                                    | 65                                                                                    | 74                                                                                    | 75                                                                                    |
| Weight (lbs / Kg)     | 22.0 / 10.0                                                                         | 16.0 / 35.0                                                                         | 44.1 / 20.0                                                                         | 52.9 / 24.0                                                                         | 37.5 / 17.0                                                                         | 41.9 / 19.0                                                                          | 72.8 / 33.0                                                                           | 88.2 / 40.0                                                                           | 57.3 / 26.0                                                                           | 81.6 / 37.0                                                                           |



## Air Conditioners



Delta air conditioners use active compressor-based cooling to keep internal enclosure temperatures below ambient. These slim air cons employ a variable speed DC inverter compressor and dual rotor design to achieve a high COP with reduced vibration and low operating noise. All Delta air conditioners feature Delta's high quality DC brushless fans engineered to run continuously for a minimum of 80,000 hours, or nine years. Standard and custom designs are available.

- High quality Delta DC brushless fan component for reduced energy consumption and low noise
- Variable speed DC inverter compressor
- Slim size

|                              | 48VDC                                                                             |                                                                                   |                                                                                   |                                                                                   | 48VDC Slim                                                                          |                                                                                     |                                                                                     |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                              |  |  |  |  |  |  |  |
| <b>Model</b>                 | HEC0800PB                                                                         | HEC1000PB                                                                         | HEC1200PB                                                                         | HEC1500PB                                                                         | HEC0800PC                                                                           | HEC1000PC                                                                           | HEC1200PC                                                                           |
| <b>Cooling Capacity</b>      | 2720 BTU/hr<br>800W                                                               | 3400 BTU/hr<br>1000W                                                              | 4010 BTU/hr<br>1200W                                                              | 5100 BTU/hr<br>1500W                                                              | 2720 BTU/hr<br>800W                                                                 | 3400 BTU/hr<br>1000W                                                                | 4080 BTU/hr<br>1200W                                                                |
| <b>Dimensions (inch)</b>     | 27.6H x 19.7W<br>x 7.9D                                                           | 27.6H x 19.7W<br>x 7.9D                                                           | 27.6H x 19.7W<br>x 7.9D                                                           | 27.6H x 19.7W<br>x 7.9D                                                           | 31.3H x 15.0W<br>x 6.4D                                                             | 31.3H x 15.0W<br>x 6.4D                                                             | 31.3H x 15.0W<br>x 6.4D                                                             |
| <b>Dimensions (mm)</b>       | 700H x 500W<br>x 200D                                                             | 700H x 500W<br>x 200D                                                             | 700H x 500W<br>x 200D                                                             | 700H x 500W<br>x 200D                                                             | 796H x 383W<br>x 163D                                                               | 796H x 383W<br>x 163D                                                               | 796H x 383W<br>x 163D                                                               |
| <b>Rated Voltage</b>         | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                               | 48VDC                                                                               | 48VDC                                                                               |
| <b>Operating Current (A)</b> | 3.9                                                                               | 5.6                                                                               | 7.3                                                                               | 12.5                                                                              | 3.8                                                                                 | 5.5                                                                                 | 8.2                                                                                 |
| <b>Noise (dB-A) @ 1.5M</b>   | 62                                                                                | 62                                                                                | 62                                                                                | 62                                                                                | 52                                                                                  | 52                                                                                  | 52                                                                                  |
| <b>Weight (lbs / Kg)</b>     | 61.7 / 28.0                                                                       | 61.7 / 28.0                                                                       | 61.7 / 28.0                                                                       | 61.7 / 28.0                                                                       | 59.5 / 27.0                                                                         | 59.5 / 27.0                                                                         | 59.5 / 27.0                                                                         |

|                              | 230VAC                                                                              |                                                                                     | 230VAC with Heater                                                                    |                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                              |  |  |  |  |
| <b>Model</b>                 | HEC0500BFA                                                                          | HEC0700BFA                                                                          | HEC0500FFA                                                                            | HEC0700FFA                                                                            |
| <b>Cooling Capacity</b>      | 1870 BTU<br>550W                                                                    | 2380 BTU<br>700W                                                                    | 1870 BTU<br>550W                                                                      | 2380 BTU<br>700W                                                                      |
| <b>Dimensions (inch)</b>     | 21.7H x 11.6W<br>x 6.3D                                                             | 21.7H x 11.6W<br>x 6.3D                                                             | 21.7H x 11.6W<br>x 6.3D                                                               | 21.7H x 11.6W<br>x 6.3D                                                               |
| <b>Dimensions (mm)</b>       | 550H x 295W<br>x 160D                                                               | 550H x 295W<br>x 160D                                                               | 550H x 295W<br>x 160D                                                                 | 550H x 295W<br>x 160D                                                                 |
| <b>Rated Voltage</b>         | 230VAC                                                                              | 230VAC                                                                              | 230VAC                                                                                | 230VAC                                                                                |
| <b>Operating Current (A)</b> | 1.3                                                                                 | 1.4                                                                                 | 1.3                                                                                   | 1.4                                                                                   |
| <b>Noise (dB-A) @ 1.5M</b>   | 58                                                                                  | 58                                                                                  | 58                                                                                    | 58                                                                                    |
| <b>Weight (lbs / Kg)</b>     | 35.3 / 16.0                                                                         | 35.3 / 16.0                                                                         | 35.3 / 16.0                                                                           | 35.3 / 16.0                                                                           |



## Thermoelectric Coolers



Delta thermoelectric coolers provide slightly below ambient cooling in tight spaces. A TEC module is a sandwich of components (Peltier chip, heat sinks and fans) which provides cooling without the need for refrigerant or a compressor. All Delta TEC's incorporate Delta DC brushless fans engineered to run continuously for 80,000 hours, or nine years. Standard and custom designs are available.

- High quality Delta DC brushless fan component for reduced energy consumption and low noise
- Built-in controller
- Self-test function and LED alarms

|                       | 48VDC                                                                             |                                                                                   |                                                                                   |                                                                                    | 24VDC                                                                               |                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |
| Model                 | HET200PB                                                                          | HET200PC                                                                          | HET200PC-B                                                                        | HET400PA                                                                           | HET200VB                                                                            | HET200VC                                                                            |
| Cooling Capacity      | 200W                                                                              | 200W                                                                              | 200W                                                                              | 400W                                                                               | 200W                                                                                | 200W                                                                                |
| Dimensions (inch)     | 7.1H x 15.7W x 8.2D                                                               | 7.1H x 15.7W x 6.6D                                                               | 7.1H x 15.7W x 5.6D                                                               | 8.3H x 17.7W x 9.0D                                                                | 7.1H x 15.7W x 8.2D                                                                 | 7.1H x 15.7W x 6.6D                                                                 |
| Dimensions (mm)       | 180H x 400W x 208D                                                                | 181H x 400W x 169D                                                                | 181H x 400W x 143D                                                                | 210H x 450W x 228D                                                                 | 180H x 400W x 208D                                                                  | 181H x 400W x 169D                                                                  |
| Rated Voltage         | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                             | 48VDC                                                                              | 24VDC                                                                               | 24VDC                                                                               |
| Operating Current (A) | 7.4                                                                               | 6.1                                                                               | 7.4                                                                               | 11.7                                                                               | 12.2                                                                                | 12.0                                                                                |
| Noise (dB-A) @1.5M    | 58                                                                                | 58                                                                                | 62                                                                                | 62                                                                                 | 58                                                                                  | 58                                                                                  |
| Weight (lbs / Kg)     | 19.8 / 9.0                                                                        | 13.2 / 6.0                                                                        | 13.2 / 6.0                                                                        | 24.2 / 11.0                                                                        | 19.8 / 9.0                                                                          | 13.2 / 6.0                                                                          |



## Heaters

Cabinet heaters provide protection for enclosed electronics and equipment in low temperature environments. Delta heaters have a Positive Temperature Coefficient (PTC) heating element for increased safety and reduced operating costs. PTC heaters generate only the heat necessary for a desired temperature, versus at a constant rate, saving energy while helping to prevent overheating and burnout. All Delta heaters feature Delta's high quality DC brushless fan component engineered to run continuously for a minimum of 80,000 hours, or nine years. Standard and custom designs are available.

- High quality Delta DC brushless fan component for reduced energy consumption and low noise
- PTC heating element for extended reliability
- 90-degree air flow and rack mount solutions to fit more spaces

|                    | 48VDC                                                                               |                                                                                     | 230VAC                                                                              |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
| Model              | HEH100PA                                                                            | HEH100PB                                                                            | HEH030BA                                                                            | HEH050BA                                                                             | HEH070BA                                                                              | HEH100BA                                                                              | HEH150BA                                                                              |
| Heating Capacity   | 1000W                                                                               | 1000W                                                                               | 300W                                                                                | 500W                                                                                 | 700W                                                                                  | 1000W                                                                                 | 1500W                                                                                 |
| Dimensions (inch)  | 9.4W x 7.3W x 2.9D                                                                  | 1.7H x 19.0W x 7.0D                                                                 | 5.9H x 5.7W x 1.8D                                                                  | 5.9H x 5.7W x 1.8D                                                                   | 5.9H x 5.7W x 1.8D                                                                    | 9.2H x 7.3W x 2.3D                                                                    | 9.2H x 7.3W x 2.3D                                                                    |
| Dimensions (mm)    | 240H x 185W x 57D                                                                   | 44H x 483W x 177D                                                                   | 150H x 145W x 45D                                                                   | 150H x 145W x 45D                                                                    | 150H x 145W x 45D                                                                     | 235H x 185W x 58D                                                                     | 235H x 185W x 58D                                                                     |
| Rated Voltage      | 48VDC                                                                               | 48VDC                                                                               | 230VAC                                                                              | 230VAC                                                                               | 230VAC                                                                                | 230VAC                                                                                | 230VAC                                                                                |
| Inrush Current (A) | 32.0                                                                                | 28.0                                                                                | 5.0                                                                                 | 7.0                                                                                  | 9.5                                                                                   | 10.0                                                                                  | 15.0                                                                                  |
| Weight (lbs / Kg)  | 3.3 / 1.5                                                                           | 5.0 / 2.3                                                                           | 3.3 / 1.5                                                                           | 3.3 / 1.5                                                                            | 3.3 / 1.5                                                                             | 3.3 / 1.5                                                                             | 3.3 / 1.5                                                                             |



## Product Value Proposition

### Fan Technology

DC brushless fan component from world's #1 DC fan manufacturer =  
*Lower energy consumption, less vibration and noise, longer fan life.*

### Low Noise

Up to 30% quieter than other market offerings =  
*Acceptable for use in more areas i.e. residential.*

### Energy Saving

DC power input with variable speed fan =  
*Lower operating costs. Less cost of ownership. Higher ROI.*

### Small Size

Same or better performance in smaller, slimmer package =  
*Frees up cabinet space for critical components. Better aesthetics.*

### Smart Operation

Various communication and control options =  
*Predictive maintenance. Fewer truck rolls. Higher ROI.*

### Service

Extensive authorized service network with available 24-hour response =  
*Less downtime. Time and labor expense savings.*

### Availability

Standard product staged in the U.S. for immediate shipment =  
*Product when you need it to accommodate project schedules.*

### Reliability

Expected service life is a minimum of 10 years =  
*Less downtime. Better network stability. Fewer truck rolls.*





## About Delta

Smarter. Greener. Together.

### Delta's Mission

Our company mission is "To provide innovative, clean and energy efficient solutions for a better tomorrow" supported by a product portfolio that features a range of energy-saving solutions including fans and thermal management, electrical vehicle chargers, solar inverters, industrial automation products and LED display systems. Delta's operations are ISO-9001, ISO-14001, ISO-14064, OHSAS-18001 and TS-16949 certified.

### The World's Leading Provider of DC Brushless Fans

Delta Group is the world's largest manufacturer of DC Brushless fans and a leading provider of switching power supplies – a \$7.5 billion global company with 38 manufacturing facilities, 60 R&D labs and U.S. headquarters in Fremont, CA.

### Dedicated to improving the environment

From 2010 to 2015, Delta's high efficiency products saved 6.4M tons of CO2 for our customers. Among its many energy-saving products, Delta has developed the world's first server power supply to achieve 80 Plus Titanium energy efficiency, which is greater than 96% efficiency.

Delta will continue its dedication to developing technologies and solutions to help ensure a sustainable future.

### When Precision is Paramount

Delta DC Brushless fans are used in applications where precision is paramount, including Information Technology, Telecommunications, Consumer Electronics, Industrial and Automotive industries..

Please visit our global website [www.deltaww.com](http://www.deltaww.com) for a more comprehensive look at Delta operations, products and company profile.

Dealer Address:



Learn more about Delta Cabinet Thermal Solutions at:  
[CoolYourCabinet.com](http://CoolYourCabinet.com)

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