

#### Fan and Thermal Management

# **Delta EC Fan and Blowers**

Brochure 2022/23



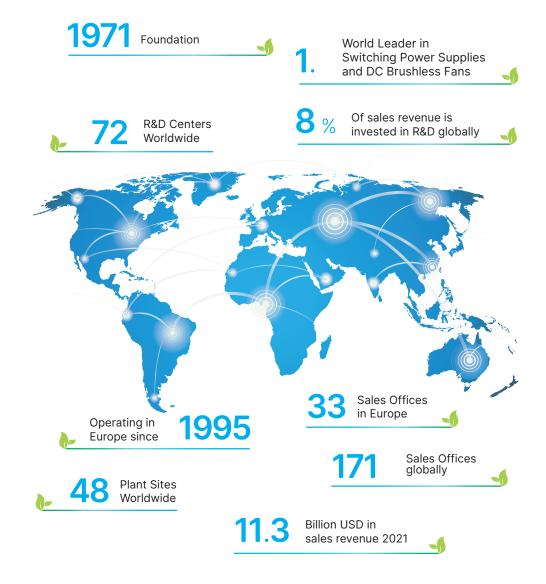






### **About Delta Group**

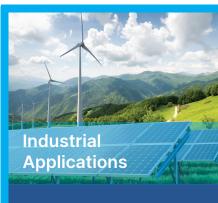
Delta, founded in 1971, is a global provider of switching power supplies and thermal management products with a thriving portfolio of smart energy-saving systems and solutions in the fields of industrial automation, building automation, telecom power, data center infrastructure, EV charging, renewable energy, energy storage and display, to nurture the development of smart manufacturing and sustainable cities.



#### About Delta EC Fans

Over 30 years experience in aerodynamics, motor design and control technologies, Delta's EC fan product line provides excellent performance. High Airflows (over 30,000 CMH) combined with great efficiency and real low noise contribute to please the market demands in different applications, e.g. building HVAC, precision cooling and industrial applications. Following the greater goal to provide a greener future for all we also focus on minimizing energy costs. Delta EC Fan user friendly accessories, interface and communication bus enable quick and reliable installation in your application.

#### Delta EC fan, a greener & smarter design for a better tomorrow.



Global energy demand is increasing rapidly, and so does the power capacity of industrial applications, requiring more efficient cooling systems. EV-Charging, solar and wind energy all rely on cooling units reducing their operating temperature. Delta's industrial EC fans are designed for this environment offering higher performance, premium materials, high electronic standards, and high operating life requirements to maintain these systems uptime.



Data center equipment generates a considerable amount of heat that is why excellent air-conditioning systems for data centers are vital for a smooth operation. Delta EC fans is dedicated in providing the best cooling efficiency fans with modern design for various needs, from Row Cooling, Room Cooling up to Fan Walls. By using top quality and reliable electronic components we ensure to our Data Center customers to enjoy reliable long fan life without risking data operation.



Heat Recovery Ventilators help make your home healthier, cleaner, and more comfortable by continuously replacing stale indoor air with fresh outdoor air. Delta's silent efficient EC fans ensure that HRV Systems work optimally, contributing to a more comfortable atmosphere in your living room, minimizing the electricity bill, and playing an important role in the journey towards a greener future.



### **EC BLOWER & EC AXIAL FAN**

## Impeller

State of the art impellers design of plastic or metal, centrifugal blowers& multi-section blade Axial fans smoothen air flow to achieve best efficiency & noise reduction. With robust design & well-studied materials, Delta fan impellers can withstand high stress & long fatigue even underdemanding conditions.

### **EC Motor**

Delta's high efficiency EC (Electronically Commutated) motor can reach over 90% efficiency by optimizing magnet parts and motor winding. With accurate motor temperature control, motor structure design including the latest bearing system structure technology, our EC fan can reach a longer life time (L10 60,000hrs @ 40 degreeC). The unique EC motor structure can easily reach IP54 standard or higher.

## **EC Control Module**

The most advanced control module design comprises PWM/ Voltage/ Current Speed control, and also RS485 & Modbus as modern communication. Delta EC fans are build to meet industrial EMC/ EMI/ Harmonic standards and incorporate different protection mechanisms (ex. over current/ over voltage/ over temperature), for safely & comfort reasons.

# Power Source & Power Quality

Delta EC Fans offer 1 phase (200Vac-277Vac) & 3 phase (380Vac-480Vac), from 85W up to 6KW motor power. With innovative design some models in the Delta EC fans series are equipped with a wide voltage range 3 phase 200Vac - 480Vac input. Our EC fans are universally applicable without modifications and loss of motor performance. Delta EC Fans provide active PFC (power factor correction) & passive PFC as options to help users to meet necessary electronic performance (ex. Harmonic) with different cost target.











# **EC BLOWER**

Metal or Plastic impeller depending on models
All include inlet cone / nozzle
Box frame / mounting bracket as option
Available motors with PPFC or APFC
CE/ TUV/ UL certified





**Data Center**Rack Cooling, Computer Room Air Conditioner, Chilled Water System



Industrial Application Motor Drive, EV Charger S

Size	Series Number	Nominal Voltage Range (phase, V)	Max. Input power (W)	Speed (rpm)	Max. Air Flow (CMH)	Max. Air Pressure (Pa)
190	GTB019BUA07R-V E1	1~100-140	85	3100	736	717
190	GTB019FUA07R-V E1	1~200-240	85	3100	754	841
190	GTB019FUG09R-V E1	1~200-240	185	4150	997	988
225	GTB023EUG10R-V E1	1~200-240	180	3000	1260	650
250	GTB025FUC19R N1	1~200-277	530	3050	2600	818
280	GTB028EUB16 N1	1~200-277	180	1850	2222	570
310	GTB031FUC20R N1	1~200-277	530	2500	3014	734
310	GTB031PHJ22M N1	3~380-480	1000	3060	3704	1035
360	GTB036EUD25R N1	1~200-277	800	2030	4752	697
360	GTB036FUC23R N1	1~200-277	500	1730	4408	522
360	GTB036NUQ27R-M001	3~380-480	2500	3000	6495	1660
360	GTB036PUD25E N1	3~380-480	1000	2200	5573	919
360	GTB036PUS32R N1	3~380-480	3650	3650	8602	2585
400	GTB040EUD26R N1	1~200-277	800	1750	5692	690
400	GTB040FUC20R N1	1~200-277	430	1600	3155	563
400	GTB040FUC23R N1	1~200-277	430	1500	3635	504
400	GTB040PUD26R N1	3~380-480	1000	1850	6001	755
500	GTB050NUT34R N1	3~380-480	3100	1820	12221	1104
560	GTB056NUT35R N1	3~380-480	3100	1550	13852	1009
560	GTB056NUT37R N1	3~380-480	3100	1550	15063	1020
560	GTB056PUT35R N1	3~380-480	3100	1550	13852	1009
630	GTB063PUU41R E1	3~380-480	4200	1800	20289	1807

# **EC AXIAL FAN**

Fan Guard & Fan Wall-Ring as option 0-10V & PWM for speed control Available with PPFC or APFC RS485, Modbus Standard CE/ TUV/ UL certified



tation, Wind Power, Photovoltaic Inverter



#### **Factories & Commercial Buildings**

Cooling Tower, Air Handling Unit, Condenser, Chiller, Heat Exchanger

Size	Series Number	Nominal Voltage Range (phase, V)	Max. Input power (W)	Speed (rpm)	Max. Air Flow (CMH)	Max. Air Pressure (Pa)
120	GTW012FU604	1~100-240	26	4100	313	210
120	GTW012FU804	1~100-240	11	4200	246	112
170	GTW017EUB12	1~200-240	240	5800	1177	844
200	GTW020EUB12	1~200-240	240	6000	1082	1037
250	GTW025FUC16	1~200-277	360	3800	1746	392
400	GTW040FUC15E-M001	1~200-277	420	1650	5350	198
400	GTW040FUC15RS	1~200-277	420	1650	5350	198
630	GTW063HUD22E-M001	3~200-480	1100	1200	13218	212
710	GTW071HUD22E-M001	3~200-480	1000	850	15499	147
710	GTW071PUR23E	3~380-480	2700	1250	23134	259
710	GTW071PUT24E-M001	3~380-480	2700	1250	23134	259
800	GTW080NUT24E-M001	3~380-480	2200	1020	25077	196
800	GTW080PUR23E	3~380-480	2200	1020	25077	196
800	GTW080PUU26E	3~380-480	3100	1200	30178	237
910	GTW091NUT24R	3~380-480	2100	950	31130	151
910	GTW091PUR23E	3~380-480	2200	950	30948	155
910	GTW091PUU26E-M001	3~380-480	3100	1100	36649	191

Motor design standard: UL 507, UL 1004-3, CSA C22.2

Air performance: All of our wind tunnel system follow AMCA-210-85

**Harmonic:** EN 61000-3-2/3

Noise: Testing method is compliant to ISO 3745

EMC: EN 61000-6-1/3 (residential) or 2/4 (industrial)



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