



By Twin City Fan & Blower

A GREEN INITIATIVE

PREMIUM EFFICIENCY PRODUCTS

Are You GridSmart™?

As the demand to reduce energy consumption continues to shape the future of the fan industry, Twin City Fan's new line of GridSmart™ Electronically Commutated (EC) Motors can help get you on the fast track for meeting the Department of Energy's new fan regulations. GridSmart™ EC Motors combine AC and DC voltages in order to bring our customers the best of both technologies and have the ability to maintain high efficiencies at the demanded speed of the application.

If your application requires a variable load, consider the GridSmart™ EC motors. If the flow is reduced by half, the power will be reduced by 88%!!!

Benefits of GridSmart™ EC Motors

- Efficiencies up to 87.5%
- Constant efficiency as the motor speed is varied
- Up to 66% energy savings over traditional PSC motors
- Performance range comparable to a belt driven fan with reduced maintenance benefits of a direct drive fan
- 80% usable turndown range as compared with 40% maximum on PSC motors
- Soft start gives fans smooth, quiet start
- Lower operating temperatures result in longer life and reduces energy consumption
- Heavy-duty ball bearings are permanently lubricated



Twin City Fan is proud to present the following sizes, RPMs and voltages. See page 3 for model availability.

MOTOR DATA	HP	RPM	Voltage/ Phase	HZ	Enclosure
	1/6	1750	115/1	50/60	ODP
	1/4	1750	115/1	50/60	ODP
			208-230/1	50/60	TENV
	1/2	1750	115/1	50/60	ODP
			208-230/1	50/60	ODP
	3/4	1750	115/1	50/60	ODP
			208-230/1	50/60	ODP
	1	1160	115/1	50/60	ODP
			208-230/1	50/60	ODP
		1750	115/1	50/60	ODP
			208-230/1	50/60	ODP
		1800	115/208-230	50/60	TEFC
	1-1/2	1800	460/3	50/60	OP
			460/3	50/60	OP
2	1750	208-230/1	50/60	TEFC	
		1800	460/3	50/60	OP
3	1800	460/3	50/60	OP	



EC MOTOR TYPES

ODP, TENV



1/6HP to 1HP
GridSmart™ EC Motors

TEFC



1HP & 2HP
GridSmart™ EC Motors

OP



1HP to 3HP, 3-Phase
GridSmart™ EC Motors
(DCV only)

Speed Control Options

- 1 Motor Mounted Dial** – Standard on EC-ODP and EC-TENV motors; Optional on EC-TEFC motors

A potentiometer is mounted to the motor housing offering full speed control range. Speed adjustment is made with a small flat head screwdriver. With this option, the motor's 0-10V DC control leads are terminated in a standard 2x4 junction box from the factory and can remain there if not required by the end user.



ODP, TENV



TEFC

- 2 0-10V DC Lead** – Standard on EC-ODP and EC-TENV motors; Optional on EC-TEFC and EC-OP motors

A 36" long control lead is prewired from the motor which accepts a 0-10V DC signal and can be wired into building control systems or field supplied controls. With this option, the control leads are terminated in a standard 2x4 junction box from the factory.



ODP, TENV



TEFC



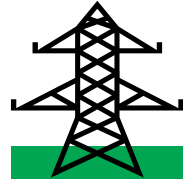
OP

- 3 Remote Mounted Dial** – Optional on EC-ODP and EC-TENV motors

A wall mounted dial allows the fan to be controlled from within the building by sending the motor a 0-10V DC option. This option includes a 115V or 230V (depending upon the motor voltage selected) to 24V AC transformer mounted in the NEMA electrical enclosure. On models DCRD, DCRU/R, DCRW/R, DCLH/P and DCV the junction box for the transformer will be located within the fan motor enclosure. On models DSI and TCPE, the junction box for the transformer will be located on the exterior of the fan.



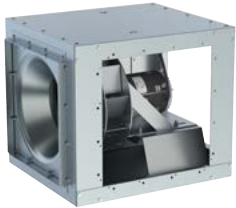
ODP, TENV



GRIDSMART™

EC MOTORS

By Twin City Fan & Blower



DSI

Size	HP	Max RPM
080AE	1/6	1750
090AE	1/4	1750
100AE	1/2	1750
120AE	3/4	1750
135ANE	3/4	1750
135AE	1	1750
	2	1750
150ANE	1	1750
	2	1750
150AE	1	1160
	1	1200
	2	1750
165ANE	1	1160
	2	1750
165AE	1	1160
	2	1500



DCRD

Size	HP	Max RPM
060BE	1/6	1750
070BE	1/6	1750
080BE	1/6	1750
085BE	1/6	1750
090BE	1/6	1750
095BE	1/4	1750
100BE	1/4	1750
120BE	1/2	1750
130BE	3/4	1750
140BE	3/4	1750
150BE	1	1160
	1	1400
160BE	2	1750
	1	1160
170BE	2	1750
	1	1160
	1	1000
180BE	2	1600
	1	1160
180BE	1	1160
	2	1300



DCV

Size	HP	Max RPM
090	1/6	1750
105	1/4	1750
122	1/2	1750
135	3/4	1750
150	1	1160
	2	1750
165	1	1160
	2	1604
182	1	1160
	3	1508
200	3	1376



**DCRU | DCRUR
DCRW | DCRWR**

Size	HP	Max RPM
073BE	1/6	1750
083BE	1/4	1750
093BE	1/4	1750
110BE	1/2	1750
120BE	3/4	1750
140BE	1	1750
	2	1750
160BE	1	1160
	2	1750
180BE	1	1160
	1	1100
180BE	2	1400



TCPE

Size	HP	Max RPM
082AE	1/6	1750
102AE	1/6	1750
122AE	1/6	1750
142AE	1/2	1750
162AE	3/4	1750
182AE	3/4	1750
202AE	3/4	1750



DCLH | DCLP

Size	HP	Max RPM
060E	1/6	1750
070E	1/6	1750
080E	1/6	1750
085E	1/6	1750
090E	1/4	1750
095E	1/4	1750
100E	1/4	1750
120E	1/2	1750