

Text for tender for Centrifugal EC blower

Centrifugal EC blower with high power density
Fan sizes 160 to 250

Directly driven double inlet centrifugal blowers with forward curved centrifugal impellers, based on a GreenTech EC external rotor motor encased in a scroll housing with external control electronics.

Impeller of galvanized sheet steel, forward curved, fishplated blades; flow-optimized inlet ring made of galvanized sheet steel integrated into the housing;

motor impeller statically and dynamically balanced on two planes to balancing grade G 6.3 in accordance with DIN ISO 1940.

GreenTech EC external rotor motor exceeds efficiency class IE4, the magnets use no rare earths, maintenance-free ball bearing with long-term lubrication, theoretical rated service life of at least 40,000 operating hours, integrated current limitation, voltage input 1~200-277 V, 50/60 Hz, this fan can be used on all standard power supply utility networks with no change to its air performance.

Motor mounted on brackets for one-sided vibration damping.

External control electronics on scroll housing, pre-wired, low-noise commutation logic; speed control; integrated PID controller; active PFC; RS485 MODBUS RTU interface, control input 0-10 VDC / PWM; output 10 VDC, max. 10 mA; need not be installed with shielded cables.

Control electronics, aluminum housing with easily accessible connection area with spring loaded terminals, environmentally stable cable glands.

Industrial design scroll housing; galvanized sheet steel.

Any work required for isolation from structure-borne noise to be performed by the customer.

Fan satisfies the applicable EMC guidelines and requirements; documentation and marking conform to the applicable EU Directives.

Reliable performance data, air performance measurements in intake-side test chamber according to ISO 5801 and DIN 24163, sound measurements in an anechoic test chamber in accordance with DIN EN ISO 3745.

Integrated protective devices:

- Locked-rotor protection
- Phase failure detection
- Mains undervoltage detection
- Thermal overload protection on electronics and motor
- Motor current limitation
- electronics temperature monitoring
- motor temperature monitoring

Optional:

- Other and specific requirements on request

Text for tender for Centrifugal EC blower

Technical data:

Fan type		D3G _____ - _____ - _____	
Air flow	q_v	= _____	m ³ /h
Actual pressure increase	p_{fs}	= _____	Pa
Overall static efficiency	η_{es}	= _____	%
Operating speed	n	= _____	rpm
Motor type		= EC motor	
Type of control		= Closed-loop speed control, 0-100%	
Motor efficiency class		= IE4	
Total power consumption	P_{ed}	= _____	kW
Specific fan power	SFP	= _____	kW/(m ³ /s)
Nominal voltage range	U_N	= _____	V
Line frequency	f	= 50 / 60	Hz
Nominal current	I_N	= _____	A
Protection class		= IP54	
Sound power level	$L_W A(A, in)$	= _____ / $L_W A(A, out)$ = _____	dB(A)
Sound pressure level (at 1 m)	$L_p A(A, in)$	= _____ / $L_p A(A, out)$ = _____	dB(A)
Permitted ambient temperature	T	= _____ to _____	°C
Weight of fan	m	= _____	kg

Product photo



Centrifugal EC blower 225 D3G

For dimensions and connections, see data sheet