Text for invitation to tender for EC medium pressure axial fans

EC medium pressure axial fan
Sizes 1120 to 1600

Direct-drive EC medium pressure axial fan with high-performance axial impeller with hub, mounted on a GreenTech EC external rotor motor with integrated control electronics.
Double-flange housing made of galvanised sheet steel, flow-optimised nozzle shape on inlet side, corrosion protection as per DIN EN ISO 12944, class C5 M; transport loops for safe handling during shipping and installation.
Impeller and hub made of die-cast aluminium, with flow-optimised Airfoil blade geometry, blade angle and number of blades specified at the factory to suit the required operating point; installation possible on inlet or pressure side; motorised impeller balanced in two planes (static and dynamic) as per DIN ISO 1940 to balance quality G 6.3.
GreenTech EC external rotor motor surpasses efficiency class IE4, magnets without use of rare earths, maintenance-free ball bearings with long-term lubrication, theoretical nominal service life of at least 40,000 operating hours, installation with horizontal and vertical motor shaft; soft start, integrated current limitation, wide input voltage range 3-phase 380-480 V, 50/60 Hz, fan suitable for use with all standard power supply systems with no effect on air performance.
Compact electronics; no need to install shielded wiring; extremely low-noise commutation logic; 100% speed control, with PID controller; RS485/MODBUS RTU interface; pre-set operating parameters, no parametrisation work required.
Terminal box made of aluminium with readily accessible connection area with spring terminals, environment-resistant cable glands.
Any work required to prevent the transmission of structure-borne noise is to be performed by the customer.
Fan satisfies the relevant EMC regulations and requirements with regard to circuit feedback; documentation and marking conform to the applicable EU directives.
Reliable performance data, air performance measurements on inlet-side chamber test rig in accordance with ISO 5801 and DIN 24163, noise measurements in low-reflection acoustic test chamber as per DIN EN ISO 3745.

Integrated protective devices:

- Alarm relay with floating contacts (250 V AC/2 A, cos φ = 1)
- Locked-rotor protection
- Phase failure detection
- Motor soft start
- Mains undervoltage detection
- Excess temperature protection for electronics and motor
- Short circuit protection

Optional:

- Different and specific requirements on request

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Technical data:

Fan types		W3G _____ - _____ - _____	
Air flow	q_V	= _____	m^3/h
Stat. pressure increase	p_{fs}	= _____	Pa
Stat. overall efficiency	η_{es}	= _____	%
Operating speed	n	= _____	min^{-1}
Motor type		= EC motor	
Type of control		= 0-100% speed control	
Motor efficiency class		= IE4	
Total power consumption	P_{ed}	= _____	kW
Specific fan power	SFP	= _____	$kW/(m^3/s)$
Nominal voltage range	U_N	= _____	V
Mains frequency	f	= 50 / 60	Hz
Nominal current	I_N	= _____	A
Ingress protection		= IP54	
Sound power level	L_W A(A, in)	= _____ / L_WA(A, out) = _____	dB(A)
Sound pressure level (at 1 m)	L_pA(A, in)	= _____ / L_pA(A, out) = _____	dB(A)
Perm. ambient temperature	T	= _____ to _____	°C
Fan mass	m	= _____	kg

Product photo

EC axial fan – straight blades W3G...

Refer to data sheet for dimensions and connections

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