

Specification template for RadiCal DC centrifugal fans

RadiCal DC centrifugal fans

Sizes 190 to 280

Direct-drive, single inlet centrifugal fans with backwards-curved high-performance centrifugal impellers with radial diffusors, based on a GreenTech EC external rotor motor with integrated control electronics.

Impeller made of glass-fiber reinforced plastic, with backwards-curved blades, manufactured in one piece without seams.

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 surpasses efficiency class IE4, magnets with no rare earths, maintenance-free ball bearings (sealed) with long-term lubrication, theoretical nominal service life of at least 40,000 hours of operation, installation with horizontal and vertical motor shaft; soft start, integrated current limitation. Voltage range 8-16 V, 16-28 V, 36-57 V; Integrated electronics, quiet commutation logic; 100 % speed controllable; control signal 0-10 V DC / PWM; tach output.

Cable connection with protruding, pre-assembled, variable cable, with wire-end ferrules, UV-resistant, water impermeable.

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

Fan satisfies the applicable EMC guidelines and requirements with regard to circuit feedback; documentation and marking conform to the applicable EU Directives. UL 507 approval.

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:

- Reverse polarity and locked-rotor protection
- Overvoltage detection
- Soft start
- Motor current limitation
- Thermal overload protection

Optional:

- Other and specific requirements on request

Specification template for RadiCal DC centrifugal fans

Technical data:

Fan type		R1G _____ - _____ - _____	
Air flow	q_v	= _____	m ³ /h
Actual pressure increase	p_{fs}	= _____	Pa
Overall static efficiency	η_{ed}	= _____	%
Operating speed	n	= _____	rpm
Motor type		= DC motor	
Control type		= 0-10 VDC, 0-100% PWM	
Motor efficiency class		= IE4	
Total power consumption	P_{ed}	= _____	kW
Specific fan power	SFP	= _____	kW/(m ³ /s)
Nominal voltage range	U_N	= _____	V
Nominal current	I_N	= _____	A
Protection class		= IP 24 KM (motor); electronics IP 66/69 K	
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



RadiCal DC centrifugal fans

For dimensions and connections, see data sheet