

Tender specification

EC centrifugal fans – RadiPac M
sizes 710 bis 800 with EC motor DV280

ebmpapst

engineering a better life

Direct-drive, single inlet centrifugal fans with backwards-curved high-performance centrifugal impellers made of aluminum, based on an EC external rotor motor with integrated control electronics.

Impeller made of aluminum, with 5 backward-curved and twisted, continuously welded 3D blades. Mounting plate and flow-optimized inlet ring made of Sendzimir galvanized sheet steel with pressure test nipple.

Motor-impeller in accordance with DIN ISO 21940, statically and dynamically balanced on two planes to balancing grade G 4.0.

EC external rotor motors achieve or exceed the efficiency specifications in accordance with efficiency class IE5 (IEC TS 60034-30-2:2016), magnets without the use of rare earths, maintenance-free ball bearings with long-term lubrication, theoretical nominal service life of at least 40,000 operating hours.

soft start, integrated current limitation, automatic resonance detection, extended voltage input 3~380-480 V, 50/60 Hz. The fan can be used with all standard power supply networks with unaltered air performance.

Integrated control electronics, low-noise commutation logic; 100% speed control; all fans have an RS485/MODBUS RTU interface, no shielded cables are required for the power supply. Terminal box made of aluminum with easily accessible connection area, environment-resistant cable glands.

Ready-to install cube design intended exclusively for floor mounting. Struts made of extruded aluminum sections connected to die-cast corner plates. Installation position with horizontal motor shaft; this version is not suitable for wall mounting.

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 (for specific information, see the respective data sheet).

Documentation and marking conform to the applicable EU Directives.

Reliable performance data, air performance measurements on intake-side chamber test rig according to ISO 5801 and DIN 24163, noise measurements in anechoic rooms according to DIN EN ISO 3745.

Integrated protective devices:

- Alarm relay with zero-potential change-over contacts (250 V AC, 2 A, $\cos \varphi = 1$)
- Locked-rotor protection
- Phase failure detection
- Soft start of motors
- Mains under-voltage detection
- Thermal overload protection for electronics and motor
- Short circuit protection

Optional:

- **Other and specific requirements on request**
- **FlowGrid air inlet grill:**

Air inlet grill tailor-made for the fan, to reduce assembly and system-related noise. Grill made of high-grade composite material in one piece, ready for installation and also suitable for retrofitting. Open FlowGrid with additional steel guard grill, black plastic coated, suitable for accidental contact protection according to EN ISO 13857.

Tender specification

EC centrifugal fans – RadiPac M
sizes 710 bis 800 with EC motor DV280

ebmpapst

engineering a better life

Technical Data:

Fan types

Order number

Air flow

Fan static pressure

Stat. overall efficiency

Operating speed

Motor type

Type of control

Motor efficiency class

Electrical power consumption

Specific fan power

Nominal voltage

Mains frequency

Nominal current

Ingress protection

Sound power level

Sound pressure level (at 1 m)

Ambient temperature range

Fan mass

q_v

p_{fs}

η_{esd}

n

P_{ed}

SFP

U_N

f

I_N

$L_W A(A, in)$

$L_p A(A, in)$

T

m

= V B F _ _ _ _ M T X N S

= _ _ _ _ _

= _ _ _ _ _

= _ _ _ _ _

= _ _ _ _ _

= _ _ _ _ _

= EC motor

= 0-100% speed control

= *equivalent or better IE5*

= _ _ _ _ _

= _ _ _ _ _

= _ _ _ _ _

= 50 / 60

= _ _ _ _ _

= IP54

= _ _ _ _ _ / $L_W A(A, out)$ = _ _ _ _ _

= _ _ _ _ _ / $L_p A(A, out)$ = _ _ _ _ _

= _ _ _ _ _ bis _ _ _ _ _

= _ _ _ _ _

m^3/h

Pa

%

min^{-1}

kW

$kW/(m^3/s)$

V

Hz

A

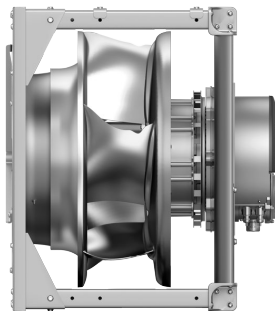
$dB(A)$

$dB(A)$

$^{\circ}C$

kg

Product photo



EC centrifugal fans–RadiPac
Cube design

Refer to data sheet for dimensions and wiring