



Dimensions MB EC 280 30 Condensate drain Dim. in mm Connection: Ø 280 mm

Casing

Double-walled, made of galvanised steel sheet. Sound insulated by lining with 30 mm thick mineral wool insulation boards. Duct connectors on inlet side and outlet side, with rubber lip seal, adapted to standard diameter. Motor-impeller unit fully retractable for inspection and cleaning, suspended on stable hinges. Comes with condensate drain and drip protection with the doors open as standard. Includes mounting rails made of galvanised steel with screwed-on vibration dampers for easy installation.

Impeller

Backward curved, free-running high performance centrifugal impeller made of aluminium, mounted directly on motor shaft. High efficiency, low noise. Dynamically balanced in accordance with DIN ISO 21940-11 – quality grade 6.3.

Drive

Energy-saving, speed-controllable EC internal rotor motor (MBD EC 280 with EC external rotor motor) in protection category IP55 with the highest level of efficiency, located outside of the air flow.

Maintenance-free and radio interference-free, ball bearing mounted.

Electrical connection

Standard terminal box (IP55) on outside of motor, mounted to external cable for 1~ type.

Motor protection

Integrated electronic temperature monitoring system for EC motor and electronics. If the maximum permissible motor temperature is exceeded, 3~ types will automatically reduce the speed which then returns back to the originally set value after cooling down. The motors in 1~ types will be deactivated if the maximum permissible temperature is exceeded.

Power control

Continuously variable speed control with potentiometer or continuously variable speed control with universal control system (see table).

Performance levels are shown in the performance curve as an example.

MBD EC 280: Stepless speed control with internal push buttons (scope of delivery).

Noise

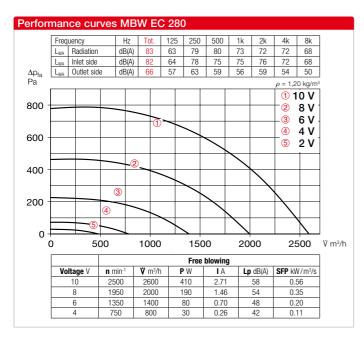
The total level and range are specified above the performance diagram for:

- Case-radiated sound power
- ☐ Inlet side sound power
- Outlet side sound power
 The case-radiated noise as
 sound pressure at 1 m (free field
 conditions) is also specified in
 the type table and the table below
 the performance curve.

Туре	Ref. no.	Connection Ø	Flow rate free blowing	Rated speed	Case-rad. sound pressure	Power consumption	Current consumption	Wiring diagram	Max. air flow temp.	Weight net aprx.	control system		Speed potentiometer flush-mounted surfmounte			
		mm	Ÿ m³/h	min-1	dB(A) at 1 m	kW	Α	No.	+°C	kg	Type	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Alternating current, 1~, 230 V, 50/60 Hz, EC motor, protection category IP55																
MBW EC 280	05850	280	2630	2450	56	0.41	2.71	1568	100	33.0	EUR EC 1) 2	01347	PU 10 1)	01734	PA 10 1)	01735
Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP55																
MBD EC 280	05845	280	3050	3000	58	0.78	1.20	1582	120	34.0	EUR EC 1) 2	01347	PU 10 1)	01734	PA 10 1)	01735

¹⁾ Multiple EC fans can normally be connected. 2) Alternative electronic diff. pressure/temperature controller (EDR/ETR, No. 01437/01438) or three level speed switch (SU/SA, No. 04266/04267).







Wall bracket

Bracket for wall installation, made of galvanised steel sheet.

MB-WK EC280 Ref. no. 05527



Weather protection cover

For protected outdoor coverage. Made of galvanised steel sheet, mounted above motor.

MB-WSD EC280 No. 01856



Performance curves MBD EC 280 Hz Tot. 125 250 500 1k 2k 4k 8k dB(A) 66 56 59 61 54 56 52 42 Frequency L_{wA} Radiation Inlet side dB(A) 64 74 81 78 77 78 75 ∆p_{fa} Pa 69 77 78 75 Outlet side dB(A) 83 80 $\rho = 1,20 \text{ kg/m}$ 1200 10 V 8 V 1000 3 6 V 4 V 800 ⑤ 2 V 600 400 200 ი -400 800 1200 1600 2000 2400 2800 V m³/h **Voltage** V n min⁻¹ **V** m³/h P W ΙA Lp dB(A) SFP kW/m³/s 2980 3050 640 1.00 0.76 2400 0.50 2360 330 0.55 1740 1800 150 0,31 49 0,30 40

Flexible connecting sleeve

Includes 2 hose clamps; for installation between fan and duct system. Prevents structure-borne noise transmission and bridges installation tolerances.

- Max. temperature +70 °C **FM 280** Ref. no. 01673

- Max. temperature +120 °C Ref. no. 01656 FM 280 T120



Universal control system

For continuously variable control or regulation of single phase and three-phase EC fans with a setpoint input of 0-10 V DC.

EUR EC Ref. no. 01347



Speed potentiometer

For direct control/setpoint setting for EC fans with potentiometer input.

PU 10 Ref. no. 01734

For flush-mounting.

PA 10 Ref. no. 01735 For surface-mounting.



Accessory details	Page			
Universal control system,				
electronic controller,				
speed potentiometer	613 ff.			