

# MB EC 280



#### 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.

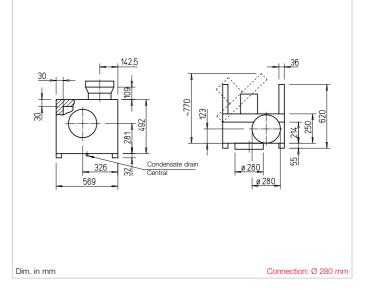
#### Drive

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 in-

terference-free, ball bearing mounted.

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

#### Dimensions MB EC 280



#### 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:

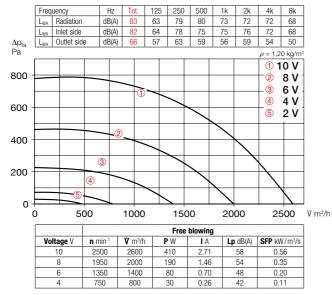
- Case-radiated sound power
- Inlet side sound power
  Outlet side sound power

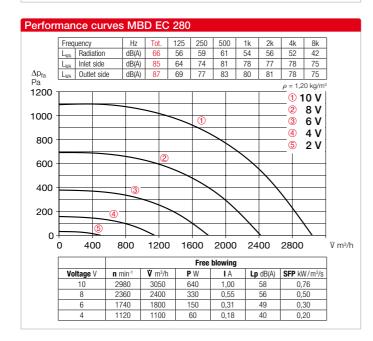
The case-radiated noise as sound pressure at 1 m (free field conditions) is also specified in the type table and the table below the performance curve.

Туре	Ref. no.	Connection Ø	Flow rate free	Rated speed	Case-rad. sound	Power con- sumption	Current consump-	Wiring diagram	Max. air flow temp.	Weight net	control system		Speed potentiometer			
			blowing		pressure		tion			aprx.			flush-mounted		surfmounted	
		mm	V m³∕h	min <sup>-1</sup>	dB(A) at 1 m	kW	А	No.	+ °C	kg	Туре	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	3.2	1568	100	33.0	EUR EC 1) 2	01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	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	1.2	1582	120	34.0	EUR EC 1) 2	01347	PU 10 <sup>1)</sup>	01734	PA 10 <sup>1)</sup>	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).																



# Performance curves MBW EC 280





# Accessories

### 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



### 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

in ip diti				
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.		