

MB EC 355



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 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.

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 con- sumption	Current consump- tion	Wiring diagram	Max. air flow temp.	Weight net aprx.	Universal control system		Speed potentiometer			
													flush-mounted		surfmounted	
		mm	₿ m³/h	min-1	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 355	05854	355	3050	1500	54	0.33	1.50	985	100	50.0	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 355 A	05853	355	5000	2500	66	1.45	2.20	988	120	56.0	EUR EC 1) 2	01347	PU 10 ¹⁾	01734	PA 10 ¹⁾	01735
MBD EC 355 B	05847	355	5600	2800	68	1.90	3.10	988	120	63.0	EUR EC 1) 2	01347	PU 10 ¹⁾	01734	PA 10 ¹⁾	01735
1) Multiple EC fans	s can norn	nally be conne	cted. 2) Alterna	tive electror	nic diff. pressur	e/temperatur	e controller (EDR/ETR, No	01437/01	438) or th	iree level sp	eed switc	n (SU/SA, M	lo. 04266/	/04267), se	e Accessories.



MegaBox EC Ø 355 mm, backward curved impeller

Performance curves MBW EC 355





Performance curves MBD EC 355 B Hz Tot. 125 250 500 1k 2k 4k 8k dB(A) 76 58 69 72 68 69 67 60 dB(A) 88 69 81 85 80 80 77 71 Frequency L_{WA} Radiation L_{WA} Inlet side dB(A) L_{wA} Outlet side dB(A) 93 71 85 89 87 86 80 73 ∆p_{fa} Pa $\rho = 1.20 \text{ kg/s}$ 10 V 1600 2 8 V 3 6 V (4) 4 V 1200 (5) 2 V 800 400 0 1000 2000 3000 4000 5000 6000 V m³/h 0 Free blowing **V** m³/h ΡW Lp dB(A) SFP kW/m³/s Voltage V n min IA 10 2800 5600 1600 2.60 68 8 2350 4700 1000 1 70 65 0.75 1800 3600 0.90 0.50 6 500 59 1300 0.31 2600 230 0.51 52 4

Accessories

Wall bracket

Bracket for wall installation, made of galvanised steel sheet. MB-WK EC355 Ref. no. 05528



Weather protection cover

For protected outdoor coverage. Made of galvanised steel sheet, mounted above motor. MB-WSD EC355 No. 01865



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 355 Ref. no. 01675 Max. temperature +120 °C Ref. no. 01658 FM 355 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.

Five-step speed switch

SA-5 10 Ref. no. 40229 Five-step switch for surface mounting. For five-step control of EC fans or frequency inverters. Steps from 2 to 10 V can be set via offset. Protection class IP54.

Accessory details

Page Universal control system, electronic controller. 617 ff. speed potentiometer





