

Special features of the GB EC T120 series

- Designed for the delivery of contaminated, humid and hot air up to max. 120 °C, e.g. as an extract air fan in commercial kitchens and many process technology applications.
- Motor located outside of air flow.
- Thermally insulated partition between motor and impeller, made of galvanised steel sheet, with 20 mm thick, non-flammable mineral wool.
- Complete motor-impeller unit can be removed without dismantling the system components.
- Inspection cover with handle, easily removable for cleaning and maintenance.
- Condensate tray with condensate drain as standard. Hole provided for rain drain (accessories) for outdoor installation.

Installation

Installation position with condensate drain below. Flexible installation due to three possible centrifugal outlet directions of the outlet fitting. Protected outdoor installation possible with weather protection cover and grille (accessories).

Electrical connection
 Standard terminal box (IP54) directly to the commutation electronics.

Special features of the GB EC series

Any installation position and flexible installation due to five possible outlet directions of the outlet fitting. The wall bracket (accessories) must be used for wall installation. Protected outdoor installation possible with weather protection cover and grille (accessories).

■ Electrical connection

Standard terminal box (IP54) mounted to external cable.

Description for both series

Casing

Self-supporting frame construction made of aluminium hollow profiles. Double-walled, 20 mm thick side panels made of galvanised steel sheet, sound and heat insulated by non-flammable mineral wool lining. Nozzle on inlet side for optimal inflow as well as connectors and flexible connecting sleeve (for the respective max. permissible air flow temperature) for duct connection. Moulded part (square to round) on outlet side for low-loss outflow and flexible connecting sleeve to prevent structure-borne noise transmission. Simple positioning with standard crane hook.

Impeller

Free-running high performance centrifugal impeller made of plastic (Type 120 made of aluminum), directly driven. Energy-efficient with low noise emission. Dynamically balanced together with the motor in accordance with DIN ISO 21940-11 – quality grade 6.3.

Drive

Energy-saving, speed-controllable EC external rotor motor in protection category IP54 with the highest level of efficiency. Maintenance-free and radio interference-free, ball bearing mounted.

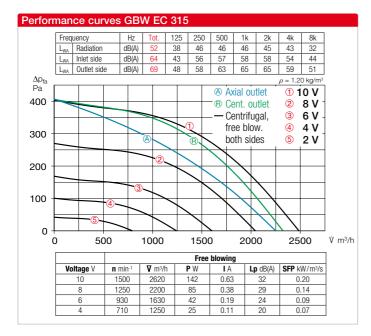
Motor protection

Integrated electronic temperature monitoring system for EC motor and electronics.

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.	Universal control system		Speed pote Flush-mounted		entiometer Surface-mounted	
		mm	Ÿ m³/h	min ⁻¹	dB(A) in 4m	kW	Α	No.	+ °C	kg	Type	Ref. no.	Туре	Ref. no.	Туре	Ref. no.
Alternating curr	rent, 1~, 2	30 V, 50/60	Hz, EC mot	or, protectio	n category	P44										
GBW EC 315	05808	315	2500	1700	33	0.22	0.99	1354	50	31.0	EUR EC1	2) 01347	PU 241)	01736	PA 241)	01737
ST120 Alternating current, 1~, 230 V, 50/60 Hz, EC motor, protection category IP54																
GBW EC 315 A T	120 06370	315	3050	1700	39	0.29	1.3	1223.1	120	42.0	EUR EC1	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).





Performance curves GBW EC 315 A T120 Frequency 52 49 47 L_{WA} Radiation dB(A) 48 44 41 38 56 61 55 63 L_{WA} Inlet side dB(A) 63 62 63 58 48 Δp_{fa} 66 L_{WA} Outlet side 64 65 57 49 dB(A) $\rho = 1.20 \text{ kg/m}$ 500 ® Cent. outlet 10 V Centrifugal, 2 8 V 400 free blow. 3 6 V 4 V both sides **5** 2 V 300 200 100 0n 500 1000 1500 2000 2500 3000 ÿ m³/h Free blowing Lp dB(A) SFP kW/m³/s **V** m³/h Voltage V n min-1 P W IΑ 1700 190 3050 0.90 0.23 39 1440 2580 0.60 36 0.17 1090 1930 60 0.38 30 0.11 730 1280 0.27 0.07

Power control

Continuously variable speed control with internal (delivery) or external potentiometer or continuously variable speed regulation 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 4 m (free field conditions) is also specified in the type table and the table below the performance curve.

Accessories for both series

Vibration dampers for indoor installation. 1 set = 4 pcs.

SDD-U Ref. no. 05627

Wall bracket for wall installation.

GB-WK 315 Ref. no. 05625

Weather protection grille for outlet-side coverage.

GB-WSG 315 Ref. no. 05638

Weather protection cover for protected outdoor installation.

GB-WSD 315 Ref. no. 05747

Special accessories

onnectors (central) for duct/hose connection.

GB-KW 315 Ref. no. 05643 (a condensate tray with condensate drain is included in delivery for GB EC T120).

of for GB EC T120 series

Rain drain for outdoor installation
(Hole in casing base already provided).

GB-RA Ref. no. 09418

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Universal control system, electronic controllers,	