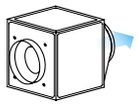
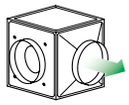
GB EC 500

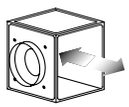




Ⓐ Axial outlet



Ⓡ Centr. outlet



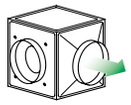
— Centrifugal, free blowing both sides

Any installation position and location due to five possible outlet directions.

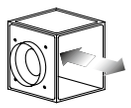
EC

GB EC 500 T120





Ⓡ Centr. outlet

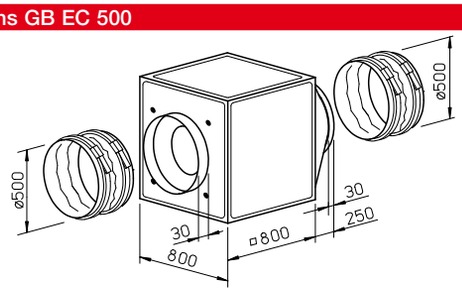


— Centrifugal, free blowing both sides

For the delivery of contaminated, humid and hot air up to max. 120 °C. Motor located outside of air flow.

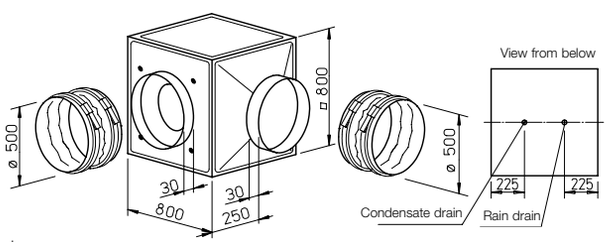
T120 EC

Dimensions GB EC 500



Dim. in mm

Dimensions GB EC 500 T120



Dim. in mm

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 mounted directly on the motor.

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 aluminium, directly driven. Energy-efficient with low noise emission. Dynamically balanced together with the motor in accordance with DIN ISO 21940-11 – quality grade 2.5.

- **Drive**
  Energy-saving, speed-controllable EC external rotor motor in protection category IP54 with a high level of efficiency. Maintenance-free and ball bearing mounted.

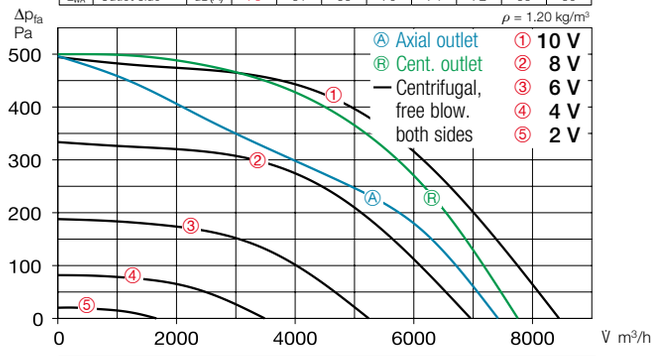
- **Motor protection**
  Integrated electronic temperature monitoring system for EC motor and electronics.

Type	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 potentiometer Flush-mounted		Speed potentiometer Surface-mounted	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4m	kW	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP44																
GBD EC 500 A	05818	500	8450	1200	43	0.95	1.60	1415	50	80.5	**EUR EC**[1) 2)]	01347	**PU 24**[1)]	01736	**PA 24**[1)]	01737
GBD EC 500 B	05813	500	10680	1500	46	2.00	3.14	1415	60	82.0	**EUR EC**[1) 2)]	01347	**PU 24**[1)]	01736	**PA 24**[1)]	01737
T120 **Three-phase current, 3~, 400 V, 50/60 Hz, EC motor, protection category IP54**																
GBD EC 500 A T120	06477	500	9850	1400	51	1.45	2.4	1214.1	120	96.0	**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).

Performance curves GBD EC 500 A

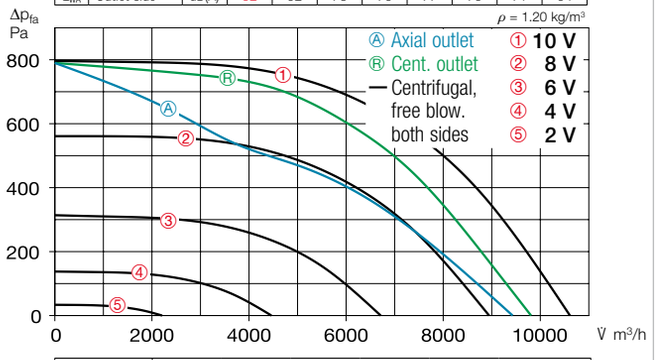
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	63	57	60	55	54	45	39	31
L_{WA}	Inlet side	dB(A)	75	57	66	66	69	68	66	59
L_{WA}	Outlet side	dB(A)	78	61	66	70	74	72	68	60



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1200	8450	620	1.14	43	0.27
8	990	6960	350	0.76	39	0.18
6	740	5240	160	0.43	33	0.11
4	490	3490	60	0.23	25	0.06

Performance curves GBD EC 500 B

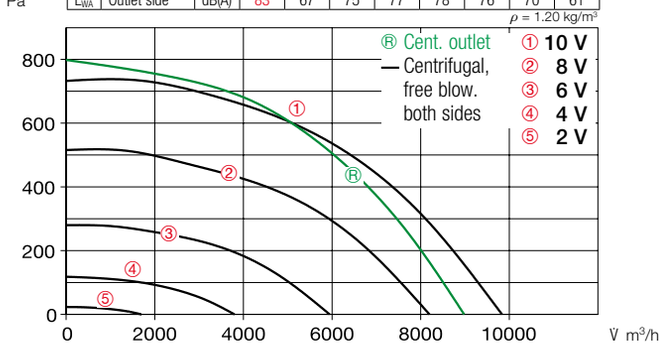
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	66	56	65	58	57	53	50	43
L_{WA}	Inlet side	dB(A)	79	58	70	72	74	73	68	61
L_{WA}	Outlet side	dB(A)	82	62	73	76	77	75	71	64



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1500	10680	1270	2.10	46	0.43
8	1260	9000	770	1.30	42	0.31
6	940	6740	350	0.77	36	0.19
4	630	4500	120	0.41	28	0.10

Performance curves GBD EC 500 T120

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Radiation	dB(A)	68	42	49	66	45	44	38	30
L_{WA}	Inlet side	dB(A)	80	58	67	70	71	72	77	58
L_{WA}	Outlet side	dB(A)	83	67	75	77	78	76	70	61



	Free blowing					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1400	9850	856	1.50	51	0.31
8	1170	8020	520	1.10	47	0.23
6	860	5930	224	0.60	40	0.14
4	550	3800	76	0.40	31	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 500 Ref. no. 05626

Weather protection grille for outlet-side coverage.
GB-WSG EC 500 Ref. no. 05640

Weather protection cover for protected outdoor installation.
GB-WSD EC 500 Ref. no. 05749

Special accessories

☐ **for GB EC series**
Condensate tray with drain connectors (central) for duct/hose connection.
GB-KW EC 500 Ref. no. 05645
(a condensate tray with condensate drain is included in delivery for GB EC T120).

☐ **for GB EC T120 series**
Rain drain for outdoor installation (Hole in casing base already provided).
GB-RA Ref. no. 09418

References	**Page**
Universal control system, electronic controllers, Speed potentiometer	615 ff.