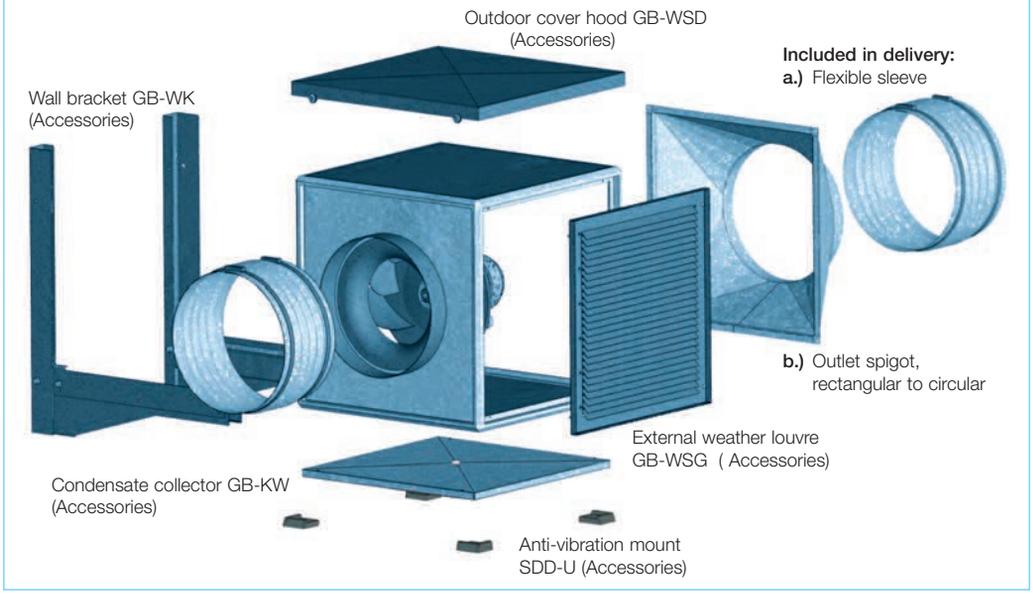
GigaBox and accessories



■ **Application**
Multifunctional fan box, suitable for medium to higher air flow volumes against high resistances in every type of ventilation system. The compact frame construction offers easy conversion of the outlet position, together with a choice of ideal accessories make these units ideal for all applications.

☐ **GB T120**
The GigaBox T120 types are suitable for the extraction of dirty, humid and hot air up to max. 120 °C, such as extract air fan in commercial kitchens and many process technology applications.

☐ **GB EC**
GigaBox types with EC motor technology are available for energy-saving application and lowest operating costs.

■ **Casing**
Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool.
Intake cone for ideal airflow, spigot and flexible connector for duct connection. With outlet adapter (from rectangular to circular) on the exhaust side for low-loss discharge and flexible connector to reduce vibration transmission.
The flexible connectors are supplied as standard and correspond to the max. permissible air flow temperature of +70 °C and/or +120 °C with the types GB T120. Easy positioning with crane hooks as standard.
☐ With GB T120, the motor is located outside of the air flow. The thermally insulated partition panel is also the support plate for the motor and impeller unit and can be removed completely for inspection without removing the complete fan from the system.

■ **Speed control**
☐ **GB and GB T120**
All types (except GBD 630/4 T120, GBD 710/4 and GBD 710/4 T120) are speed controllable by voltage reduction using a 5-step transformer controller or an electronic controller. The 3-phase GB types can also be 2 speed controlled by Y/△ switch (accessories DS 2 or full motor protection device M4). The performances stages are specified in the performance curve.
3-phase models are controllable by means of frequency inverter with Sine filter (FU-BS, accessories); GBD 630/4 T120, GBD 710/4 and GBD 710/4 T120 only controllable by frequency inverter FU-BS.
☐ **GB EC**
All EC types are steplessly speed-controllable by means of speed-potentiometer. Furthermore, control is also possible by means of three-step switch or steplessly via a universal control system or electronic differential pressure/ temperature controller. The example performances stages are specified in the performance curve.

■ **Assembly, Installation**
☐ **GB and GB EC**
Installation in any position and flexible assembly using the five possible discharge directions via the discharge adapter.
Removable panels allow inspection access on all sides.

☐ **GB T120**
Installation must be carried out with downward condensation discharge. Flexible assembly through three possible centrifugal discharge directions via the discharge adapter. Easy-access inspection cover with handle, for cleaning and maintenance.
Easy positioning of all types with integrated crane hooks. Vibration transmission to the building is minimised with anti-vibration mounts (Type SDD-U, accessories). Vibration transmission to the ducting is prevented using the standard flexible connector supplied.

■ **Impeller**
Free-running high-performance centrifugal impeller with backward curved polymer blades (NG 250 made from steel) on a galvanised steel back plate, direct driven. Series GB EC, GB from NG 500 and GB T120 with aluminium impellers.
Energy-efficient with low noise generation. Dynamically balanced together with the motor according to DIN ISO 1940 T.1 – grade 6.3 or 2.5.

■ **Motor**
☐ **GB and GB T120**
IEC-standard motor or maintenance-free external rotor motor protected to IP 54 or 44. Thermal overload protection through built-in thermal contacts.
Suitable for continuous operation S1. Insulation class F.
Ball bearings are lubricated for life.

☐ **GB EC**
Energy-saving, speed-controllable EC external rotor motor protected to IP 54 with high level of efficiency. Maintenance-free and interference-free, ball bearing mounted.

■ **Electrical connection**
☐ **GB and GB T120**
Standard terminal box, protected to IP 54.
☐ **GB EC**
Standard terminal box (IP 54) mounted to running cable.

■ **Air flow direction**
The air flow direction of centrifugal fans is not reversible, but can be set by positioning the fan to the required air flow direction. Furthermore the position can be set individually to constructional conditions through the conversion of the discharge adapter and panels. The correct motor rotation direction is marked by rotation arrows on the motor and must be checked at start-up.

■ **Incorrect direction of rotation**
If the fan is operated in the incorrect direction of rotation, the motor will overheat and the thermal contact will trip. A typical indication of this is a very low air flow combined with high noise levels and vibration.

■ **Air flow temperature**
The maximum permitted air flow temperature is specified in the type table.

■ **Ambient temperature**
From –40 °C to +40 °C.

VDI 2052 (2006) "Ventilation equipment for kitchens – Planning, design, inspection" is applied when planning exhaust air systems in commercial kitchens. This means the following for exhaust air fans:

- ☐ Fans in exhaust air systems must be designed and fitted so that they are easy to access, easy to control and easy to clean. It must be possible to turn them off from inside the kitchen. The motors must be located outside the flow line of the exhaust air. Connected extractor hoods must be able to distinguish between solid and liquid components where possible. Passage of flame to the following components is to be prevented.

These specific requirements are excellently fulfilled in the Gigabox GB T120. Freely accessible casing and dual-wall side panels allow easy cleaning with degreasing agents and steam.

The guidelines on fire safety requirements for ventilation systems (LüAR) from September 2006 have been introduced across large areas of Germany.
This places the following additional requirements on exhaust air systems in commercial and comparable kitchens:

- ☐ Exhaust air ducts must be made of non-flammable components (building material class A1 or A2 according to DIN 4102). From the kitchen outlet, they have to have at least a fire resistance class of L90 or must be equipped with a shut-off device with proof of use for this purpose.

- ☐ Kitchen exhaust air ducts must not be connected to one another or to other ventilation ducts. Having a joint line for the room air and the kitchen exhaust within the kitchen and the connection of multiple extractor hoods in a kitchen to a shared exhaust line is permitted.

- ☐ Suitable grease filters or separating devices made of non-combustible materials are to be attached placed on or directly behind exhaust devices (hoods or ventilation ceilings). It must be possible to remove and reattach these easily for cleaning.

- ☐ The exhaust ducts must have smooth, easy-to-clean interior surfaces. Profiled walls, such as flexible ducts and porous or absorbent materials are not permitted. Neither fat nor condensate must be able to pass through the walls.

- ☐ The exhaust ducts must have a cleaning opening after every change of direction and in horizontal, straight sections at intervals of no more than 3 m. Their dimensions must have a duct cross-section of at least 3600 cm^2. Devices must be placed at suitable locations in the ducting to collect and discharge condensate and cleaning agents.

- ■ **Fire protection to neighbouring buildings**
  If there is a ventilation system on the building envelope (wall), the parts of the ventilation system must have fire-resistant L90 lining. This also applies to fans and their exhaust lines, which are guided outwardly up through the roof.

- ■ **Fire protection in the roof space**
  Parts of the ventilation system (fan) in the roof space must have fire-resistant L90 lining. Lines that lead to the outdoors must have this lining up to the roof panels. Ventilation ducts (in the building and roof space) must have fire-resistant lining.

- ■ In the GigaBox T120 range, the motor is located outside the delivery flow and is separated from the impeller by a heat-insulated wall. The motor impeller unit can be removed without dismantling the ducting system.

- ■ Assembly of the shaped piece on exhaust side with GB T120 centrifugally above or at the side.

- ■ GB T120 with easy-to-remove access panel.

By combining the parameters of static pressure increase Δp_{fa}, radiated noise and intake air noise as sound pressure at 4 m (free field conditions), the following table facilitates the selection of GigaBox centrifugal fans.

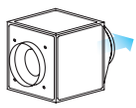
	Sound press. case breakout	Sound press. intake	Air flow volume $\dot{V}$ m³/h depending on static pressure												
Type GB EC	L_{PA} dB(A)	L_{PA} dB(A)	(ΔP_{fa}) in Pa												
	at 4 m	at 4 m	**0**	**50**	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**500**	**600**	**700**	**800**
GBW EC 250	31	43	2010	1880	1750	1600	1360	1010							
GBW EC 315	32	44	2620	2460	2310	2130	1830	1500							
GBW EC 355	30	49	3440	3270	3120	2950	2740	2500	2135	1630					
GBW EC 400 A	36	48	4050	3860	3600	3350	3050	2670	1880						
GBW EC 400 B	37	52	5160	4970	4730	4550	4210	4100	3800	3410	2900				
GBW EC 450	38	55	6460	6280	6100	5890	5660	5450	5190	4870	4600	3810			
GBD EC 450	39	56	7300	7120	6870	6650	6390	6110	5800	5500	5180	4420	3070		
GBD EC 500 A	43	55	8280	7980	7700	7380	7000	6620	6170	5680	5070	1800			
GBD EC 500 B	46	59	10500	10260	9980	9730	9410	9100	8850	8600	8320	7600	6650	5300	
GBD EC 560	49	59	13370	13110	12800	12510	12190	11930	11610	11280	10920	10310	9580	8320	6700
GBD EC 630	44	60	15000	14680	14200	13870	13450	12930	12380	11900	11310	10180	7850		
GBD EC 710 A	42	53	15890	15020	14250	13500	12510	11670	10680	9500	6730				
GBD EC 710 B	48	61	19630	19060	18400	16760	17130	16460	15720	15050	14060	11910	6960		

	Sound press. case breakout	Sound press. intake	Air flow volume $\dot{V}$ m³/h depending on static pressure												
Type GB	L_{PA} dB(A)	L_{PA} dB(A)	(ΔP_{fa}) in Pa												
	at 4 m	at 4 m	**0**	**50**	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**500**	**600**	**700**	**800**
GBW 250/4	27	39	1420	1160	890	500									
GBW 315/4	29	41	1760	1500	1260	970	560								
GBW 355/4	38	48	3060	2850	2640	2420	2180	1900	1510	560					
GBD 355/4/4	34	46	3090	2910	2720	2520	2290	2030	1680	1000					
GBW 400/4	38	50	4120	3920	3720	3500	3270	3000	2690	2260	1440				
GBD 400/4/4	38	50	4120	3910	3710	3500	3290	3050	2780	2430	1870				
GBW 450/4	40	49	4610	4400	4200	3990	3770	3530	3270	2970	2610				
GBD 450/4/4	40	52	5500	5220	4930	4640	4330	4000	3640	3210	2670				
GBW 500/4	47	59	8320	8020	7740	7460	7180	6910	6630	6340	6030	5330	4340	370	
GBD 500/4/4	45	57	8860	8540	8220	7880	7530	7160	6770	6350	5900	4800	2940	140	
GBW 560/4	45	57	9150	8910	8670	8420	8160	7890	7620	7330	7030	6360	5570	4500	2270
GBD 560/4/4	44	57	12610	12260	11910	11560	11200	10830	10450	10050	9630	8690	7540	5950	2940
GBD 560/6/6	35	48	8670	8160	7600	6990	6280	5410	4210	2190					
GBD 630/4/4	51	62	14430	14070	13710	13370	13040	12720	12390	12050	11710	11000	10200	9280	8110
GBD 630/6/6	42	53	9990	9430	8870	8290	7670	6980	6160	5070	3020				
GBD 710/4	46	59	20280	20020	19760	19490	19210	18930	18640	18340	18040	17400	16730	15990	15190
GBD 710/6/6	51	62	18740	17980	17190	16360	15490	14560	13550	12440	11170	7730	970		

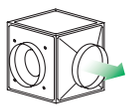
	Sound press. case breakout	Sound press. intake	Air flow volume $\dot{V}$ m³/h depending on static pressure												
Type GB T120	L_{PA} dB(A)	L_{PA} dB(A)	(ΔP_{fa}) in Pa												
	at 4 m	at 4 m	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**	**1200**
GBW 355/4 T120	36	49	3460	2990	2460	1505									
GBD 355/4/4 T120	36	49	3470	3045	2510	1690									
GBW 400/4 T120	40	53	4930	4380	3790	2900	1580								
GBD 400/4/4 T120	40	53	4870	4295	3650	2740	1370								
GBW 450/4 T120	45	57	7110	6480	5850	5135	4350	3300	1900						
GBD 450/4/4 T120	45	57	7180	6600	5950	5220	4340	3230	1340						
GBW 500/4 T120	45	59	8345	7770	7160	6480	5670	4680	3510	1840					
GBD 500/4/4 T120	45	59	8350	7765	7490	7180	6600	5910	4970	3820	1920				
GBD 560/4/4 T120	48	62	12300	11690	11080	10475	9800	9120	8410	7430	6000				
GBD 630/4 T120	53	67	14140	13690	13200	12720	12230	11670	11150	10470	8830	7850	6820	5150	
GBD 710/4 T120	55	66	18200	17650	17200	16650	16000	15300	14500	13750	12800	11850	10850	9800	8500

GB EC

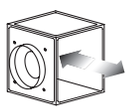
Arbitrary installation position and assembly in five possible discharge directions.



Ⓐ Axial disch.



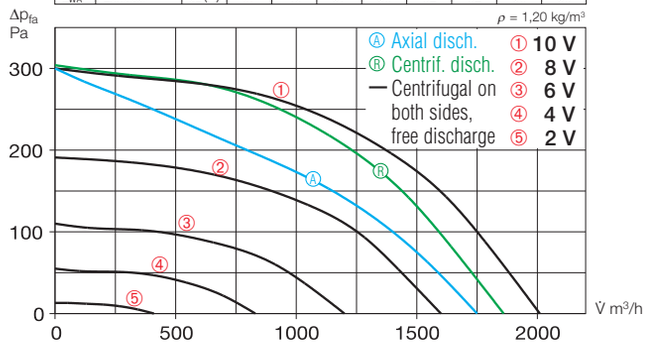
Ⓡ Centrif. disch.



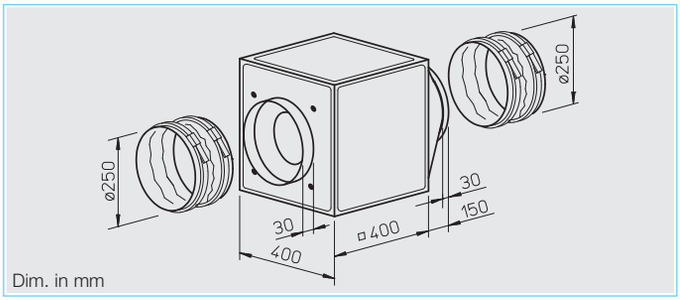
— Centrifugal on both sides, free discharge

GBW EC 250

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	51	41	48	44	41	39	36	29
L_{WA}	Intake	dB(A)	63	44	54	56	58	57	52	45
L_{WA}	Exhaust	dB(A)	67	45	57	59	62	62	56	50



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1650	2010	120	0,79	31	0,22
8	1325	1600	70	0,46	28	0,15
6	1000	1200	35	0,25	22	0,11
4	710	830	21	0,18	17	0,09



Dim. in mm

ECgreen Vent **50% Saving *** ** with speed control*

EC box fans

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Free-running backward curved centrifugal impeller from aluminium, direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 54. With ball bearings, maintenance-free and interference-free.

□ Electrical connection

Standard terminal box (IP 54) is mounted with a permanently attached cable.

□ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

□ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

□ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 250 Ref. no. 5625

External weather louvre to cover exhaust opening.
GB-WSG 250 Ref. no. 5637

Outdoor cover hood for protected outdoor installation.
GB-WSD 250 Ref. no. 5746

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 250 Ref. no. 5642

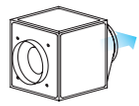
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Single phase motor, 1~, 230 V, 50/60 Hz, EC motor, protection to IP 54																
GBW EC 250	5807	250	2010	1650	31	0.17	1.05	973	55	20.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

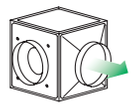
1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

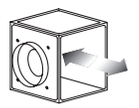
Arbitrary installation position and assembly in five possible discharge directions.



Ⓐ Axial disch.



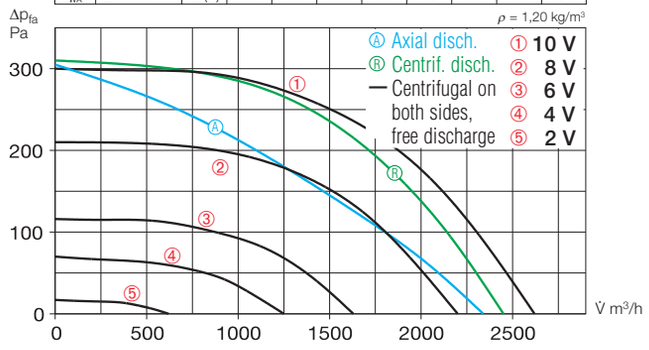
Ⓡ Centrif. disch.



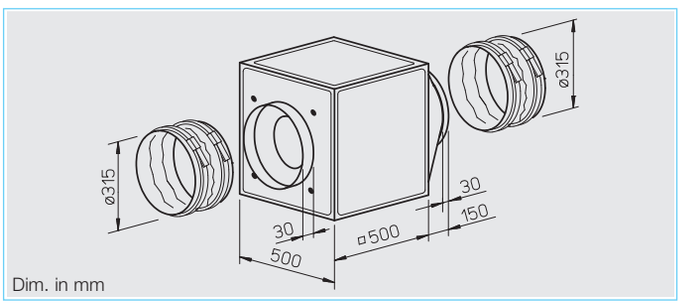
— Centrifugal on both sides, free discharge

GBW EC 315

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	52	38	46	46	46	45	43	32
L_{WA}	Intake	dB(A)	64	43	56	57	58	58	54	44
L_{WA}	Exhaust	dB(A)	69	48	58	63	65	65	59	51



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1500	2620	142	0,91	32	0,20
8	1250	2200	85	0,58	29	0,14
6	930	1630	42	0,31	24	0,09
4	710	1250	25	0,19	20	0,07



Dim. in mm

ECgreen Vent **55% Saving *** ** with speed control*

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Free-running backward curved centrifugal impeller from aluminium, direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 54. With ball bearings, maintenance-free and interference-free.

□ Electrical connection

Standard terminal box (IP 54) is mounted with a permanently attached cable.

□ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

□ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

□ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 315 Ref. no. 5625

External weather louvre to cover exhaust opening.
GB-WSG 315 Ref. no. 5638

Outdoor cover hood for protected outdoor installation.
GB-WSD 315 Ref. no. 5747

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 315 Ref. no. 5643

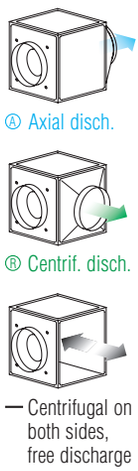
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Single phase motor, 1~, 230 V, 50/60 Hz, EC motor, protection to IP 54																
GBW EC 315	5808	315	2620	1500	32	0.20	1.25	973	55	31.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

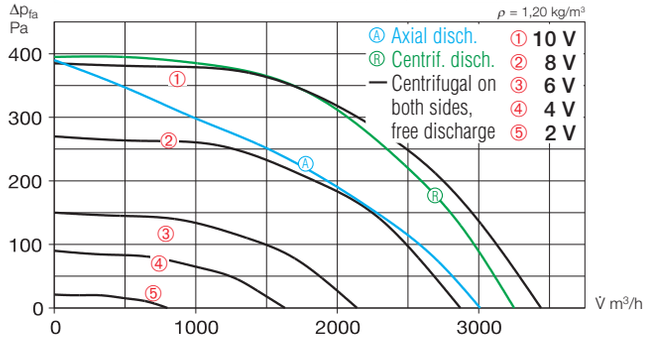
GB EC

Arbitrary installation position and assembly in five possible discharge directions.

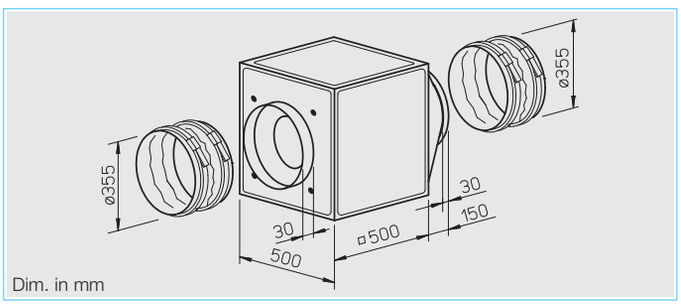


GBW EC 355

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	50	45	44	39	42	41	38	29
L_{WA}	Intake	dB(A)	69	49	63	65	62	59	55	48
L_{WA}	Exhaust	dB(A)	72	52	64	68	66	63	58	51



Voltage V	Free discharge n min⁻¹	V̇ m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
10	1500	3440	235	1,40	30	0,25
8	1250	2870	140	0,87	27	0,17
6	930	2140	64	0,45	22	0,11
4	710	1630	34	0,26	18	0,08



Dim. in mm

ECgreen Vent **60% Saving *** ** with speed control*

EC box fans

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

☐ Impeller

Free-running backward curved centrifugal impeller from aluminium, direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

☐ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 54. With ball bearings, maintenance-free and interference-free.

☐ Electrical connection

Standard terminal box (IP 54) is mounted with a permanently attached cable.

☐ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

☐ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

☐ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 355 Ref. no. 5625

External weather louvre to cover exhaust opening.
GB-WSG 355 Ref. no. 5638

Outdoor cover hood for protected outdoor installation.
GB-WSD 355 Ref. no. 5747

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 355 Ref. no. 5643

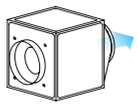
☐ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Single phase motor, 1~, 230 V, 50/60 Hz, EC motor, protection to IP 54																
GBW EC 355	5809	355	3440	1500	30	0.35	2.10	973	50	33.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

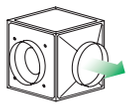
1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

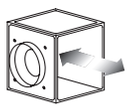
Arbitrary installation position and assembly in five possible discharge directions.



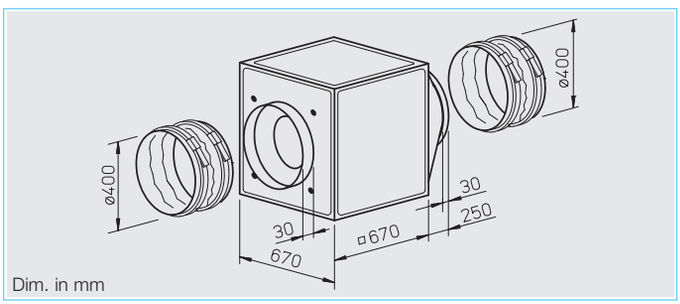
Ⓐ Axial disch.



Ⓡ Centrif. disch.



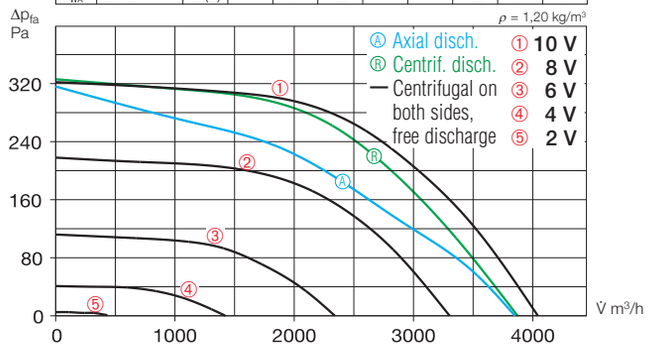
— Centrifugal on both sides, free discharge



Dim. in mm

GBW EC 400 A

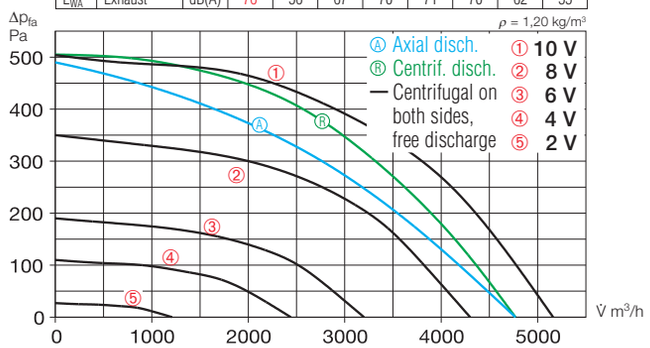
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	56	52	52	47	43	40	35	27
L_{WA}	Intake	dB(A)	68	53	62	67	60	58	55	48
L_{WA}	Exhaust	dB(A)	71	61	62	64	67	62	57	48



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1200	4040	209	1,2	36	0,19
8	990	3300	118	0,7	32	0,13
6	710	2340	49	0,3	25	0,08
4	430	1420	21	0,2	18	0,05

GBW EC 400 B

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	57	46	54	49	48	46	43	39
L_{WA}	Intake	dB(A)	72	53	64	65	66	67	59	53
L_{WA}	Exhaust	dB(A)	76	56	67	70	71	70	62	55



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1500	5160	395	2,52	37	0,28
8	1250	4300	244	1,63	34	0,21
6	930	3200	117	0,85	29	0,13
4	710	2440	63	0,49	25	0,09

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Impeller and remaining design see description on page 241.

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 400 Ref. no. 5626

External weather louvre to cover exhaust opening.
GB-WSG 400 Ref. no. 5639

Outdoor cover hood for protected outdoor installation.
GB-WSD 400 Ref. no. 5748

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 400 Ref. no. 5644

ECgreen Vent **60% Saving *** ** with speed control*

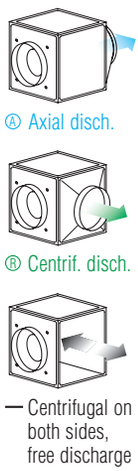
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

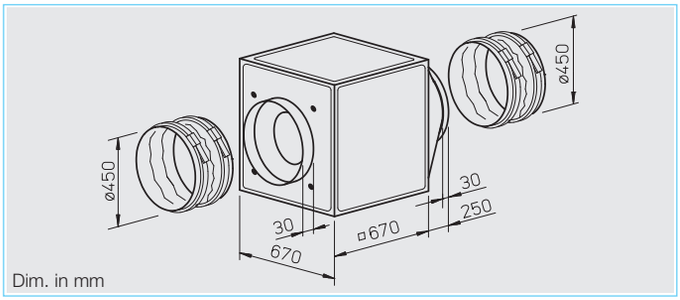
Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Single phase motor, 1~, 230 V, 50/60 Hz, EC motor, protection to IP 54																
GBW EC 400 A	5817	400	4050	1200	36	0.35	2.00	973	50	43.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737
GBW EC 400 B	5810	400	5160	1500	37	0.62	3.70	976	50	46.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

Arbitrary installation position and assembly in five possible discharge directions.

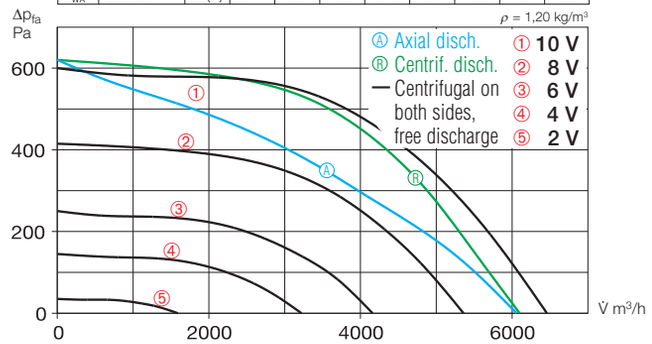




Dim. in mm

GBW EC 450

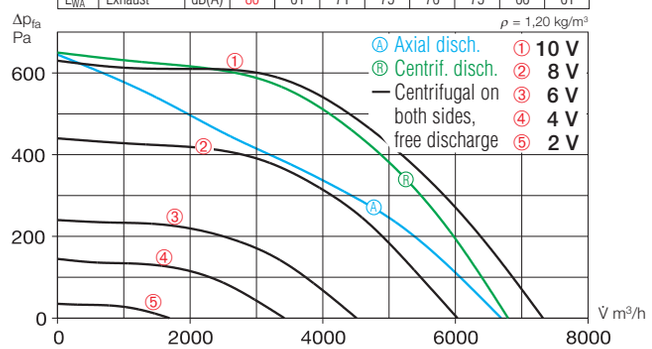
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	58	48	56	48	47	46	42	31
L_{WA}	Intake	dB(A)	75	54	66	68	70	69	64	57
L_{WA}	Exhaust	dB(A)	79	60	70	74	75	74	65	60



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1450	6460	614	3,71	38	0,34
8	1200	5360	363	2,35	35	0,24
6	930	4160	185	1,27	31	0,16
4	710	3220	92	0,68	26	0,10

GBD EC 450

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	59	49	57	49	48	47	43	32
L_{WA}	Intake	dB(A)	76	55	67	69	71	70	65	58
L_{WA}	Exhaust	dB(A)	80	61	71	75	76	75	66	61



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1500	7320	640	1,20	39	0,31
8	1250	6030	380	0,80	36	0,23
6	930	4510	170	0,45	31	0,14
4	710	3420	90	0,27	28	0,10

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Impeller and remaining design see description on page 241.

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 450 Ref. no. 5626

External weather louvre to cover exhaust opening.
GB-WSG 450 Ref. no. 5639

Outdoor cover hood for protected outdoor installation.
GB-WSD 450 Ref. no. 5748

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 450 Ref. no. 5644

ECgreen Vent **60% Saving *** ** with speed control*

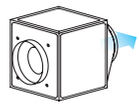
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Single phase motor, 1~, 230 V, 50/60 Hz, EC motor, protection to IP 54																
GBW EC 450	5811	450	6460	1450	38	1.00	5.70	976	50	55.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737
Three phase motor, 3~, 400 V, 50/60 Hz, EC motor, protection to IP 54																
GBD EC 450	5812	450	7320	1500	39	1.00	1.80	976	55	52.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

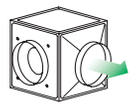
1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

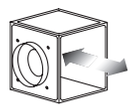
Arbitrary installation position and assembly in five possible discharge directions.



Ⓐ Axial disch.



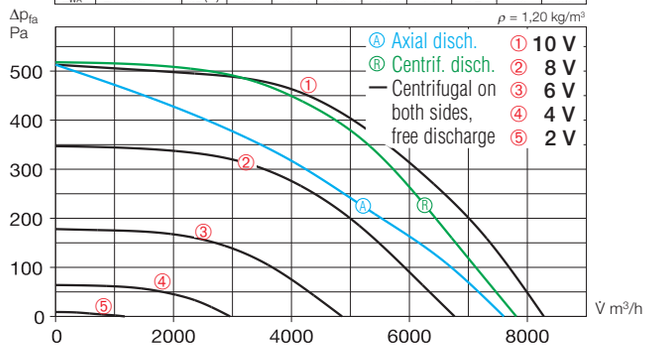
Ⓡ Centrif. disch.



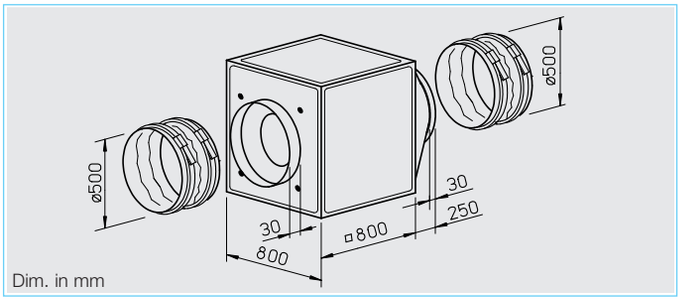
— Centrifugal on both sides, free discharge

GBD EC 500 A

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	63	57	60	55	54	45	39	31
L_{WA}	Intake	dB(A)	75	57	66	66	69	68	66	59
L_{WA}	Exhaust	dB(A)	78	61	66	70	74	72	68	60



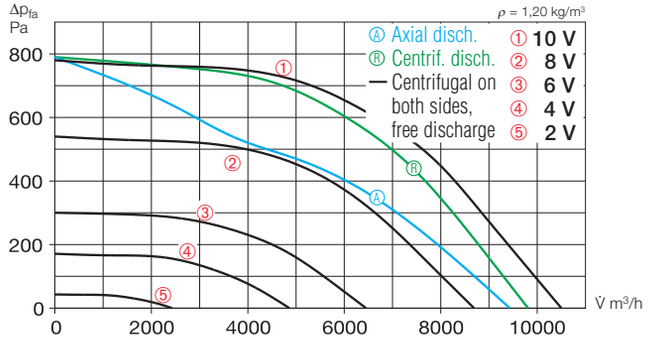
	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1200	8280	701	1,20	43	0,30
8	990	6770	414	0,75	39	0,22
6	710	4860	190	0,37	32	0,14
4	430	2960	63	0,16	22	0,08



Dim. in mm

GBD EC 500 B

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	66	56	65	58	57	53	50	43
L_{WA}	Intake	dB(A)	79	58	70	72	74	73	68	61
L_{WA}	Exhaust	dB(A)	82	62	73	76	77	75	71	64



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1500	10500	1250	2,10	46	0,43
8	1250	8690	745	1,30	43	0,31
6	930	6450	300	0,60	38	0,17
4	710	4860	170	0,40	34	0,13

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Impeller and remaining design see description on adjacent page.

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 500 Ref. no. 5626

External weather louvre to cover exhaust opening.
GB-WSG EC500 Ref. no. 5640

Outdoor cover hood for protected outdoor installation.
GB-WSD EC500 Ref. no. 5749

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW EC500 Ref. no. 5645

ECgreen Vent **65% Saving *** ** with speed control*

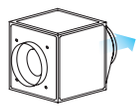
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Three phase motor, 3~, 400 V, 50/60 Hz, EC motor, protection to IP 54																
GBD EC 500 A	5818	500	8280	1200	43	1.10	1.80	976	50	80.5	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737
GBD EC 500 B	5813	500	10500	1500	46	1.95	3.10	976	50	79.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

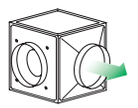
1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

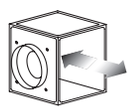
Arbitrary installation position and assembly in five possible discharge directions.



Ⓐ Axial disch.



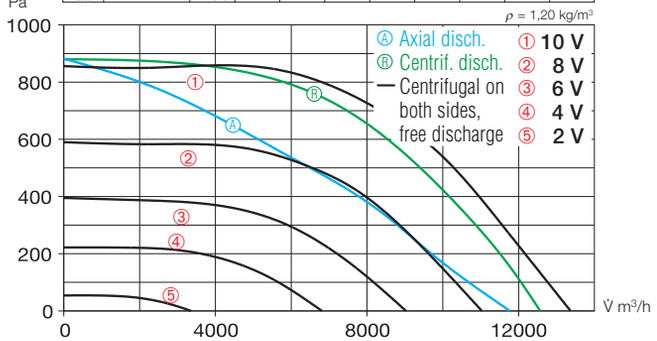
Ⓡ Centrif. disch.



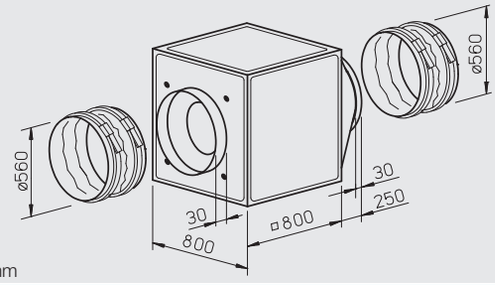
— Centrifugal on both sides, free discharge

GBD EC 560

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	69	60	67	58	57	56	55	49
L_{WA}	Intake	dB(A)	79	61	71	73	74	72	66	60
L_{WA}	Exhaust	dB(A)	84	65	74	79	80	75	70	62



Voltage V	Free discharge n min⁻¹	V̇ m³/h	P W	I A	Lp dB(A)	SFP kW/m³/s
10	1400	13370	1847	2,90	49	0,49
8	1150	11030	1030	1,70	46	0,34
6	930	9030	578	1,00	43	0,23
4	710	6810	281	0,55	39	0,15



Dim. in mm

ECgreen Vent **65% Saving *** ** with speed control*

EC box fans

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Free-running backward curved centrifugal impeller from aluminium, direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 2.5.

□ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 54. With ball bearings, maintenance-free and interference-free.

□ Electrical connection

Standard terminal box (IP 54) is mounted with a permanently attached cable.

□ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

□ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

□ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 560 Ref. no. 5626

External weather louvre to cover exhaust opening.
GB-WSG 560 Ref. no. 5640

Outdoor cover hood for protected outdoor installation.
GB-WSD 560 Ref. no. 5749

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 560 Ref. no. 5645

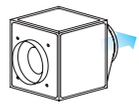
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
Three phase motor, 3~, 400 V, 50/60 Hz, EC motor, protection to IP 54																
GBD EC 560	5814	560	13370	1400	49	2.80	4.30	976	50	83.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

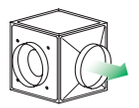
1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

GB EC

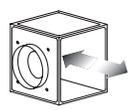
Arbitrary installation position and assembly in five possible discharge directions.



Ⓐ Axial disch.



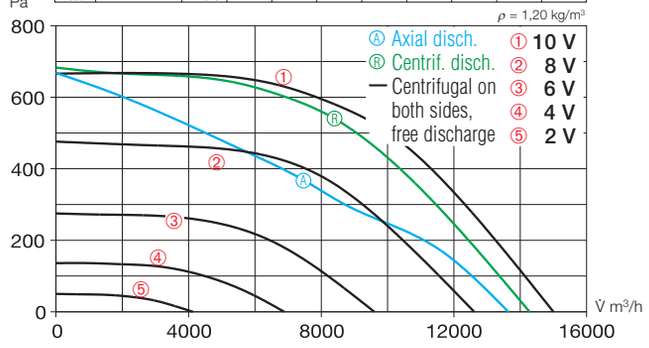
Ⓡ Centrif. disch.



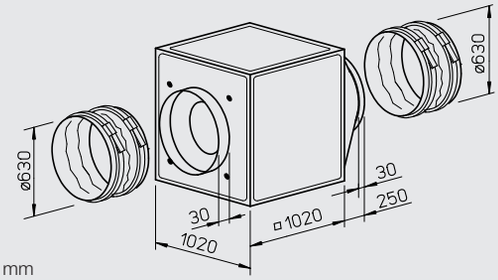
— Centrifugal on both sides, free discharge

GBD EC 630

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	64	58	61	53	53	51	49	41
L_{WA}	Intake	dB(A)	80	66	71	72	74	73	72	68
L_{WA}	Exhaust	dB(A)	83	69	76	77	78	75	68	61



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	1100	15000	1430	2,40	44	0,34
8	930	12610	890	1,50	42	0,25
6	710	9600	415	0,78	38	0,16
4	500	6880	170	0,36	32	0,09



Dim. in mm

ECgreen Vent **65% Saving *** ** with speed control*

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Free-running backward curved centrifugal impeller from aluminium, direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 2.5.

□ Motor

Energy saving, speed controllable EC-external rotor motors with highest efficiency, protection to IP 54. With ball bearings, maintenance-free and interference-free.

□ Electrical connection

Standard terminal box (IP 54) is mounted with a permanently attached cable.

□ Motor protection

Integrated electronic temperature monitoring for EC motor and electronics.

□ Speed control

Stepless speed control with potentiometer or stepless speed control with universal control system (see table). Duties at different speeds are exemplarily given in the performance curve.

□ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

External weather louvre to cover exhaust opening.
GB-WSG EC630 Ref. no. 5641

Outdoor cover hood for protected outdoor installation.
GB-WSD EC630 Ref. no. 5750

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW EC630 Ref. no. 5646

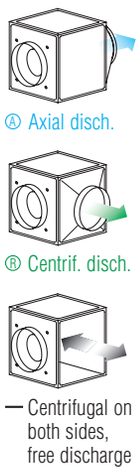
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Three phase motor, 3~, 400 V, 50/60 Hz, EC motor, protection to IP 54																
GBD EC 630	5815	630	15000	1100	44	2.30	3.70	976	50	116.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

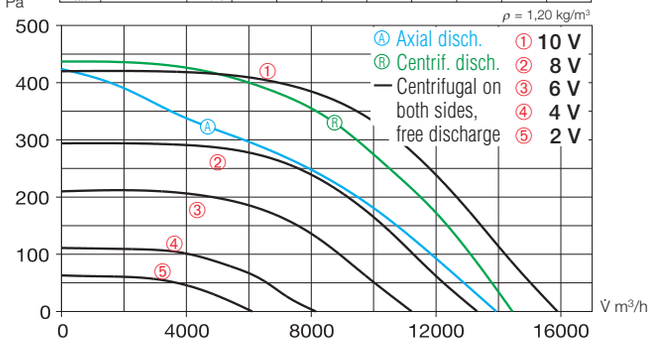
GB EC

Arbitrary installation position and assembly in five possible discharge directions.

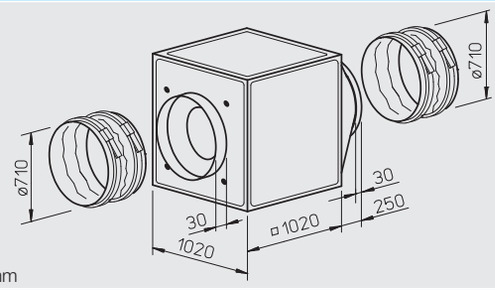


GBD EC 710 A

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	62	58	57	52	51	50	46	44
L_{WA}	Intake	dB(A)	73	60	64	66	68	66	61	59
L_{WA}	Exhaust	dB(A)	75	60	67	69	72	68	63	62



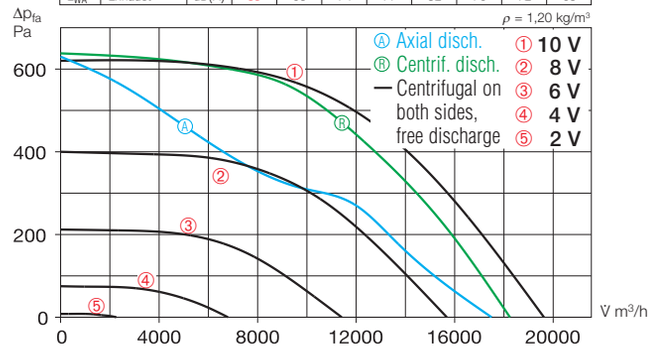
	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	775	15890	935	1,50	42	0,21
8	650	13320	561	1,00	40	0,15
6	550	11220	358	0,70	38	0,12
4	400	8150	158	0,34	33	0,07



Dim. in mm

GBD EC 710 B

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	68	65	64	54	53	51	47	41
L_{WA}	Intake	dB(A)	81	62	74	75	75	73	70	61
L_{WA}	Exhaust	dB(A)	85	65	74	77	82	76	72	63



	Free discharge					
Voltage V	**n** min⁻¹	**V̇** m³/h	**P** W	**I** A	**Lp** dB(A)	**SFP** kW/m³/s
10	940	19650	1700	2,70	48	0,31
8	750	15690	904	1,50	43	0,21
6	550	11420	393	0,80	36	0,12
4	330	6800	97	0,20	26	0,05

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Impeller and remaining design see description on adjacent page.

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

External weather louvre to cover exhaust opening.
GB-WSG 710 Ref. no. 5641

Outdoor cover hood for protected outdoor installation.
GB-WSD 710 Ref. no. 5750

Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 710 Ref. no. 5646

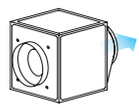
□ Accessory details	Page
Universal control system, electronic controller, speed-potentiometer	539 on

ECgreen Vent **65% Saving *** ** with speed control*

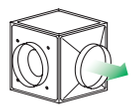
Type	Ref. no.	Connection Ø	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power	Current	Wiring diagram	max. air flow temperature	Weight net approx.	Universal control system		Speed-potentiometer flush		surface	
		mm	V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	No.	+ °C	kg	**Type**	Ref. no.	**Type**	Ref. no.	**Type**	Ref. no.
Three phase motor, 3~, 400 V, 50/60 Hz, EC motor, protection to IP 54																
GBD EC 710 A	5816	710	15890	775	42	1.50	2.40	976	50	119.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737
GBD EC 710 B	5819	710	19650	940	48	2.65	4.10	976	50	100.0	**EUR EC** [1) 2)]	1347	**PU 24** [1)]	1736	**PA 24** [1)]	1737

1) several EC fans can normally be connected 2) alternative electronic differential pressure/temp. controller (EDR/ETR, No. 1437/1438) or three-step speed switch (SU/SA, No. 4266/4267), see accessories

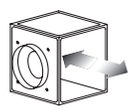
GB



Ⓐ Axial disch.



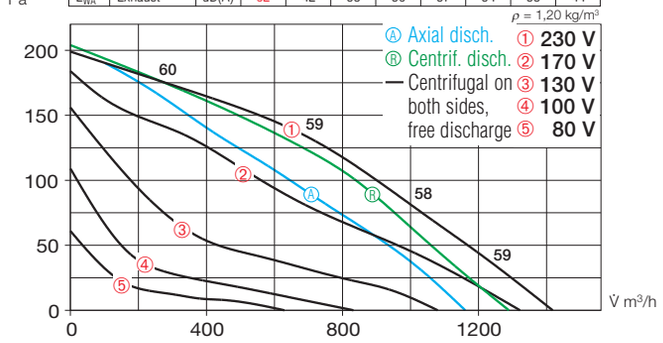
Ⓡ Centrif. disch.

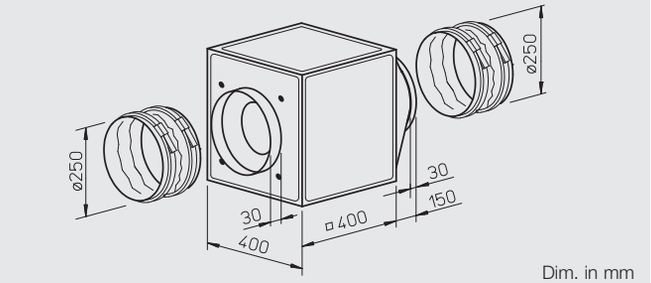


— Centrifugal on both sides, free discharge

GBW 250/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	47	37	45	40	33	30	22	19
L_{WA}	Intake	dB(A)	59	41	49	52	54	55	49	39
L_{WA}	Exhaust	dB(A)	62	42	53	56	57	54	53	44





Dim. in mm

■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

□ Impeller

Free-running high-performance centrifugal fan made from steel with backward curved blades on a galvanised steel plate, direct driven. Energy efficient with low noise development. Dynamically balanced together with the motor according to DIN ISO 1940 T.1 – grade 6.3.

□ Motor

Through maintenance-free, speed controllable external rotor motor protected to IP 44. Ball bearing mounted, interference-free.

□ Electrical connection

Standard terminal box (IP 54) on motor.

□ Motor protection

Through built-in thermal contacts wired in series with the winding, switches off and on automatically after cooling.

□ Speed control

Through voltage reduction by means of 5-step transformer or electronic speed controller. The performance stages are specified in the performance curve.

□ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter. For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.

SDD-U Ref. no. 5627

Wall bracket for wall mounting.

GB-WK 250 Ref. no. 5625

External weather louvre to cover exhaust opening.

GB-WSG 250 Ref. no. 5637

Outdoor cover hood for protected outdoor installation.

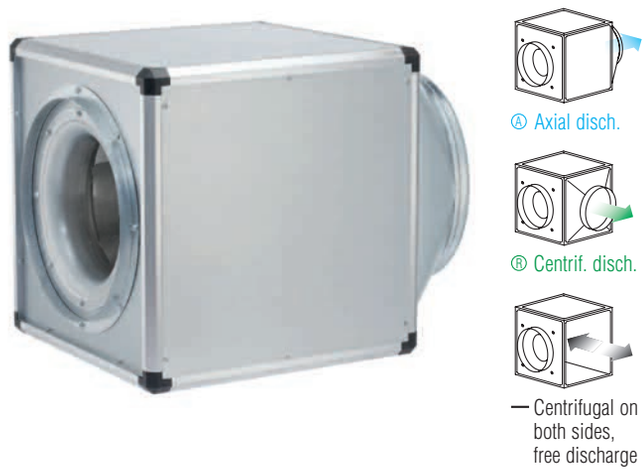
GB-WSD 250 Ref. no. 5746

Condensate collector with condensate spigot (centre) for pipe connection.

GB-KW 250 Ref. no. 5642

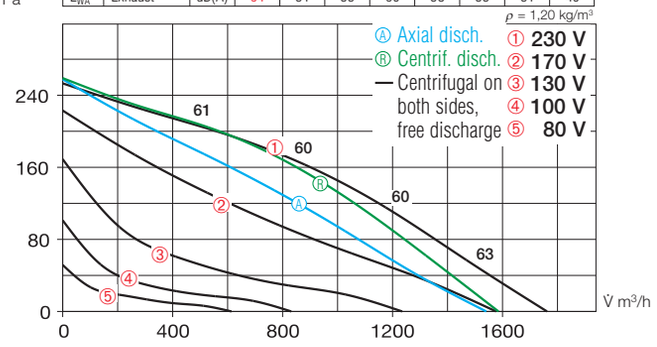
Type	Ref. no.	Air flow volume max.	R.P.M.	Sound press. case breakout	Motor power	Current full load	Current controlled	Wiring diagram	max. air flow temperature at full load	max. air flow temperature at control.	Weight net approx.	5-step transformer-speed switch without full motor protection		
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type	Ref. no.	
Single phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection to IP 44														
GBW 250/4	5509	1500	1290	27	0.11	0.44	0.48	864	65	65	20.0	**TSW 1,5**	1495	

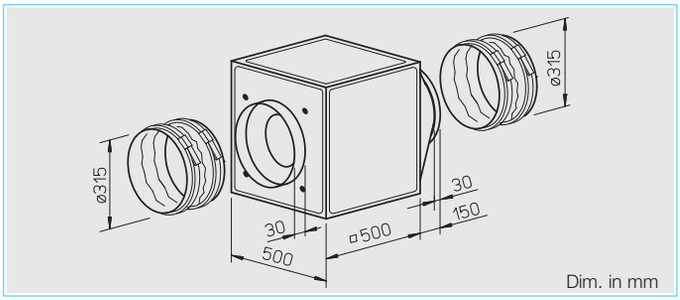
GB



GBW 315/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	49	41	45	44	39	34	23	20
L_{WA}	Intake	dB(A)	61	49	50	56	56	53	49	36
L_{WA}	Exhaust	dB(A)	64	51	55	60	58	55	51	40





■ Specification

■ Casing

Self-supporting frame construction made from hollow aluminium profiles. Lined with 20 mm thick double-walled side panels made from galvanised sheet steel, sound and thermally insulated with flame-retardant mineral wool. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning with standard crane hooks.

☐ Impeller

Free-running high-performance centrifugal fan made from steel with backward curved blades on a galvanised steel plate, direct driven. Energy efficient with low noise development. Dynamically balanced together with the motor according to DIN ISO 1940 T.1 – grade 6.3.

☐ Motor

Through maintenance-free, speed controllable external rotor motor protected to IP 44. Ball bearing mounted, interference-free.

☐ Electrical connection

Standard terminal box (IP 54) on motor.

☐ Motor protection

Through built-in thermal contacts wired in series with the winding, switches off and on automatically after cooling.

☐ Speed control

Through voltage reduction by means of 5-step transformer or electronic speed controller. The performance stages are specified in the performance curve.

☐ Installation

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter. For wall mounting the wall bracket (accessories) has to be used. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories

Anti vibration mounts for installation indoors. 1 set = 4 pcs.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 315 Ref. no. 5625

External weather louvre to cover exhaust opening.
GB-WSG 315 Ref. no. 5638

Outdoor cover hood for protected outdoor installation.
GB-WSD 315 Ref. no. 5747

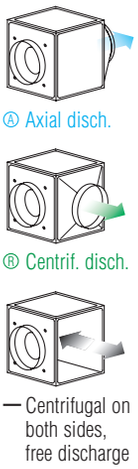
Condensate collector with condensate spigot (centre) for pipe connection.
GB-KW 315 Ref. no. 5643

☐ Information	Page
Information for planning	10 on
General techn. information, speed control	15 on
☐ Accessory-Details	**Page**
Speed switch, controller	525 on

Type	Ref. no.	Air flow volume max.	R.P.M.	Sound press. case breakout	Motor power	Current full load	Current controlled	Wiring diagram	max. air flow temperature at full load	max. air flow temperature at control.	Weight net approx.	5-step transformer-speed switch without full motor protection	
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type	Ref. no.
Single phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection to IP 44													
GBW 315/4	5510	1760	1230	29	0,123	0,55	0,55	864	55	55	31,0	**TSW 1,5**	1495

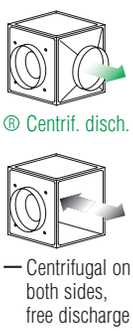
GB

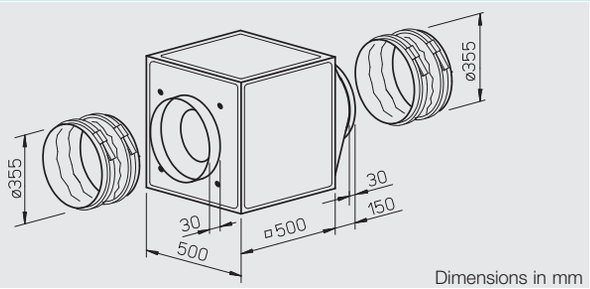
Arbitrary installation position and flexible assembly by five possible discharge directions.

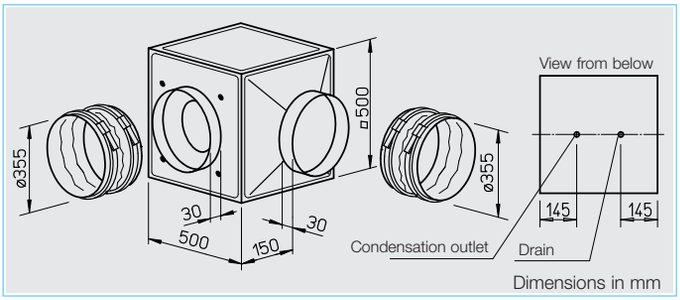


GB T120

Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.







■ Special features of types GB T120

– Designed for moving dirty, humid and hot air volumes up to max. 120° C.
– Motor located outside of air flow.
– Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
– Easily accessible motor and impeller unit, removable without disassembling the system components.
– Inspection cover with handle, simply remove for cleaning and maintenance.
– Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved centrifugal impeller highly efficient with polymer blades on galvanised steel disc (with GB T120 aluminium impeller), direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

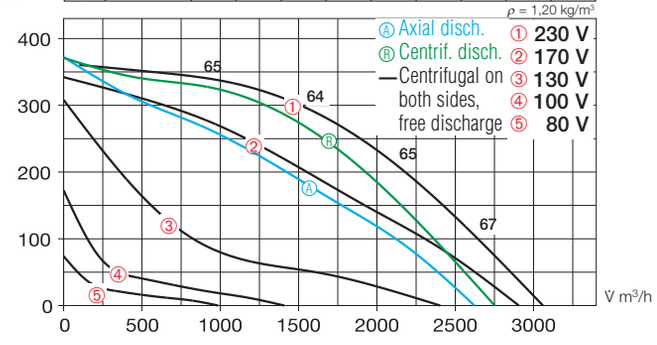
Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		$\dot{V}$ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type		Type		Type	
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 355/4	5511	3060	1375	38	0.29	1.47	1.90	864	60	60	32.0	**MWS 3**	1948	**TSW 3,0**	1496	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 355/4/4	5512	2850/3100	1230/1405	34	0.25/0.34	0.41/0.75	0.75	867	55	55	35.0	**RDS 1**	1314	**TSD 1,5**	1501	**MD**	5849
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 355/4 T120	5770	3460	1340	36	0.32	1.55	1.75	935	120	120	38.0	**MWS 3**	1948	**TSW 3,0**	1496	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 355/4/4 T120	5771	2990/3470	1100/1360	36	0.22/0.33	0.40/0.75	0.75	947	120	120	38.0	**RDS 1**	1314	**TSD 0,8**	1500	**MD**	5849

1) incl. operation switch

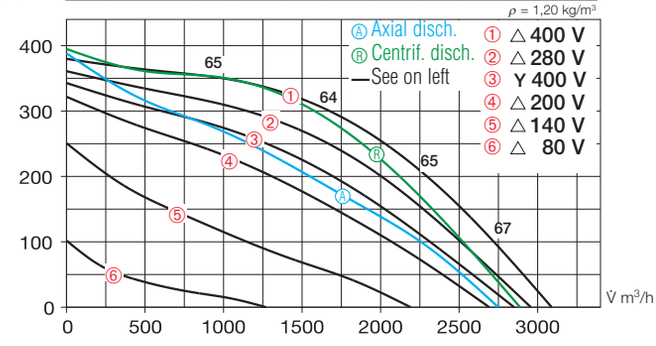
GBW 355/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	58	54	54	49	45	42	37	29
L_{WA}	Intake	dB(A)	68	55	60	63	62	59	56	53
L_{WA}	Exhaust	dB(A)	74	62	65	68	69	67	59	55



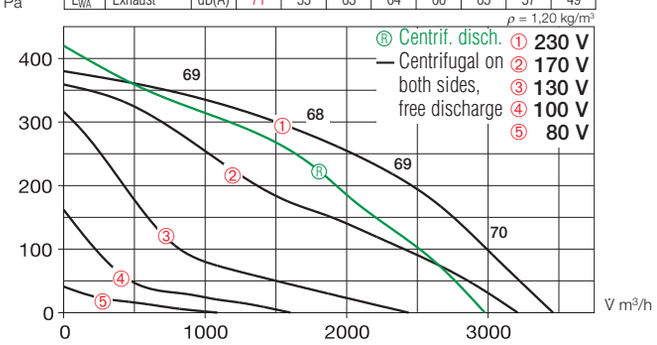
GBD 355/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	54	46	50	49	44	39	28	25
L_{WA}	Intake	dB(A)	66	54	55	61	61	58	54	41
L_{WA}	Exhaust	dB(A)	69	56	60	65	63	60	56	45



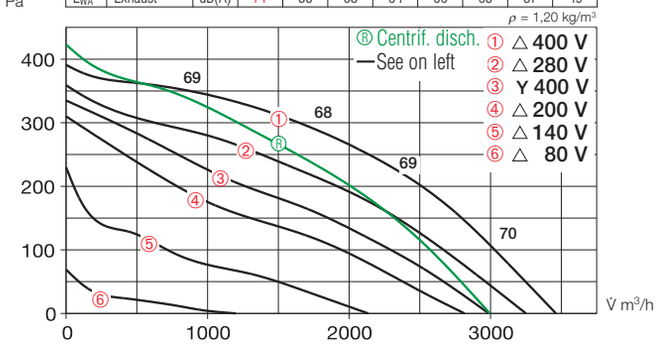
GBW 355/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	56	48	52	49	47	44	41	38
L_{WA}	Intake	dB(A)	69	55	61	63	62	63	58	48
L_{WA}	Exhaust	dB(A)	71	55	63	64	66	65	57	49



GBD 355/4/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	56	48	52	49	47	44	41	38
L_{WA}	Intake	dB(A)	69	55	61	63	62	63	58	48
L_{WA}	Exhaust	dB(A)	71	55	63	64	66	65	57	49



☐ Electrical connection

Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

☐ Motor protection

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

☐ Speed control

All types are speed controllable by voltage reduction using a transformer controller.
The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 355 Ref. no. 5625

External weather louvers to cover exhaust opening.
GB-WSG 355 Ref. no. 5638

Outdoor cover hood for outdoor installation.
GB-WSD 355 Ref. no. 5747

On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [2] Ref. no. 1351

[2] full motor protection unit recommended: MD Ref. No. 5849

■ Specific accessories

☐ for types GB

Condensate collector with condensate spigot for pipe connection.
GB-KW 355 Ref. no. 5643

(Condensate collector with condensate spigot included in delivery with GB T120).

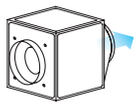
☐ for types GB T120

Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

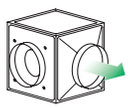
☐ Information	Page
Information for planning	10 on
General techn. information, speed control	15 on
☐ Accessory-Details	**Page**
Speed controller and full motor protection unit	525 on

GB

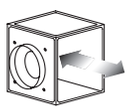
Arbitrary installation position and flexible assembly by five possible discharge directions.



Ⓐ Axial disch.



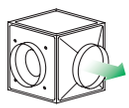
Ⓡ Centrif. disch.



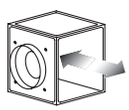
— Centrifugal on both sides, free discharge

GB T120

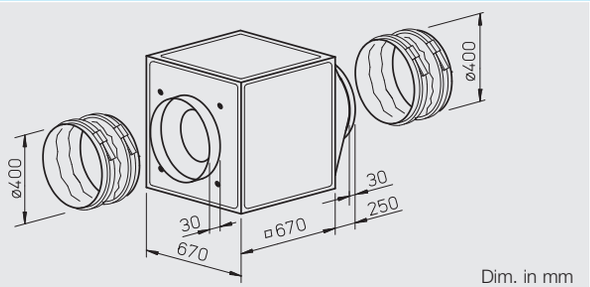
Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.



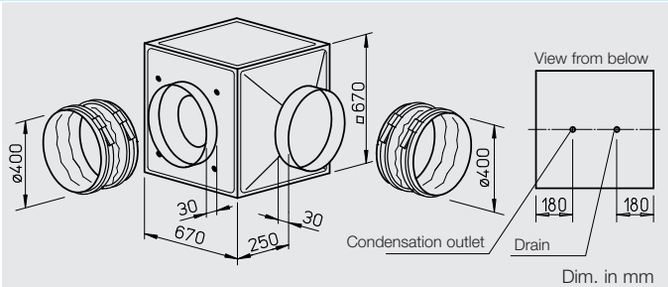
Ⓡ Centrif. disch.



— Centrifugal on both sides, free discharge



Dim. in mm



Dim. in mm

■ Special features of types GB T120

- Designed for moving dirty, humid and hot air volumes up to max. 120° C.
- Motor located outside of air flow.
- Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
- Easily accessible motor and impeller unit, removable without disassembling the system components.
- Inspection cover with handle, simply remove for cleaning and maintenance.
- Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved centrifugal impeller highly efficient with polymer blades on galvanised steel disc (with GB T120 aluminium impeller), direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

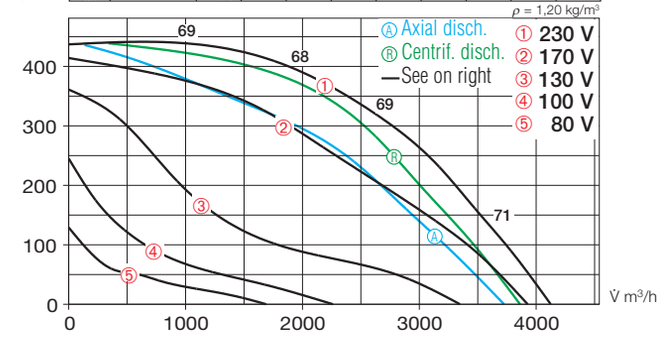
Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type		Type		Type	
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 400/4	5513	4300	1360	38	0.53	2.40	2.80	864	50	50	52.0	**MWS 5**	1949	**TSW 5,0**	1497	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 400/4/4	5514	3700/4100	1193/1390	38	0.38/0.49	0.61/1.05	1.08	867	50	45	52.0	**RDS 2**	1315	**TSD 1,5**	1501	**MD**	5849
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 400/4 T120	5772	4930	1280	40	0.54	2.50	2.50	935	120	100	62.0	**MWS 3**	1948	**TSW 3,0**	1496	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 400/4/4 T120	5773	4010/4870	975/1255	40	0.29/0.48	0.50/1.10	1.10	947	120	120	62.0	**RDS 1**	1314	**TSD 1,5**	1501	**MD**	5849

1) incl. operation switch

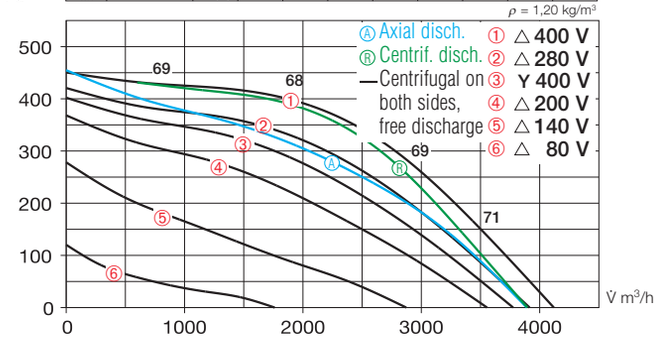
GBW 400/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	58	54	54	49	45	42	37	29
L_{WA}	Intake	dB(A)	70	60	61	63	66	61	56	47
L_{WA}	Exhaust	dB(A)	73	58	67	69	65	63	60	53



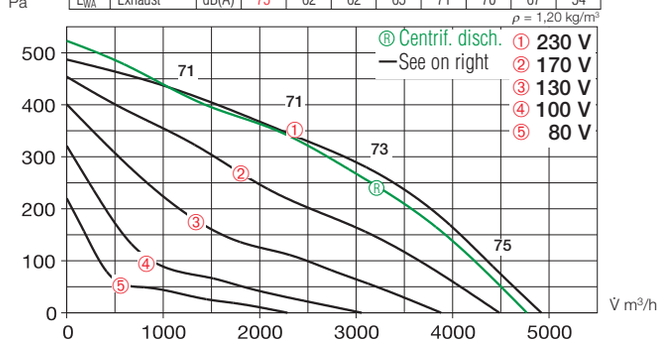
GBD 400/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	58	54	54	49	45	42	37	29
L_{WA}	Intake	dB(A)	70	60	61	63	66	61	56	47
L_{WA}	Exhaust	dB(A)	73	58	67	69	65	63	60	53



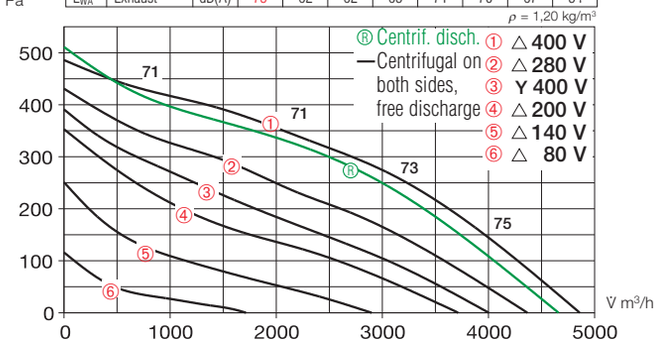
GBW 400/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	60	56	53	51	52	50	47	39
L_{WA}	Intake	dB(A)	73	58	60	63	68	69	63	52
L_{WA}	Exhaust	dB(A)	75	62	62	65	71	70	67	54



GBD 400/4/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	60	56	53	51	52	50	47	39
L_{WA}	Intake	dB(A)	73	58	60	63	68	69	63	52
L_{WA}	Exhaust	dB(A)	75	62	62	65	71	70	67	54



☐ **Electrical connection**
Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

☐ **Motor protection**
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

☐ **Speed control**
All types are speed controllable by voltage reduction using a transformer controller.
The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

■ **Sound levels**
Total sound power levels and the spectrum figures in dB(A) are given for:
– Sound level case breakout
– Sound level intake
– Sound level exhaust
In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ **Accessories of both types**

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 400 Ref. no. 5626

External weather louvers to cover exhaust opening.
GB-WSG 400 Ref. no. 5639

Outdoor cover hood for outdoor installation.
GB-WSD 400 Ref. no. 5748

On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [2] Ref. no. 1351

[2] full motor protection unit recommended: MD Ref. No. 5849

■ **Specific accessories**

☐ **for types GB**
Condensate collector with condensate spigot for pipe connection.
GB-KW 400 Ref. no. 5644
(Condensate collector with condensate spigot included in delivery with GB T120).

☐ **for types GB T120**
Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

☐ Information	Page
Information for planning	10 on
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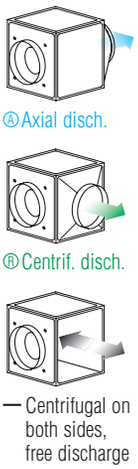
☐ Accessory-Details	Page
Speed controller and full motor protection unit	525 on

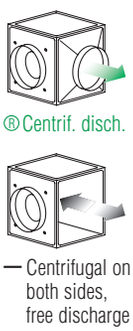
GB

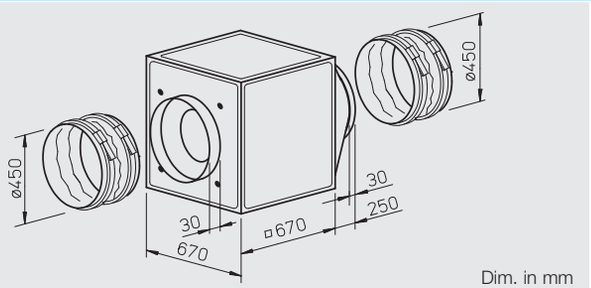
Arbitrary installation position and flexible assembly by five possible discharge directions.

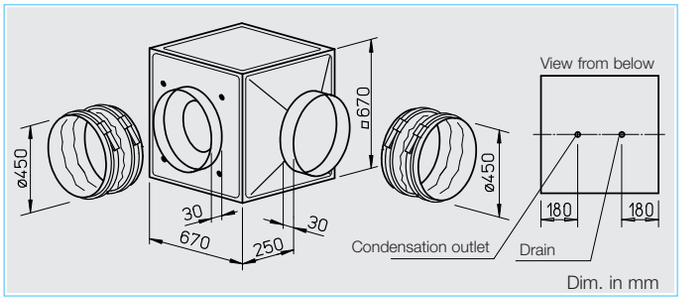


GB T120

Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.







■ Special features of types GB T120

- Designed for moving dirty, humid and hot air volumes up to max. 120° C.
- Motor located outside of air flow.
- Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
- Easily accessible motor and impeller unit, removable without disassembling the system components.
- Inspection cover with handle, simply remove for cleaning and maintenance.
- Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved centrifugal impeller highly efficient with polymer blades on galvanised steel disc (with GB T120 aluminium impeller), direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

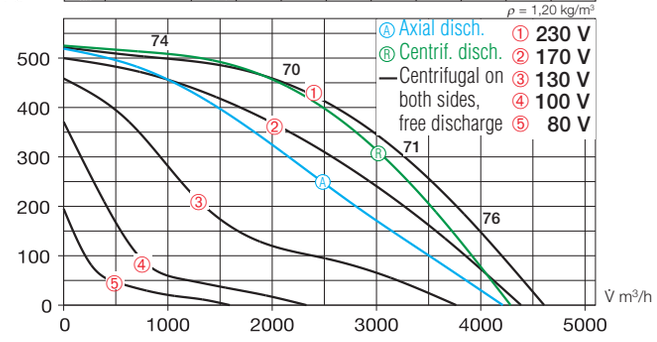
Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type		Type		Type	
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 450/4	5515	4600	1380	40	0.66	2.90	4.0	864	45	45	49.0	**MWS 5**	1949	**TSW 5,0**	1497	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 450/4/4	5516	4350/5450	880/1240	40	0.36/0.67	0.67/1.33	1.30	867	55	55	49.0	**RDS 2**	1315	**TSD 1,5**	1501	**MD**	5849
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 450/4 T120	5774	7110	1370	45	1.00	4.60	5.50	935	120	100	74.0	**MWS 7,5**	1950	**TSW 7,5**	1596	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 450/4/4 T120	5775	6210/7180	1100/1350	45	0.65/0.90	1.10/1.60	1.80	947	120	110	74.0	**RDS 2**	1315	**TSD 3,0**	1502	**MD**	5849

[1] incl. operation switch

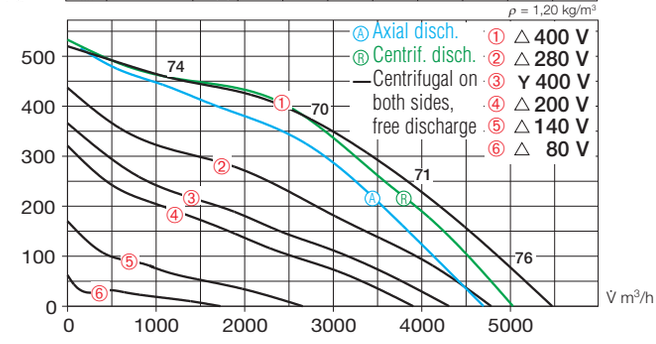
GBW 450/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	60	56	56	51	47	44	39	31
L_{WA}	Intake	dB(A)	69	61	63	65	67	65	60	54
L_{WA}	Exhaust	dB(A)	75	64	66	68	70	68	63	57



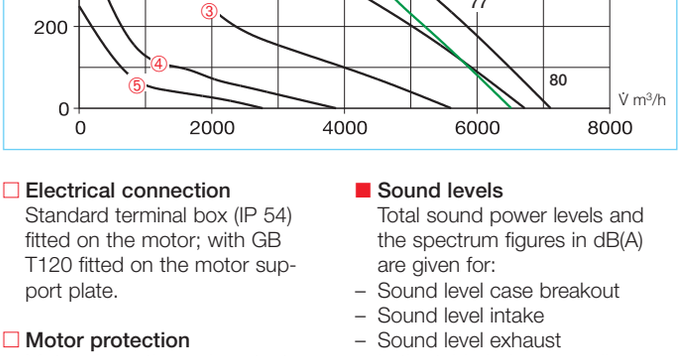
GBD 450/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	60	56	56	51	47	44	39	31
L_{WA}	Intake	dB(A)	72	62	63	65	68	63	58	49
L_{WA}	Exhaust	dB(A)	75	60	69	71	67	65	62	55



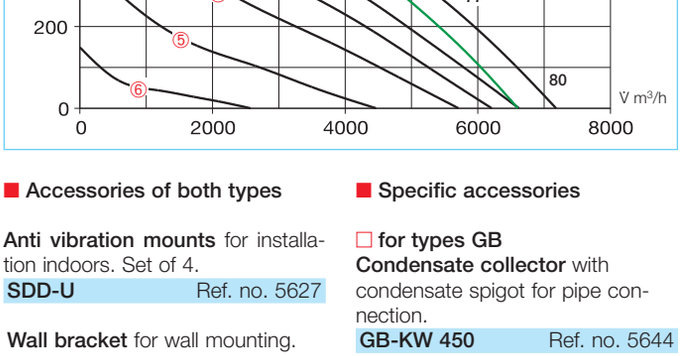
GBW 450/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	61	58	56	57	55	52	44
L_{WA}	Intake	dB(A)	77	62	64	67	72	73	67	56
L_{WA}	Exhaust	dB(A)	80	67	68	70	76	75	72	59



GBD 450/4/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	61	58	56	57	55	52	44
L_{WA}	Intake	dB(A)	77	62	64	67	72	73	67	56
L_{WA}	Exhaust	dB(A)	80	67	68	70	76	75	72	59



☐ Electrical connection

Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

☐ Motor protection

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

☐ Speed control

All types are speed controllable by voltage reduction using a transformer controller.
The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 450 Ref. no. 5626

External weather louvers to cover exhaust opening.
GB-WSG 450 Ref. no. 5639

Outdoor cover hood for outdoor installation.
GB-WSD 450 Ref. no. 5748

On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [2] Ref. no. 1351

[2] full motor protection unit recommended: MD Ref. No. 5849

■ Specific accessories

☐ **for types GB**

Condensate collector with condensate spigot for pipe connection.
GB-KW 450 Ref. no. 5644

(Condensate collector with condensate spigot included in delivery with GB T120).

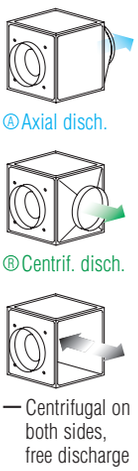
☐ **for types GB T120**

Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

☐ Information	Page
Information for planning	10 on
General techn. information, speed control	15 on
☐ Accessory-Details	Page
Speed controller and full motor protection unit	525 on

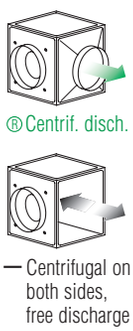
GB

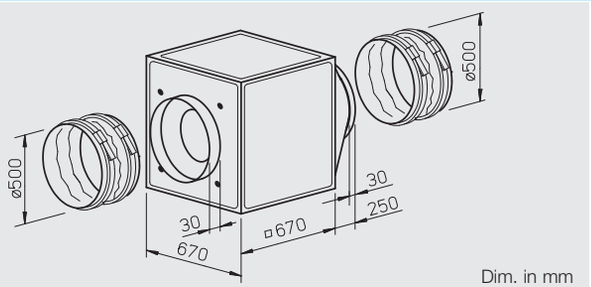
Arbitrary installation position and flexible assembly by five possible discharge directions.

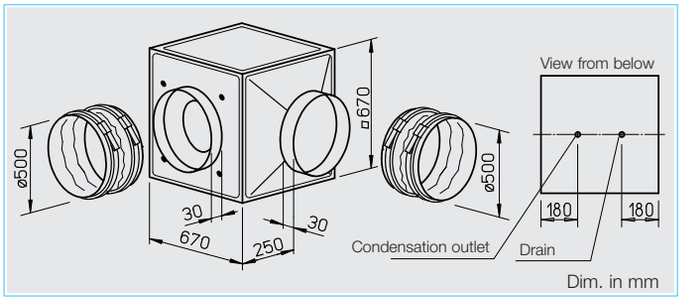


GB T120

Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.







■ Special features of types GB T120

– Designed for moving dirty, humid and hot air volumes up to max. 120° C.
– Motor located outside of air flow.
– Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
– Easily accessible motor and impeller unit, removable without disassembling the system components.
– Inspection cover with handle, simply remove for cleaning and maintenance.
– Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

□ Electrical connection

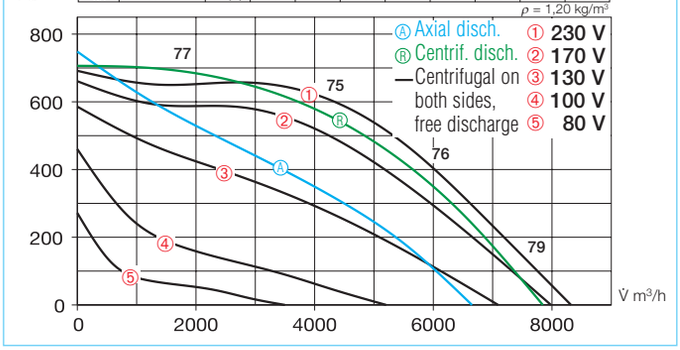
Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type		Type		Type	
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 500/4	5517	8321	1401	47	1.50	6.70	9.60	865	65	55	61	**MWS 10**	1946	**TSW 10**	1498	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 500/4/4	5518	8000/9200	1075/1340	45	0.97/1.45	1.60/2.80	2.90	867	50	50	57	**RDS 7**	1578	**TSD 5,5**	1503	**MD**	5849
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 500/4 T120	5776	8345	1340	45	1.40	6.1	7.0	301	120	100	75	**MWS 10**	1946	—		—	
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 500/4/4 T120	5777	7320/8350	1120/1370	45	0.95/1.30	1.60/2.50	2.5	947	120	110	75	**RDS 4**	1316	**TSD 3,0**	1502	**MD**	5849

[1] incl. operation switch

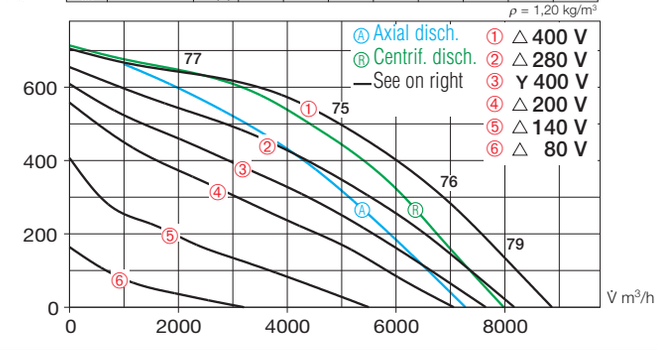
GBW 500/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	67	64	63	53	52	50	46	40
L_{WA}	Intake	dB(A)	79	63	72	72	74	72	66	59
L_{WA}	Exhaust	dB(A)	83	72	75	76	78	75	71	67



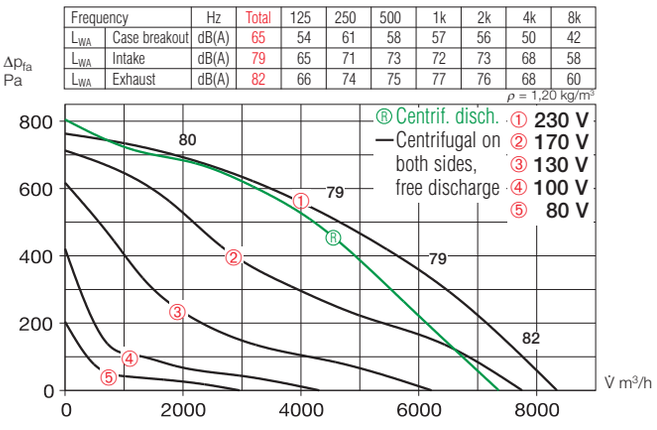
GBD 500/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	59	62	57	56	47	41	33
L_{WA}	Intake	dB(A)	77	57	66	69	74	70	64	55
L_{WA}	Exhaust	dB(A)	80	61	73	74	74	73	69	60



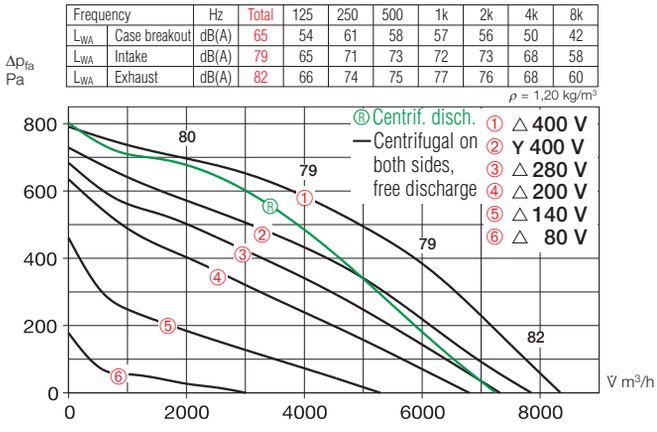
GBW 500/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	54	61	58	57	56	50	42
L_{WA}	Intake	dB(A)	79	65	71	73	72	73	68	58
L_{WA}	Exhaust	dB(A)	82	66	74	75	77	76	68	60



GBD 500/4/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	54	61	58	57	56	50	42
L_{WA}	Intake	dB(A)	79	65	71	73	72	73	68	58
L_{WA}	Exhaust	dB(A)	82	66	74	75	77	76	68	60



☐ Motor protection

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

☐ Speed control

All types are speed controllable by voltage reduction using a transformer controller.
The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 500 Ref. no. 5626

External weather louvers to cover exhaust opening.
GB-WSG 500 Ref. no. 5639

Outdoor cover hood for outdoor installation.
GB-WSD 500 Ref. no. 5748

On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [2] Ref. no. 1351

[2] full motor protection unit recommended: MD Ref. No. 5849

■ Specific accessories

☐ for types GB

Condensate collector with condensate spigot for pipe connection.
GB-KW 500 Ref. no. 5644

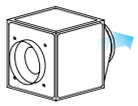
(Condensate collector with condensate spigot included in delivery with GB T120).

☐ for types GB T120

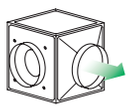
Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

GB

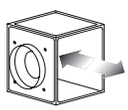
Arbitrary installation position and flexible assembly by five possible discharge directions.



Ⓐ Axial disch.



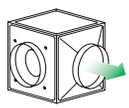
Ⓡ Centrif. disch.



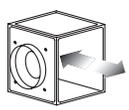
— Centrifugal on both sides, free discharge

GB T120

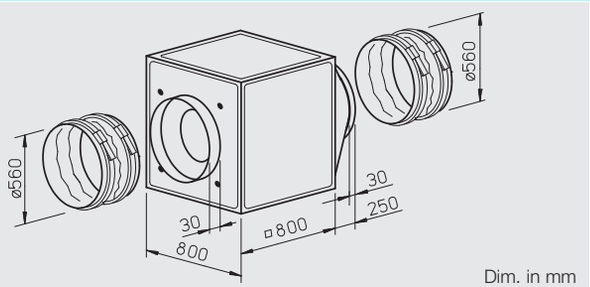
Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.



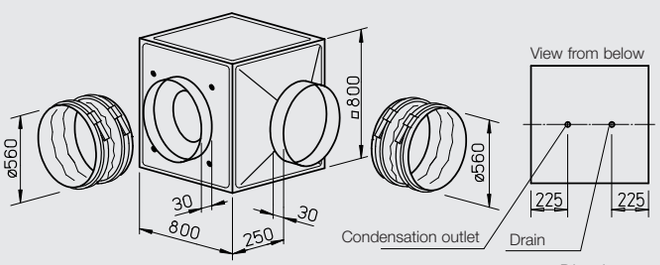
Ⓡ Centrif. disch.



— Centrifugal on both sides, free discharge



Dim. in mm



Dim. in mm

■ **Special features of types GB T120**

– Designed for moving dirty, humid and hot air volumes up to max. 120° C.
– Motor located outside of air flow.
– Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
– Easily accessible motor and impeller unit, removable without disassembling the system components.
– Inspection cover with handle, simply remove for cleaning and maintenance.
– Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ **Assembly GB T120**

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ **Feature**

□ **Assembly of types GB**

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ **Specification of both types**

□ **Casing**

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ **Impeller**

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ **Motor**

Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

□ **Electrical connection**

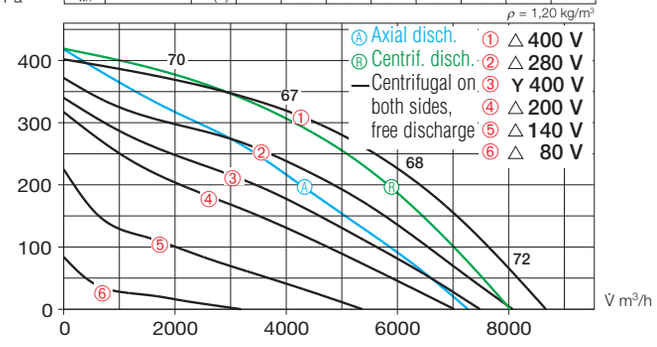
Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current Full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		$\dot{V}$ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	**Type**		**Type**		**Type**	
1 Phase motor, 230 V / 1 ph. / 50 Hz, capacitor motor, protection to IP 54																	
GBW 560/4	5508	9123	1409	45	1.83	7.93	10.4	867	45	45	92	**MWS 10**	1946	**TSW 10**	1498	**MW** [1]	1579
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 560/6/6	5522	7800/9000	705/885	35	0.51/0.80	0.90/1.85	1.90	867	60	60	80	**RDS 4**	1316	**TSD 3,0**	1502	**MD**	5849
GBD 560/4/4	5521	11500/13000	1110/1350	44	1.70/2.60	2.80/4.80	4.90	867	55	45	90	**RDS 7**	1578	**TSD 7,0**	1504	**MD**	5849
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 560/4/4 T120	5778	11520/12300	1250/1400	48	1.85/2.50	3.20/6.80	6.80	520	120	120	105	**RDS 7**	1578	**TSD 7,0**	1504	**MD**	5849

[1] incl. operation switch

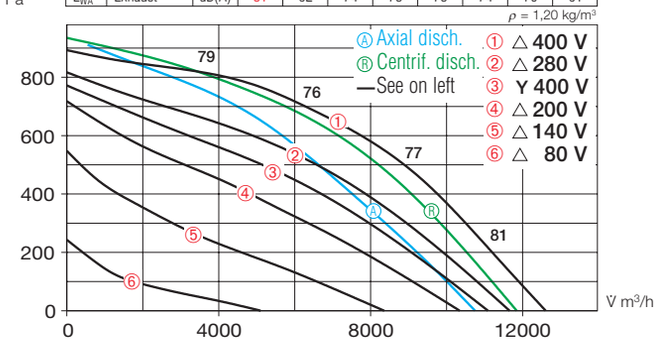
GBD 560/6/6

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	55	52	51	42	40	37	32	25
L_{WA}	Intake	dB(A)	68	51	53	63	64	61	53	43
L_{WA}	Exhaust	dB(A)	72	60	62	69	67	66	61	50



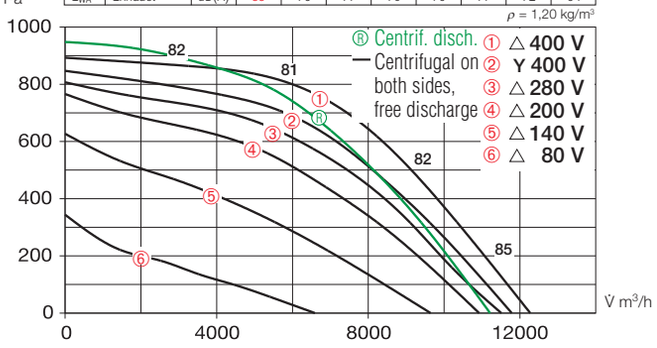
GBD 560/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	64	64	64	48	50	46	43	37
L_{WA}	Intake	dB(A)	77	57	66	69	74	70	64	55
L_{WA}	Exhaust	dB(A)	81	62	74	75	75	74	70	61



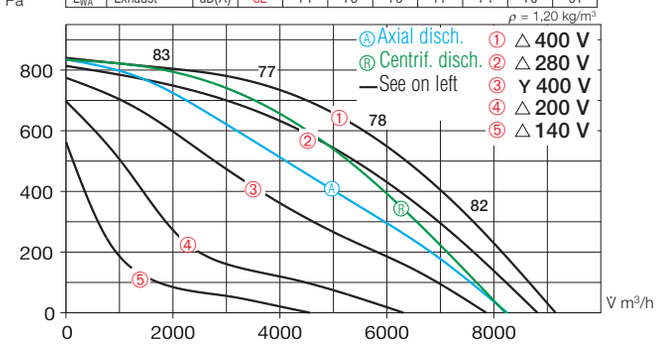
GBD 560/4/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	68	61	62	60	60	60	56	50
L_{WA}	Intake	dB(A)	82	69	78	75	74	73	70	62
L_{WA}	Exhaust	dB(A)	85	76	77	79	79	77	72	64



GBW 560/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	65	62	61	51	50	48	44	38
L_{WA}	Intake	dB(A)	76	63	68	69	71	69	64	57
L_{WA}	Exhaust	dB(A)	82	71	73	76	77	74	70	61



☐ Motor protection

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

☐ Speed control

All types are speed controllable by voltage reduction using a transformer controller.
The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:
- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 560 Ref. no. 5626

External weather louvers to cover exhaust opening.
GB-WSG 560 Ref. no. 5640

Outdoor cover hood for outdoor installation.
GB-WSD 560 Ref. no. 5749

On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [2] Ref. no. 1351

[2] full motor protection unit recommended: MD Ref. No. 5849

■ Specific accessories

☐ for types GB

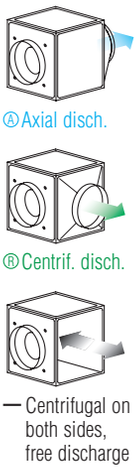
Condensate collector with condensate spigot for pipe connection.
GB-KW 560 Ref. no. 5645
(Condensate collector with condensate spigot included in delivery with GB T120).

☐ for types GB T120

Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

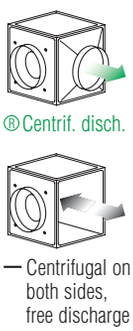
GB

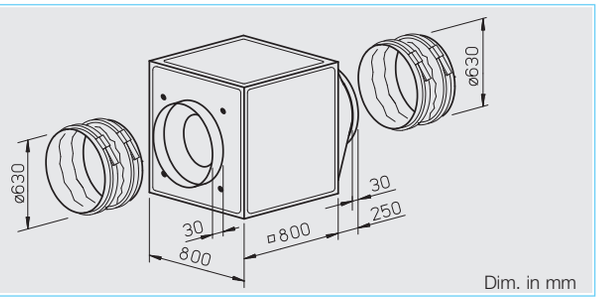
Arbitrary installation position and flexible assembly by five possible discharge directions.

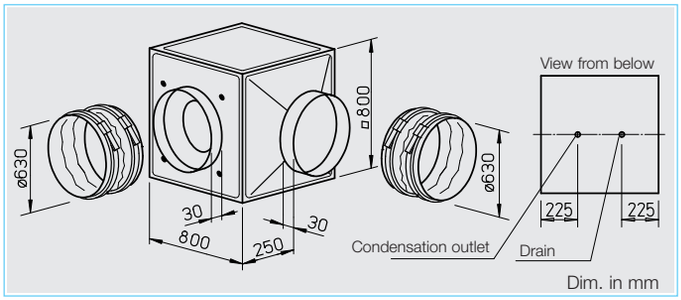


GB T120

Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.







■ Special features of types GB T120

- Designed for moving dirty, humid and hot air volumes up to max. 120° C.
- Motor located outside of air flow.
- Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
- Easily accessible motor and impeller unit, removable without disassembling the system components.
- Inspection cover with handle, simply remove for cleaning and maintenance.
- Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

Maintenance-free external rotor motor or IEC-standard motor protected to IP 54. With ball bearings and interference-free as standard.

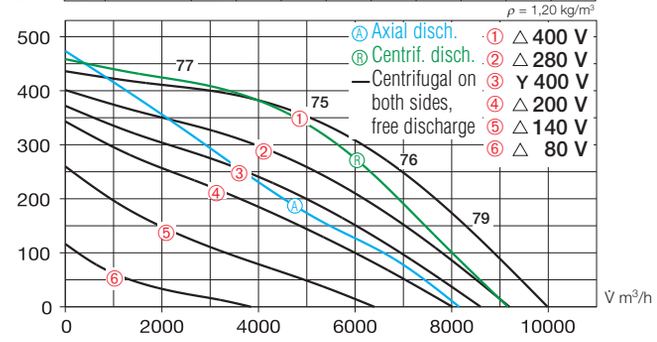
□ Electrical connection

Standard terminal box (IP 54) fitted on the motor; with GB T120 fitted on the motor support plate.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net) kg	5 step transformer controller with mot. protect. unit Type	Ref. no.	5 step transformer controller without mot. protect. unit Type	Ref. no.	Full motor protection unit using the thermal contacts Type	Ref. no.
		V m^3/h	min^{-1}	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg						
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 630/6/6	5524	8600/9990	723/893	42	0.64/0.93	1.08/1.88	2.03	867	60	60	86	**RDS 4**	1316	**TSD 5,5**	1503	**MD**	5849
GBD 630/4/4	5523	12954/14430	1128/1383	51	2.40/3.45	4.10/6.20	7.20	867	75	50	105	**RDS 11**	1332	**TSD 11,0**	1513	**MD**	5849
3 Phase motor, 3~, 400 V, 50 Hz, protection to IP 54																	
GBD 630/4 T120	5779	14200	1445	53	4.40	8.0	—	499	120	—	105	—	—	—	—	**MD**	5849

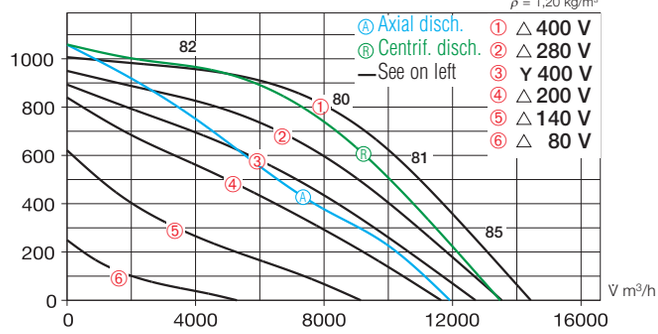
GBD 630/6/6

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	62	59	58	48	47	45	41	35
L_{WA}	Intake	dB(A)	73	63	64	67	66	66	63	57
L_{WA}	Exhaust	dB(A)	79	68	72	73	73	71	66	59



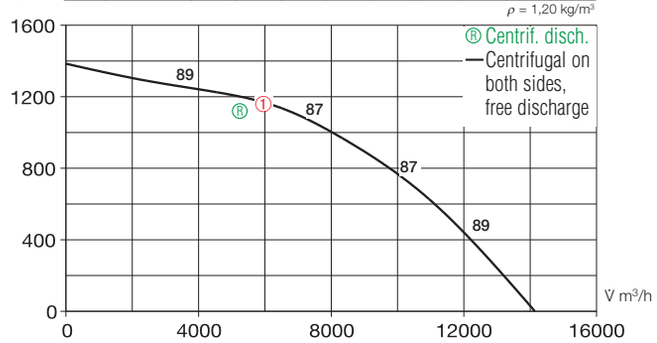
GBD 630/4/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	71	68	57	57	56	54	50	44
L_{WA}	Intake	dB(A)	82	72	73	76	75	75	72	66
L_{WA}	Exhaust	dB(A)	88	77	81	82	82	80	75	68



GBD 630/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	73	66	67	65	65	65	61	55
L_{WA}	Intake	dB(A)	87	74	83	80	79	78	75	67
L_{WA}	Exhaust	dB(A)	90	81	82	84	84	82	77	69



☐ Motor protection

Types GBD with thermal contacts embedded on the terminal strip, which must be wired with the full motor protection device. Type GBD T120 with PTC thermistor for direct wiring with the full motor protection device or frequency inverter FU-BS (see table below, accessories).

☐ Speed control

All types (except GB T120) are speed controllable by voltage reduction using a transformer controller. The 3-phase models can also be 2 speed controlled by Y/△ switch or full motor protection unit M4; Type GBD T120 is exclusively controllable via frequency inverter with Sine filter. The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.
SDD-U Ref. no. 5627

Wall bracket for wall mounting.
GB-WK 630 Ref. no. 5626

External weather louvers to cover exhaust opening.
GB-WSG 630 Ref. no. 5640

Outdoor cover hood for outdoor installation.
GB-WSD 630 Ref. no. 5749

■ Specific accessories

☐ for types GB

Condensate collector with condensate spigot for pipe connection.
GB-KW 630 Ref. no. 5645
(Condensate collector with condensate spigot included in delivery with GB T120).

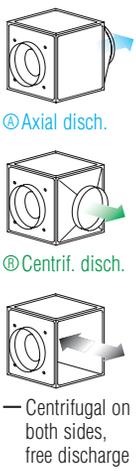
On/Off and 2-speed switch for 3-phase Y/△ motors.
Type DS 2 [1] Ref. no. 1351

[1] full motor protection unit recommended: MD Ref. No. 5849

☐ for types GB T120

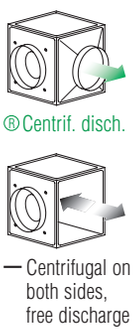
Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).
GB-RA Ref. no. 9418

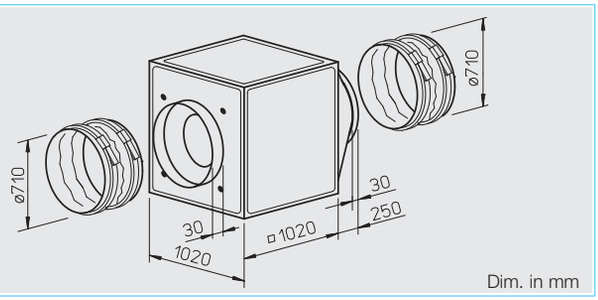
GB

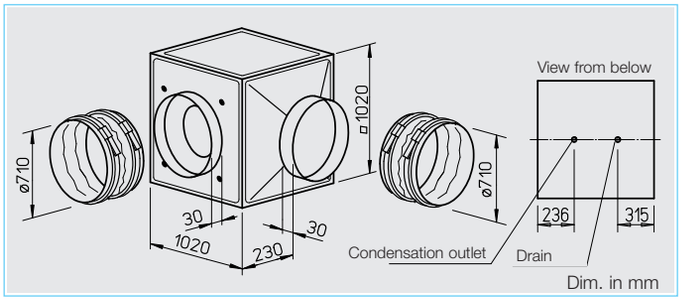


GB T120

Designed for moving dirty, humid and hot air up to max. 120° C.
Motor located outside the air flow.







■ Special features of types GB T120

- Designed for moving dirty, humid and hot air volumes up to max. 120° C.
- Motor located outside of air flow.
- Temperature insulated partition panel between motor and impeller, lined with 20 mm thick, flame-retardant mineral wool.
- Easily accessible motor and impeller unit, removable without disassembling the system components.
- Inspection cover with handle, simply remove for cleaning and maintenance.
- Condensate collector with condensate spigot included in delivery. Drill hole for rain drainage (accessories) for outdoor installation is prepared.

□ Assembly GB T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter.
Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Feature

□ Assembly of types GB

Arbitrary installation position and flexible assembly by five possible discharge directions via the discharge adapter.
For wall mounting the wall bracket (accessories) have to be used. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

■ Specification of both types

□ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool. Intake cone for ideal inflow as well as spigot and flexible sleeve (for the respective max. permissible air flow temperature) for duct connection. With discharge adapter (from square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks.

□ Impeller

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 – class 6.3.

□ Motor

Maintenance-free external rotor motor or IEC-standard motor protected to IP 54/55. With ball bearings and interference-free as standard.

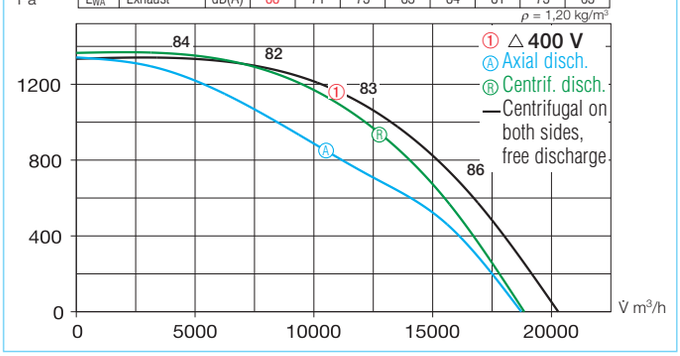
□ Electrical connection

Standard terminal box (IP 54/55) fitted on the motor; with GB T120 fitted on the motor support plate.

Type	Ref. no.	Air flow volume (FID)	R.P.M.	Sound press. case breakout	Motor power (nominal)	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature Full load	Maximum air flow temperature controlled	Weight (net)	5 step transformer controller with mot. protect. unit	Ref. no.	5 step transformer controller without mot. protect. unit	Ref. no.	Full motor protection unit using the thermal contacts	Ref. no.
		V̇ m³/h	min⁻¹	dB(A) in 4 m	kW	A	A	No.	+°C	+°C	kg	Type		Type		Type	
3 Phase motor, 3~, 400 V, 50 Hz, Y/△ wiring, protection to IP 55																	
GBD 710/4	5529	20285	1465	51	5.97	10.20	—	499	70	—	170	—		—		**MD**	5849
2 speed motor, 3 Phase motor, 400 V / 3 ph. / 50 Hz, Y/△ wiring, protection to IP 54																	
GBD 710/6/6	5525	16500/19000	690/890	46	1.55/2.45	2.90/4.70	4.70	867	50	50	157	**RDS 7**	1578	**TSD 7,0**	1504	**MD**	5849
3 Phase motor, 3~, 400 V, 50 Hz, protection to IP 54																	
GBD 710/4 T120	5756	18200	1465	55	5,89	10.4	—	499	120	—	188	—		—		**MD**	5849

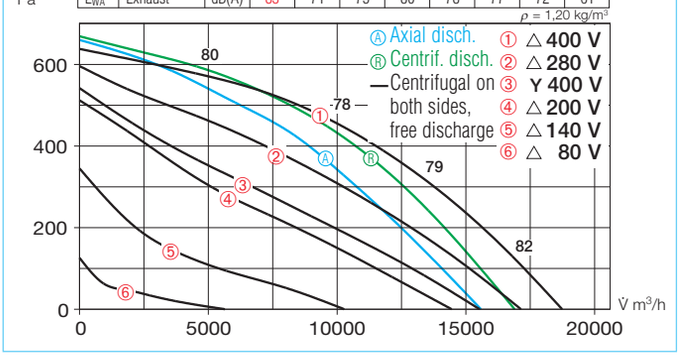
GBD 710/4

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	71	67	68	58	56	53	48	41
L_{WA}	Intake	dB(A)	82	70	73	77	76	74	71	60
L_{WA}	Exhaust	dB(A)	88	71	73	83	84	81	73	63



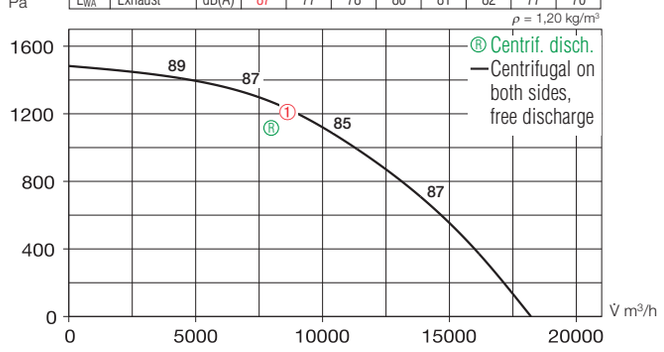
GBD 710/6/6

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	66	63	62	53	51	48	43	36
L_{WA}	Intake	dB(A)	79	62	64	74	75	72	64	54
L_{WA}	Exhaust	dB(A)	83	71	75	80	78	77	72	61



GBD 710/4 T120

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Case breakout	dB(A)	75	70	67	65	68	65	64	61
L_{WA}	Intake	dB(A)	86	73	76	76	81	81	67	69
L_{WA}	Exhaust	dB(A)	87	77	78	80	81	82	77	70



☐ Motor protection

Types GBD with thermal contacts embedded on the terminal strip, which must be wired with the full motor protection device. Type GBD T120 with PTC thermistor for direct wiring with the full motor protection device or frequency inverter FU-BS (see table below, accessories).

☐ Speed control

All types (except GB T120) are speed controllable by voltage reduction using a transformer controller. The 3-phase models can also be 2 speed controlled by Y/△ switch or full motor protection unit M4; Type GBD T120 is exclusively controllable via frequency inverter with Sine filter. The duties at different speeds are given in the performance curve.

■ Sound levels

Total sound power levels and the spectrum figures in dB(A) are given for:

- Sound level case breakout
- Sound level intake
- Sound level exhaust

In the table below as well as underneath the performance curve you can find additionally the sound pressure levels at 4 m (free field conditions).

■ Accessories of both types

Anti vibration mounts for installation indoors. Set of 4.

SDD-U Ref. no. 5627

External weather louvers to cover exhaust opening.

GB-WSG 710 Ref. no. 5641

Outdoor cover hood for outdoor installation.

GB-WSD 710 Ref. no. 5750

■ Specific accessories

☐ for types GB

Condensate collector with condensate spigot for pipe connection.

GB-KW 710 Ref. no. 5646

(Condensate collector with condensate spigot included in delivery with GB T120).

On/Off and 2-speed switch for 3-phase Y/△ motors.

Type DS 2 [1] Ref. no. 1351

[1] full motor protection unit recommended: MD Ref. No. 5849

☐ for types GB T120

Rain drainage for outdoor installation (drill holes for rain drainage is already prepared).

GB-RA Ref. no. 9418