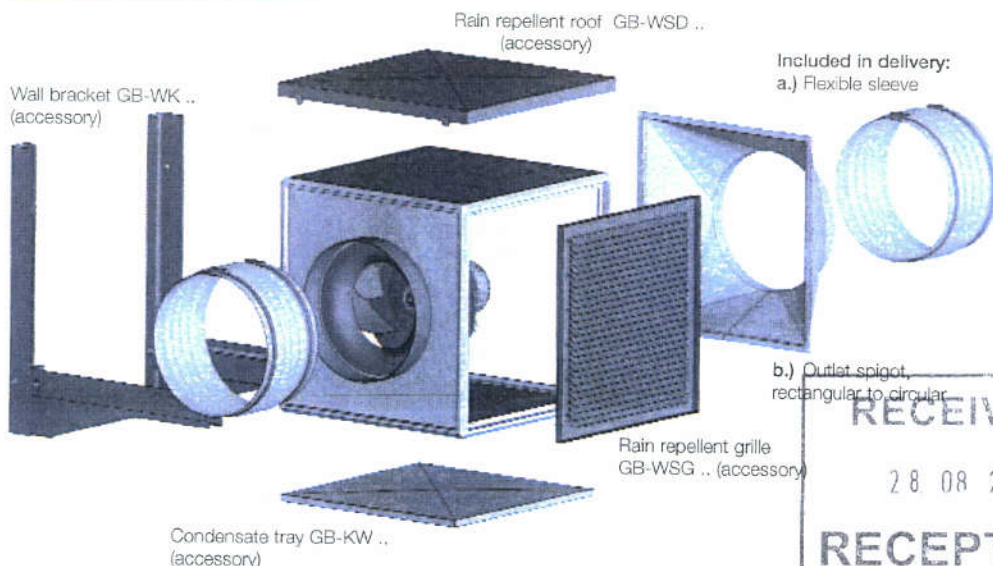


## GigaBox and accessory



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## ■ Application

Multifunctional fan box for medium to bigger air flows against high resistances in ventilation systems of all kinds.

The compact frame construction and mounting-friendly accessory offers through easy conversion of casing panels a variable and therefore ideal adjustment to constructional conditions.

## ■ Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

## ■ Speed control

All models are speed controllable using voltage reduction with a 5 tap transformer controller or electronic speed controllers. Of cost-effective manner the 3 ph.-models are operated on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). At 3 ph.-models can be controlled by inverter frequency through on site installation from si-

nus filter between converter and motor. The voltage steps are given in the performance curve.

## ■ Installation, mounting

Operation in any position. Simple positioning through integrated load hook. Detachable panels offer an inspection access from four sides. Noise transmission from fan to ducting and building should be avoided.

The fan has to be connect via flexible sleeves (included in delivery) with the duct system.

## ■ Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades (NG 250 made from steel) made from galvanised steel plate, direct powering. From NG 500 impeller is made from aluminium. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – Voltage steps 6.3 or 2.5.

## ■ Motor

Maintenance-free external rotor motor in protection to IP 54 or 44. Thermal overload protection through built-in thermo contacts. Suitable for continuous operation S1. Insulation class F. Ball bearings have a sufficient fat reserve for its durability.

## ■ Electrical connection

Terminal box on the motor as standard, protection to IP 54.

## ■ 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 perfusion can be set individually to constructional conditions through conversion from discharge spigots and panels. The correct motor rotation direction is marked through rotation direction arrows on the motor and has to be checked when placing the fan into operation.

## ■ Wrong direction of rotation

If the fan is operated in the wrong direction of rotation the motor will overheat and the thermal contact will trip. Typical indication for this is a very low air flow combined with high noise levels and vibration.

## ■ Air flow temperature

The maximum admitted air flow temperature is given in the model chart.

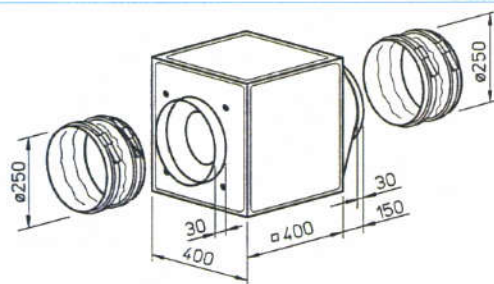
## ■ Surrounding temperature

From -40 °C to +40 °C.

Information	Pages
Design of systems, acoustic	12 ff.
General techn. information, speed control	17 ff.
Accessories	Pages
Speed controller and full motor protection unit	348 ff.

	Sound press. Case breakout	Sound press. Intake	Air flow volumein $\dot{V}$ m <sup>3</sup> /h against static pressure													
ype	L <sub>pA</sub> dB(A)	L <sub>pA</sub> dB(A)	(ΔP <sub>st</sub> ) in Pa													
	at 4 m Abst.	at 4 m Abst.	0	50	100	150	200	250	300	350	400	500	600	700	800	
BW 250/4	27	39	1400	1150	880	530										
BW 315/4	29	41	1490	1300	1080	850	550	150								
BW 355/4	34	46	2940	2690	2430	2140	1820	1440	930							
BD 355/4/4	34	46	3010	2780	2560	2560	2080	1770	1320	320						
BW 400/4	38	50	4110	3930	3730	3510	3300	3060	2750	2360	1840					
BD 400/4/4	38	50	3950	3710	3460	3200	2920	2610	2260	1690	410					
3W 450/4	40	52	5450	5160	4900	4650	4380	4040	3620	3120	2490	300				
3D 450/4/4	40	52	5450	5150	4840	4520	4180	3820	3410	2960	2390	300				
3W 500/4	45	57	8400	8050	7700	7350	7010	6660	6280	5860	5420	4390	2800	150		
3D 500/4/4	44	57	8850	8520	8200	7880	7550	7220	6850	6440	5990	4930	3410	50		
3W 500/6	35	46	5760	5320	4850	4280	3520	2440	520							
3D 500/6/6	35	46	5330	4800	4200	4200	2420	1030								
1D 560/4/4	44	57	12590	12230	11880	11530	11180	10840	10480	10120	9740	8860	7710	6230	4120	
1D 560/6/6	35	48	8640	8140	7610	7030	6360	5540	4460	2760						
1D 630/4/4	48	61	14950	14610	14260	13930	13590	13260	12930	12600	12250	11500	10630	9630	8400	
1D 630/6/6	43	56	11490	10770	10060	9350	8550	7570	6360	4880	2850					
1D 710/6/6	46	59	18700	17960	17220	16430	15600	14700	13720	12640	11440	8400	2710			



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Dim. in mm

### ■ Specification

#### ■ Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

#### ■ Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 6.3.

### ■ Motor

Maintenance-free external rotor motor in protection to IP 44. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

#### ■ Electrical connection

Terminal box on the motor as standard, protection to IP 54.

#### ■ Motor protection

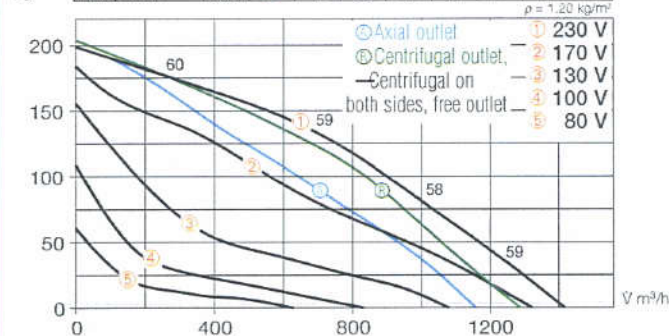
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

#### ■ Speed control

Through voltage reduction via 5 step transformer controller or electronic speed controllable. The voltage steps are given in the performance curve.

### GBW 250/4

Frequency	Hz	125	250	500	1k	2k	4k	8k
L <sub>wa</sub> Case breakout	dB(A)	47	37	45	40	33	22	19
L <sub>wa</sub> Intake	dB(A)	59	41	49	52	54	49	39
L <sub>wa</sub> Extract	dB(A)	62	42	53	56	57	54	44


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### ■ Accessory

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

Water repellent extract grille.  
**GB-WSG 250** Ref.No. 5637

Water repellent roof outlet.  
**GB-WSD 250** Ref.No. 5746

Condensate tray with spigot for duct/ hose connection.  
**GB-KW 250** Ref.No. 5642

### ■ Mounting

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

### ■ Sound levels

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

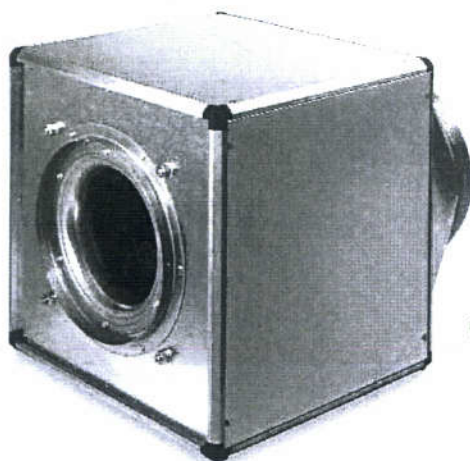
- case breakout level at 4 m (free-field conditions).

Information	Pages
Design of systems, acoustic	12 ff.
General techn. information, speed control	17 ff.
Accessory-Details	Pages
Speed controller and full motor protection unit	348 ff.

Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		V m³/h	min⁻¹	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.
1 Phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection to IP 44												
GBW 250/4	5509	1400	1290	27	0,11	0,44	0,48	854	65	65	MWS 1,5 1947	TSW 1,5 1495 MW <sup>1)</sup> 1579

<sup>1)</sup> Incl. operation switch



**NEW!**

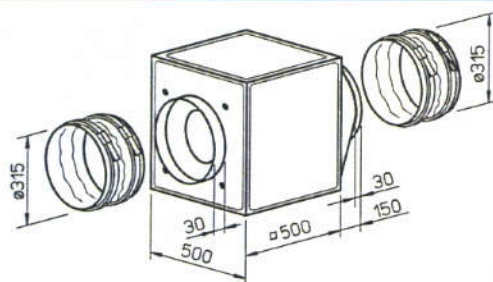
Axial discharge



Centrifugal discharge



— centrifugal on both sides, free discharge



Dim. in mm

**Specification****Casing**

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

**Impeller**

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 6.3.

**Motor**

Maintenance-free external rotor motor in protection to IP 44. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

**Electrical connection**

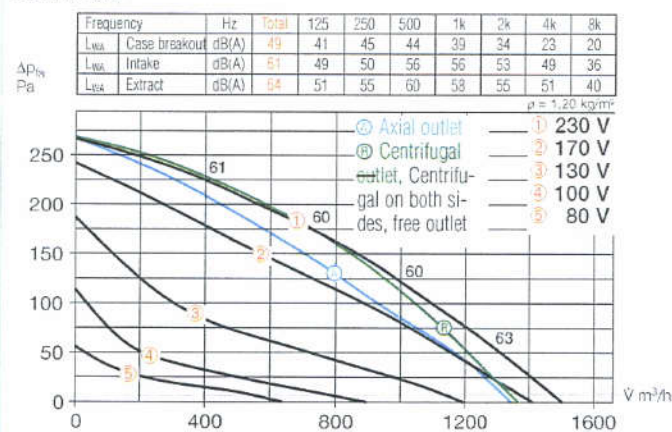
Terminal box on the motor as standard, protection to IP 54.

**Motor protection**

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

**Speed control**

Through voltage reduction via 5 step transformer controller or electronic speed controllable. The voltage steps are given in the performance curve.

**GBW 315/4**

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**Mounting**

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

**Sound levels**

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

**Accessory**

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

Water repellent extract grille.  
**GB-WSG 315** Ref.No. 5638

Water repellent roof outlet.  
**GB-WSD 315** Ref.No. 5747

Condensate tray with spigot for duct/ hose connection.  
**GB-KW 315** Ref.No. 5643

Information	Pages
Design of systems, acoustic	12 ff.
General techn. information, speed control	17 ff.
Accessory-Details	Pages
Speed controller and full motor protection unit	348 ff.

Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load controlled	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		V m³/h	min⁻¹	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.
<b>1 Phase motor, 1–, 230 V, 50 Hz, capacitor motor, protection to IP 44</b>												
<b>GBW 315/4</b>	5510	1490	1325	29	0,135	0,58	0,60	864	55	55	<b>MWS 1,5</b> 1947	<b>TSW 1,5</b> 1495 <b>MW<sup>1)</sup></b> 1579

<sup>1)</sup> incl. operation switch



**NEW!**



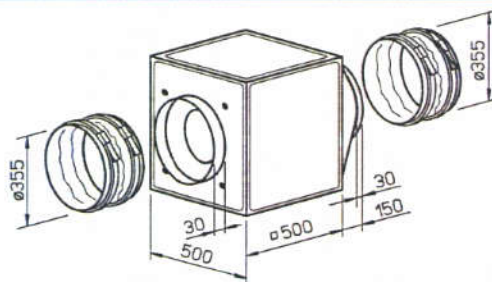
○ Axial discharge



○ Centrifugal discharge



— centrifugal on both sides, free discharge



Dim. in mm

#### ■ Specification

##### ■ Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

##### □ Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 6.3.

##### □ Motor

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

##### □ Electrical connection

Terminal box on the motor as standard, protection to IP 54.

##### □ Motor protection

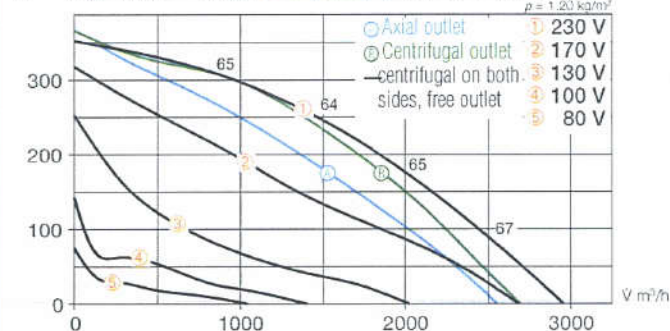
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

##### □ Speed control

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

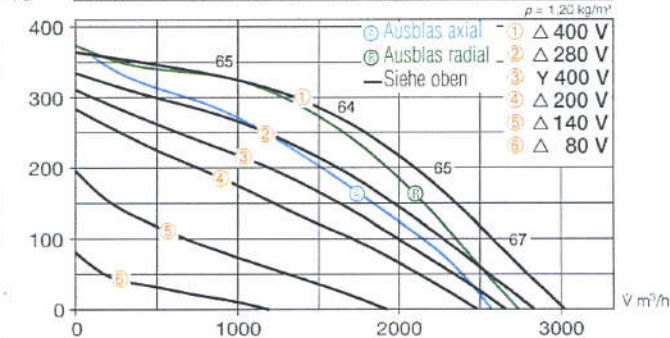
#### GBW 355/4

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)	56	54	55	61	58	54	41	
$L_{wa}$ Extract	dB(A)	59	56	60	65	63	60	56	45



#### 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)	56	54	55	61	58	54	41	
$L_{wa}$ Extract	dB(A)	59	56	60	65	63	60	56	45



##### □ Mounting

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

##### ■ Sound levels

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

##### ■ Accessory

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

Water repellent extract grille.  
**GB-WSG 355** Ref.No. 5638

Water repellent roof outlet.  
**GB-WSD 355** Ref.No. 5747

Condensate tray with spigot for duct/ hose connection.  
**GB-KW 355** Ref.No. 5643

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.  
**Type DS 2** <sup>3)</sup> Ref.No. 1351

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Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		$\text{m}^3/\text{h}$	$\text{min}^{-1}$	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.
<b>1 Phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
GBW 355/4	5511	2940	1325	34	0,29	1,30	1,40	864	60	60	MWS 1,5 1947	TSW 1,5 1495 MW <sup>1)</sup> 1579
<b>2 speed motor, 3 Phase motor, 3~, 400 V, 50 Hz, Y/Δ-wiring, protection to IP 54</b>												
GBD 355/4/4	5512	2700/3010	1115/1355	34	0,20/0,30	0,35/0,70	0,70	867	55	55	RDS 1 1314	TSO 0,8 1500 M4 <sup>2)</sup> 1571

<sup>1)</sup> incl. operation switch

<sup>2)</sup> incl. operation and reversing switch

<sup>3)</sup> required full motor protection unit: model MD, No. 5849



**NEW!**

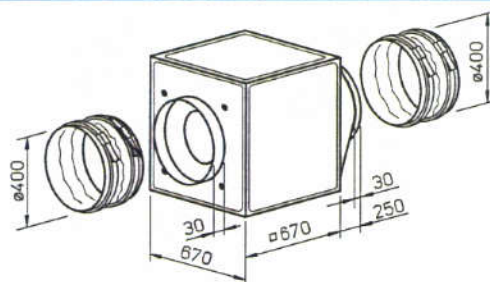
Axial discharge



Centrifugal discharge



centrifugal on both sides, free discharge



Dim. in mm

**Specification****Casing**

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

**Impeller**

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

**Motor**

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

**Electrical connection**

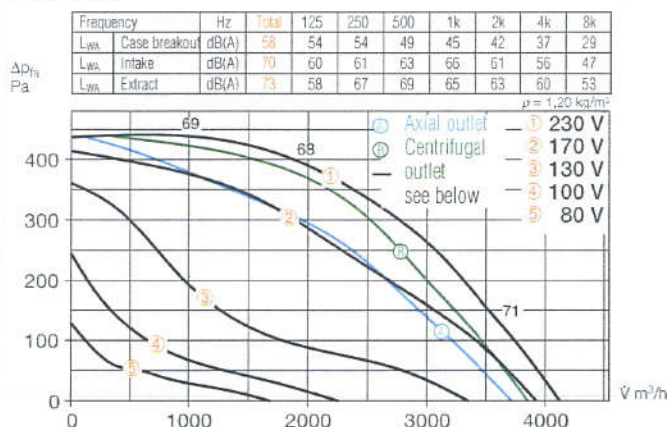
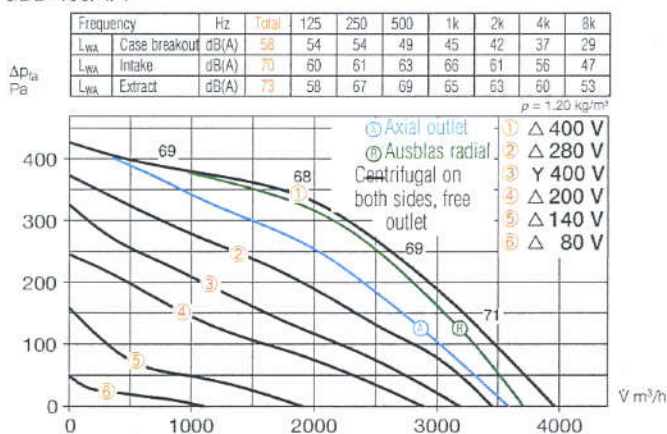
Terminal box on the motor as standard, protection to IP 54.

**Motor protection**

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

**Speed control**

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

**GBW 400/4****GBD 400/4/4****Mounting**

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

**Sound levels**

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

**Accessory**

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

Water repellent extract grille.  
GB-WSG 400 Ref.No. 5639

Water repellent roof outlet.  
GB-WSD 400 Ref.No. 5748

Condensate tray with spigot for duct/ hose connection.  
GB-KW 400 Ref.No. 5644

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.

Type DS 2<sup>3)</sup> Ref.No. 1351

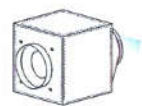
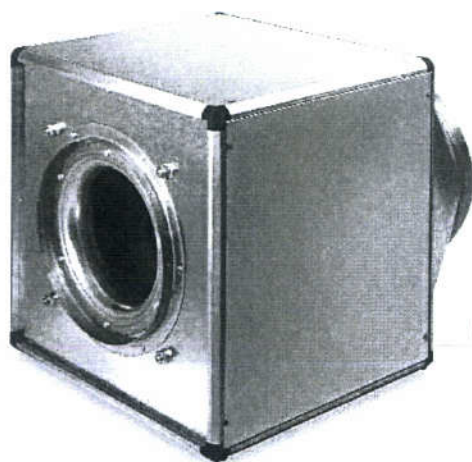


Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load controlled	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		V m³/h	min⁻¹	dB(A) at 4 m	kW	A	A	No.	+°C	kg	Type Ref.No.	Type Ref.No.
<b>1 Phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection to IP 54</b>												
GBW 400/4	5513	4110	1360	38	0,53	2,40	2,80	864	50	50	MWS 3 1948	TSW 3,0 1496 MW <sup>1)</sup> 1579
<b>2 speed motor, 3 Phase motor, 3~, 400 V, 50 Hz, Y/Δ-motor, protection to IP 54</b>												
GBD 400/4/4	5514	3300/3950	910/1270	38	0,29/0,46	0,50/0,78	0,92	867	50	45	RDS 1 1314	TSD 1,5 1501 M4 <sup>2)</sup> 1571

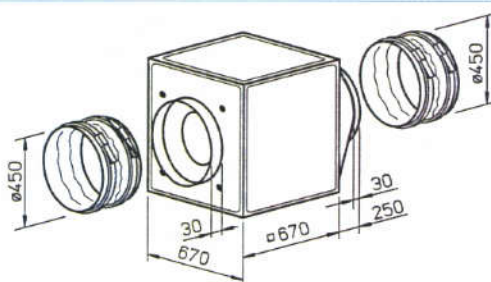
<sup>1)</sup> incl. operation switch<sup>2)</sup> incl. operation and reversing switch<sup>3)</sup> required full motor protection unit: model MD, No. 5849



**NEW!**



— centrifugal on both sides, free discharge



**Specification**

**Casing**

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

**Impeller**

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

**Motor**

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

**Electrical connection**

Terminal box on the motor as standard, protection to IP 54.

**Motor protection**

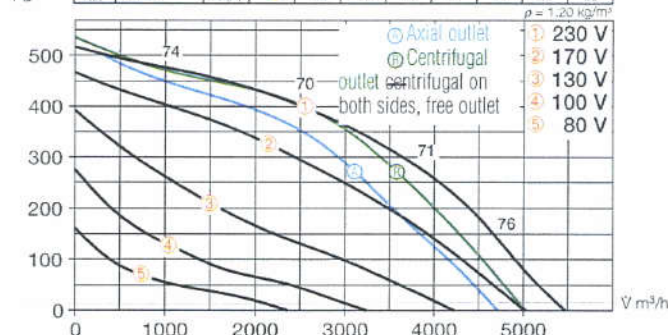
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

**Speed control**

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

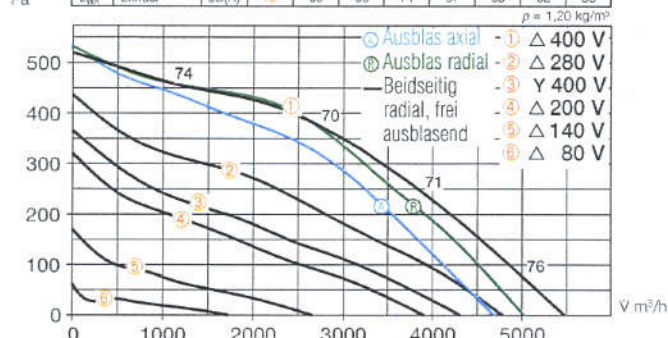
**GBW 450/4**

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout	dB(A)	80	56	56	51	47	44	39	31
L <sub>WA</sub> Intake	dB(A)	72	62	63	65	68	63	58	49
L <sub>WA</sub> Extract	dB(A)	75	60	69	71	67	65	62	55



**GBD 450/4/4**

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Case breakout	dB(A)	80	56	56	51	47	44	39	31
L <sub>WA</sub> Intake	dB(A)	72	62	63	65	68	63	58	49
L <sub>WA</sub> Extract	dB(A)	75	60	69	71	67	65	62	55



**Mounting**

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

**Sound levels**

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

**Accessory**

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

Water repellent extract grille.  
**GB-WSG 450** Ref.No. 5639

Water repellent roof outlet.  
**GB-WSD 450** Ref.No. 5748

Condensate tray with spigot for duct/ hose connection.  
**GB-KW 450** Ref.No. 5644

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.

**Type DS 2<sup>3)</sup>** Ref.No. 1951



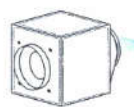
Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load controlled	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		V m³/h	min⁻¹	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.
<b>1 Phase motor, 1~, 230 V, 50 Hz, capacitor motor, protection IP 54</b>												
GBW 450/4	5515	5450	1270	40	0,76	3,50	3,50	864	45	45	MWS 5 1949	TSW 5,0 1497 MW <sup>1)</sup> 1579
<b>2 speed motor, 3 Phase motor, 3~, 400 V, 50 Hz, Y/Δ-wiring, protection to IP 54</b>												
GBD 450/4/4	5516	4350/5450	880/1240	40	0,36/0,67	0,70/1,30	1,30	867	55	55	RDS 2 1315	TSD 1,5 1501 M4 <sup>2)</sup> 1571

<sup>1)</sup> incl. operation switch

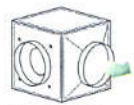
<sup>2)</sup> incl. operation and reversing switch

<sup>3)</sup> required full motor protection unit: model MD, No. 5849

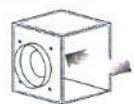


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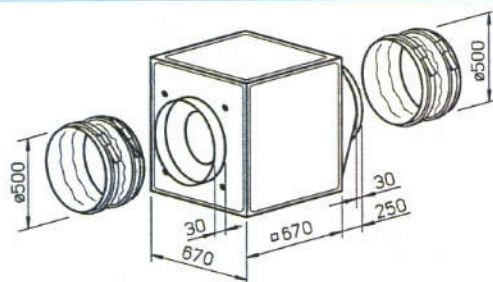
Axial outlet



Centrifugal outlet



centrifugal on both sides, free outlet



Dim in mm

**Specification****Casing**

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

**Impeller**

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

**Motor**

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

**Electrical connection**

Terminal box on the motor as standard, protection to IP 54.

**Motor protection**

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

**Speed control**

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operated on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

**Mounting**

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water

repellent roof and grille (accessory).

**Sound levels**

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

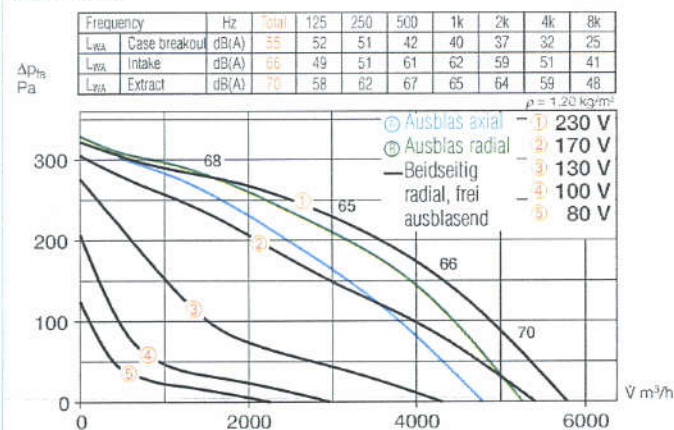
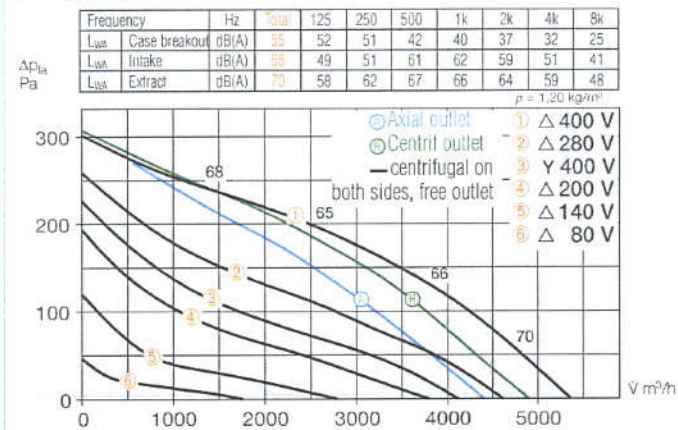
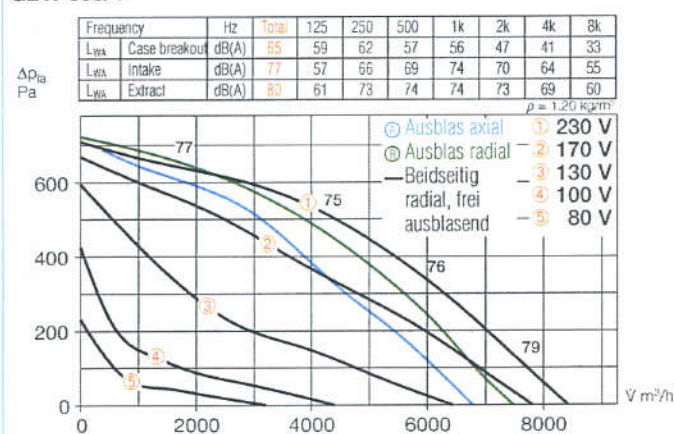
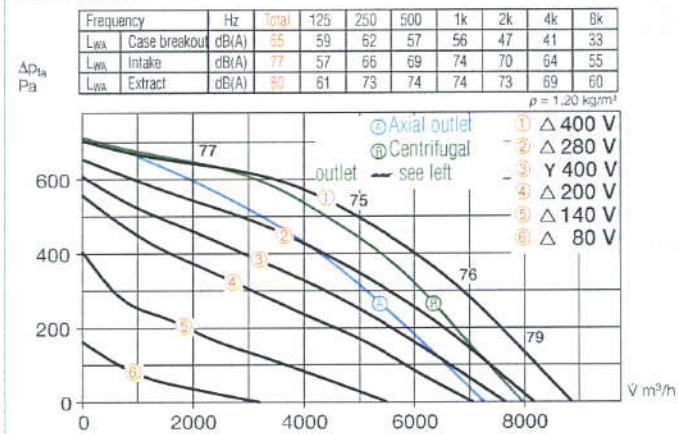
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Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load	Nominal weight (net)	5 step transformer controller with motor protect.unit	Full motor protection unit using the thermal contacts		
		V m³/h	min <sup>-1</sup>	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	kg	Type Ref.No.	Type Ref.No.	Type Ref.No.
1 Phase motor, 1–, 230 V, 50 Hz, capacitor motor, protection to IP 54														
GBW 500/6	5519	5760	880	35	0,52	2,30	2,60	864	45	45	47	MWS 3 1948	TSW 3,0 1496	MW <sup>1)</sup> 1579
GBW 500/4	5517	8400	1350	45	1,38	6,40	8,20	865	65	55	61	MWS 10 1946	–	–
2 speed motor, 3 Phase motor, 3–, 400 V, 50 Hz, Y/Δ-motor, protection to IP 54														
GBD 500/6/6	5520	4500/5330	545/790	35	0,23/0,42	0,38/0,75	0,78	867	45	45	46	RDS 1 1314	TSD 0,8 1500	M4 <sup>2)</sup> 1571
GBD 500/4/4	5518	8000/8850	1075/1340	45	0,97/1,45	1,60/2,80	2,90	867	50	50	57	RDS 7 1578	TSD 5,5 1503	M4 <sup>2)</sup> 1571

<sup>1)</sup> incl. operation switch<sup>2)</sup> incl. operation and reversing switch<sup>3)</sup> required full motor protection unit: model MD, No. 5849

**GBW 500/6**

**GBD 500/6/6**

**GBW 500/4**

**GBD 500/4/4**

**Accessory**

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

Water repellent extract grille.  
GB-WSG 500 Ref.No. 5639

Water repellent roof outlet.  
GB-WSD 500 Ref.No. 5748

Condensate tray with spigot for duct/ hose connection.  
GB-KW 500 Ref.No. 5644

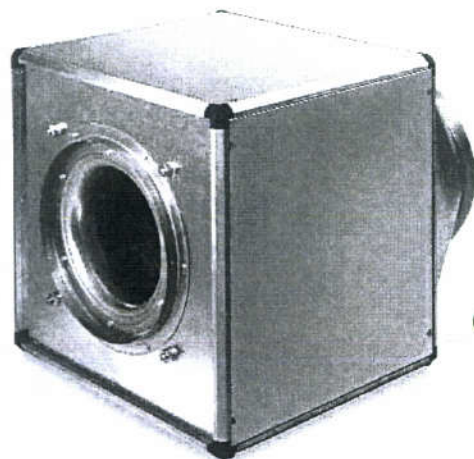
Reversing and on/off switch for double-rotating Y/ $\Delta$ -switchable 3 Phase fans.  
Type DS 2 <sup>3)</sup> Ref.No. 1351

Information	Pages
Design of systems, acoustic	12 ff.
General techn. information, speed control	17 ff.
Accessory-Details	Pages
Speed controller and full motor protection unit	348 ff.





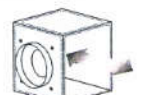
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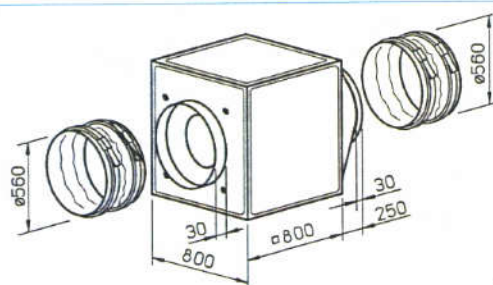
Axial discharge



Centrifugal discharge



centrifugal on both sides, free discharge



Dim. in mm

### Specification

#### Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts.

Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer.

Simple positioning through load hooks as standard.

#### Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

### Motor

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

#### Electrical connection

Terminal box on the motor as standard, protection to IP 54.

#### Motor protection

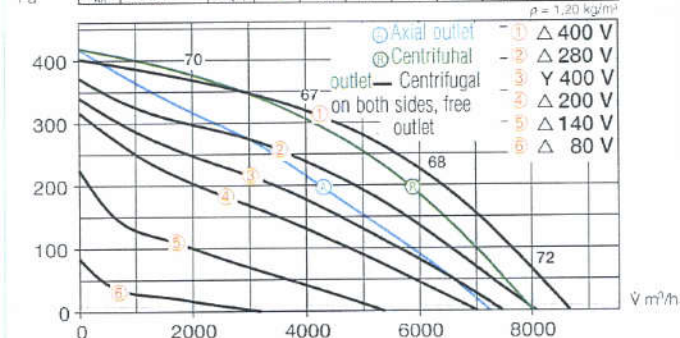
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

#### Speed control

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

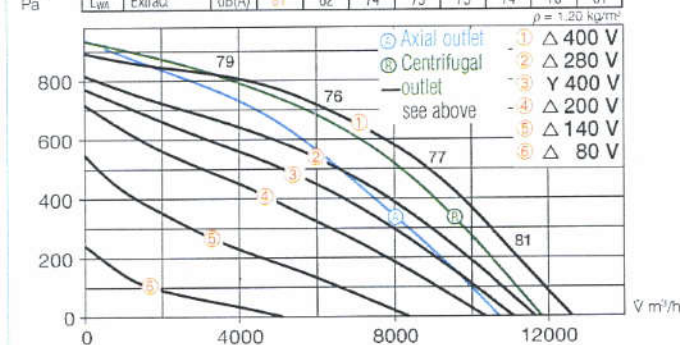
### GBD 560/6/6

Frequency	Hz	Total	125	250	500	1k	2k	4k	8k
L <sub>wa</sub> Case breakout	dB(A)	35	52	51	42	40	37	32	25
L <sub>wa</sub> Intake	dB(A)	68	51	53	63	64	61	53	43
L <sub>wa</sub> Extract	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 <sub>wa</sub> Case breakout	dB(A)	64	64	64	48	50	46	43	37
L <sub>wa</sub> Intake	dB(A)	77	57	66	69	74	70	64	55
L <sub>wa</sub> Extract	dB(A)	81	62	74	75	75	74	70	61



### Mounting

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

### Sound levels

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

### Accessory

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

Water repellent extract grille.  
GB-WSG 560 Ref.No. 5640

Water repellent roof outlet.  
GB-WSD 560 Ref.No. 5749

Condensate tray with spigot for duct/ hose connection.  
GB-KW 560 Ref.No. 5645

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.

Type DS 2<sup>2)</sup> Ref.No. 1351

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Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		m³/h	min⁻¹	dB(A) at 4 m	KW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.

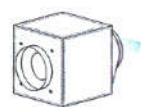
2 speed motor, 3 Phase motor, 3~, 400 V, 50 Hz, Y/Δ-motor, protection to IP 54

GBD 560/6/6	5522	7800/8640	690/870	35	0.51/0.80	0.90/1.90	1.90	867	60	60	80	RDS 4 1316 TSD 3,0 1502 M4 <sup>1)</sup> 1571
GBD 560/4/4	5521	11500/12590	1110/1350	44	1.70/2.50	2.80/4.80	4.90	867	55	45	90	RDS 7 1578 TSD 7,0 1504 M4 <sup>1)</sup> 1571

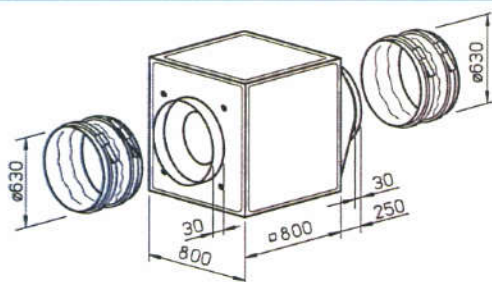
<sup>1)</sup> incl. operation and reversing switch

<sup>2)</sup> required full motor protection unit: model MD, No. 5849



**NEW!**


— centrifugal on both sides, free discharge



Dim. in mm

### Specification

#### Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

#### Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

#### Motor

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

#### Electrical connection

Terminal box on the motor as standard, protection to IP 54.

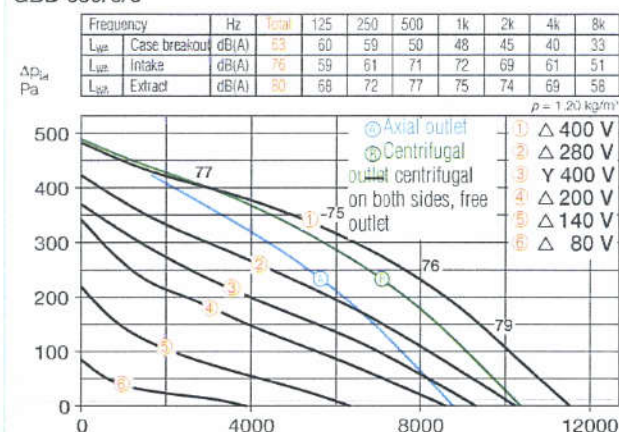
#### Motor protection

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

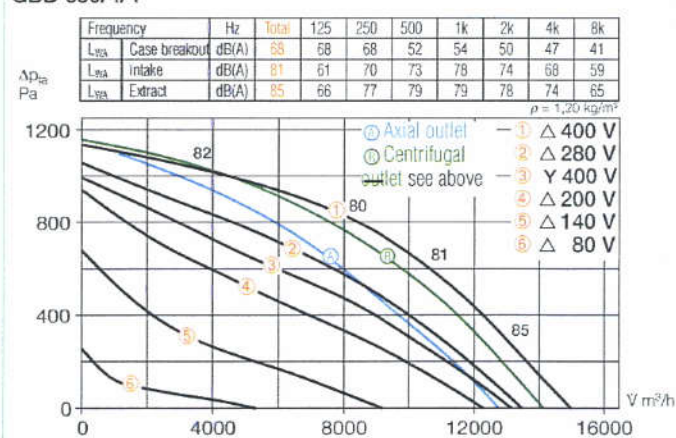
#### Speed control

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

### GBD 630/6/6



### GBD 630/4/4



### Mounting

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

### Sound levels

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

### Accessory

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

Water repellent extract grille.  
GB-WSG 630 Ref.No. 5640

Water repellent roof outlet.  
GB-WSD 630 Ref.No. 5749

Condensate tray with spigot for duct/ hose connection.  
GB-KW 630 Ref.No. 5645

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.



Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load controlled	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		$\text{m}^3/\text{h}$	$\text{min}^{-1}$	dB(A) at 4 m	kW	A	A	No.	$^{\circ}\text{C}$	kg	Type Ref.No.	Type Ref.No.

2 speed motor, 3 Phase motor, 3~, 400 V, 50 Hz, Y/Δ-wiring, protection to IP 54

GBD 630/6/6	5524	9700/11490	630/820	43	0.76/1.35	1.50/2.40	2.40	867	60	103	RDS 4 1316	TSD 5,5 1503	M4 <sup>1)</sup> 1571
GBD 630/4/4	5523	13500/14950	1120/1380	48	2.55/3.65	4.50/6.60	7.90	867	75	105	RDS 11 1332	TSD 11,0 1513	M4 <sup>1)</sup> 1571

<sup>1)</sup> incl. operation and reversing switch-

<sup>2)</sup> required full motor protection unit: model MD, No. 5849



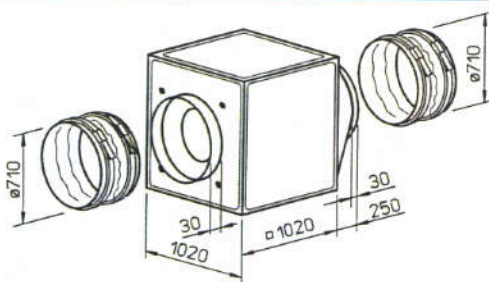
NEW!



Centrifugal discharge



— centrifugal on both sides, free discharge



Dim. in mm

### Specification

#### Casing

Self-supporting frame construction made from aluminium hollow section. Double skinned, 20 mm strong side panel made from galvanised steel plate, soundproof and heat insulated through coating with non flammable mineral wool. Intake with mouth for ideal inlets as well as connectors and flexible sleeve for installation to ducts. Extract with spigot (from rectangular to circular) for low-loss escape and flexible sleeve for prevention of impact sound transfer. Simple positioning through load hooks as standard.

#### Impeller

Free-wheeling centrifugal high performance impeller with backwards curved polymer blades made from galvanised steel plate, direct powering. Energy-efficient at low noise development. It is dynamical together with the motor to DIN ISO 1940 T.1 – quality grade 2.5.

#### Motor

Maintenance-free external rotor motor in protection to IP 54. Thermal overload protection through built-in thermo contacts. Ball bearings and radio interference-free.

#### Electrical connection

Terminal box on the motor as standard, protection to IP 54.

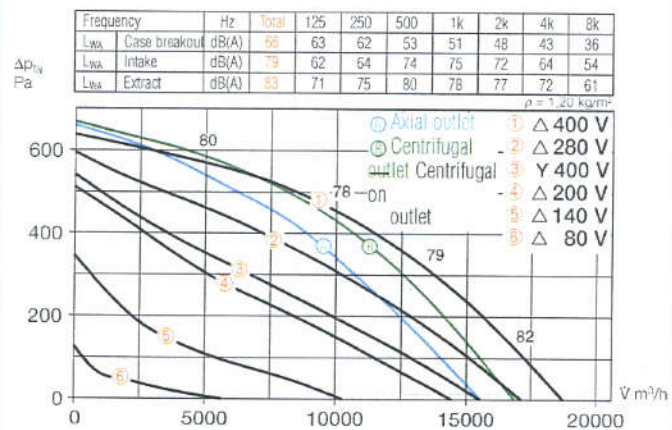
#### Motor protection

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

#### Speed control

All models are speed controllable using voltage reduction with transformer controller. The 3 ph.-models can operate on two speed controllers through Y/Δ wiring (accessories to DS 2 or full motor protection unit M4). The voltage steps are given in the performance curve.

### GBD 710/6/6



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### Accessory

Water repellent extract grille.  
GB-WSG 710 Ref.No. 5641

Water repellent roof outlet.  
GB-WSD 710 Ref.No. 5750

Kondensatwanne mit Ablaufstutzen für Rohr-/Schlauch-Anschluss.  
GB-KW 710 Ref.No. 5646

Reversing and on/off switch for double-rotating Y/Δ-switchable 3 Phase fans.

Type DS 2<sup>2)</sup> Ref.No. 1351

### Mounting

Mounting position in any position and flexible installation through five possible discharge directions of the spigot.

For wall mounting the wall bracket has to be used (accessory). It is possible to set up an outlet water repellent roof and grille (accessory).

### Sound levels

Above the performance curves the sound power levels are given in total and spectrum for:

- sound level case breakout
- sound level intake
- sound level extract

Within the performance curve the sound power level (on intake) is given for the transformer speed steps. In the table below there is also to find

- case breakout level at 4 m (free-field conditions).

Information	Pages
Design of systems, acoustic	12 ff.
General techn. information, speed control	17 ff.
Accessory-Details	Pages
Speed controller and full motor protection unit	348 ff.

Type	Ref.No.	Air flow volume (FID)	R.P.M.	Sound press. level case breakout	Motor powering	Current full load	Current speed controlled	Wiring diagram	Maximum air flow temperature full load controlled	Nominal weight (net)	5 step transformer controller with motor protect. unit	Full motor protection unit using the thermal contacts
		$\text{m}^3/\text{h}$	$\text{min}^{-1}$	dB(A) at 4 m	kW	A	A	No.	+°C	+°C	Type Ref.No.	Type Ref.No.

2 speed motor, 3 Phase motor, 3-, 400 V, 50 Hz, Y/Δ-motor, protection to IP 54

GBD 710/6/6	5525	16500/18700	690/890	46	1.55/2.45	2.90/4.70	4.70	867	50	157	RDS 7	1578	TSD 7,0	1504	M4 <sup>2)</sup>	1571
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incl. operation and reversing switch

<sup>2)</sup> required full motor protection unit: model MD, No. 5849



# AIRCLEAN

YOUR AIR FILTER MANUFACTURER

P.O. BOX 147,  
MAIDSTONE, ME14 2LA.

TEL:01622 832777  
FAX:01622 832507

[sales@airclean.co.uk](mailto:sales@airclean.co.uk) [www.airclean.co.uk](http://www.airclean.co.uk)

## Technical

The capacities shown are based on a dwell time of 0.1 seconds .

For contact times of 0.3 seconds, reduce rated airflow to 1/3rd, pressure drop will also reduce to 1/3rd.

Max Temperature 40 Deg C

Max Humidity 80% RH

## Non-standard sizes

Other sizes are available to suit individual requirements. Our Technical Department will be pleased to





# AIRCLEAN

YOUR AIR FILTER MANUFACTURER

P.O. BOX 147,  
MAIDSTONE, ME14 2LA.

TEL:01622 832777  
FAX:01622 832507

sales@airclean.co.uk www.airclean.co.uk

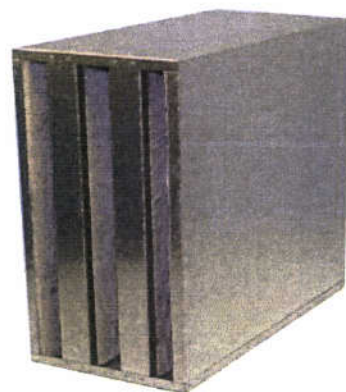
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## Metal Cased Discarbs

The metal cased 'Discarb' cells have the highest carbon loading in our range, and have standard or heavy-duty carbon panels permanently sealed into a galvanised sheet steel casing. This construction gives a very strong unit capable of handling large air volumes or where conditions dictate, increased contact time. The advantage of this unit is that with panels sealed in, there is no possibility of air leakage. Also, these units can be manufactured to almost any reasonable size, the limiting factors being the overall weight for handling purposes and the size of individual panels. When the unit has finished its useful life it is discarded and replaced with a complete new cell.



Standard Duty Cells

Nominal Size	Actual Size mm	Number of	Carb.	Discarb	Airflow		Pressure
W x H x L	W x H x L	Panels	Weight	Weight	m <sup>3</sup> /s	cfm	Pa
12" x 12" x 12"	292 x 292 x 292	6	5 kg	9 kg	0.10	212	75
12" x 12" x 18"	292 x 292 x 445	6	8 kg	14 kg	0.15	318	95
12" x 12" x 24"	292 x 292 x 597	6	10 kg	18 kg	0.22	466	140
18" x 18" x 12"	445 x 445 x 292	8	10 kg	17 kg	0.21	445	55
18" x 18" x 18"	445 x 445 x 445	8	15 kg	25 kg	0.31	657	70
18" x 18" x 24"	445 x 445 x 597	8	21 kg	33 kg	0.41	868	105
24" x 24" x 12"	597 x 597 x 292	12	20 kg	31 kg	0.41	868	70
24" x 24" x 18"	597 x 597 x 445	12	31 kg	45 kg	0.61	1292	90
24" x 24" x 24"	597 x 597 x 597	12	42 kg	59 kg	0.81	1716	130
12" x 24" x 24"	298 x 597 x 597	6	21 kg	35 kg	0.40	847	130

Extra Duty Cells

Nominal Size	Actual Size	No. of	Carb.	Discarb	Airflow		Pressure
W x H x L	W x H x L	Panels	weight	weight	m <sup>3</sup> /s	cfm	Pa
12" x 12" x 12"	292 x 292 x 292	6	6 kg	10 kg	0.13	275	125
12" x 12" x 18"	292 x 292 x 445	6	9 kg	15 kg	0.20	424	175
12" x 12" x 24"	292 x 292 x 597	6	12 kg	20 kg	0.27	572	250
18" x 18" x 12"	445 x 445 x 292	8	12 kg	19 kg	0.30	635	95
18" x 18" x 18"	445 x 445 x 445	8	19 kg	28 kg	0.41	868	125
18" x 18" x 24"	445 x 445 x 597	8	25 kg	37 kg	0.54	1144	185
24" x 24" x 12"	597 x 597 x 292	12	25 kg	35 kg	0.54	1144	125
24" x 24" x 18"	597 x 597 x 445	12	38 kg	52 kg	0.80	1694	150
24" x 24" x 24"	597 x 597 x 597	12	51 kg	68 kg	1.06	2245	225
12" x 24" x 24"	298 x 597 x 597	6	26 kg	46 kg	0.53	1122	225

The company reserves the right to change the specifications without notice. E & OE.

Code AC6/2a Ref 02/09





Adams Close  
Heonor Gate Industrial Park,  
Heonor,  
Derbyshire,  
DE75 7SW

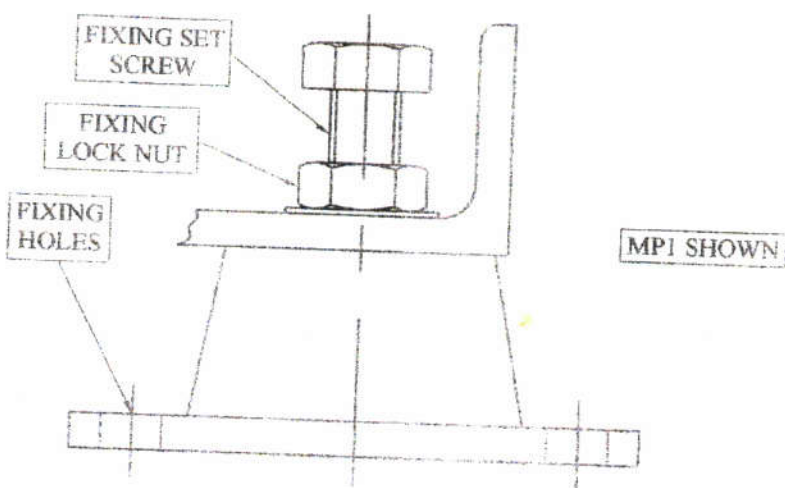
Tel No. (+44) 0870 7274210  
Fax No. (+44) 0870 7274211  
Email: [sales@isolatedsystems.com](mailto:sales@isolatedsystems.com)  
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## INSTALLATION INSTRUCTIONS

In order to ensure the correct installation of the above type of mountings, please adhere to the following procedure:

1. Position the Anti-Vibration Mountings beneath the base of the equipment to be isolated, with fixing screw removed.
2. Line up the holes in the base of the equipment to be isolated with the tapped holes in the Anti-Vibration Mountings.
3. Lower the equipment on to the Anti-Vibration Mountings.
4. Wind the fixing lock nut down the fixing set screw.
5. Position the washer over the equipment fixing hole and insert the fixing set screw/lock nut assembly.
6. Wind the fixing set screw into the Anti-Vibration Mounting and secure into position using the lock nut.
7. This range of mountings has provision for bolting to the floor or supporting structure.
8. Further adjustment and maintenance are not required.

This mounting should not be used in either tension or shear - to be used in compression only.



## RECEPTION

WILLIAMSON, J. H. 1963. AC.