

The roof-mounted smoke and heat exhaust fans BDV are available from sizes of Ø 315 up to 710 mm and flow rates from 3 700 to 40 000 m³/h.

The vertical air outlet prevents damage of adjacent parts of the building in case of fire or by conveying polluted air. Due to the robust design, BDV-roof fans are ideal for use in harsh operating conditions.

**All BDV models with DIBt technical approvals. The types are CE certified and are ready for connection.**

Easy positioning of the unit on site using the standard integrated eyebolt.

From the outside, easily accessible spacious terminal box.

A motor protection against thermal overload by integrated thermal- or PTC elements is standard equipment. Furthermore, the centrifugal impeller is equipped with special backvanes which enable efficient

supply of cooling air, thus preventing motor overheating in smoke control.

The wide range of accessories contains among other things purlin boxes, back draught shutters, flanged flexible connectors as well as speed controllers and motor full protection units.



Certified for temperature class F400 according to the European product and test standard DIN EN 12101-3, roof mounted-, in-line rectangular and centrifugal fans in preventive

fire protection guarantee a smoke and heat extraction. They allow air flow temperatures up to 400 °C/120 minutes or 100 °C for continuous operation. To ensure maximum safety

for buildings and people, all materials used in production are monitored by the German technical monitoring agency (TÜV) beyond.

The centrifugal smoke exhaust fans BK / BR for rectangular ducts and connections are ideal for applications with soiled air and operating temperatures of 400 °C/120 minutes (smoke extraction mode) or 100 °C continuous operation, such as in foundries, hardening shops, etc.

### In-line rectangular smoke exhaust fans F400 for rectangular ducts 40 x 20 cm to 140 x 70 cm

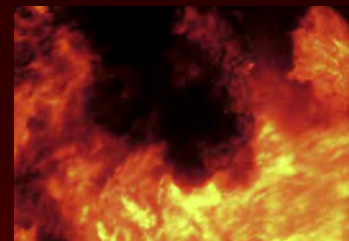
- Service friendly (cleaning) through swing-out motor and impeller unit.
- Compact design for direct installation in the duct course, without height offset.
- Flanged on both sides, with drill holes for connection of standard flanges.
- 21 types  
 $\dot{V} = 1\,500 - 22\,000 \text{ m}^3/\text{h}$

### Centrifugal smoke exhaust fans F400 for rectangular connection 30 x 15 cm to 67 x 36 cm

- Compact rectangular casing for easy, direct mounting on anti vibration mounts.
- Bell mouth shaped inlet, rectangular exhaust with drill holes for easy connection of standard flanges or ducts.
- 17 types  
 $\dot{V} = 1\,500 - 11\,000 \text{ m}^3/\text{h}$



For smoke extraction from  
all kinds of buildings





■ **Application/Use**

- For preventive fire protection to ensure the smoke and heat extraction for single rooms, corridors, escape routes or entire building
- Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 ( smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.

■ **Air flow temperature**

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation and an atmospheric temperature of -20 °C to +40 °C.

■ **Features**

- Vertical air outlet prevents damage of adjacent parts of the building in case of fire or by conveying polluted air.
- Easy connection of accessories on the intake through base plate with threaded bolts.
- Standard motor protection against thermal overload by integrated thermal or PTC elements.
- Robust design for harsh operating conditions.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

■ **Casing**

- Made of galvanized sheet steel, for direct mounting on purlin box. Base plate with threaded bolt for connection of accessories on the intake.
- Architecture design.

■ **Impeller**

- Direct driven, backward curved, highly efficient centrifugal impeller from galvanised steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.
- High efficiency, low noise.

■ **Motor**

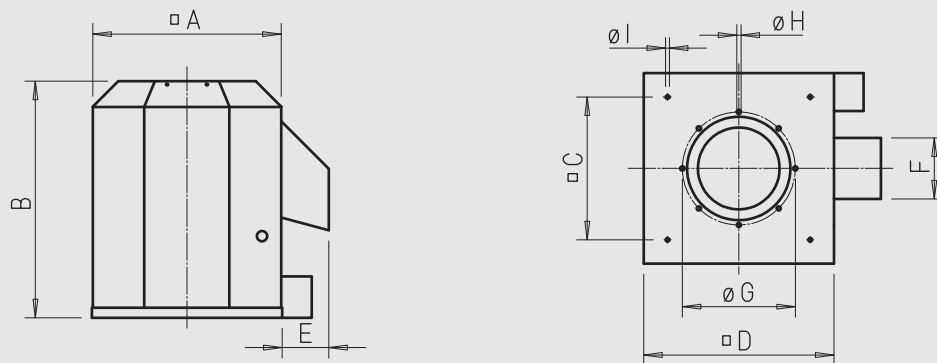
- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation
- Air flow of motor cooling air through intake duct. Supply of cooling air through additional backvanes on the impeller.
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Speed controller 5-step with motor full protection		Motor full protection device*to connect built-in thermal contacts	
		min <sup>-1</sup>			Vm <sup>3</sup> /h	dB(A) in 4 m			Power	Motor Current	No.	kg
<b>1 Phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 55</b>												
<b>BDVW 315/4 F400</b>	7566	1450	3710	56	0,59	3,8	434	60	<b>MWS 5<sup>1)</sup></b>	1949	<b>MW<sup>1)</sup></b>	1579
<b>BDVW 400/4 F400</b>	7569	1390	6820	63	1,61	7,4	434	85	<b>MWS 10<sup>1)</sup></b>	1946	<b>MW<sup>1)</sup></b>	1579
<b>3 Phase motor, 230/400 V, 50 Hz, protection to IP 55, with PTC-resistors</b>												
Frequency inverter												
<b>BDVD 315/4 F400</b>	7567	1450	3710	57	0,59	1,5	776	55	<b>FU-BS 2,5<sup>2)</sup></b>	5459	<b>MSA</b>	1289
<b>BDVD 400/4 F400</b>	7570	1440	7060	62	1,59	3,3	776	80	<b>FU-BS 5,0<sup>2)</sup></b>	5460	<b>MSA</b>	1289

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

<sup>1)</sup> Motor full protection unit included

<sup>2)</sup> Motor full protection unit and sine filter included



Dimensions in mm

Type	A	B	C	D	E	F	øG	øH	øI
<b>BDVW 315/4</b>	594	746	450	600	150	193,5	356	8x M8	12
<b>BDVW 400/4</b>	724	880	535	730	150	223,5	438	6x M8	12
<b>BDVD 315/4</b>	594	746	450	600	150	193,5	356	8x M8	12
<b>BDVD 400/4</b>	724	880	535	730	150	223,5	438	6x M8	12

### ■ Motor full protection

All models are equipped with thermal contacts or PTC-resistors, which are connected to the terminal box located on the outside of the casing and to be wired with the appropriate motor full protection unit (accessories).

### ■ Electrical connection

Standard terminal box (IP 66), outside on console. Interchangeable with isolator switch (accessories).

### ■ Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### ■ Speed control

The 1-phase models are controllable by transformer controller, the 3-phase models by frequency inverter FU. The planned use of a frequency inverter without sine filter must be specified when ordering. It requires a change in the fan version and if necessary additional costs. Appropriate control and regulation units see data table and accessories program.

### ■ Installation/Mounting

For installation / mounting on horizontal roof surfaces or bases, outdoors. With standard, central lifting eye for easy positioning.

### ■ Protection / Guard

Fitted with a guard from galvanized steel on the discharge as standard. Prevents ingress of leaves, solids, and provides protection against accidental contact in accordance to DIN EN ISO 13857.

### ■ Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels

### ■ Certification

The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06. CE-approval: F400 - 400°C / 120 minutes: 0036 CPD RG 05 07 With DIBt technical approval: Z-78.11-150

### ■ Accessories

Intake air accessories, such as back draught shutters, flanged flexible connectors and flanges can be attached to the existing threaded bolts in the base plate.

### ■ Important information

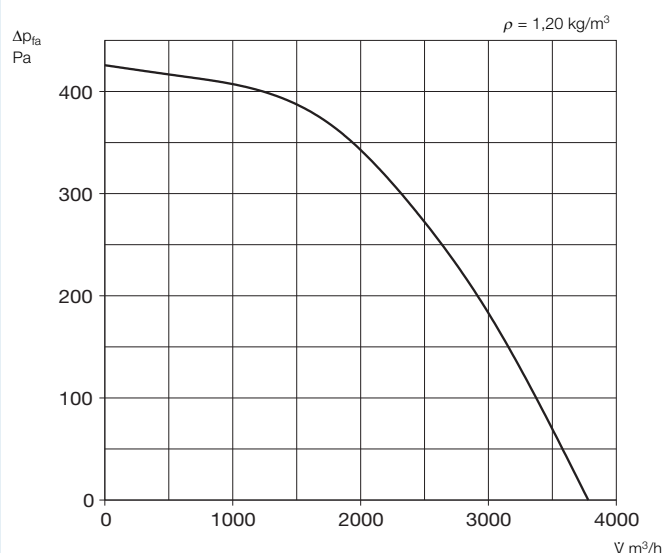
In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

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Accessories	Pages
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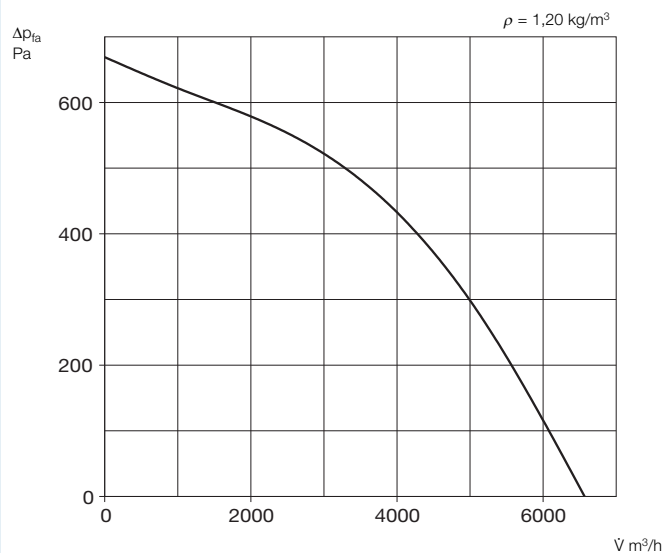
### BDV.. 315/4

R.P.M. = 1450



### BDV.. 400/4

R.P.M. = 1450





■ **Application/Use**

- For preventive fire protection to ensure the smoke and heat extraction for single rooms, corridors, escape routes or entire building
- Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 ( smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.

■ **Air flow temperature**

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation and an atmospheric temperature of -20 °C to +40° C.

■ **Features**

- Vertical air outlet prevents damage of adjacent parts of the building in case of fire or by conveying polluted air.
- Easy connection of accessories on the intake through base plate with threaded bolts.
- Standard motor protection against thermal overload by integrated thermal or PTC elements.
- Robust design for harsh operating conditions.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

■ **Casing**

- Made of galvanized sheet steel, for direct mounting on purlin box. Base plate with threaded bolt for connection of accessories on the intake.
- Architecture design.

■ **Impeller**

- Direct driven, backward curved, highly efficient centrifugal impeller from galvanised steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.
- High efficiency, low noise.

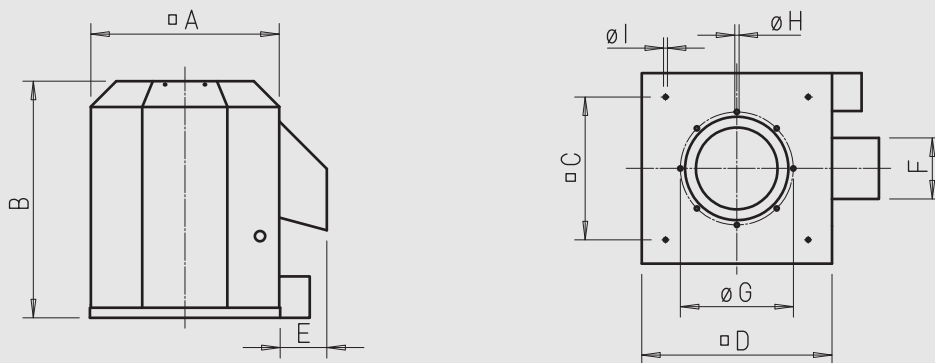
■ **Motor**

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation
- Air flow of motor cooling air through intake duct. Supply of cooling air through additional backvanes on the impeller.
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Frequency inverter* for 3-phase fans		Motor full protection device*to connect built-in PTC resistors	
					Motor Power	Motor Current			Type	Ref.No.	Type	Ref.No.
min <sup>-1</sup> Vm <sup>3</sup> /h dB(A) in 4 m kW A Nr. kg												
<b>3 Phase motor, 400/690 V, 50 Hz, protection to IP 55</b>												
<b>BDVD 500/4 F400</b>	7571	1450	14440	72	4	8,5	776	155	<b>FU-BS 10<sup>1)</sup></b>	5462	<b>MSA</b>	1289
<b>BDVD 560/4 F400</b>	7572	1450	20920	75	7,5	15,4	776	200	<b>FU-CS 18<sup>1)</sup></b>	5469	<b>MSA</b>	1289
<b>2 speed motor, pole-switching, (Dahlander winding Y/YY), 400 V / 3 ph. / 50 Hz</b>												
Pole switch												
<b>BDVD 500/8/4 F400</b>	7579	700/1435	6970/14290	56/72	0,75/4	2,5/8,5	777	155	<b>PDA 12</b>	5081	<b>MSA</b>	1289
<b>BDVD 560/8/4 F400</b>	7580	705/1440	10170/20780	60/75	1,8/7,5	4,6/15,4	777	200	<b>PDA 25</b>	5060	<b>MSA</b>	1289

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

<sup>2)</sup> Motor full protection unit and sine filter included



Dimensions in mm

Type	A	B	C	D	E	F	øG	øH	øI
BDVD 500/4	974	1074	750	980	200	316	541	6x M8	14
BDVD 500/8/4	974	1074	750	980	200	316	541	6x M8	14
BDVD 560/4	1024	1191	750	1030	200	396	605	8x M10	14
BDVD 560/8/4	1024	1191	750	1030	200	396	605	8x M10	14

### Motor full protection

All models are equipped with thermal contacts or PTC-resistors, which are connected to the terminal box located on the outside of the casing and to be wired with the appropriate motor full protection unit (MSA, accessories).

### Electrical connection

Standard terminal box (IP 66), outside on console. Interchangeable with isolator switch (accessories) with Ø 500 mm (with Ø 560 mm to be provided on site).

### Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### Speed control

The 1-phase models are controllable by transformer controller, the 3-phase models by frequency inverter FU. The planned use of a frequency inverter without sine filter must be specified when ordering. It requires a change in the fan version and if necessary additional costs. Appropriate control and regulation units see data table and accessories program.

### Installation/Mounting

For installation / mounting on horizontal roof surfaces or bases, outdoors. With standard, central lifting eye for easy positioning.

### Protection / Guard

Fitted with a guard from galvanised steel on the discharge as standard. Prevents ingress of leaves, solids, and provides protection against accidental con-

tact in accordance to DIN EN ISO 13857.

### Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels

### Certification

The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06. CE-approval: F400 - 400°C / 120 minutes: 0036 CPD RG 05 07 With DIBt technical approval: Z-78.11-150

### Accessories

Intake air accessories, such as back draught shutters, flanged flexible connectors and flanges can be attached to the existing threaded bolts in the base plate.

### Important information

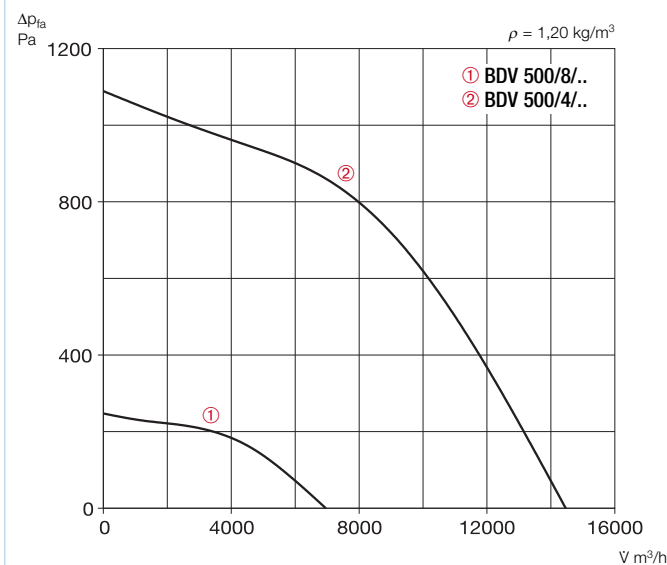
In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

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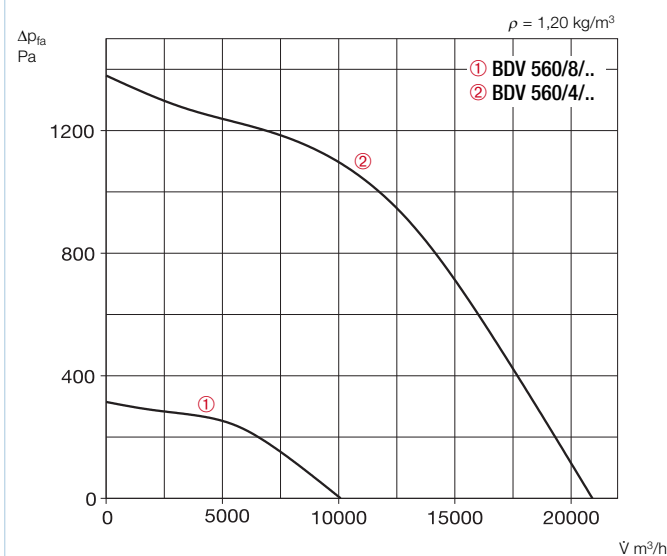
### BDVD 500/..

R.P.M. = 1450



### BDVD 560/..

R.P.M. = 1450





■ **Application/Use**

- For preventive fire protection to ensure the smoke and heat extraction for single rooms, corridors, escape routes or entire building.
- Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 (smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.

■ **Air flow temperature**

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation and an atmospheric temperature of -20 °C to +40 °C.

■ **Features**

- Vertical air outlet prevents damage of adjacent parts of the building in case of fire or by conveying polluted air.
- Easy connection of accessories on the intake through base plate with threaded bolts.
- Standard motor protection against thermal overload by integrated thermal or PTC elements.
- Robust design for harsh operating conditions.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

■ **Casing**

- Made of galvanized sheet steel, for direct mounting on purlin box. Base plate with threaded bolt for connection of accessories on the intake.
- Architecture design.

■ **Impeller**

- Direct driven, backward curved, highly efficient centrifugal impeller from galvanised steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.
- High efficiency, low noise.

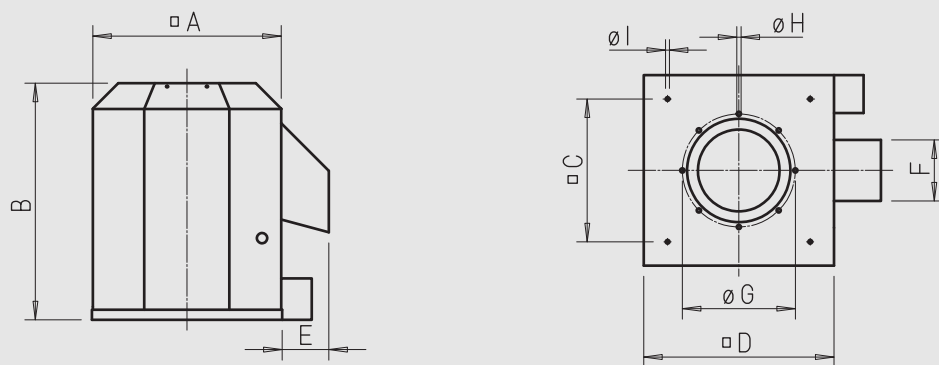
■ **Motor**

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation.
- Air flow of motor cooling air via intake duct. Supply of cooling air through additional backvanes on the impeller.
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Frequency inverter* for 3-phase fans		Motor full protection device* to connect built-in PTC resistors	
		min <sup>-1</sup>	Vm <sup>3</sup> /h	dB(A) in 4 m	Power	Motor Current			Type	Ref.No.	Type	Ref.No.
<b>3 Phase motor, 400/690 V, 50 Hz, protection to IP 55</b>												
<b>BDVD 630/4 F400</b>	7573	1460	29980	82	15	30	776	325	<b>FU-CS 32<sup>1)</sup></b>	5471	<b>MSA</b>	1289
<b>BDVD 710/4 F400</b>	7574	1460	39740	86	22	43	776	420	<b>FU-CS 50<sup>1)</sup></b>	5473	<b>MSA</b>	1289
<b>2 speed motor, pole-switching, (Dahlander winding Y/YY), 400 V / 3 ph. / 50 Hz</b>												
									Pole switch			
<b>BDVD 630/8/4 F400</b>	7581	715/1445	14780/29880	67/82	3,8/15	9,9/30	777	325	<b>PDA 63</b>	1283	<b>MSA</b>	1289
<b>BDVD 710/8/4 F400</b>	7582	720/1450	19540/39470	71/86	5,5/22	13/43	777	420	<b>PDA 63</b>	1283	<b>MSA</b>	1289

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

<sup>2)</sup> Motor full protection unit and sine filter included



Dimensions in mm

Type	A	B	C	D	E	F	øG	øH	øI
BDVD 630/4	1144	1406	840	1150	250	452	674	8x M10	14
BDVD 630/8/4	1144	1406	840	1150	250	452	674	8x M10	14
BDVD 710/4	1294	1539	1050	1300	250	452	751	8x M10	14
BDVD 710/8/4	1294	1539	1050	1300	250	452	751	8x M10	14

### Motor full protection

All models are equipped with thermal contacts or PTC-resistors, which are connected to the terminal box located on the outside of the casing and to be wired with the appropriate motor full protection unit (MSA, accessories).

### Electrical connection

Standard terminal box (IP 65), outside on console. Interchangeable with isolator switch (accessories).

### Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### Speed control

The 1-phase models are controllable by transformer controller, the 3-phase models by frequency inverter FU. The planned use of a frequency inverter without sine filter must be specified when ordering. It requires a change in the fan version and if necessary additional costs. Appropriate control and regulation units see data table and accessories program.

### Installation/Mounting

For installation / mounting on horizontal roof surfaces or bases, outdoors. With standard, central lifting eye for easy positioning.

### Protection / Guard

Fitted with a guard from galvanised steel on the discharge as standard. Prevents ingress of leaves, solids, and provides protection against accidental contact in accordance to DIN EN ISO 13857.

### Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels

### Certification

The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06. CE-approval: F400 - 400°C / 120 minutes: 0036 CPD RG 05 07 With DIBt technical approval: Z-78.11-150

### Accessories

Intake air accessories, such as back draught shutters, flanged flexible connectors and flanges can be attached to the existing threaded bolts in the base plate.

### Important information

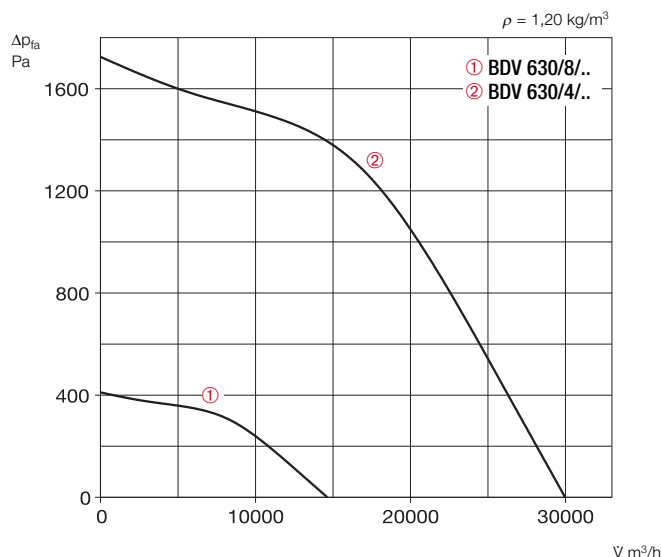
In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

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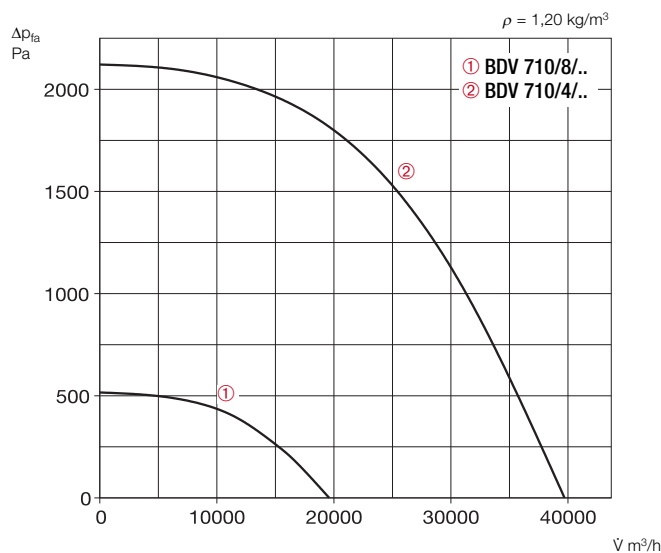
### BDV.. 630/..

R.P.M. =1450



### BDV.. 710/..

R.P.M. =1450







#### ■ Application/Use

- For preventive fire protection to ensure the smoke and heat extraction from single rooms, corridors, escape routes or entire building. Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 (smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.
- For all industrial and commercial applications where the motor must be outside the air stream.
- Wherever easy access for cleaning and maintenance is required.
- Corresponds to VDI 2052: "Heat ventilation equipment for kitchens".

#### ■ Air flow temperature

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation. Motor ambient temperature of -20 °C to +40 °C.

#### ■ Features

- Swing-out motor impeller unit for easy cleaning and maintenance. All parts are freely accessible.
- Robust design for harsh operating conditions..
- Speed control by voltage reduction.
- All three-phase models are equipped with two speeds as standard.
- Standard motor protection against thermal overload by integrated thermal contacts.
- Additional cooling wheel on the motor shaft for effective heat dissipation.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

#### ■ Casing

- Made of galvanized sheet steel. Rectangular, for direct installation in the ventilation duct. Inlet and outlet with holes for connection of standard flanges.
- Compact design for easy integration into ventilation ducts, without vertical offset.

#### ■ Impeller

- Direct driven, backward curved, centrifugal impeller from galvanized steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.

#### ■ Motor

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation.
- Additional impeller for atmospheric cooling.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Speed controller 5-step		Motor full protection device*to connect built-in thermal contacts			
					min <sup>-1</sup>	Vm <sup>3</sup> /h			dB(A) in 4 m	kW	A	No.	kg	motor full protection
<b>1 Phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 55</b>														
BKW 250/4/50/30	8552	1350	1550	45	0,16	0,80	563 <sup>1)</sup>	36	MWS 1,5 <sup>5)</sup>	1947	TSW 1,5	1495	MW	1579
BKW 280/4/50/30	8555	1370	2170	48	0,16	0,82	563 <sup>1)</sup>	38	MWS 1,5 <sup>5)</sup>	1947	TSW 1,5	1495	MW	1579
BKW 315/4/60/35	8558	1320	3470	52	0,42	2,00	563 <sup>1)</sup>	46	MWS 3 <sup>5)</sup>	1948	TSW 3,0	1496	MW	1579
BKW 400/6/60/35	8557	915	2750	45	0,30	1,62	563 <sup>1)</sup>	57	MWS 3 <sup>5)</sup>	1948	TSW 3,0	1496	MW	1579
BKW 400/4/60/35	8559	1420	4330	55	1,36	6,90	563 <sup>1)</sup>	58	MWS 7,5 <sup>5)</sup>	1950	—	—	—	—
<b>2 speed motor, 3 Phase, 400 V, 50 Hz, Y/Δ-motor, protection to IP 55</b>														
BKD 225/2/2/40/20	8548	2080/2630	1500/1900	54/56	0,30/0,47	0,48/0,96	520 <sup>2)</sup>	34	RDS 2	1315	TSD 1,5	1501	MD <sup>3)</sup>	5849
BKD 250/2/2/50/30	8553	2180/2720	2810/3510	56/59	0,66/1,03	1,00/2,00	520 <sup>2)</sup>	37	RDS 2	1315	TSD 3,0	1502	MD <sup>3)</sup>	5849
BKD 280/2/2/50/30 <sup>4)</sup>	8556	2160/2720	3450/4350	61/63	0,96/1,45	1,60/2,60	520 <sup>2)</sup>	40	RDS 4	1316	TSD 5,5	1503	MD <sup>3)</sup>	5849
BKD 400/4/4/60/35	8561	1080/1350	3340/4170	53/55	0,55/0,81	0,86/1,60	520 <sup>2)</sup>	60	RDS 2	1315	TSD 3,0	1502	MD <sup>3)</sup>	5849

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

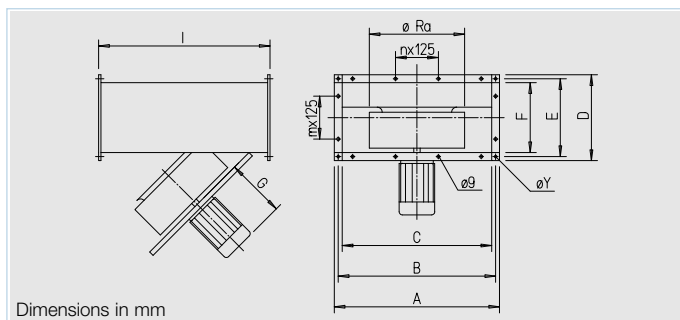
<sup>1)</sup> Wiring diagram SS-564

<sup>2)</sup> Wiring diagram SS-565

<sup>3)</sup> When operating on two-speed Type M is 4, No. 1571, is required.

<sup>4)</sup> Use only for air flow temperatures up to +100 °C.

<sup>5)</sup> Motor full protection unit included



Type	A	B	C	D	E	F	G	I	Ø Y
BKD 225/2/2/40/20	440	420	400	240	220	200	270	500	9
BKW 250/4/50/30	540	520	500	340	320	300	215	675	9
BKD 250/2/2/50/30	540	520	500	340	320	300	290	675	9
BKW 280/4/50/30	540	520	500	340	320	300	221	675	9
BKD 280/2/2/50/30	540	520	500	340	320	300	300	675	9
BKW 315/4/60/35	640	620	600	390	370	350	260	775	9
BKW 400/6/60/35	640	620	600	390	370	350	285	775	9
BKW 400/4/60/35	640	620	600	390	370	350	357	775	9
BKD 400/4/4/60/35	640	620	600	390	370	350	285	775	9

Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

### Motor full protection

All models are equipped with thermal contacts, which are connected to the terminal board and to be wired with the appropriate motor full protection unit (accessories).

### Electrical connection

Freely accessible terminal box (protection to IP 55) mounted on the motor. Consider swing-out range of motor impeller unit when cutting connecting cable to length.

### Speed control

All models (1~ und 3~) are controllable by voltage reduction. Thereby optimum adjustment to the required operating point and the user needs possible. The models are assigned to a controller shown in the column "Transformer speed controller". All 2-speed models can be operated by speed controller DS 2, Ref.No. 1351 (accessories).

### Installation/Mounting

For installation outside the temperature-critical/fire risk zones.

Installation in any position. Consider swing-out range and easy access to the motor- impeller-unit.

With application as a smoke and heat exhaust fan or in continuous operation at high temperatures, the motor may be mounted only horizontally in position with "motor pointing downwards".

### Note:

When used as a smoke and heat exhaust fan this must be insulated in accordance with DIN 4102-4, if an impairment of the environment is to be expected by the casing temperature..

### Protection/Guard

Protection against accidental contact with the impeller according to DIN EN ISO 13857 must be ensured.

### Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels

### Certification

The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06. CE-approval: F400 - 400°C / 120 minutes: 0036 CPD RG 05 08 With DIBt technical approval: Z-78.11-151

### Important information

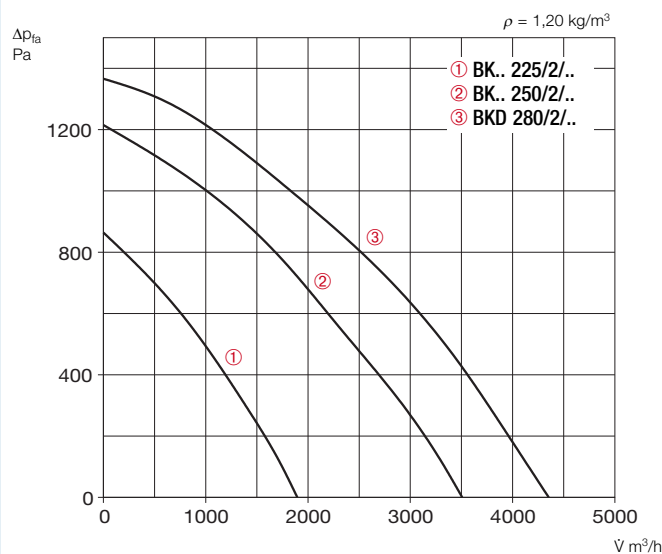
In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

Design of systems Page 3 on

Accessories	Pages
Mounting accessories	146 on
controllers, switches	152 on

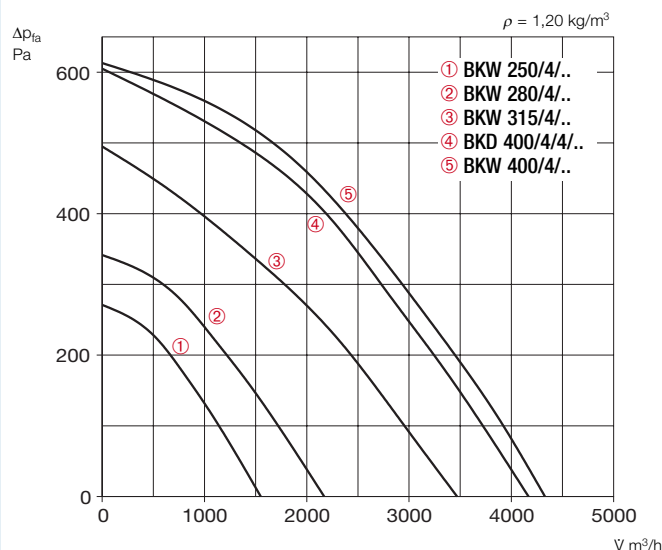
### BK.. /2/..

R.P.M. = 2800



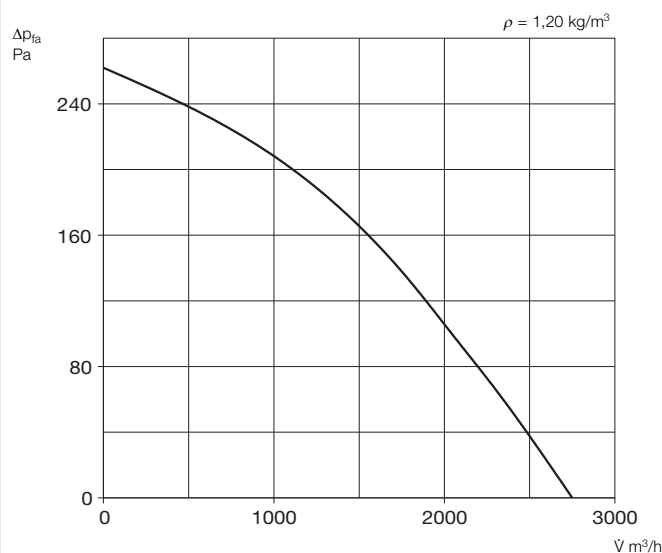
### BK.. /4/..

R.P.M. = 1400



### BK.. /6/..

R.P.M. = 900





■ **Application/Use**

- For preventive fire protection to ensure the smoke and heat extraction from single rooms, corridors, escape routes or entire building. Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 (smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology..
- For all industrial and commercial applications where the motor must be outside the air stream.
- Wherever easy access for cleaning and maintenance is required.
- Corresponds to VDI 2052: "Heat ventilation equipment for kitchens".

■ **Air flow temperature**

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation. Motor ambient temperature of -20 °C to +40 °C.

■ **Features**

- Swing-out motor impeller unit for easy cleaning and maintenance. All parts are freely accessible.
- Robust design for harsh operating conditions..
- Speed control by voltage reduction.
- All three-phase models are equipped with two speeds as standard.
- Standard motor protection against thermal overload by integrated thermal or PTC elements.
- Additional cooling wheel on the motor shaft for effective heat dissipation.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

■ **Casing**

- Made of galvanized sheet steel. Rectangular, for direct installation in the ventilation duct. Inlet and outlet with holes for connection of standard flanges.
- Compact design for easy integration into ventilation ducts, without vertical offset.

■ **Impeller**

- Direct driven, backward curved, centrifugal impeller from galvanized steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.

■ **Motor**

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Speed controller 5-step		Motor full protection device*to connect built-in thermal contacts			
					min <sup>-1</sup>	Vm <sup>3</sup> /h			dB(A) in 4 m	kW	A	No.	kg	Type
<b>1 Phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 55</b>														
BKW 450/6/70/40	8562	870	4040	49	0,42	2,0	563 <sup>1)</sup>	85	MWS 3 <sup>5)</sup>	1948	TSW 3,0	1496	MW	1579
BKW 500/6/80/50	8564	810	5620	52	0,58	2,6	563 <sup>1)</sup>	105	MWS 3 <sup>5)</sup>	1948	TSW 3,0	1496	MW	1579
<b>2 speed motor, 3 Phase, 400 V, 50 Hz, Y/Δ-motor, protection to IP 55</b>														
BKD 450/4/4/70/40	8563	1170/1380	5440/6420	56/59	0,95/1,41	1,6/3,2	520 <sup>2)</sup>	87	RDS 7 <sup>5)</sup>	1578	TSD 5,5	1503	MD <sup>4)</sup>	5849
BKD 500/4/4/80/50	8550	1120/1370	8350/10210	58/62	1,50/2,10	2,5/4,2	520 <sup>2)</sup>	108	RDS 7 <sup>5)</sup>	1578	TSD 5,5	1503	MD <sup>4)</sup>	5849
BKD 560/6/6/80/50	8565	800/920	7490/8610	53/56	0,90/1,31	2,0/3,8	520 <sup>2)</sup>	120	RDS 7 <sup>5)</sup>	1578	TSD 5,5	1503	MD <sup>4)</sup>	5849
BKD 630/6/6/100/50	8566	860/950	9750/10770	57/59	1,78/2,20	3,8/6,3	520 <sup>2)</sup>	150	RDS 7 <sup>5)</sup>	1578	TSD 7,0	1504	MD <sup>4)</sup>	5849
<b>3 Phase motor, 400 V, 50 Hz, protection to IP 55, with PTC resistors</b>														
BKD 560/4/80/50	8551	1420	12770	65	4,80	8,5	776 <sup>3)</sup>	142	—	—	—	—	MSA	1289
BKD 630/4/100/50	8567	1450	16500	69	5,50	12,2	776 <sup>3)</sup>	174	—	—	—	—	MSA	1289
BKD 710/6/120/60	8568	950	15400	63	3,75	6,90	776 <sup>3)</sup>	185	—	—	—	—	MSA	1289
BKD 800/6/140/70	8554	950	21930	67	6,50	12,4	776 <sup>3)</sup>	232	—	—	—	—	MSA	1289

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

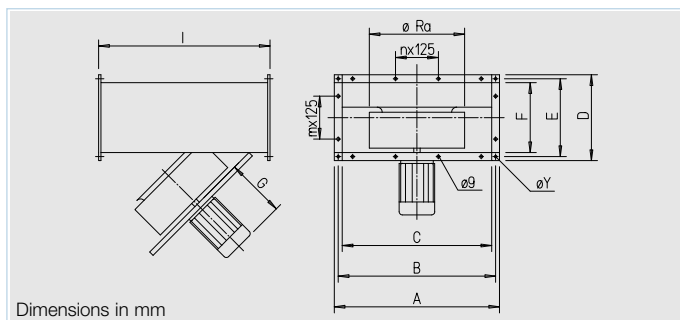
<sup>1)</sup> Wiring diagram SS-564

<sup>2)</sup> Wiring diagram SS-565

<sup>3)</sup> Wiring diagram SS-565.1

<sup>4)</sup> When operating on two-speed Type M is 4, No. 1571, is required.

<sup>5)</sup> Motor full protection unit included



Dimensions in mm

Type	A	B	C	D	E	F	G	I	ØY
BKW 450/6/70/40	740	720	700	440	420	400	273	850	9
BKD 450/4/4/70/40	740	720	700	440	420	400	323	850	9
BKW 500/6/80/50	840	820	800	540	520	500	273	1025	9
BKD 500/4/4/80/50	840	820	800	540	520	500	357	1025	9
BKD 560/6/6/80/50	840	820	800	540	520	500	372	1025	9
BKD 560/4/80/50	840	820	800	540	520	500	372	1025	9
BKD 630/6/6/100/50	1040	1020	1000	540	520	500	372	1075	9
BKD 630/4/100/50	1040	1020	1000	540	520	500	453	1075	9
BKD 710/6/120/60	1240	1220	1200	640	620	600	442	1200	9
BKD 800/6/140/70	1440	1420	1400	740	720	700	440	1300	9

- Additional impeller for atmospheric cooling
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

### Motor full protection

- All models are equipped with thermal contacts or PTC resistors, which are connected to the terminal board and to be wired with the appropriate motor full protection unit (accessories).

### Electrical connection

- Freely accessible terminal box (protection to IP 55) mounted on the motor. Consider swing-out range of motor impeller unit when cutting connecting cable to length.

### Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### Speed control

Many models (1~ und 3~) are controllable by voltage reduction. Therby optimum adjustment to the required operating point and the user needs possible. The models are assigned to a controller shown in the column "Transformer speed controller". All 2-speed models can be operated by speed controller DS 2, Ref.No. 1351 (accessories).

### Installation/Mounting

- For installation outside the temperature-critical/fire risk zones.
- Installation in any position. Consider swing-out range and easy access to the motor- impeller-unit.

- With application as a smoke and heat exhaust fan or in continuous operation at high temperatures, the motor may be mounted only horizontally in position with "motor pointing downwards".

### Note:

When used as a smoke and heat exhaust fan this must be insulated in accordance with DIN 4102-4, if an impairment of the environment is to be expected by the casing temperature.

### Protection/Guard

Protection against accidental contact with the impeller according to DIN EN ISO 13857 must be ensured.

### Sound level

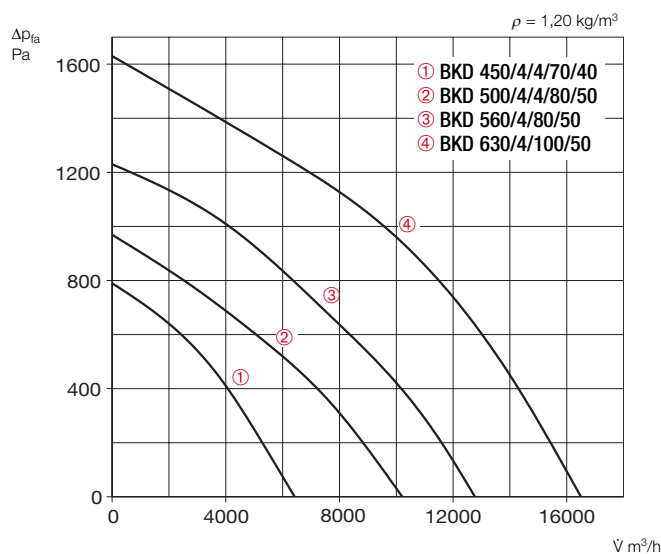
Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels.

### Certification

- The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06.  
CE-approval:  
F400 - 400°C / 120 minutes:  
0036 CPD RG 05 08  
With DIBt technical approval:  
Z-78.11-151

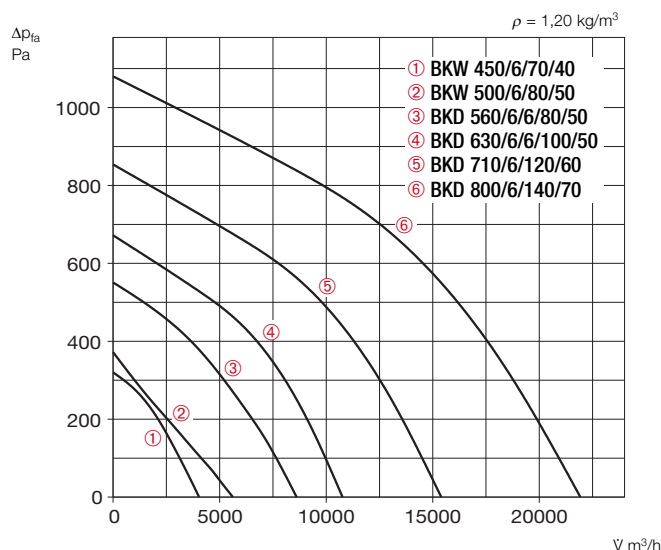
### BK.. /4/..

R.P.M. = 1400



### BK.. /6/..

R.P.M. = 900



### Important information

In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

Design of systems Page 3 on

Accessories	Pages
Mounting accessories	146 on
controllers, switches	152 on



#### ■ Application/Use

- For preventive fire protection to ensure the smoke and heat extraction from single rooms, corridors, escape routes or entire building. Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 (smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.
- Corresponds to VDI 2052: "Heat ventilation equipment for kitchens".

#### ■ Air flow temperature

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation. Motor ambient temperature of -20 °C to +40 °C.

#### ■ Features

- Robust design for harsh operating conditions..
- Speed control by voltage reduction.
- All three-phase models are equipped with two speeds as standard.
- Standard motor protection against thermal overload by integrated thermal contacts.
- Additional cooling wheel on the motor shaft for effective heat dissipation.
- Compact design in rectangular casing simplifies installation.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

#### ■ Casing

- Made of galvanized sheet steel.
- Rectangular, for direct mounting on anti vibration mounts without brackets.
- With drill holes for any assembly position.
- Rectangular air outlet with holes for connecting flanges or ducts.
- Inflow via bell mouth with threaded holes for easy connection of standard flanges or pipes.

#### ■ Impeller

- Direct driven, backward curved, centrifugal impeller from galvanized steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.
- High efficiency and low noise characteristics through aerodynamically shaped scroll casing.

#### ■ Motor

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation.
- Additional impeller for atmospheric cooling
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Speed controller 5-step		Motor full protection device*			
					with motor full protection	without motor full protection			with motor full protection	without motor full protection				
		min <sup>-1</sup>	Vm <sup>3</sup> /h	dB(A) in 4 m	kW	A	No.	kg	Type	Ref.No.	Type	Ref.No.		
<b>1 Phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 55</b>														
BRW 250/4/30/15	8570	1350	1550	45	0,16	0,80	563 <sup>1)</sup>	27	MWS 1,5 <sup>5)</sup>	1947	TSW 1,5	1495	MW	1579
BRW 280/4/37/20	8572	1370	2170	48	0,16	0,82	563 <sup>1)</sup>	34	MWS 1,5 <sup>5)</sup>	1947	TSW 1,5	1495	MW	1579
BRW 315/4/37/20	8574	1320	3470	52	0,42	2,00	563 <sup>1)</sup>	40	MWS 3 <sup>5)</sup>	1948	TSW 3,0	1496	MW	1579
<b>2 speed motor, 3 Phase, 400 V, 50 Hz, Y/Δ-motor, protection to IP 55</b>														
BRD 225/2/2/30/15	8569	2080/2630	1500/1900	54/56	0,30/0,47	0,48/0,96	520 <sup>2)</sup>	25	RDS 2 <sup>5)</sup>	1315	TSD 1,5	1501	MD <sup>3)</sup>	5849
BRD 250/2/2/30/15	8571	2180/2720	2810/3510	56/59	0,66/1,03	1,00/2,00	520 <sup>2)</sup>	29	RDS 2 <sup>5)</sup>	1315	TSD 3,0	1502	MD <sup>3)</sup>	5849
BRD 280/2/2/37/20 <sup>4)</sup>	8573	2160/2720	3450/4350	61/63	0,96/1,45	1,60/2,60	520 <sup>2)</sup>	36	RDS 4 <sup>5)</sup>	1316	TSD 5,5	1503	MD <sup>3)</sup>	5849

\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

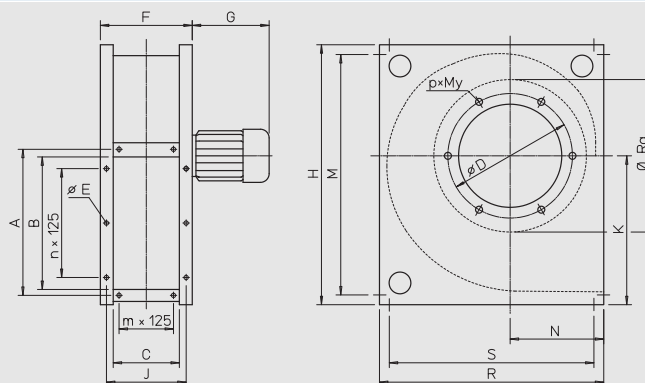
<sup>1)</sup> Wiring diagram SS-564

<sup>2)</sup> Wiring diagram SS-565

<sup>3)</sup> When operating on two-speed Type M is 4, No. 1571, is required.

<sup>4)</sup> Use only for air flow temperatures up to +100 °C.

<sup>5)</sup> Motor full protection unit included



Dimensions in mm

Type	A	B	C	$\phi D$	$\phi E$	F	G	H	J	K	M	N	R	S	p	Y	n	m
BRD 225/2/2/30/15	333	271	145	259	10	205	232	530	183	304	470	191	458	400	6	M6	2	1
BRW 250/4/30/15	333	305	156	286	10	211	187	597	183	340	552	215	515	470	6	M6	2	1
BRD 250/2/2/30/15	333	305	156	286	10	211	261	597	183	340	552	215	515	470	6	M6	2	1
BRD 280/2/2/37/20	398	344	180	322	10	254	261	674	228	385	600	242	580	520	8	M8	2	1
BRW 280/4/37/20	398	344	180	322	10	254	175	674	228	385	600	242	580	520	8	M8	2	1
BRW 315/4/37/20	398	366	201	356	10	261	234	715	228	410	665	260	620	570	8	M8	2	1

### ■ Motor full protection

- All models are equipped with thermal contacts, which are connected to the terminal board and to be wired with the appropriate motor full protection unit (accessories).

### ■ Electrical connection

- Freely accessible terminal box (protection to IP 55) mounted on the motor.

### ■ Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### ■ Speed control

Many models (1~ und 3~) are controllable by voltage reduction. Thereby optimum adjustment to the required operating point and the user needs possible. Appropriate control and regulation devices see data table and accessories. All three-phase types can be operated on two speeds (rpm). For this use controller DS 2, Ref.No. 1351 (accessories).

### ■ Installation/Mounting

- In steps of 90 ° in any position.
- For installation outside the temperature-critical/fire risk zones.

#### Note:

When used as a smoke and heat exhaust fan this must be insulated in accordance with DIN 4102-4, if an impairment of the environment is to be expected by the casing temperature.

### ■ Protection/Guard

Protection against accidental contact with the impeller according to DIN EN ISO 13857 must

be ensured by installation.

Guard on inlet side available as accessories.

### ■ Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels.

### ■ Certification

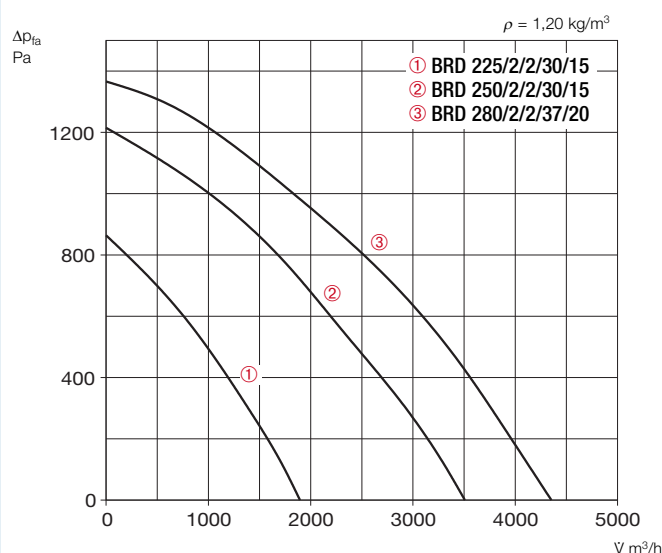
- The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06.
- CE-approval: F400 - 400°C / 120 minutes: 0036 CPD RG 05 09
- With DIBt technical approval: Z-78.11-151

### ■ Important information

In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the function at maximum fan speed must be guaranteed.

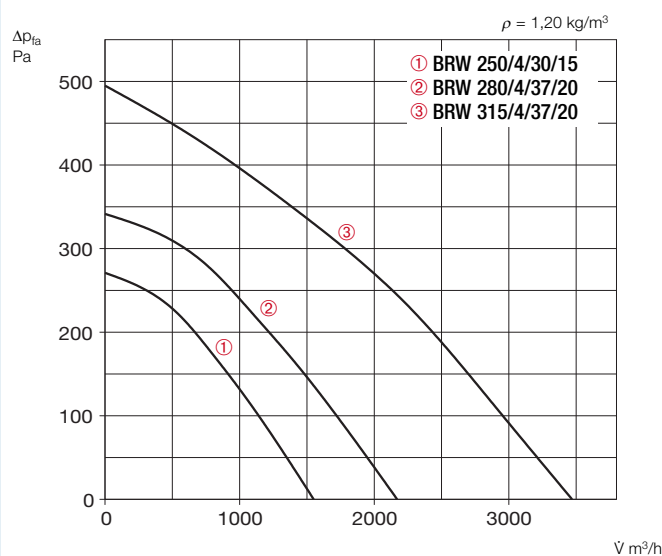
### BR.. /2/..

R.P.M. = 2800



### BR.. /4/..

R.P.M. = 1400





#### ■ Application/Use

- For preventive fire protection to ensure the smoke and heat extraction from single rooms, corridors, escape routes or entire building. Furthermore to the prevention of "Flash-Overs".
- For applications with operating temperatures of 400 °C/120 minutes/F400 (smoke extraction mode), or in continuous operation up to 100 °C, such as in foundries, hardening shops, commercial kitchens etc.
- Versatile for general tasks in the field of ventilation-, air conditioning-, heat-, and drying technology.
- Corresponds to VDI 2052: "Heat ventilation equipment for kitchens".

#### ■ Air flow temperature

- Temperature range 400 °C/120 minutes (smoke extraction mode) or 100 °C for continuous operation. Motor ambient temperature of -20 °C to +40 °C.

#### ■ Features

- Robust design for harsh operating conditions..
- Speed control by voltage reduction.
- All three-phase models are equipped with two speeds as standard.
- Standard motor protection against thermal overload by integrated thermal contacts.
- Additional cooling wheel on the motor shaft for effective heat dissipation.
- Compact design in rectangular casing simplifies installation.
- Supplied ready for installation, easy assembly
- High reliability by minimal maintenance.

#### ■ Casing

- Made of galvanized sheet steel.
- Rectangular, for direct mounting on anti vibration mounts without brackets.
- With drill holes for any assembly position.
- Rectangular air outlet with holes for connecting flanges or ducts.
- Inflow via bell mouth with threaded holes for easy connection of standard flanges or pipes.

#### ■ Impeller

- Direct driven, backward curved, centrifugal impeller from galvanized steel.
- Dynamically balanced to DIN ISO 1940 P.1 – class 6.3.
- High efficiency and low noise characteristics through aerodynamically shaped scroll casing.

#### ■ Motor

- Special motor for use in high ambient temperatures.
- Totally enclosed, fan cooled motor, protection to IP 55. Maintenance-free, sealed for life ball bearings.
- Tropical protection of windings, insulation class F.
- Motor outside of air stream, protected from it by thermal separation.
- Additional impeller for atmospheric cooling
- Execution according to IEC/T5 60034-1, IEC 72, VDE 530 / DIN EN 60034 und VDE 0700 / DIN EN 60335-1.

Type	Ref. No.	R.P.M.	Air flow volume (FID)	Sound pressure case breakout	Power consumption		Wiring diagram	Nominal weight (net)	Speed controller 5-step				Motor full protection device*to connect built-in thermal contacts	
					min <sup>-1</sup>	Vm <sup>3</sup> /h			dB(A) in 4 m	kW	A	No.	kg	with motor full protection
<b>1 Phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 55</b>														
BRW 400/6/45/25	8575	915	2750	45	0,30	1,62	563 <sup>1)</sup>	64	MWS 3 <sup>4)</sup>	1948	TSW 3,0	1496	MW	1579
BRW 400/4/45/25	8593	1420	4330	55	1,36	6,90	563 <sup>1)</sup>	68	MWS 7,5 <sup>4)</sup>	1950	—	—	—	—
BRW 450/6/50/27	8595	870	4040	49	0,42	2,00	563 <sup>1)</sup>	86	MWS 3 <sup>4)</sup>	1948	TSW 3,0	1496	MW	1579
BRW 500/6/55/30	8597	810	5620	52	0,58	2,60	563 <sup>1)</sup>	110	MWS 3 <sup>4)</sup>	1948	TSW 3,0	1496	MW	1579
<b>2 speed motor, 3 Phase, 400 V, 50 Hz, Y/Δ-motor, protection to IP 55</b>														
BRD 400/4/4/45/25	8594	1080/1350	3340/4170	53/55	0,55/0,81	0,86/1,60	520 <sup>2)</sup>	68	RDS 2 <sup>4)</sup>	1315	TSD 3,0	1502	MD <sup>3)</sup>	5849
BRD 450/4/4/50/27	8596	1170/1380	5440/6420	56/59	0,95/1,41	1,60/3,20	520 <sup>2)</sup>	88	RDS 7 <sup>4)</sup>	1578	TSD 5,5	1503	MD <sup>3)</sup>	5849
BRD 500/4/4/55/30	8560	1120/1370	8350/10210	58/62	1,50/2,10	2,50/4,20	520 <sup>2)</sup>	113	RDS 7 <sup>4)</sup>	1578	TSD 5,5	1503	MD <sup>3)</sup>	5849
BRD 560/6/6/61/33	8598	800/920	7490/8610	53/56	0,90/1,31	2,00/3,80	520 <sup>2)</sup>	142	RDS 7 <sup>4)</sup>	1578	TSD 5,5	1503	MD <sup>3)</sup>	5849
BRD 630/6/6/67/36	8599	860/950	9750/10770	57/59	1,78/2,20	3,80/6,30	520 <sup>2)</sup>	190	—	—	—	—	—	—

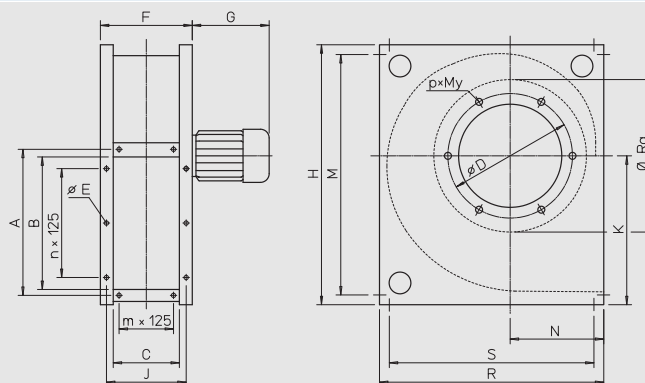
\* When used as smoke exhaust fan these switching devices are to be bridged in the on-site control.

<sup>1)</sup> Wiring diagram SS-564

<sup>2)</sup> Wiring diagram SS-565

<sup>3)</sup> When operating on two-speed Type M is 4, No. 1571, is required

<sup>4)</sup> Motor full protection unit included



Dimensions in mm

Type	A	B	C	ØD	ØE	F	G	H	J	K	M	N	R	S	p	Y	n	m
BR.. 400/././45/25	490	448	252	438	15	332	*	870	292	505	790	305	740	660	6	M8	3	1
BR.. 450/././50/27	530	491	277	487	15	352	286	955	312	550	855	340	820	720	6	M8	3	1
BRW 500/6/55/30	586	545	298	541	15	378	233	1038	338	598	938	365	885	755	6	M8	4	2
BRD 500/4/4/55/30	586	545	298	541	15	378	317	1038	338	598	938	365	885	755	6	M8	4	2
BRD 560/6/6/61/33	647	606	328	605	15	408	325	1135	368	655	1035	405	975	875	8	M10	4	2
BRD 630/6/6/67/36	712	670	355	674	15	435	332	1280	395	725	1180	485	1140	1040	8	M10	4	2

\* 6-pole (BRW 400/6/45/25): 240 mm, 4-pole (BRW 400/4/45/25): 317 mm, 4-pole (BRD 400/4/4/45/25): 245 mm

### ■ Motor full protection

- All models are equipped with thermal contacts, which are connected to the terminal board and to be wired with the appropriate motor full protection unit (accessories).

### ■ Electrical connection

- Freely accessible terminal box (protection to IP 55) mounted on the motor.

### ■ Voltage and frequency

Rated voltage and frequency are shown in the table. These also form the basis of the performance data.

### ■ Speed control

Many models (1~ und 3~) are controllable by voltage reduction. Therby optimum adjustment to the required operating point and the user needs possible. Appropriate control and regulation devices see data table and accessories. All three-phase types can be operated on two speeds (rpm). For this use controller DS 2, Ref.No. 1351 (accessories).

### ■ Installation/Mounting

- In steps of 90 ° in any position.
- For installation outside the temperature-critical/fire risk zones.

#### Note:

When used as a smoke and heat exhaust fan this must be insulated in accordance with DIN 4102-4, if an impairment of the environment is to be expected by the casing temperature.

### ■ Protection/Guard

Protection against accidental contact with the impeller according to DIN EN ISO 13857 must

be ensured by installation.

Guard on inlet side available as accessories.

### ■ Sound level

Shown in the data table is the case breakout sound level as sound pressure level in dB(A) at 4 m (freefield conditions). Different installation conditions or disturbed inflow may increase noise levels.

### ■ Certification

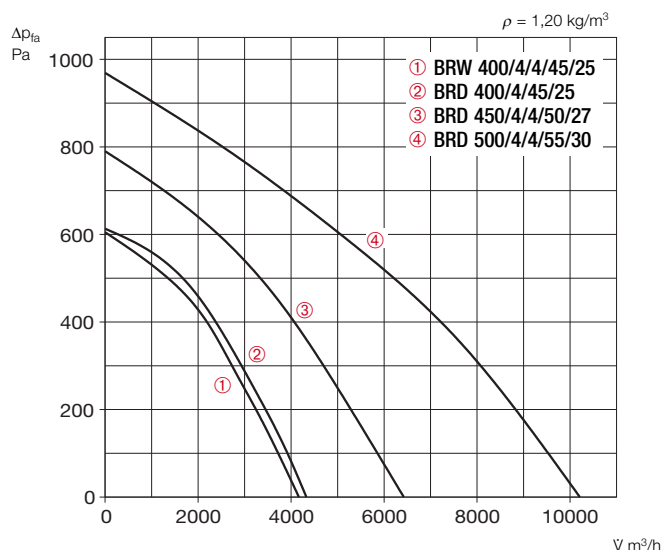
- The smoke and heat exhaust fans BDV were tested to DIN EN 12101-3: 2002-06. CE-approval: F400 - 400 °C/120 minutes: 0036 CPD RG 05 09 With DIBt technical approval: Z-78.11-151

### ■ Important information

In case of fire the electrical supply is to be carried out fire-protected. Possible motor protection devices, control and regulating devices must be bridged automatically in case of fire (put out of operation) and the fan speed at maximum fan speed must be guaranteed.

### BR.. /4/..

R.P.M. = 1400



### BR.. /6/..

R.P.M. = 900

