

### B VAR 500 F300/F400



#### ■ Casing

Duct with flanges on both sides DIN 24155 pt. 3. Welded construction, hot-dip galvanised. Welded guide vane with inner hub for mounting the flange motor, hot-dip galvanised.

#### ■ Impeller

Optimised for high pressure and volume output. Special development with spatially curved hot-dip galvanised steel blades.

#### ■ Motor

Direct through efficient IE3 three phase motor (smoke extraction motors F300 and F400). Pole-switching fans with IEC standard motor. Protection class IP55. Insulation class H. External cable with sheathing.

#### ■ Motor protection

All types (except pole-switching) have PTC resistors as standard and must be protected with aa full motor protection device (MSA, Ref. no. 01289). This must be bridged in smoke extraction situation.

#### ■ Installation

Installation in any position. Suitable for installation within and outside of the fire zone.

#### ■ Electrical connection

Standard terminal box in temperature-resistant design (protection class IP54) outside of duct.

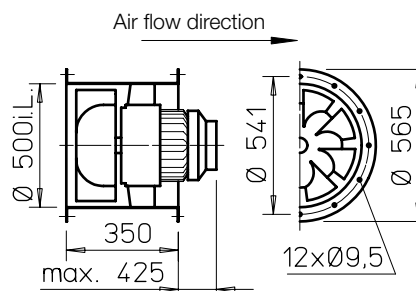
#### ■ Safety information

Guard for impeller pursuant to DIN EN ISO 13857 must be secured by installation.

#### ■ Noise levels

See information on sound power levels above the performance curves. The lower sound pressure level can be determined using the diagram on the "Technical information" page. Noise emissions and room acoustics see page 5.

### Dimensions B VAR 500 F300/F400



All dim. in mm

#### Double pressure

##### ■ Mounting package MP-Z for two-stage Z unit

For arrangement of two identical fans in a row, for highest pressure ratings.

Scope of delivery: Extension ducts (2 pcs.) and assembly kit.

Weight: 15 kg

**MP-Z 500** Ref. no. 04907  
Additional extension duct required for type B VAR 500/2 and 500/4/2.

**VR 500**

Ref. no. 01408

#### Double volume

##### ■ Mounting package MP-P for parallel P unit

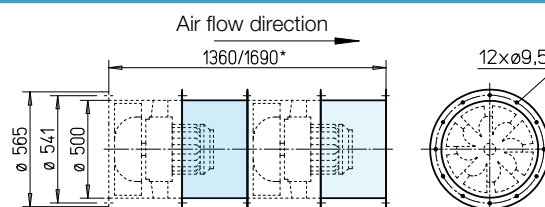
For arrangement of two identical fans side by side, for highest flow rates.

Scope of delivery: Extension ducts, backdraught shutter, mounting rails (2 pcs. each), mounting brackets (4 pcs.) and assembly kits. Weight: 55 kg

**MP-P 500**

Ref. no. 04891

### Dimensions MP-Z 500

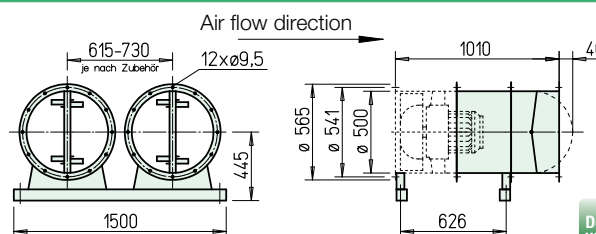


All dim. in mm

\* Additional extension duct for type B VAR 500/2 and 500/4/2 needed.

Double pressure

### Dimensions MP-P 500



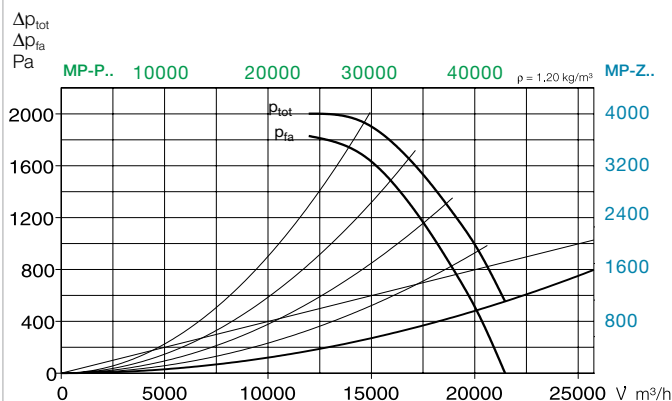
All dim. in mm

Double volume

## Performance curves B VAR 500/2 F300/F400

n=2900 1/min

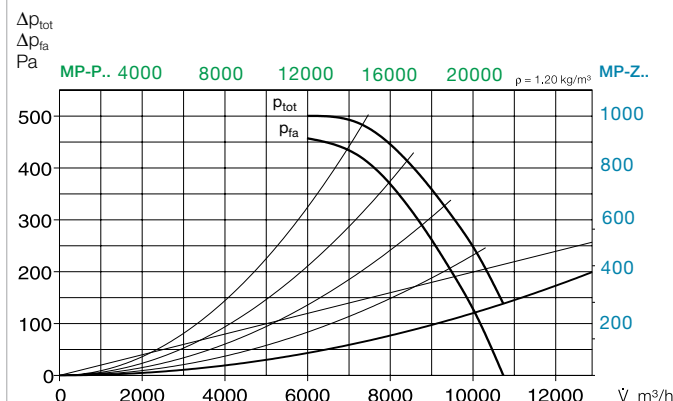
| Frequency          |           | Hz    | Total | 125 | 250 | 500 | 1k  | 2k  | 4k | 8k |
|--------------------|-----------|-------|-------|-----|-----|-----|-----|-----|----|----|
| L <sub>WA</sub>    | Air noise | dB(A) | 106   | 76  | 87  | 99  | 101 | 101 | 97 | 89 |
| L <sub>PA 4m</sub> | Air noise | dB(A) | 86    | 56  | 67  | 79  | 81  | 81  | 77 | 69 |



## Performance curves B VAR 500/4 F300/F400

n=1450 1/min

| Frequency          |           | Hz    | Total | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|--------------------|-----------|-------|-------|-----|-----|-----|----|----|----|----|
| L <sub>WA</sub>    | Air noise | dB(A) | 90    | 66  | 79  | 84  | 86 | 84 | 77 | 67 |
| L <sub>PA 4m</sub> | Air noise | dB(A) | 70    | 46  | 59  | 64  | 66 | 64 | 57 | 47 |



### Certification

The smoke extraction fans B VARD have been tested according to DIN EN 12101-3. Certificate of performance reliability:  
F300: 0036-CPR-RG05-01  
F400: 0036-CPR-RG05-05

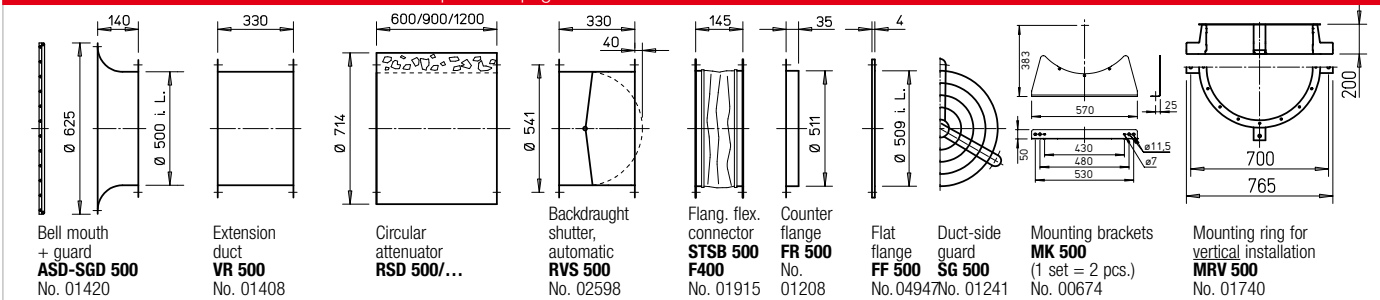
### Information

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| Project planning information 10 ff. |

### Accessory details

|                                                            |
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| Mounting accessories 163 ff.                               |
| Attenuator 168                                             |
| Gas warning systems, switch and control technology 170 ff. |

## Accessories for B VAR 500 F300/F400 Description see page 163 ff.



| Type                                                                                                                                                                                    | Ref. no. | Speed             | Output<br>free-blowing | Nom. motor<br>power.<br>(output) | Nominal<br>voltage | Power<br>consump-<br>tion | Wiring<br>diagram | max. air<br>flow temp. <sup>1)</sup> | Net<br>weight<br>approx. | Smoke exhaust fan<br>control system incl.<br>full motor protection | Anti-vibration mount <sup>2)</sup> |       |          |       |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|------------------------|----------------------------------|--------------------|---------------------------|-------------------|--------------------------------------|--------------------------|--------------------------------------------------------------------|------------------------------------|-------|----------|-------|----------|
|                                                                                                                                                                                         |          |                   |                        |                                  |                    |                           |                   |                                      |                          |                                                                    | Pressure                           |       | Tensile  |       |          |
|                                                                                                                                                                                         |          | min <sup>-1</sup> | V m³/h                 | kW                               | V                  | A                         | No.               | +°C                                  | kg                       | Type                                                               | Ref. no.                           | Type  | Ref. no. | Type  | Ref. no. |
| 🔥F300 Three phase motor, 50 Hz, protection class IP54                                                                                                                                   |          |                   |                        |                                  |                    |                           |                   |                                      |                          |                                                                    |                                    |       |          |       |          |
| B VARD 500/4 F300                                                                                                                                                                       | 02322    | 1435              | 10510                  | 2.2                              | 400                | 4.56                      | 776               | 40 / 300                             | 79                       | EVS-D 001 04594                                                    |                                    | SDD 4 | 01944    | SDZ 4 | 01945    |
| B VARD 500/2 F300                                                                                                                                                                       | 02296    | 2945              | 21760                  | 15.0                             | 400                | 27.7                      | 776               | 40 / 300                             | 168                      | EVS-SD 005 04582                                                   |                                    | SDD 5 | 01924    | SDZ 5 | 01925    |
| 🔥F300 Pole-switching, 2 speed (Dahlander winding  ) , three phase motor 50 Hz, protection class IP54 |          |                   |                        |                                  |                    |                           |                   |                                      |                          |                                                                    |                                    |       |          |       |          |
| B VARD 500/8/4 F300                                                                                                                                                                     | 02323    | 700/1430          | 4960/10430             | 0.55/2.2                         | 400                | 2.0/4.84                  | 777               | 40 / 300                             | 84                       | on demand                                                          |                                    | SDD 4 | 01944    | SDZ 4 | 01945    |
| B VARD 500/4/2 F300                                                                                                                                                                     | 02299    | 1470/2950         | 10840/21760            | 4.0/16.0                         | 400                | 9.57/30.5                 | 777               | 40 / 300                             | 191                      | on demand                                                          |                                    | SDD 5 | 01924    | SDZ 5 | 01925    |
| 🔥F400 Three phase motor, 50 Hz, protection class IP54                                                                                                                                   |          |                   |                        |                                  |                    |                           |                   |                                      |                          |                                                                    |                                    |       |          |       |          |
| B VARD 500/4 F400                                                                                                                                                                       | 02404    | 1435              | 10510                  | 2.2                              | 400                | 4.56                      | 776               | 40 / 400                             | 79                       | EVS-D 001 04594                                                    |                                    | SDD 4 | 01944    | SDZ 4 | 01945    |
| 🔥F400 Pole-switching, 2 speed (Dahlander winding  ) , three phase motor 50 Hz, protection class IP54 |          |                   |                        |                                  |                    |                           |                   |                                      |                          |                                                                    |                                    |       |          |       |          |
| B VARD 500/8/4 F400                                                                                                                                                                     | 02405    | 700/1430          | 4960/10430             | 0.55/2.2                         | 400                | 2.0/4.84                  | 777               | 40 / 400                             | 84                       | on demand                                                          |                                    | SDD 4 | 01944    | SDZ 4 | 01945    |

<sup>1)</sup> For ventilation / smoke extraction (once 120 min. at 300 °C or 120 min. at 400 °C).

<sup>2)</sup> For Z/P version due to higher total weight Type allocation according to tables on page 157.