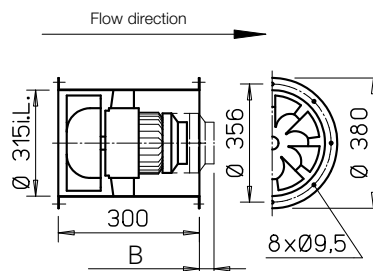


## VAR 315



Also available in version:

## Dimensions VAR 315



Dim. B see table  
Dim. in mm

### Casing

Duct with double-sided flange DIN 24155 p. 3. Made of galvanized steel sheet, fixed guide wheel with inner hub for mounting the flange motor.

### Impeller

Optimised for high pressure and volume performance. Special development with spatially curved blades made of high-quality plastic.

### Drive

Directly through maintenance-free flange motor. Closed design type IP54. Aluminium casing with cooling fins. Radio interference-free, sealed ball bearings. Tropicalised winding with moisture proof coating. With condensate drain holes upon request (except for explosion-proof types), and the installation method must be indicated when placing the order.

### Power control

The voltage-controllable types are identified in the "Current consumption with control mode" column with a value which must be observed when determining the controller (see Speed controller column). The flow rates are shown in the performance diagram. The planned use of a frequency inverter without a sine filter should be indicated when placing the order. This requires a change of fan version and additional costs, if necessary. Explosion-proof types are not controllable.

### Electrical connection

Standard terminal box (protection category IP55) on outside of duct.

### Installation

Installation possible in any position; but be aware of any condensate drain holes depending on usage.

### Motor protection

All types (except for 3~ explosion-proof) are equipped with thermal contacts. These should be wired with the motor protection circuit breaker (see type table) for effective motor protection. For 1~ explosion-proof types, the thermal contacts are wired in series with the winding, automatic deactivation and re-activation after cool down. Motors without thermal contacts must be protected by means of on-site a motor protection circuit breaker.

### Noise levels

See sound power information above performance diagram. The lower sound pressure value can be determined using the diagram on the "Technical information" page. See page 14 f for noise emissions and room acoustics.

| Reference            | Page   |
|----------------------|--------|
| Techn. description   | 258    |
| Selection table      | 259    |
| Planning information | 14 ff. |

### Special design

Different voltage, frequency, protection category, higher air flow temperature and acid protection upon request.

The technical information on p. 19 ff. must be observed.

| Type                                                                                                                                                                                                                                                                                                      | Ref. no. | Speed             | Flow rate<br>free-blow. | Power<br>consump.* | Voltage | Current consumption* |                 | Wiring<br>diagram | Max. air flow temp. |                 | Weight<br>net | Dim.<br>B<br>Motor<br>protru-<br>sion | Speed controller<br>5-step<br>Pole chang. switch |               | Motor pro-<br>tection circuit<br>breaker for<br>connecting<br>built-in thermal<br>contacts |       | Vibration<br>dampers |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-------------------------|--------------------|---------|----------------------|-----------------|-------------------|---------------------|-----------------|---------------|---------------------------------------|--------------------------------------------------|---------------|--------------------------------------------------------------------------------------------|-------|----------------------|-------|
|                                                                                                                                                                                                                                                                                                           |          |                   |                         |                    |         | at rated<br>voltage  | with<br>control |                   | at rated<br>voltage | with<br>control |               |                                       | Type                                             | Ref. no.      | Type                                                                                       | No.   | Compr.               | Tens. |
|                                                                                                                                                                                                                                                                                                           |          | min <sup>-1</sup> | Ų m³/h                  | kW                 | V       | A                    | A               | No.               | +°C                 | +°C             | ca. kg        | mm                                    | Type                                             | Ref. no.      | Type                                                                                       | No.   | Type                 | Type  |
| Single-phase alternating current, 50 Hz, protection category IP54                                                                                                                                                                                                                                         |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARW 315/4                                                                                                                                                                                                                                                                                                | 06677    | 1440              | 2480                    | 0.23               | 230     | 1.10                 | 1.17            | 966               | 60                  | 40              | 13.0          | –                                     | MWS 3 <sup>1)</sup>                              | 01948         | MW                                                                                         | 01579 | SDD 1                | SDZ 1 |
| Three-phase current, 50 Hz, protection category IP54                                                                                                                                                                                                                                                      |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARD 315/4                                                                                                                                                                                                                                                                                                | 06678    | 1450              | 2510                    | 0.22               | 400     | 0.60                 | 0.70            | 469               | 60                  | 40              | 13.0          | –                                     | RDS 1 <sup>1) 4)</sup>                           | 01314         | MD                                                                                         | 05849 | SDD 1                | SDZ 1 |
| Two-speed, three-phase current, 50 Hz, Y/Δ connection, protection category IP54                                                                                                                                                                                                                           |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARD 315/2/2                                                                                                                                                                                                                                                                                              | 06679    | 2150/2650         | 3580/4670               | 0.9/1.35           | 400Y/Δ  | 1.5/2.4              | 2.5             | 520               | 60                  | 40              | 20.5          | 66                                    | RDS 4 <sup>1)</sup>                              | 01316         | M 4 <sup>2)</sup>                                                                          | 01571 | SDD 1                | SDZ 1 |
| Pole-changeable, 2 speeds (Dahlander winding Y/Y), Three-phase current, 50 Hz, protection category IP54                                                                                                                                                                                                   |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARD 315/4/2                                                                                                                                                                                                                                                                                              | 06777    | 1480/2890         | 2730/5340               | 0.42/1.83          | 400     | 1.2/3.3              | –               | 472               | 60                  | –               | 20.5          | 54                                    | PDA 12 <sup>3)</sup>                             | 05081         | –                                                                                          | –     | SDD 1                | SDZ 1 |
|   Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55                  |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARW 315/4 Ex                                                                                                                                                                                                                                                                                             | 06738    | 1450              | 2680                    | 0.18               | 230     | 1.25                 | –               | 757               | 40                  | –               | 15.0          | 6                                     | not permitted                                    | –             | –                                                                                          | SDD 1 | SDZ 1                |       |
|   Explosion-proof, II 2G Ex h IIB + H <sub>2</sub> T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55 |          |                   |                         |                    |         |                      |                 |                   |                     |                 |               |                                       |                                                  |               |                                                                                            |       |                      |       |
| VARD 315/4 Ex                                                                                                                                                                                                                                                                                             | 06680    | 1420              | 2610                    | 0.37               | 400     | 1.15                 | –               | 470               | 40                  | –               | 17.0          | –                                     | not permitted                                    | not permitted | SDD 1                                                                                      | SDZ 1 |                      |       |
| VARD 315/2 Ex                                                                                                                                                                                                                                                                                             | 06681    | 2885              | 5260                    | 1.50               | 400     | 3.16                 | –               | 470               | 40                  | –               | 23.0          | 44                                    | not permitted                                    | not permitted | SDD 1                                                                                      | SDZ 1 |                      |       |

\* For Ex types: Motor ratings see information on page 20.

<sup>1)</sup> incl. motor protection circuit breaker. <sup>2)</sup> includes operating and speed switch.

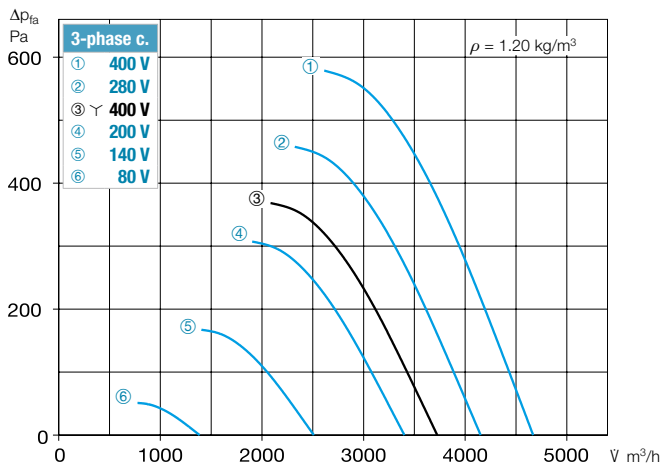
<sup>3)</sup> Flush-m. version see Switch product page.

<sup>4)</sup> Frequency inverter with integrated sine filter, Type FU-BS 2.5, No. 05459, see product page FU.

## Performance curves VAR 315/2

n=2700 1/min

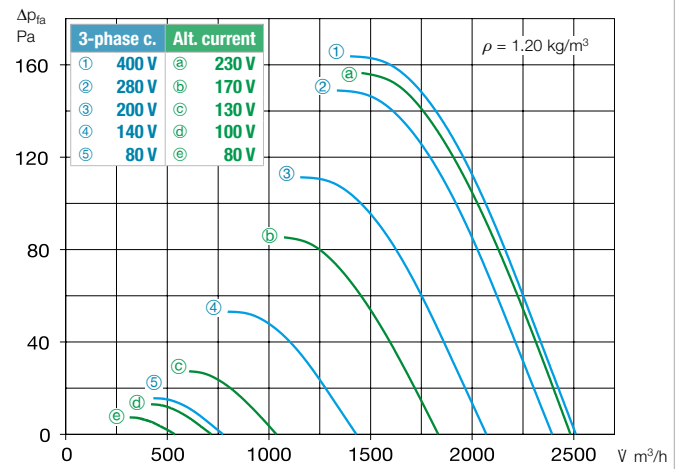
| Frequency           |           | Hz    | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---------------------|-----------|-------|------|-----|-----|-----|----|----|----|----|
| L <sub>WA</sub>     | Air noise | dB(A) | 91   | 62  | 73  | 84  | 86 | 87 | 82 | 74 |
| L <sub>PA, 4m</sub> | Air noise | dB(A) | 71   | 42  | 53  | 64  | 66 | 67 | 62 | 54 |



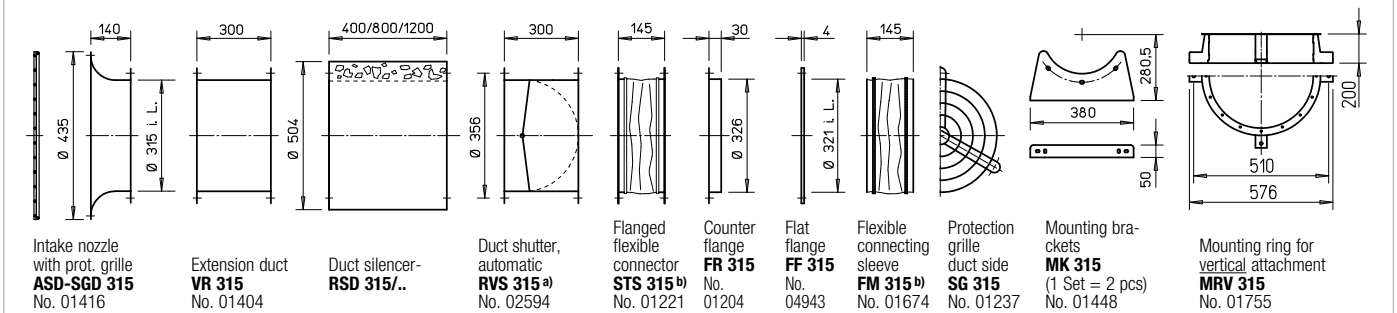
## Performance curves VAR 315/4

n=1450 1/min

| Frequency           |           | Hz    | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---------------------|-----------|-------|------|-----|-----|-----|----|----|----|----|
| L <sub>WA</sub>     | Air noise | dB(A) | 76   | 52  | 65  | 70  | 72 | 70 | 63 | 53 |
| L <sub>PA, 4m</sub> | Air noise | dB(A) | 56   | 32  | 45  | 50  | 52 | 50 | 43 | 33 |



## Accessories VAR 315 Description see page 280 ff.



a) Shutter, motorised see Accessories product pages. b) Types for explosion-proof fans see above.

## Other accessories Page

### Access. for expl.-proof fans

|                                              |                |
|----------------------------------------------|----------------|
| <b>Flanged flexible connector STS 315 Ex</b> | Ref. no. 02503 |
| <b>Flexible connecting sleeve FM 315 Ex</b>  | Ref. no. 01690 |

|                                             |         |
|---------------------------------------------|---------|
| Filters and silencers                       | 485 ff. |
| Shutters and ventilation grilles            | 565 ff. |
| Speed controllers, controllers and switches | 603 ff. |