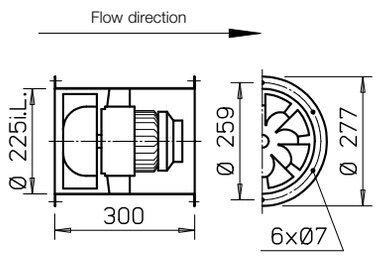
## VAR 225



Also available in version:

## Dimensions VAR 225




Dim. in mm

### Casing
Duct with double-sided flange DIN 24155 p. 3. Made of galvanised 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 | 256 |
| Selection table | 257 |
| 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.

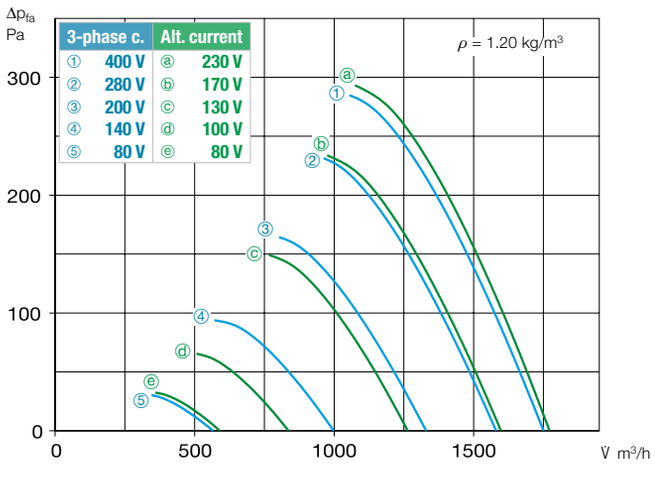
| Type | Ref. no. | Speed | Flow rate free-blow. | Power consump.* | Voltage | Current consumption* at rated voltage | Current consumption* with control | Wiring diagram | Max. air flow temp. at rated voltage | Max. air flow temp. with control | Weight net | Speed controller 5-step Pole chang. switch Type | Ref. no. | Motor protection circuit breaker for connecting built-in thermal contacts Type | Ref. no. | Vibration dampers Compr. | Vibration dampers Tens. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | min⁻¹ | V m³/h | kW | V | A | A | No. | +°C | +°C | ca. kg | Type | Ref. no. | Type | Ref. no. | Type | Type |
| **Single-phase alternating current.50 Hz, protection category IP54** | | | | | | | | | | | | | | | | | |
| **VARW 225/4** | 06660 | 1450 | 900 | 0.10 | 230 | 0.50 | 0.55 | 966 | 60 | 40 | 10.5 | **MWS 1.5**[1] | 01947 | **MW** | 01579 | **SDD 1** | **SDZ 1** |
| **VARW 225/2** | 06661 | 2770 | 1778 | 0.35 | 230 | 1.56 | 2.50 | 966 | 60 | 40 | 10.5 | **MWS 3**[1] | 01948 | **MW** | 01579 | **SDD 1** | **SDZ 1** |
| **Three-phase current, 50 Hz, protection category IP54** | | | | | | | | | | | | | | | | | |
| **VARD 225/4** | 06662 | 1420 | 880 | 0.10 | 400Y | 0.20 | 0.20 | 469 | 60 | 40 | 10.5 | **RDS 1**[1) 4)] | 01314 | **MD** | 05849 | **SDD 1** | **SDZ 1** |
| **VARD 225/2** | 06663 | 2720 | 1750 | 0.28 | 400Y | 0.60 | 0.60 | 469 | 60 | 40 | 10.5 | **RDS 1**[1) 4)] | 01314 | **MD** | 05849 | **SDD 1** | **SDZ 1** |
| **Pole-changeable, 2 speeds (Dahlander winding Y/YY), Three-phase current, 50 Hz, protection category IP54** | | | | | | | | | | | | Pole chang. switch | | | | | |
| **VARD 225/4/2** | 06771 | 1460/2800 | 880/1800 | 0.06/0.30 | 400 | 0.22/0.57 | – | 472 | 60 | – | 10.5 | **PDA 12**[3)] | 05081 | **M 3**[2)] | 01293 | **SDD 1** | **SDZ 1** |
| Ex **Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55** | | | | | | | | | | | | | | | | | |
| **VARW 225/4 Ex** | 06733 | 1400 | 950 | 0.06 | 230 | 0.70 | – | 757 | 40 | – | 12.0 | not permitted | | – | – | **SDD 1** | **SDZ 1** |
| **VARW 225/2 Ex** | 06734 | 2650 | 1780 | 0.18 | 230 | 1.23 | – | 757 | 40 | – | 12.5 | not permitted | | – | – | **SDD 1** | **SDZ 1** |
| Ex **Explosion-proof, II 2G Ex h IIB + $H_2$ T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55** | | | | | | | | | | | | | | | | | |
| **VARD 225/4 Ex** | 06664 | 1400 | 940 | 0.12 | 400 | 0.41 | – | 470 | 40 | – | 12.5 | not permitted | | not permitted | | **SDD 1** | **SDZ 1** |
| **VARD 225/2 Ex** | 06665 | 2850 | 1930 | 0.25 | 400 | 0.72 | – | 470 | 40 | – | 12.5 | not permitted | | not permitted | | **SDD 1** | **SDZ 1** |

* For Ex types: Motor ratings see information on page 20. [1)] incl. motor protection circuit breaker. [2)] includes operating and speed switch. [3)] Flush-m. version see Switch product page.
[4)] Frequency inverter with integrated sine filter, Type FU-BS 2.5, No. 05459, see FU product page.

## Performance curves VAR 225/2

n=2800 1/min

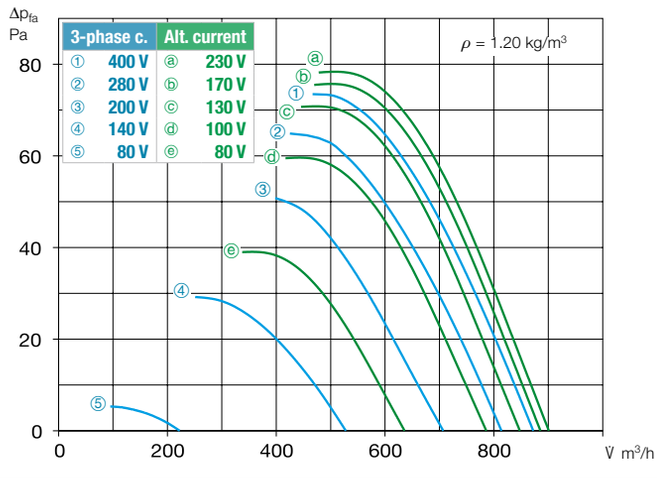
| Frequency | | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---|---|---|---|---|---|---|---|---|---|---|
| $L_{WA}$ | Air noise | dB(A) | 81 | 51 | 62 | 74 | 76 | 76 | 72 | 63 |
| $L_{PA,\ 4m}$ | Air noise | dB(A) | 61 | 31 | 42 | 54 | 56 | 56 | 52 | 43 |



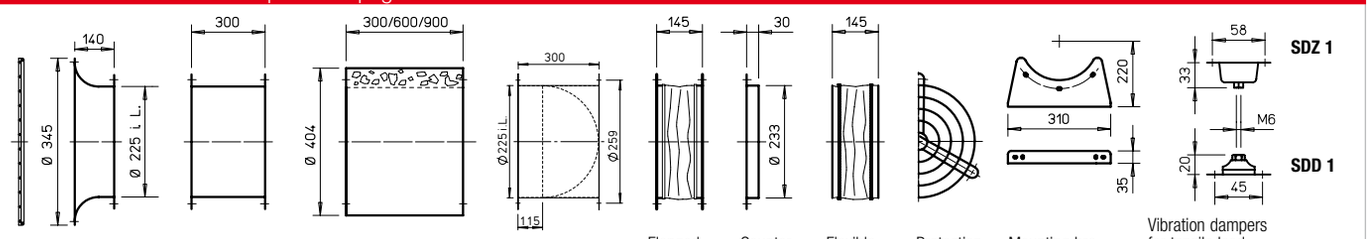

## Performance curves VAR 225/4

n=1450 1/min

| Frequency | | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---|---|---|---|---|---|---|---|---|---|---|
| $L_{WA}$ | Air noise | dB(A) | 66 | 41 | 55 | 60 | 62 | 59 | 52 | 43 |
| $L_{PA,\ 4m}$ | Air noise | dB(A) | 46 | 21 | 35 | 40 | 42 | 39 | 32 | 23 |




## Accessories VAR 225 Description see page 278 ff.




Intake nozzle with prot. grille **ASD-SGD 225** No. 01413

Extension duct **VR 225** No. 01401

Duct silencer- **RSD 225/..**

Duct shutter, automatic **RVS 225** [a] No. 02591

Flanged flexible connector **STS 225** [b] No. 01218

Counter flange **FR 225** No. 01201

Flexible connecting sleeve **FM 225** [b] No. 01671

Protection grille duct side **SG 225** No. 01215

Mounting brackets **MK 225** (1 Set = 2 pcs) No. 01446

Vibration dampers for tensile load **SDZ 1** (1 set = 4 Pc) No. 01454
Vibration dampers for compression load **SDD 1** (1 set = 4 Pc) No. 01452

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

| Other accessories | Page |
|---|---|
| **[b] Access. for expl.-proof fans** | |
| **Flanged flexible connector STS 225 Ex** | Ref. no. 02500 |
| **Flexible connecting sleeve FM 225 Ex** | Ref. no. 01687 |
| Filters and silencers | 483 ff. |
| Shutters and ventilation grilles | 563 ff. |
| Speed controllers, controllers and switches | 601 ff. |