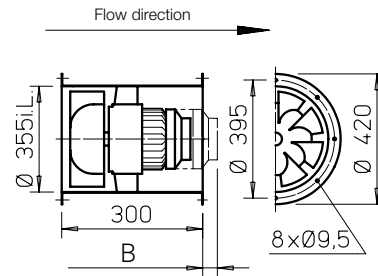


VAR 355



Also available in version:

Dimensions VAR 355



Dim. B see table
 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; made of hot-dip galvanised steel for types with $n = 2800 \text{ min}^{-1}$.

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 explosion-proof models and type VARD 355/4/2) are equipped with thermal contacts. These should be wired for effective motor protection. 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.

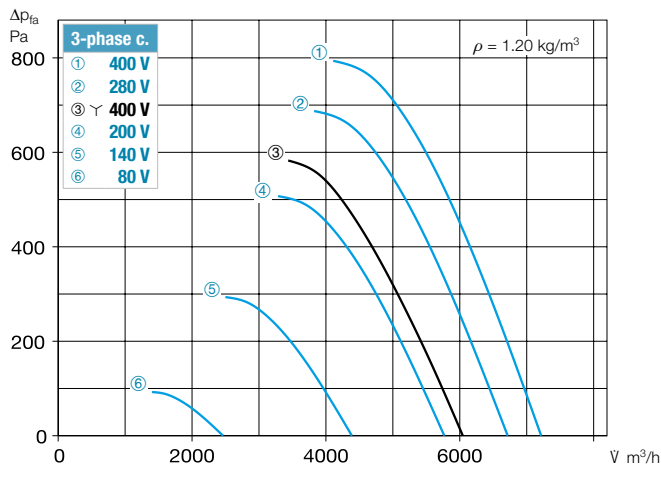
| Type | Ref. no. | Speed min ⁻¹ | Flow rate free-blow. V m ³ /h | Power consump.* kW | Voltage V | Current consumption* | | Wiring diagram No. | Max. air flow temp. | | Weight net ca. kg | Dim. B Motor protru- sion mm | Speed controller 5-step Pole chang. switch | | Motor pro- tection circuit breaker for connecting built-in thermal contacts | | Vibration dampers | | |
|---|---|----------------------------|--|--------------------------|---------------------|--------------------------|----------------------|--------------------------|----------------------------|------------------------|-------------------------|--|--|----------|--|-------|----------------------|---------------|--|
| | | | | | | at rated voltage A | with control A | | at rated voltage +°C | with control +°C | | | Type | Ref. no. | Type | No. | Compr. Type | Tens. Type | |
| Single-phase alternating current, 50 Hz, protection category IP54 | | | | | | | | | | | | | | | | | | | |
| VARW 355/4 | 06682 | 1380 | 3470 | 0.37 | 230 | 3.30 | 2.35 | 966 | 60 | 40 | 21.0 | 22 | MWS 3 ¹⁾ | 01948 | MW | 01579 | SDD 1 | SDZ 1 | |
| Three-phase current, 50 Hz, protection category IP54 | | | | | | | | | | | | | | | | | | | |
| VARD 355/4 | 06683 | 1440 | 3550 | 0.40 | 400 | 0.87 | 1.20 | 469 | 60 | 40 | 15.5 | 12 | RDS 1 ^{1) 2)} | 01314 | MD | 05849 | SDD 1 | SDZ 1 | |
| Two-speed, three-phase current, 50 Hz, γ/Δ connection, protection category IP54 | | | | | | | | | | | | | | | | | | | |
| VARD 355/2/2 | 06684 | 2415/2790 | 6040/7220 | 2.06/2.81 | 400 γ/Δ | 3.40/5.40 | – | 520 | 60 | 30 | 30.3 | 94 | RDS 7 ¹⁾ | 01578 | M 4 ²⁾ | 01571 | SDD 1 | SDZ 1 | |
| Pole-changeable, 2 speeds (Dahlander winding $\gamma/\gamma\gamma$), Three-phase current, 50 Hz, protection category IP54 | | | | | | | | | | | | | | | | | | | |
| VARD 355/4/2 | 06779 | 1470/2870 | 3830/7500 | 0.48/3.11 | 400 | 1.35/5.50 | – | 471 | 40 | – | 29.0 | 80 | PDA 12 ³⁾ | 05081 | – | – | SDD 1 | SDZ 1 | |
| Ex | Explosion-proof, II 2G Ex h IIB + H₂ T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55 | | | | | | | | | | | | | | | | | | |
| VARD 355/4 Ex | 06685 | 1420 | 3740 | 0.37 | 400 | 1.08 | – | 470 | 40 | – | 19.0 | – | – | – | – | – | SDD 1 | SDZ 1 | |
| Ex | Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55 | | | | | | | | | | | | | | | | | | |
| VARD 355/2 Ex ⁴⁾ | 06686 | 2860 | 7580 | 2.50 | 400 | 4.85/2.77 | – | 498 | 40 | – | 33.0 | 77 | – | – | – | – | 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⁾ A vibration monitoring system (on-site) must be provided according to DIN EN 14986. ⁵⁾ Frequency inverter with integrated sine filter, Type FU-BS 2.5, No. 05459, see product page FU.

Performance curves VAR 355/2

n=2800 1/min

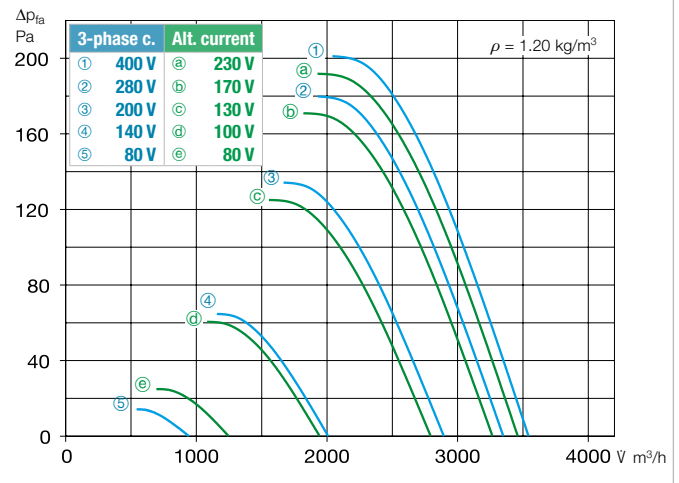
| Frequency | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
|------------------------------|----|-------|-----|-----|-----|----|----|----|----|----|
| L _{WA} Air noise | | dB(A) | 95 | 65 | 76 | 88 | 90 | 90 | 86 | 77 |
| L _{PA,4m} Air noise | | dB(A) | 75 | 45 | 56 | 68 | 70 | 70 | 66 | 57 |



Performance curves VAR 355/4

n=1400 1/min

| Frequency | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
|------------------------------|----|-------|-----|-----|-----|----|----|----|----|----|
| L _{WA} Air noise | | dB(A) | 80 | 55 | 69 | 73 | 76 | 73 | 66 | 56 |
| L _{PA,4m} Air noise | | dB(A) | 60 | 35 | 49 | 53 | 56 | 53 | 46 | 36 |



Accessories VAR 355 Description see page 278 ff.

| | | | | | | | | | | |
|--|--|-------------------------------------|--|--|--|---|---|---|--|--|
| Intake nozzle with prot. grille ASD-SGD 355 No. 01417 | Extension duct VR 355 No. 01405 | Duct silencer- RSD 355/.. | Duct shutter, auto- matic RVS 355^{a)} No. 02595 | Flanged flexible connector STS 355^{b)} No. 01222 | Counter flange FR 355 No. 01205 | Flat flange FF 355 No. 04944 | Flexible connecting sleeve FM 355^{b)} No. 01675 | Protection grille duct side SG 355 No. 01238 | Mounting brackets MK 355 (1 Set = 2 pcs) No. 01448 | Mounting ring for vertical attachment MRV 355 No. 01759 |
|--|--|-------------------------------------|--|--|--|---|---|---|--|--|

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

Axial and VAR fans

| Other accessories | Page |
|--|----------------|
| ^{b)} Access. for expl.-proof fans | |
| Flanged flexible connector STS 355 Ex | Ref. no. 02504 |
| Flexible connecting sleeve FM 355 Ex | Ref. no. 01691 |
| Filters and silencers | 483 ff. |
| Shutters and ventilation grilles | 563 ff. |
| Speed controllers, controllers and switches | 601 ff. |