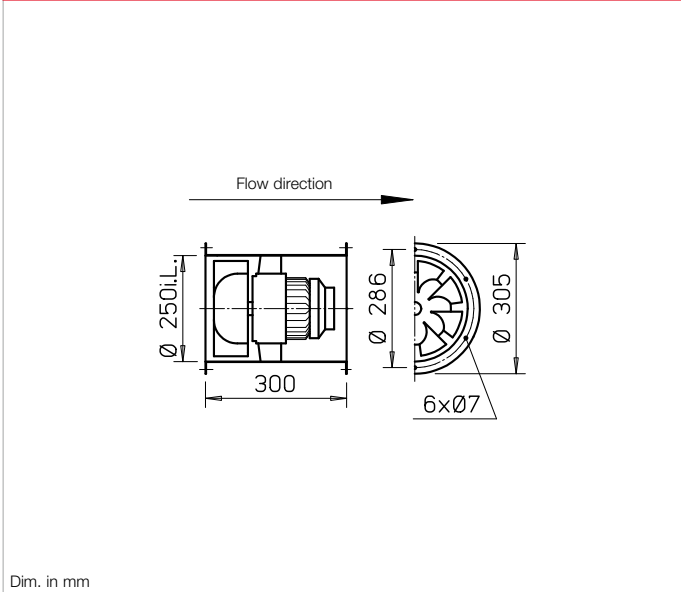


**VAR 250**



Also available in version:

**Dimensions VAR 250**



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	254
Selection table	255
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 <sup>-1</sup>	Flow rate free-blow. V m <sup>3</sup> /h	Power consump.* kW	Voltage V	Current consumption*		Wiring diagram No.	Max. air flow temp.		Weight net ca. kg	Speed controller 5-step Pole chang. switch		Motor protection 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	Ref. no.	Compr. Type	Tens. Type
<b>Single-phase alternating current 50 Hz, protection category IP54</b>																	
VARW 250/4	06666	1420	1210	0.12	230	0.46	0.60	966	60	40	11.5	MWS 1.5 <sup>1)</sup> 01947	MW	01579	SDD 1	SDZ 1	
VARW 250/2	06667	2840	2540	0.55	230	2.60	3.90	966	60	40	13.0	MWS 5 <sup>1)</sup> 01949	MW	01579	SDD 1	SDZ 1	
<b>Three-phase current, 50 Hz, protection category IP54</b>																	
VARD 250/4	06668	1410	1250	0.09	400	0.30	0.30	469	60	40	11.5	RDS 1 <sup>1)</sup> 01314	MD	05849	SDD 1	SDZ 1	
VARD 250/2	06669	2800	2450	0.47	400	1.10	1.10	469	60	40	11.5	RDS 2 <sup>1)</sup> 01315	MD	05849	SDD 1	SDZ 1	
<b>Pole-changeable, 2 speeds (Dahlander winding <math>\gamma/\gamma</math>), Three-phase current, 50 Hz, protection category IP54</b>																	
VARW 250/4/2	06773	1425/2750	1200/2400	0.75/0.49	400	0.24/0.94	–	472	60	–	13.0	PDA 12 <sup>3)</sup> 05081	M 3 <sup>2)</sup>	01293	SDD 1	SDZ 1	
<b>Ex Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex d, alternating current 230 Volt, 50 Hz, protection category IP55</b>																	
VARW 250/4 Ex	06735	1400	1290	0.06	230	0.70	–	757	40	–	13.0	not permitted	–	–	SDD 1	SDZ 1	
<b>Ex 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</b>																	
VARD 250/4 Ex	06670	1355	1300	0.12	400	0.37	–	470	40	–	13.0	not permitted	not permitted	–	SDD 1	SDZ 1	
VARD 250/2 Ex	06671	2890	2590	0.25	400	1.13	–	470	40	–	15.5	not permitted	not permitted	–	SDD 1	SDZ 1	

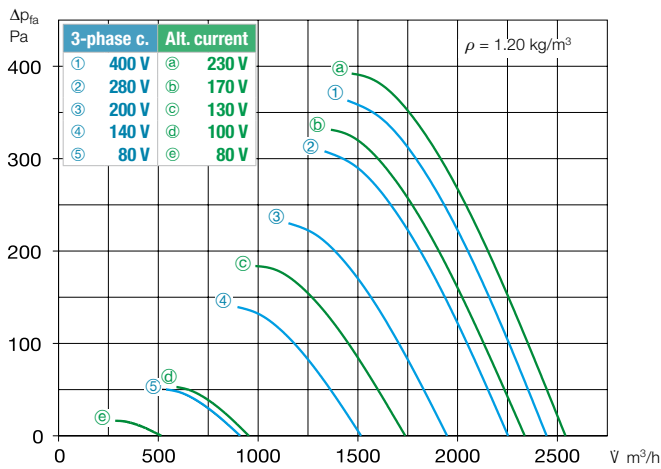
\* For Ex types: Motor ratings see information on page 20. <sup>1)</sup> incl. motor protection circuit breaker. <sup>2)</sup> includes operating and speed switch. <sup>3)</sup> Flush-m. version see Switch product page.

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

## Performance curves VAR 250/2

n=2800 1/min

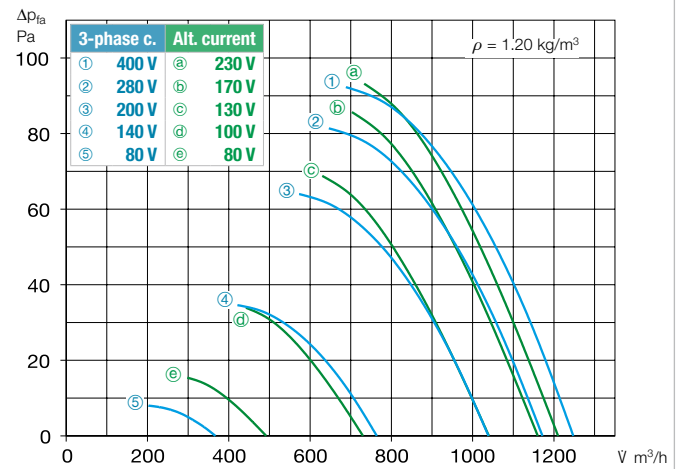
Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L <sub>WA</sub>	Air noise	dB(A)	84	55	65	77	79	80	75	67
L <sub>PA,4m</sub>	Air noise	dB(A)	64	35	45	57	59	60	55	47



## Performance curves VAR 250/4

n=1450 1/min

Frequency	Hz	Tot.	125	250	500	1k	2k	4k	8k	
L <sub>WA</sub>	Air noise	dB(A)	69	44	58	63	65	63	56	46
L <sub>PA,4m</sub>	Air noise	dB(A)	49	24	38	43	45	43	36	26



## Accessories VAR 250 Description see page 276 ff.

Intake nozzle with prot. grille <b>ASD-SGD 250</b> No. 01414	Extension duct <b>VR 250</b> No. 01402	Duct silencer- <b>RSD 250/..</b>	Duct shutter, auto- matic <b>RVS 250<sup>a)</sup></b> No. 02592	Flanged flexible connector <b>STS 250<sup>b)</sup></b> No. 01220	Counter flange <b>FR 250</b> No. 01203	Flat flange <b>FF 250</b> No. 04941	Flexible connecting sleeve <b>FM 250<sup>b)</sup></b> No. 01672	Protection grille duct side <b>SG 250</b> No. 01236	Mounting brackets <b>MK 250</b> (1 Set = 2 pcs) No. 01447	Vibration dampers for tensile load <b>SDZ 1</b> (1 set = 4 Pc) No. 01454 Vibration dampers for compression load <b>SDD 1</b> (1 set = 4 Pc) No. 01452
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<sup>a)</sup> Shutter, motorised see Accessories product pages. <sup>b)</sup> Types for explosion-proof fans see above.

Axial and VAR fans

Other accessories	Page
<sup>b)</sup> Access. for expl.-proof fans	
<b>Flanged flexible connector STS 250 Ex</b>	Ref. no. 02501
<b>Flexible connecting sleeve FM 250 Ex</b>	Ref. no. 01688
Filters and silencers	481 ff.
Shutters and ventilation grilles	561 ff.
Speed controllers, controllers and switches	599 ff.