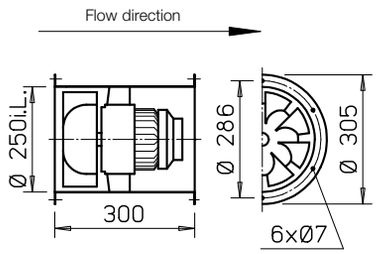
VAR 250



Also available in version: Ex

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	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.

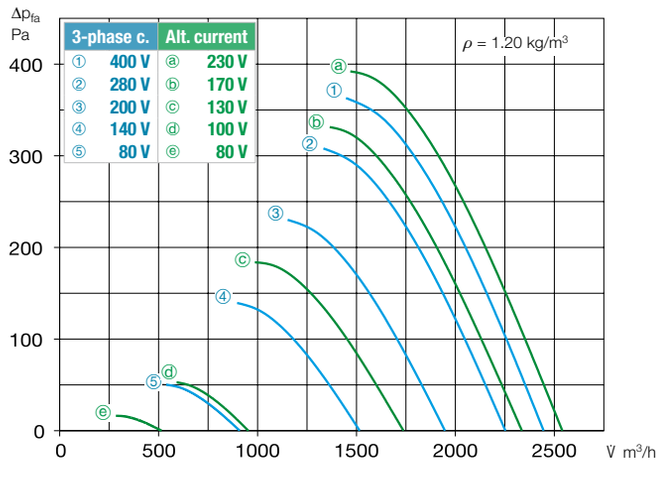
Type	Ref. no.	Speed	Flow rate free-blow.	Power consump.*	Voltage	Current consumption* at rated voltage	Current consumption* with control	Wiring diagram	Max. air flow temp. at rated voltage	Max. air flow temp. with control	Weight net	Speed controller 5-step Pole chang. switch		Motor protection circuit breaker for connecting built-in thermal contacts		Vibration dampers Compr.	Vibration dampers Tens.
		min^{-1}	V m^3/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 250/4	06666	1420	1210	0.12	230	0.46	0.60	966	60	40	11.5	**MWS 1.5**[1]	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**[1]	01949	**MW**	01579	**SDD 1**	**SDZ 1**
Three-phase current, 50 Hz, protection category IP54																	
VARD 250/4	06668	1410	1250	0.09	400	0.30	0.30	469	60	40	11.5	**RDS 1**[1) 4)]	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**[1) 4)]	01315	**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 250/4/2	06773	1425/2750	1200/2400	0.75/0.49	400	0.24/0.94	–	472	60	–	13.0	**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 250/4 Ex	06735	1400	1290	0.06	230	0.70	–	757	40	–	13.0	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 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. [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 product page FU.

Performance curves VAR 250/2

n=2800 1/min

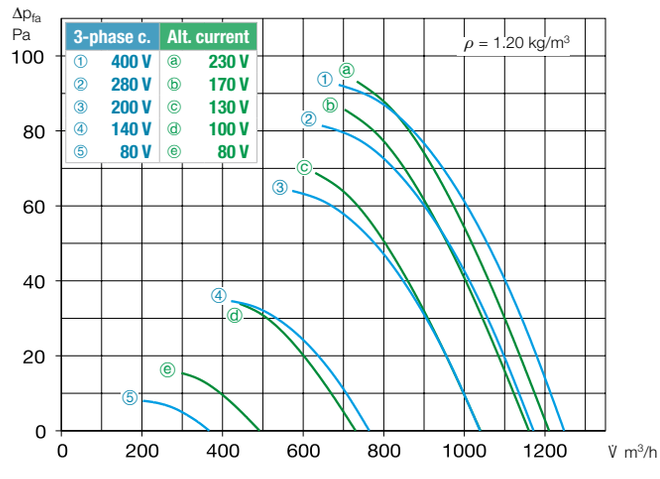
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	84	55	65	77	79	80	75	67
$L_{PA,\ 4m}$	Air noise	dB(A)	64	35	45	57	59	60	55	47



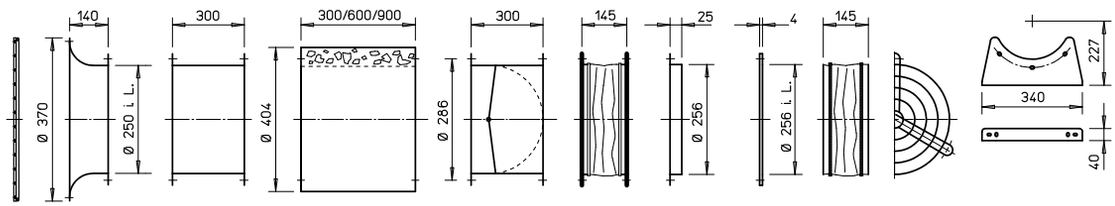
Performance curves VAR 250/4

n=1450 1/min

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	69	44	58	63	65	63	56	46
$L_{PA,\ 4m}$	Air noise	dB(A)	49	24	38	43	45	43	36	26



Accessories VAR 250 Description see page 280 ff.



Intake nozzle with prot. grille **ASD-SGD 250** No. 01414

Extension duct **VR 250** No. 01402

Duct silencer- **RSD 250/..**

Duct shutter, automatic **RVS 250** [a] No. 02592

Flanged flexible connector **STS 250** [b] No. 01220

Counter flange **FR 250** No. 01203

Flat flange **FF 250** No. 04941

Flexible connecting sleeve **FM 250** [b] No. 01672

Protection grille duct side **SG 250** No. 01236

Mounting brackets **MK 250** (1 Set = 2 pcs) No. 01447

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 250 Ex	Ref. no. 02501
Flexible connecting sleeve FM 250 Ex	Ref. no. 01688
Filters and silencers	485 ff.
Shutters and ventilation grilles	565 ff.
Speed controllers, controllers and switches	603 ff.