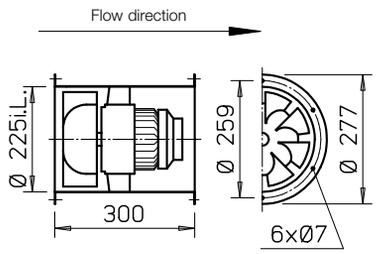
High pressure circular duct fans RADAX® VAR
Ø 225 mm

VAR 225



Also available in version: Ex

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.

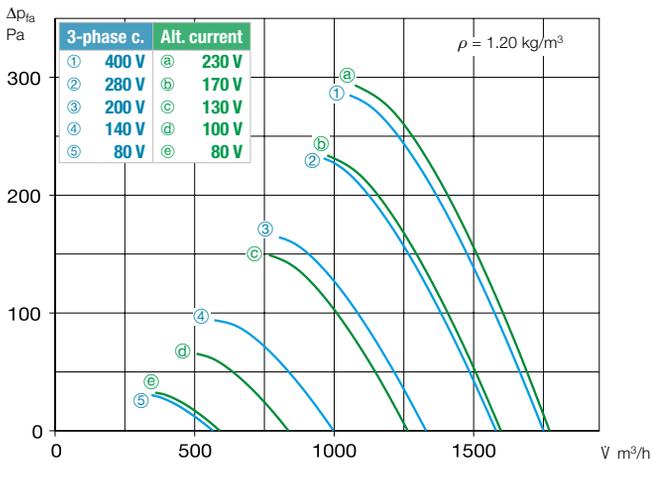
Type	Ref. no.	Speed	Flow rate free-blow.	Power consump.*	Voltage	Current consumption* at rated voltage	Current consumption* with control	Wiring diagram	Max. air flow temp. at rated voltage	Max. air flow temp. with control	Weight net	Speed controller 5-step Pole chang. switch Type	Speed controller 5-step Pole chang. switch Ref. no.	Motor protection circuit breaker for connecting built-in thermal contacts Type	Motor protection circuit breaker for connecting built-in thermal contacts 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	1730	0.30	230	1.50	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	0.57	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	0.22/0.54	–	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

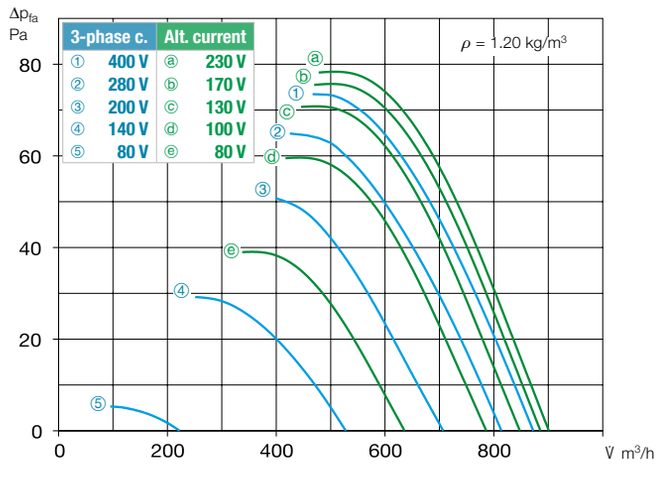
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	81	51	62	74	76	76	72	63
$L_{PA,\ 4m}$	Air noise	dB(A)	61	31	42	54	56	56	52	43



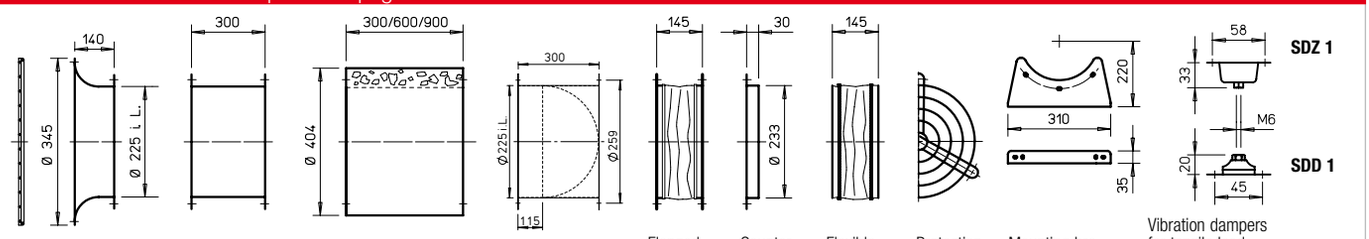
Performance curves VAR 225/4

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.