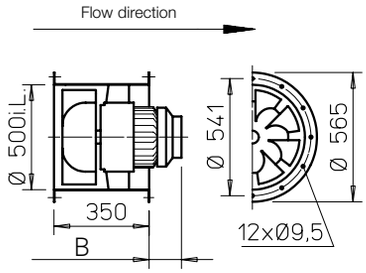
VAR 500

Also available in version: Ex

Dimensions VAR 500



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.
Types with n = 2800 min^{-1} welded casing, hot-dip galvanised.

Impeller
Optimised for high pressure and volume performance.
Special development with spatially curved blades made of hot-dip galvanised steel.

Drive
Directly through maintenance-free flange motor. Closed design type IP54. Aluminium or grey cast iron 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) are equipped with thermal contacts or PTC thermistors. These should be wired with the motor protection circuit breaker (see type table) 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	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.

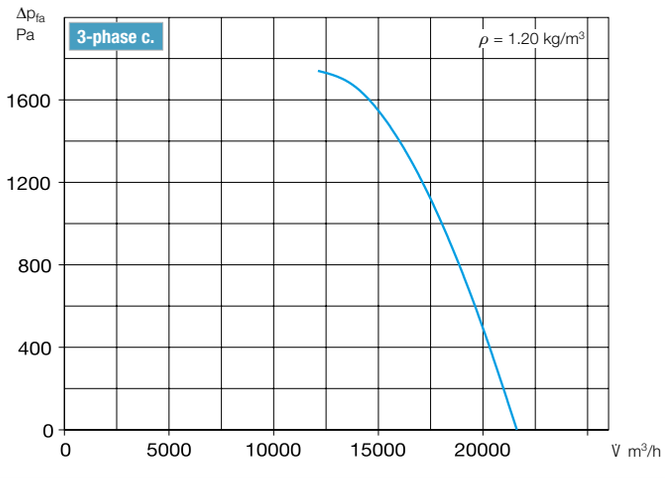
Type	Ref. no.	Speed	Flow rate free-blow.	Power consump.*	Voltage	Current consumption*		Wiring diagram	Max. air flow temp.		Weight net	Dim. B Motor protrusion	Speed controller 5-step Pole chang. switch		Motor protection circuit breaker for connecting built-in thermal contacts		Vibration dampers	
						at rated voltage	with control		at rated voltage	with control							Compr.	Tens.
		min^{-1}	V m^3/h	kW	V	A	A	No.	+°C	+°C	ca. kg	mm	Type	Ref. no.	Type	No.	Type	Type
Single-phase alternating current.50 Hz, protection category IP5																		
VARW 500/4	06739	1340	9920	2.02	230	9.10	9.10	968	60	40	70.0	181	**MWS 10**[1]	01946	**MW**	01579	**SDD 2**	**SDZ 2**
Three-phase current, 50 Hz, protection category IP54																		
VARD 500/2	06705	2935	21730	15.70	400	29.00	–	776	40	–	180.0	367	**FU-CS 32**[1) 5)]	05471	**MSA**[3)]	01289	**SDD 2**	**SDZ 3**
Two-speed, three-phase current, 50 Hz, Y/Δ connection, protection category IP54																		
VARD 500/4/4	06704	1120/1370	8360/10070	1.2/1.8	400Y/Δ	2.1/3.9	3.9	520	60	40	70.0	126	**RDS 7**[1)]	01578	**M 4**[2)]	01571	**SDD 2**	**SDZ 2**
Ex **Explosion-proof, II 2G Ex h IIB T3 Gb, Motor Ex e, three-phase current 400 Volt, 50 Hz, protection category IP55**													Pole chang. switch					
VARD 500/6 Ex	06706	945	6810	0.55	400	1.60	–	470	40	–	70.0	121	not permitted		not permitted		**SDD 2**	**SDZ 2**
VARD 500/4 Ex	06707	1445	10470	2.00	400	4,20	–	470	40	–	75.0	235	not permitted		not permitted		**SDD 2**	**SDZ 2**

* For Ex types: Motor ratings see information on page 20.
1) incl. motor protection circuit breaker.
2) includes operating and speed switch.
3) for PTC thermistor temperature sensor.
4) A vibration monitoring system (on-site) must be provided according to DIN EN 14986.
5) with integrated sine filter, see product page FU.

Performance curve VAR 500/2

n=2900 1/min

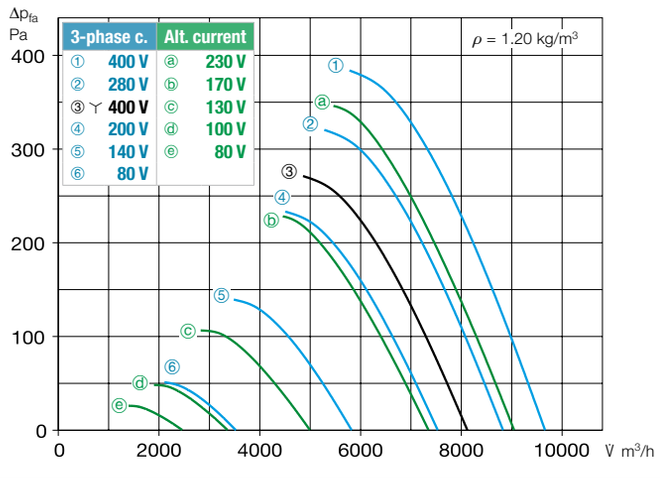
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	106	76	87	99	101	101	97	89
$L_{PA,\ 4m}$	Air noise	dB(A)	86	56	67	79	81	81	77	69



Performance curves VAR 500/4

n=1450 1/min

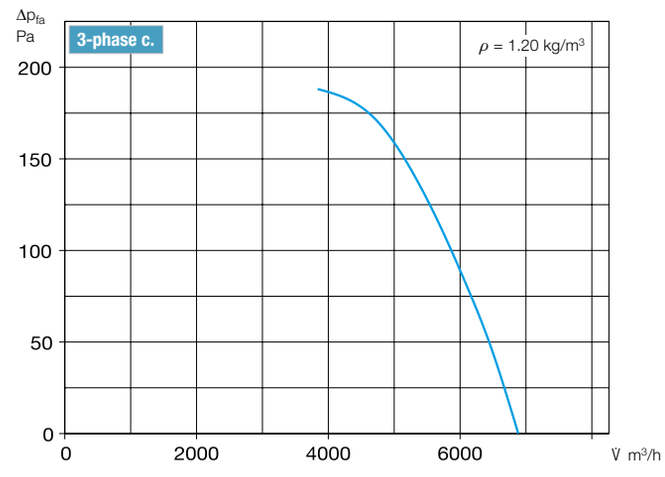
Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	90	66	79	84	86	84	77	67
$L_{PA,\ 4m}$	Air noise	dB(A)	70	46	59	64	66	64	57	47



Performance curve VAR 500/6

n=930 1/min

Frequency		Hz	Tot.	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	79	63	69	74	75	71	63	54
$L_{PA,\ 4m}$	Air noise	dB(A)	59	43	49	54	55	51	43	34



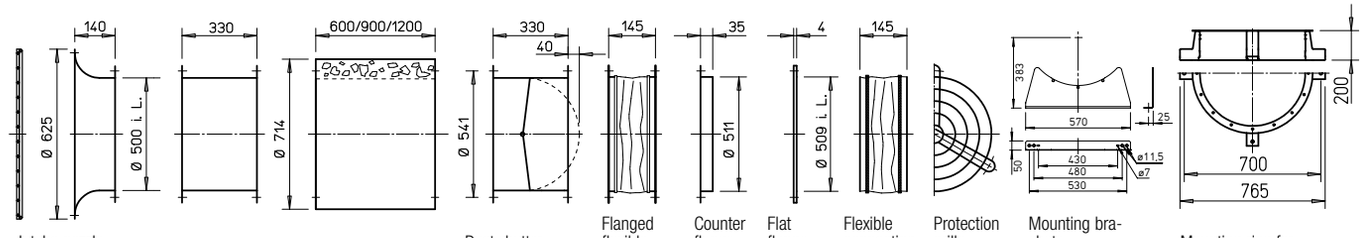
Other accessories **Page**

[b]Access. for expl.-proof fans

Flanged flexible connector STS 500 Ex Ref. no. 02507

Flexible connecting sleeve FM 500 Ex Ref. no. 01694

Accessories VAR 500 Description see page 276 ff.



Intake nozzle with prot. grille **ASD-SGD 500** No. 01420

Extension duct **VR 500** No. 01408

Duct silencer- **RSD 500/..**

Duct shutter, automatic **RVS 500** [a] No. 02598

Flanged flexible connector **STS 500** [b] No. 01225

Counter flange **FR 500** No. 01208

Flat flange **FF 500** No. 04947

Flexible connecting sleeve **FM 500** [b] No. 01678

Protection grille duct side **SG 500** No. 01241

Mounting brackets **MK 500** (1 Set = 2 pcs) No. 00674

Mounting ring for vertical attachment **MRV 500** No. 01740

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