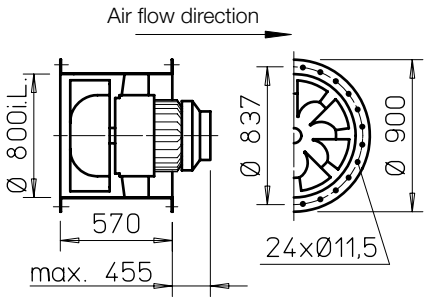
VAR and B VAR 800 F300/F400



40 °C 60 °C Ex F300 F400

Dimensions VAR and B VAR 800 F300/F400



All dim. in mm

Casing
Duct with flanges on both sides DIN 24155 pt. 3. Welded construction, hot-dip galvanised. Welded guide vane with inner hub for mounting the flange motor, hot-dip galvanised.

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

Motor
Direct through IEC three phase motor.

☐ **Series VAR**
Enclosed design IP54. With condensation drain holes upon request, installation type specification necessary when ordering for this purpose.

☐ **Series B VAR**
Efficient IE3 three phase motor (smoke extraction motors F300 and F400). Pole-switching fans with IEC standard motor. Protection class IP55. Insulation class H. External cable with sheathing.

Motor protection

☐ **Series VAR**
All types (except explosion-proof and pole-switching models) have PTC resistors. For effective motor protection, these must be wired to a full motor protection device (see type table). Motors without PTC resistors must be protected with an on-site motor-protective circuit-breaker.

☐ **Series B VAR**
All types (except pole-switching) have PTC resistors as standard and must be protected with aa full motor protection device (MSA, Ref. no. 01289). This must be bridged in smoke extraction situation.

Installation
Installation in any position.

☐ **Series VAR**
Consider potential condensation drain holes depending on application.

☐ **Series B VAR**
Suitable for installation within and outside of the fire zone.

Electrical connection
Standard plastic terminal box (protection class IP54) (series VAR) or in temperature-resistant design (series B VAR), outside of duct.

Double pressure

Mounting package MP-Z for two-stage Z unit
For arrangement of two identical fans in a row, for highest pressure ratings.
Scope of delivery: Extension ducts (2 pcs.) and assembly kit.
Weight: 60 kg

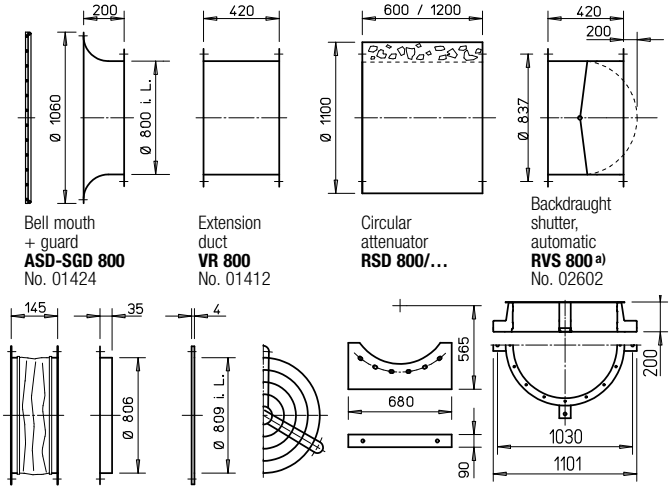
MP-Z 800 Ref. no. 04911

Double volume

Mounting package MP-P for parallel P unit
For arrangement of two identical fans side by side, for highest flow rates.
Scope of delivery: Extension ducts, backdraught shutter, mounting rails (2 pcs. each), mounting brackets (4 pcs.) and assembly kits.
Weight: 205 kg

MP-P 800 Ref. no. 04895

Accessories VAR + B VAR 800 F300/F400 Description see page 161 ff.



Bell mouth + guard **ASD-SGD 800** No. 01424

Extension duct **VR 800** No. 01412

Circular attenuator **RSD 800/…**

Backdraught shutter, automatic **RVS 800** [a] No. 02602

Flang. flex. connector **STS 800** [b] No. 01233

Counter flange **FR 800** No. 01198

Flat flange **FF 800** No. 04951

Duct-side guard **SG 800** No. 01245

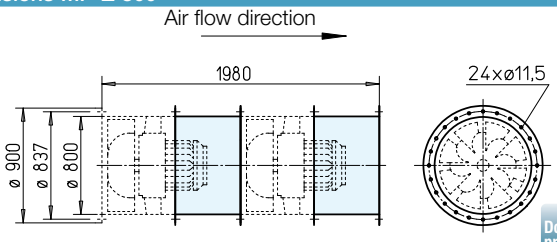
Mounting brackets **MK 800** (1 set = 2 pcs.) No. 01373

Mounting ring for vertical installation **MRV 800** No. 01744

[a] Backdraught shutter, motorised, **for ventilation**, see main Helios catalogue

[b] Type for B VARD: STSB 800 F400, No. 01919

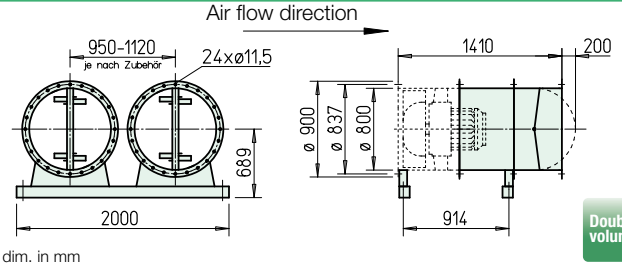
Dimensions MP-Z 800



Double pressure

All dim. in mm

Dimensions MP-P 800



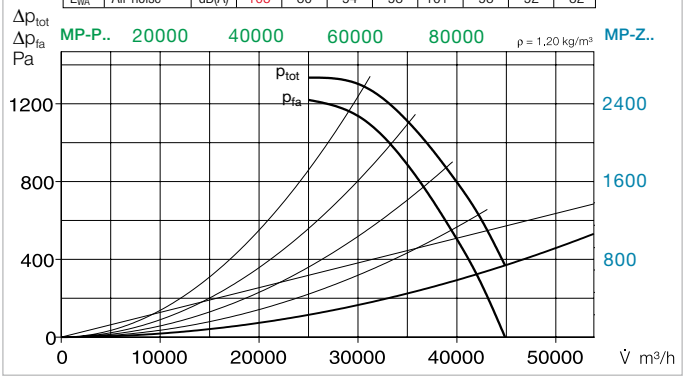
Double volume

All dim. in mm

Performance curves VAR / B VAR 800/4 F300/F400

n=1480 1/min

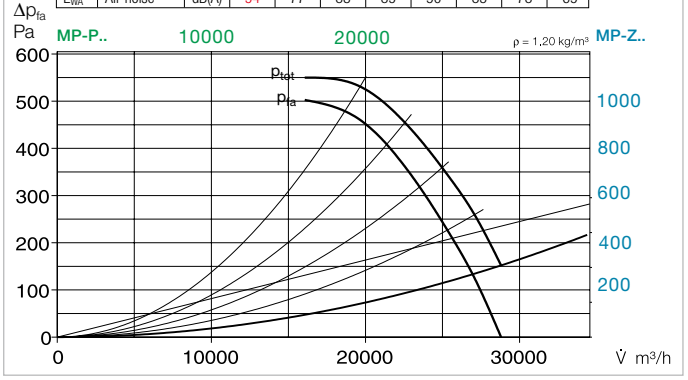
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	105	80	94	98	101	98	92	82



Performance curves VAR / B VAR 800/6 F300/F400

n=950 1/min

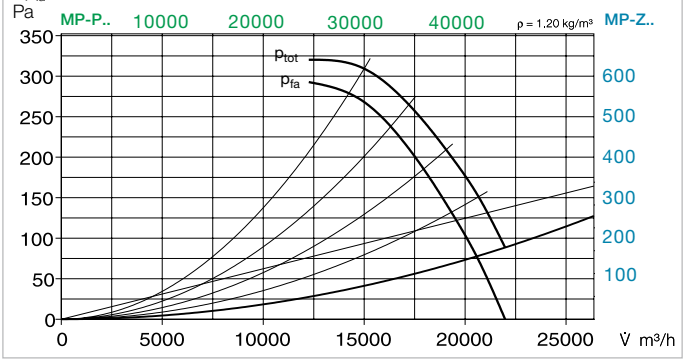
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	94	77	83	89	90	85	78	69



Performance curves VAR / B VAR 800/8 F300/F400

n=725 1/min

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	87	72	79	83	83	77	69	62



Certification

The smoke extraction fans B VARD have been tested according to DIN EN 12101-3. Certificate of performance reliability:
F300: 0036-CPR-RG05-01
F400: 0036-CPR-RG05-05

Information

	Page
Techn. description	84 f.
Project planning information	13 ff.
Accessory details	
Mounting accessories	161 ff.
Attenuator	166
Gas warning systems, switch and control technology	168 ff.

Safety information B VAR

Protection against accidental contact for impeller must be ensured by installation pursuant to DIN EN ISO 13857.

Noise levels

See information on sound power levels above the performance curves. The lower sound pressure level can be determined using the diagram on the “Technical information” page. Noise emmissions and room acoustics see page 5.

Type	Ref. no.	Speed	Output free-blowing	Nom. motor power. (output)	Nominal voltage	Power consumption at nom. voltage	Wiring diagram	max. air flow temp.[4] at nom. voltage	Net weight approx.	Frequency inverter		Full motor protection or Smoke exhaust fan control system		Anti-vibration mount [2]			
														Pressure		Tensile	
		min^{-1}	V̇ m³/h	kW	V	A	No.	+°C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
40° **Three phase motor, 50 Hz, protection class IP54**												Full motor protection					
VARD 800/4	06729	1460	44720	18.50*	400/690	34.4/20	776	40	324.0	**FU-CS 40[3]**	05472	**MSA**	01289	**SDD 3**	01367	**SDZ 6**	01927
60° **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
VARD 800/8/4	06796	735/1470	22280/44570	5.50/20.00*	400	12.0/40.0	471	60	325.0	—		—		**SDD 3**	01367	**SDZ 6**	01927
Ex **Explosion-proof, E Exe II, three phase motor, 50 Hz, temperature class T 3, protection class IP54**																	
VARD 800/8 Ex[1]	06730	710	21530	2.60*	400	6.6/3.8	470	40	240.0	not permitted		not permitted		**SDD 3**	01367	**SDZ 3**	01366
VARD 800/6 Ex[1]	06731	970	29410	6.60*	400	15.0/8.7	498	40	280.0	not permitted		not permitted		**SDD 3**	01367	**SDZ 3**	01366
VARD 800/4 Ex[1]	06732	1475	44720	17.50*	400	33.5/19.4	498	40	370.0	not permitted		not permitted		**SDD 3**	01367	**SDZ 6**	01927
F300 **Three phase motor, 50 Hz, protection class IP54**												Smoke exhaust fan control system					
B VARD 800/4 F300	02360	1470	44570	18.5	400	35.1	776	40 / 300[3]	326.0	—		**EVS-SD 006**	04581	**SDD 7**	01928	**SDZ 7**	01929
F300 **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
B VARD 800/8/4 F300	02361	730/1470	22430/44570	5.0/20.0	400	14.1/38.6	777	40 / 300[3]	339.0	—		**on demand**		**SDD 7**	01928	**SDZ 7**	01929
F400 **Three phase motor, 50 Hz, protection class IP54**																	
B VARD 800/4 F400	02444	1470	44570	18.5	400	35.1	776	40 / 400[3]	330.0	—		**EVS-SD 006**	04581	**SDD 7**	01928	**SDZ 7**	01929
F400 **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
B VARD 800/8/4 F400	02445	730/1470	22430/44570	5.0/20.0	400	14.1/38.6	777	40 / 400[3]	339.0	—		**on demand**		**SDD 7**	01928	**SDZ 7**	01929

[1] There must be a vibration monitoring system (on-site) pursuant to DIN EN 14986.
[2] Types SDZ not permitted for installation within fire zone.
[3] incl. full motor protection device and sine filter
[4] Smoke extraction (once 120 min. at 300 °C or 120 min. at 400 °C).