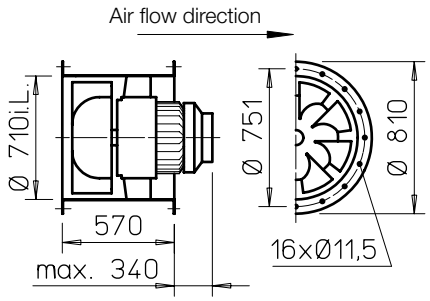
VAR and B VAR 710 F300/F400



40 °C 60 °C Ex F300 F400

Dimensions VAR and B VAR 710 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 a 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: 43 kg

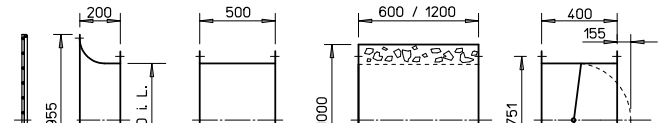
MP-Z 710 Ref. no. 04910

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: 145 kg

MP-P 710 Ref. no. 04894

Accessories VAR + B VAR 710 F300/F400 Description see page 161 ff.

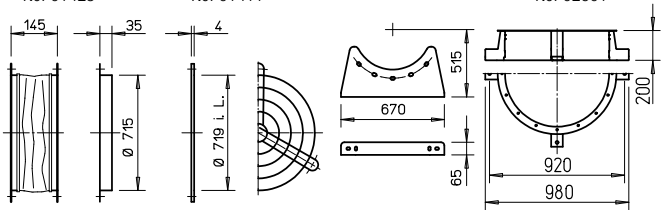


Bell mouth + guard **ASD-SGD 710** No. 01423

Extension duct **VR 710** No. 01411

Circular attenuator **RSD 710/…**

Backdraught shutter, automatic **RVS 710**[a] No. 02601



Flang. flex. connector **STS 710**[b] No. 01229

Counter flange **FR 710** No. 01212

Flat flange **FF 710** No. 04950

Duct-side guard **SG 710** No. 01244

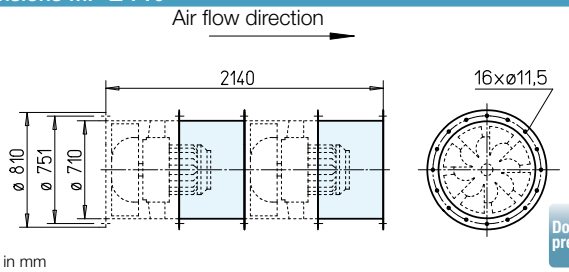
Mounting brackets **MK 710** (1 set = 2 pcs.) No. 01372

Mounting ring for vertical installation **MRV 710** No. 01743

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

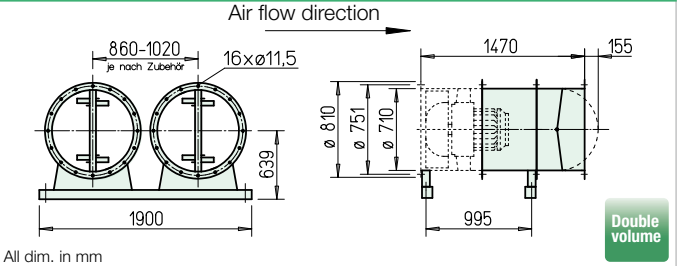
[b] Type for B VARD: STSB 710 F400, No. 01918

Dimensions MP-Z 710



All dim. in mm

Dimensions MP-P 710

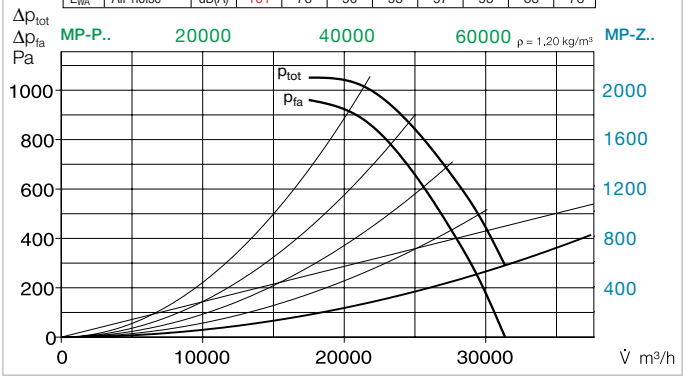


All dim. in mm

Performance curves VAR / B VAR 710/4 F300/F400

n=1480 1/min

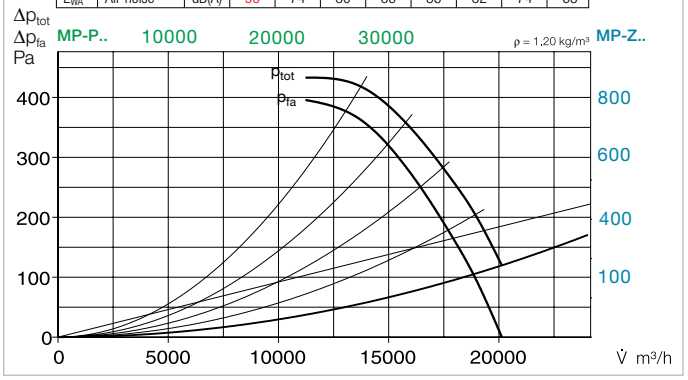
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	101	76	90	95	97	95	88	78



Performance curves VAR / B VAR 710/6 F300/F400

n=950 1/min

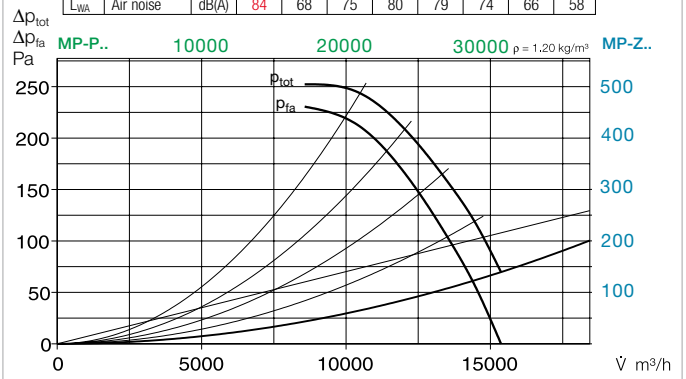
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	90	74	80	86	86	82	74	65



Performance curves VAR / B VAR 710/8 F300/F400

n=725 1/min

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	84	68	75	80	79	74	66	58



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

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	Stromaufnahme bei Nominal voltage	Anschluss Schaltplan	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 [5] Pressure		Anti-vibration mount [5] 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 710/4	06723	1450	31050	11.0*	400/690	21.6/12.6	776	40	280.0	**FU-CS 22**[2]	05470	**MSA**[3]	01289	**SDD 3**	01367	**SDZ 3**	01366
60° **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
VARD 710/8/4	06794	730/1470	15470/31160	3.00/11.00*	400	8.90/24.0	471	60	230.0	—		**MSA**[3]	01289	**SDD 3**	01367	**SDZ 3**	01366
Ex **Explosion-proof, E Exe II, three phases motor, 50 Hz, temperature class T 3, protection class IP54**																	
VARD 710/8 Ex[1]	06724	680	14410	1.30*	400	3.65	470	40	165.0	not permitted		not permitted		**SDD 2**	01453	**SDZ 3**	01366
VARD 710/6 Ex[1]	06725	955	20240	2.60*	400	6.8/3.9	498	40	190.0	not permitted		not permitted		**SDD 3**	01367	**SDZ 3**	01366
VARD 710/4 Ex[1]	06726	1475	31050	11.00*	400	21.5/12.5	498	40	255.0	not permitted		not permitted		**SDD 3**	01367	**SDZ 3**	01366
F300 **Three phase motor, 50 Hz, protection class IP54**												Smoke exhaust fan control system					
B VARD 710/4 F300	02350	1470	30940	11.00	400	20.9	776	40 / 300[4]	230.0	—		**EVS-SD 004**	04583	**SDD 6**	01926	**SDZ 6**	01927
F300 **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
B VARD 710/8/4 F300	02351	725/1455	15460/30940	3.0/11.0	400	7.0/21.0	777	40 / 300[4]	244.0	—		**on demand**		**SDD 6**	01926	**SDZ 6**	01927
F400 **Three phase motor, 50 Hz, protection class IP54**																	
B VARD 710/4 F400	02433	1470	30940	11.0	400	20.9	776	40 / 400[4]	240.0	—		**EVS-SD 004**	04583	**SDD 6**	01926	**SDZ 6**	01927
F400 **Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54**																	
B VARD 710/8/4 F400	02434	725/1455	15460/30940	3.0/11.0	400	7.0/21.0	777	40 / 400[4]	244.0	—		**on demand**		**SDD 6**	01926	**SDZ 6**	01927

[1] There must be a vibration monitoring system (on-site) pursuant to DIN EN 14986. [2] incl. full motor protection device and sine filter [3] for PTC resistor temperature sensor
[4] Smoke extraction (once 120 min. at 300 °C or 120 min. at 400 °C) [5] Types SDZ not permitted for installation within fire zone.