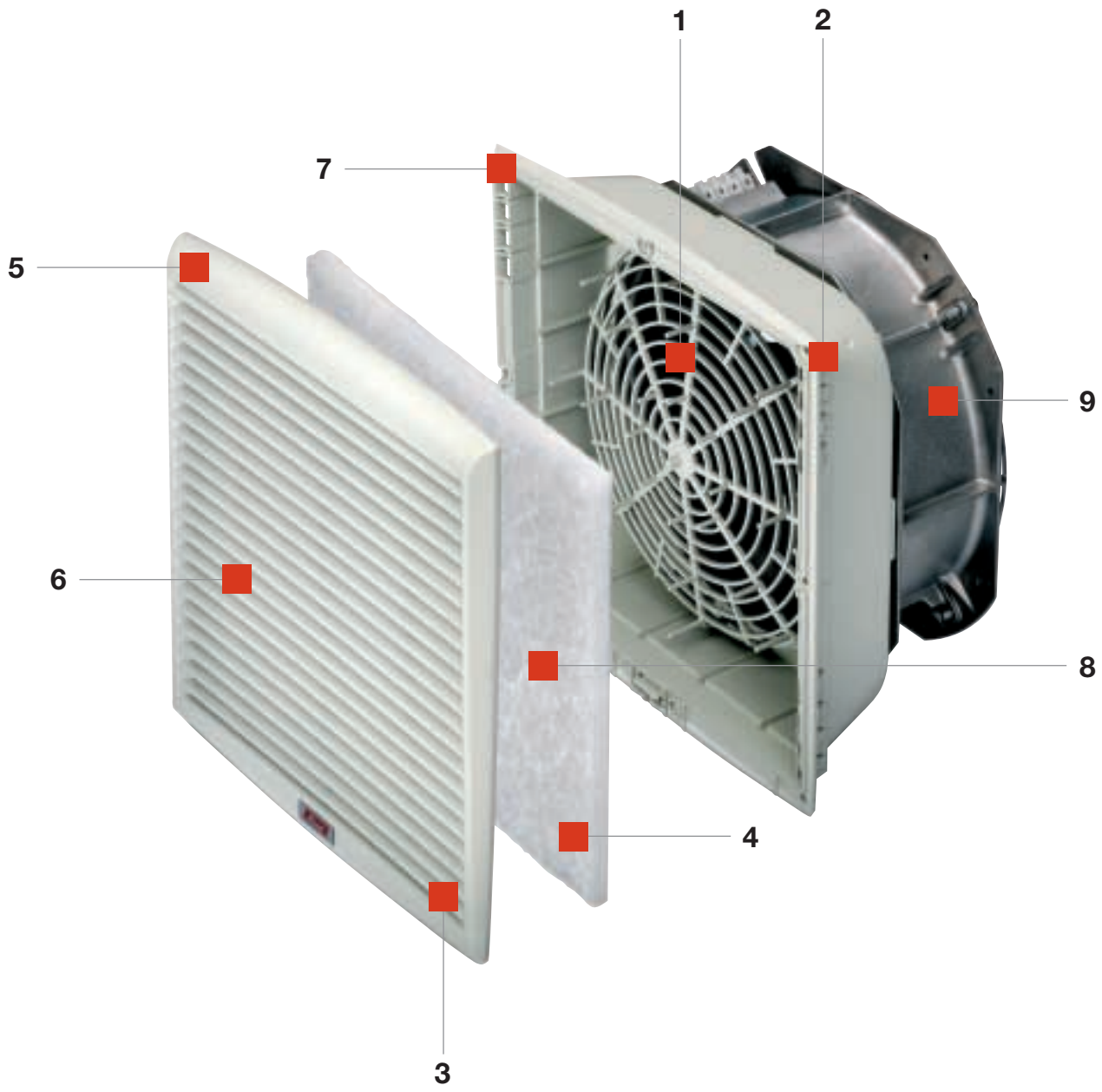
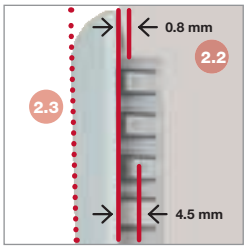
Ventilation systems VF
Wide range of ventilation products



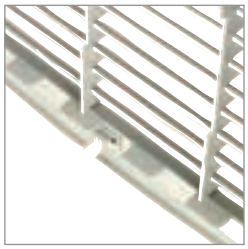
1 Minimum pressure loss. Better air flow. The angles of walls, the tilting of slats, the fixing distance of the motor and the sizing of the unit have been studied to guarantee the best possible air conduction and minimise pressure loss.



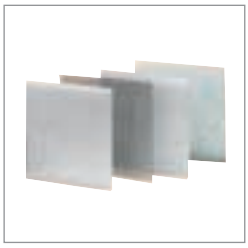
2 Fixing guide (2.1). Exclusive device (patented) that centres the fan body with the machining carried out on the enclosure wall. This system corrects possible defects in sizing and in the precision of machining. It also facilitates the operation of the “multiple fixing clips”.

Multiple thickness fixing clips system (2.2). This exclusive patented device guarantees easy and reliable fixing of the ventilation system on 0.8 mm to 4.5 mm thick walls without the need for any other screws.
It also guarantees a perfect joint compression on the cut outline. Protection between the grille and the wall is guaranteed for all materials: steel, stainless steel, polyester, aluminium, etc.

Tilted profile of the grill (2.3). This innovating profile increases the protection of the filter against vertical exposure:
- Each slat is protected by the slat above it.
- The external size remains small.



3 IP54-55.
Designed (patented) especially to evacuate any water that might be retained by the filter blanket for applications that may be splashed under pressure.



4 Wide offer of filters.
- For application in greasy atmospheres (OEMs).
- Anti-insect filters.
- Small fine filter (when greater dust protection is required).

ENVIRONMENTALLY friendly

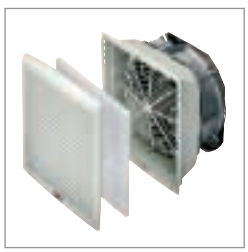
5 Environment.
- Recyclable plastic materials and filters.
- Motors compliant with the ROHS legislation.
- Lower electrical consumption for greater air flow.

UV

c UL us LISTED

6 Selection of plastic materials.
The materials (ASA/PC) selected give the system:
- Good behaviour (long service life) with regard to UV rays.
- Excellent mechanical behaviour.
- The colours of the grills in the standard supply are RAL-7032 and 7035.
- Grill colour can be changed by mould injection (check with the sales network).

7 Strong, reliable and effortless fixing that is evident upon installation, made possible by the set of “guide devices” and the “multiple fixing clips”.
It also allows traditional enclosures to be fixed with fasteners.



8 Fast replacement of the filter blanket.
Fast, easy and secure replacement of the filter blanket, even with the fan operating.

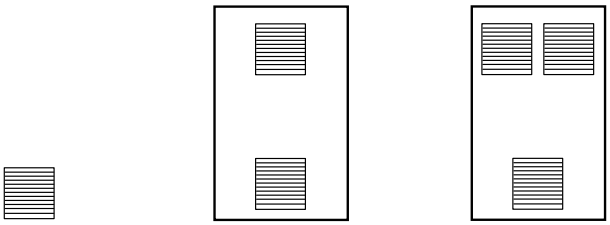
Reversibility.
The rotation of the fan motor can be easily changed on all models (extraction/discharge).

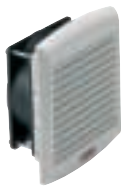
9 Motor selection. State-of-the-art motors have been selected from leading manufacturers in the sector, with a view to achieving:
- Higher flow rate.
- Longer useful life.

The largest range of voltages is available in the standard motor selection, both in alternating (50/60 Hz) and direct current.

Self-extinguishing. Self-extinguishing according to the UL94 VO regulation.

VENTILATION SYSTEMS WITH FILTER



	Free flow (fan with filter)		Flow rate (m^3/h)				Voltage	Type of connection (*)	Dimensions (mm)	
			Fan + 1 outlet grill		Fan + 2 outlet grills					
	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz			Total (external) (mm)	Cut-out (mm)
	38	39	25	26	33	34	230 V	C	137 × 117	92 × 92
	38	39	27	28	35	36	115 V	C		
	58		39		47		24 DC	C		
	44		34		41		48 DC	C		
	85	98	63	72	71	83	230 V	F	170 × 150	125 × 125
	79	92	65	74	73	79	115 V	F		
	80		57		77		24 DC	F		
	79		59		68		48 DC	F		
	165	193	153	171	161	175	230 V	F	268 × 248	223 × 223
	164	192	153	171	161	174	115 V	F		
	188		171		179		24 DC	F		
	193		171		179		48 DC	F		
	302	350	260	307	268	311	230 V	F		
	302	348	263	305	271	314	115 V	F		
	262		221		229		24 DC	F		
	247		210		218		48 DC	F		
	562	586	473	477	481	485	230 V	B	336 × 316	291 × 291
	582	583	485	475	494	477	115 V	B		
	838	803	718	568	728	585	230 V	B		
	983	944	843	642	854	667	115 V	B		
	931	803	798	568	809	585	400/440 V	B		

(*) C = by cable, F = by connector, B = by terminal block.

NEW **Fans with type of connection F include a fan connection cable (L = 2 m)**

	Reference				IP
	Fan with filter	Outlet grille	Fan with filter	Outlet grille	
	RAL-7032	RAL-7032	RAL-7035	RAL-7035	
	VF38	**FS38**	**VF38R35**	**FS38R35**	54
	VF38/115		**VF38/115R35**		
	VF38/24DC		**VF38/24DCR35**		
	VF38/48DC		**VF38/48DCR35**		
	VF85	**FS85**	**VF85R35**	**FS85R35**	54
	VF85/115		**VF85/115R35**		
	VF85/24DC		**VF85/24DCR35**		
	VF85/48DC		**VF85/48DCR35**		
	VF165	**FS165**	**VF165R35**	**FS165R35**	54
	VF165/115		**VF165/115R35**		
	VF165/24DC		**VF165/24DCR35**		
	VF165/48DC		**VF165/48DCR35**		
	VF300		**VF300R35**		
	VF300/115		**VF300/115R35**		
	VF300/24DC		**VF300/24DCR35**		
	VF300/48DC		**VF300/48DCR35**		
	VF560	**FS560**	**VF560R35**	**FS560R35**	54
	VF560/115		**VF560/115R35**		
	VF850		**VF850R35**		
	VF850/115		**VF850/115R35**		
	VF850/400		**VF850/400R35**		

OUTLET GRILLES

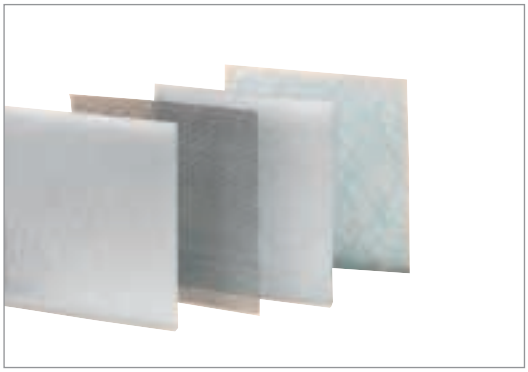
Reference		Dimensions (mm)		IP
RAL-7032	RAL-7035	Total (outside)	Cut-out	
FS38	**FS38R35**	137 × 117	92 × 92	54
FS85	**FS85R35**	170 × 150	125 × 125	54
FS165	**FS165R35**	268 × 248	223 × 223	54
FS560	**FS560R35**	336 × 316	291 × 291	54

VANDAL PROOF SYSTEM

Reference	Dimensions (mm)	Set of
RAL-7011		
ANVF	137 × 177	2
ANVF	170 × 150	2
ANVF	268 × 248	2
ANVF	336 × 316	2

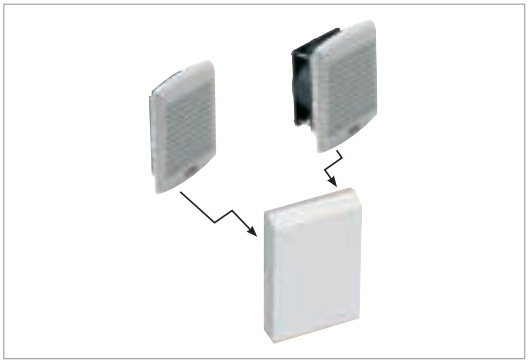
POWER CONNECTION CABLE FOR FANS

Reference	Length (mm)
CBMV100	1000
CBMV200	2000



FILTERS

Reference	Concept	For fans and grilles with dimensions (mm)
F38	Standard filter (G2 class conforming to EN 779)	137 × 117
F85		170 × 150
F165		268 × 248
F560		336 × 316
F85OEM	"Greasy environments" OEM filter	170 × 150
F165OEM		268 × 248
F560OEM		336 × 316
FF85	Fine filter (G3 class conforming to EN 779)	170 × 150
FF165		268 × 248
FF560		336 × 316
FAIN38	"Anti-insect" filters	137 × 117
FAIN85		170 × 150
FAIN165		268 × 248
FAIN560		336 × 316

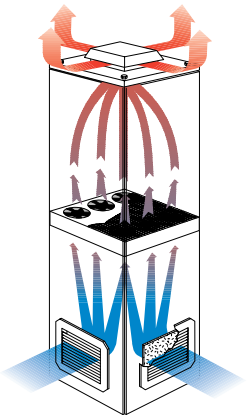


EMC EXTERNAL KIT IP55

Reference	For fans and grilles with dimensions (mm)
VF85/KITIPCEM	170 × 150
VF165/KITIPCEM	268 × 248
VF560/KITIPCEM	336 × 316

PROTECTION KIT IP55

For grilles and fans (mm)	Aluzinc RAL-7032	Aluzinc RAL-7035	Stainless steel	Replacement filters
170 × 150	**VF85/KITIPALZ32**	**VF85/KITIPALZ35**	**VF85/KITIP**	**F85/KITIP**
268 × 248	**VF165/KITIPALZ32**	**VF165/KITIPALZ35**	**VF165/KITIP**	**F165/KITIP**
336 × 316	**VF560/KITIPALZ32**	**VF560/KITIPALZ35**	**VF560/KITIP**	**F560/KITIP**



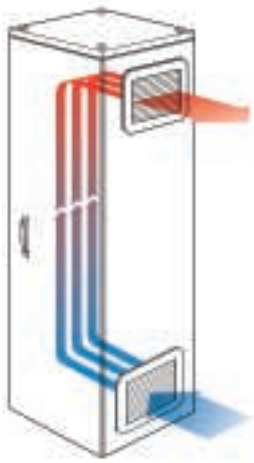
Forced ventilation

The movement of air inside the enclosure with the aid of a fan makes it possible to:

1
Increase thermal dissipation through the enclosure walls and, as a result, reduce the inside temperature.

2
Avoid hot spots in the enclosure (even temperature) harmful to some components.

Solution 1



Solution 2

Natural ventilation

The provision of fresh air from the outside by means of ventilation grills improves the dissipation of heat by natural convection. However, this solution is feasible in cases where the power to be dissipated is weak and in atmospheres with low dust levels. There are 4 ways of ventilating, with a common principle: entry of cold air through the bottom of the enclosure by means of an accessory and the exit of hot air through the top of the enclosure by means of an accessory:

1
By elevating the ceiling of the enclosures (only in Spacial 6000 models) and adding a filterless bottom air inlet (solution 1).

2
By means of a ceiling ventilation device, adding a filterless air inlet at the bottom (solution 1).

3
By means of inlet and outlet grills (filterless) (solution 2).

4
By means of ventilation lugs (Solution for insulating enclosures).

VF38 Fans...

General features:

- The Himel fans are comprised of an axial motor, a protection housing for the front and rear sides, and a filter for retaining dust particles.
- The filter can even be replaced during operation, without any risk of contact with the blades or other rotating elements.
- The cut-out template included with the standard supply avoids drawing and protects the enclosure surface from the risk of scratches during handling.

Conditions of use:

- The outside temperature Te should be 5 °C below the temperature required Ts in the enclosure.
- The filters the fans are equipped with must be cleaned or replaced periodically.
- The environment should be relatively “clean” and over-frequent filter replacement should be avoided.
- Load losses caused by the outlet element (grill with filter, ventilation louvre or single opening) must be taken into consideration to determine ventilation flow.

Characteristics	Reference			
Colour RAL-7032	**VF38**	**VF38/115**	**VF38/24DC**	**VF38/48DC**
Colour RAL-7035	**VF38R35**	**VF38/115R35**	**VF38/24DCR35**	**VF38/48DCR35**
Flow rate with filter (m^3/h) (50/60 Hz)	38/39	38/39	58	44
Flow rate with 1 outlet grill (m^3/h) (50/60 Hz)	25/26	27/28	39	34
Voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	150...250 V	75...125 V	10...27.6 V	24...55 V
Absorbed power (50/60 Hz)	4.5/4.8 W	3.3/3.5 W	3.6 W	4.6 W
Intensity max. (50/60 Hz)	0.16/0.17 A	0.16/0.16 A	0.18 A	0.074 A
Noise level	40/41 dB (A)			
Bearing	Balls			
IP Degree of protection (with standard filter)	54			
External dimensions (mm)	137 × 117 × 49			
Cut-out dimensions (mm)	92 × 92			
Weight	0.220 kg		0.230 kg	
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0			
Service temperature	–10 a +70 °C		–10 a +70 °C	
Storage temperature	–40 a +70 °C			
100% operating factor	100%			
Maximum static pressure (0 m^3/h airflow)	20 Pa			

Outlet grilles

Characteristics	Reference
Colour RAL-7032	**FS38**
Colour RAL-7035	**FS38R35**
Degree of protection IP54	54
External dimensions (mm) (height × length × depth)	137 × 117 × 18
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0
Operating temperature	–20 a +70 °C

Replacement filter

Characteristics	Reference
Standard filter (G2 class conforming to EN 779)	**F38**

Dimensions (mm)

FIG. 1

Fans VF38-VF38/115

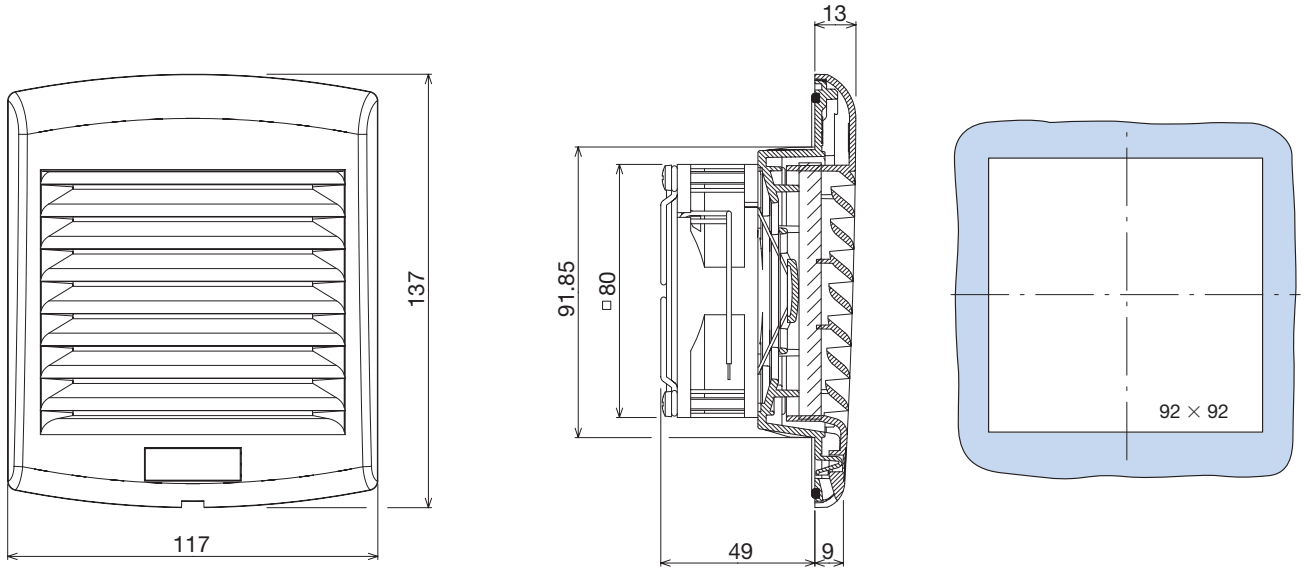
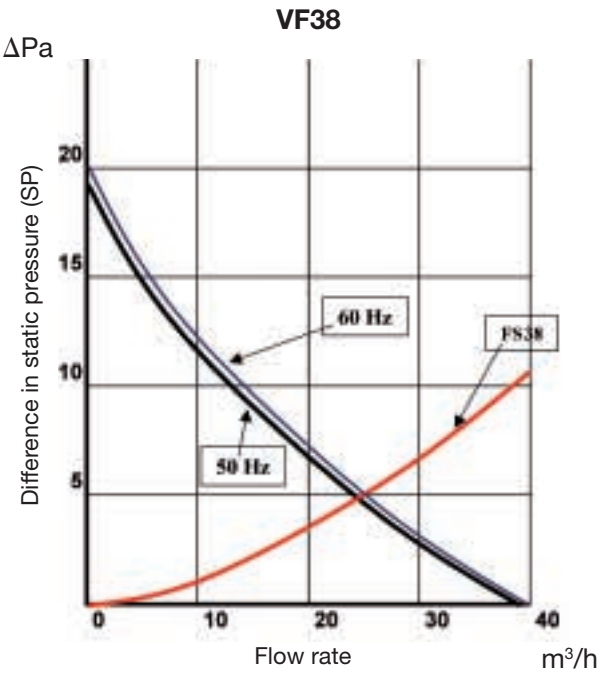


FIG. 2

“Pressure/Flow” Diagram



VF85 Fans...

General features:

- The Himel fans are comprised of an axial motor, a protection housing for the front and rear sides, and a filter for retaining powder particles.
- The filter can even be replaced during operation, without any risk of contact with the blades or other rotating elements.
- Optionally, the fans can be fitted with a fine filter to provide more efficient protection for dust-sensitive installations.
- The cut-out template included with the standard supply avoids drawing and protects the enclosure surface from the risk of scratches during handling.

Conditions of use:

- The outside temperature Te should be 5 °C below the temperature required Ts in the enclosure.
- The filters the fans are equipped with must be cleaned or replaced periodically.
- The environment should be relatively “clean” and over-frequent filter replacement should be avoided.
- Load losses caused by the outlet element (grill with filter, ventilation louvre or single opening) must be taken into consideration to determine ventilation flow.

Characteristics	Reference			
Colour RAL-7032	**VF85**	**VF85/115**	**VF85/24DC**	**VF85/48DC**
Colour RAL-7035	**VF85R35**	**VF85/115R35**	**VF85/24DCR35**	**VF85/48DCR35**
Flow rate with filter (m^3/h) (50/60 Hz)	85/98	79/92	80	
Flow rate with 1 outlet grill (m^3/h) (50/60 Hz)	63/72	65/74	60	
Voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	175...253 V	75...126 V	10...27.6 V	25...55.2 V
Absorbed power (50/60 Hz)	17/15 W	16/15 W	7.6 W	8 W
Intensity max. (50/60 Hz)	0.12/0.097 A	0.21/0.179 A	0.30 A	0.173 A
Noise level	46/49 dB (A)			
Bearing	Balls			
IP Degree of protection (with standard filter)	54			
External dimensions (mm)	170 × 150 × 62			
Cut-out dimensions (mm)	125 × 125			
Weight	0.780 kg		0.480 kg	
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0			
Service temperature	–20 a +60 °C		–10 a +70 °C	
Storage temperature	–40 a +70 °C			
100% operating factor	100%			
Maximum static pressure (0 m^3/h airflow)	50 Pa			

Outlet grills

Characteristics	Reference
Colour RAL-7032	**FS85**
Colour RAL-7035	**FS85R35**
IP	54
Outside dimensions (mm) (height × width × depth)	170 × 150 × 18
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0
Service temperature	–20 a +70 °C

Replacement filter

Characteristics	Reference
Standard filter (filtration capacity: G2 conforming to EN 779)	**F85**
OEM filter (oily environment)	**F85OEM**
Fine filter	**FF85**
Anti-insect filter	**FAIN85**

Dimensions (mm)

FIG. 1

Fans

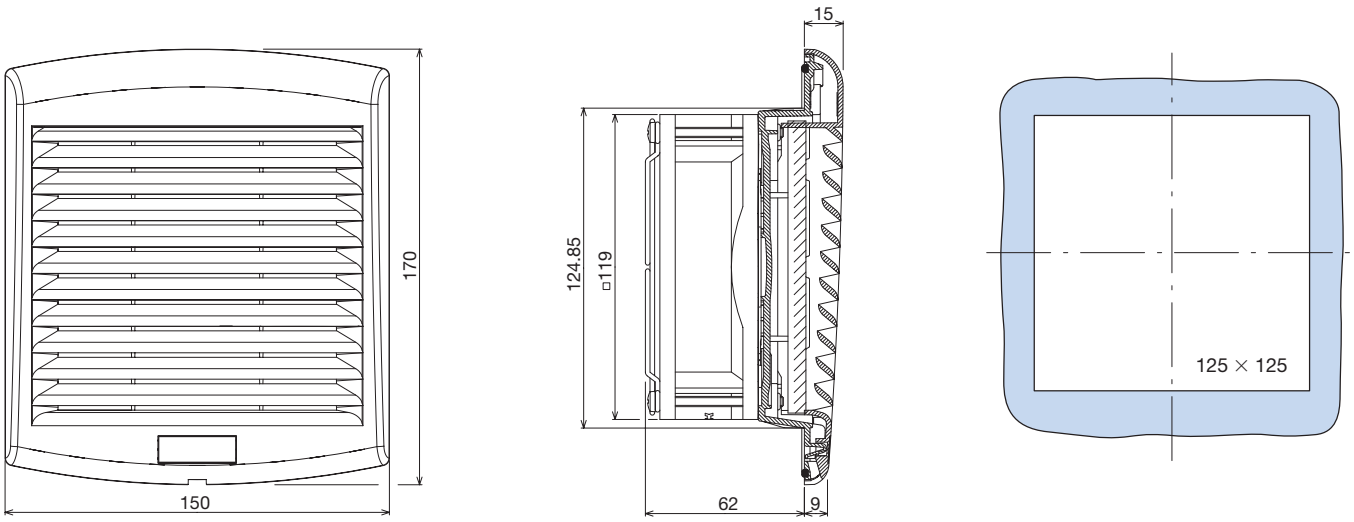
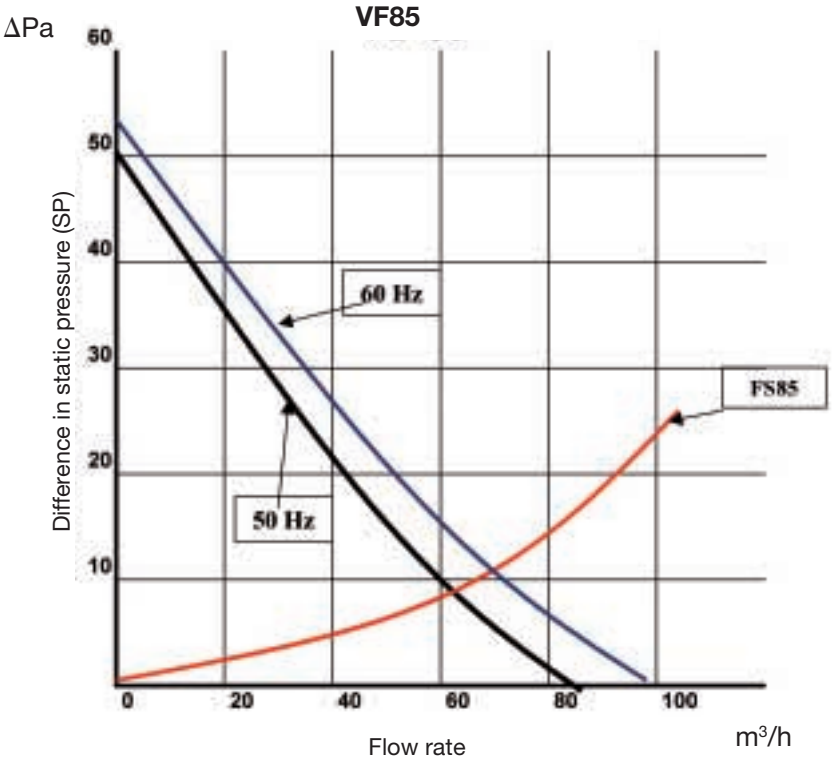


FIG. 2

“Pressure/Flow” Diagram



VF165 Fans...

General features:

- The Himel fans are comprised of an axial motor, a protection housing for the front and rear sides, and a filter for retaining powder particles.
- The filter can even be replaced during operation, without any risk of contact with the blades or other rotating elements.
- Optionally, the fans can be fitted with a fine filter to provide more efficient protection for dust-sensitive installations.
- The cut-out template included with the standard supply avoids drawing and protects the enclosure surface from the risk of scratches during handling.

Conditions of use:

- The outside temperature Te should be 5 °C below the temperature required Ts in the enclosure.
- The filters the fans are equipped with must be cleaned or replaced periodically.
- The environment should be relatively “clean” and over-frequent filter replacement should be avoided.
- Load losses caused by the outlet element (grill with filter, ventilation louvre or single opening) must be taken into consideration to determine ventilation flow.

Characteristics	Reference			
Colour RAL-7032	**VF165**	**VF165/115**	**VF165/24DC**	**VF165/48DC**
Colour RAL-7035	**VF165R35**	**VF165/115R35**	**VF165/24DCR35**	**VF165/48DCR35**
Flow rate with filter (m^3/h) (50/60 Hz)	165/193		190	
Flow rate with 1 outlet grill (m^3/h) (50/60 Hz)	153/171		171	
Flow rate with 2 outlet grills (m^3/h) (50/60 Hz)	161/175		179	
Voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	175...253 V	75...126 V	10...27.6 V	25...55.2 V
Absorbed power (50/60 Hz)	16.3/14.3 W	15.5/14.4 W	8 W	8.7 W
Intensity max. (50/60 Hz)	0.12 A/0.94 A	0.20 A/0.18 A	0.3 A	0.18 A
Noise level	50/51 dB (A)			
Bearing	Balls			
IP Degree of protection (with standard filter)	54			
External dimensions (mm)	268 × 248 × 104			
Cut-out dimensions (mm)	223 × 223			
Weight	1.140 kg		0.810 kg	
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0			
Service temperature	–20 a +60 °C		–10 a +70 °C	
Storage temperature	–40 a +70 °C			
100% operating factor	100%			
Maximum static pressure (0 m^3/h airflow)	50 Pa			

Outlet grills

Characteristics	Reference
Colour RAL-7032	**FS165**
Colour RAL-7035	**FS165R35**
IP	54
Outside dimensions (mm) (height × width × depth)	268 × 248 × 18
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0
Service temperature	–20 a +70 °C

Replacement filter

Characteristics	Reference
Standard filter (filtration capacity: G2 conforming to EN 779)	**F165**
OEM filter (oily environment)	**F165OEM**
Fine filter	**FF165**
Anti-insect filter	**FAIN165**

Dimensions (mm)

FIG. 1

Fans VF165-VF165/115

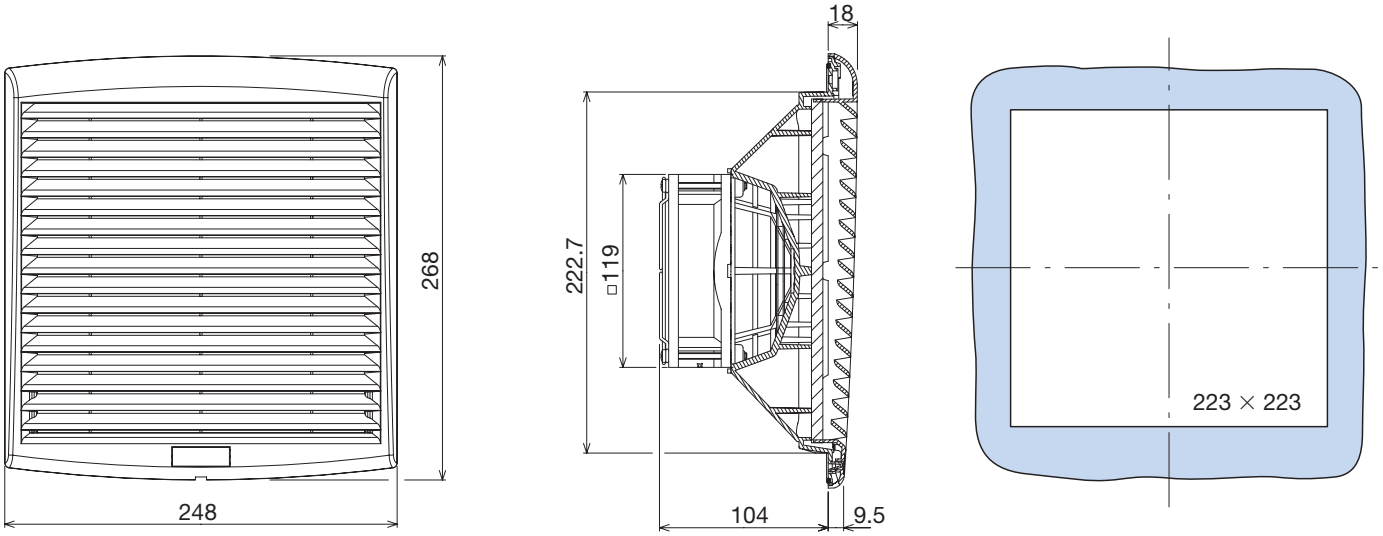
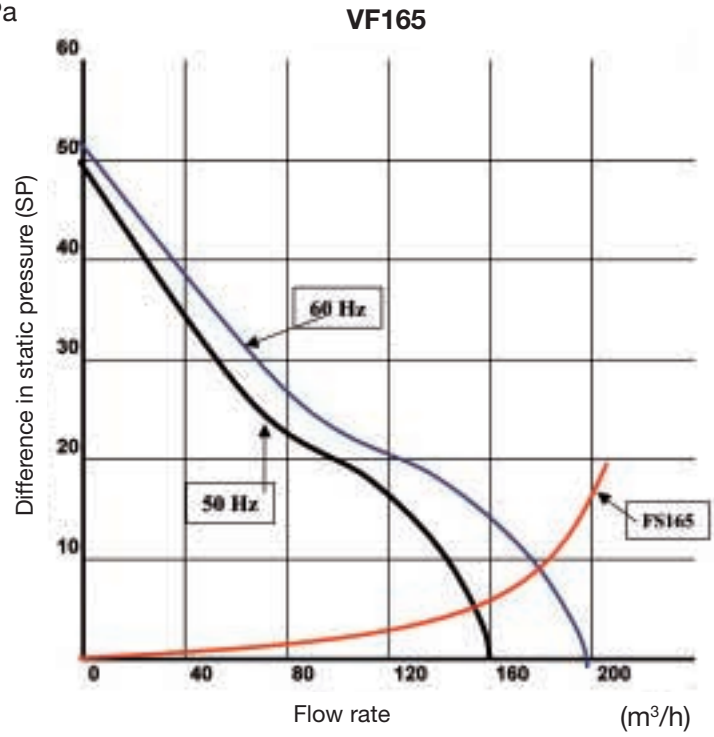


FIG. 2

“Pressure/Flow” Diagram



VF300 Fans...

General features:

- The Himel fans are comprised of an axial motor, a protection housing for the front and rear sides, and a filter for retaining powder particles.
- The filter can even be replaced during operation, without any risk of contact with the blades or other rotating elements.
- Optionally, the fans can be fitted with a fine filter to provide more efficient protection for dust-sensitive installations.
- The cut-out template included with the standard supply avoids drawing and protects the enclosure surface from the risk of scratches during handling.

Conditions of use:

- The outside temperature Te should be 5 °C below the temperature required Ts in the enclosure.
- The filters the fans are equipped with must be cleaned or replaced periodically.
- The environment should be relatively “clean” and over-frequent filter replacement should be avoided.
- Load losses caused by the outlet element (grill with filter, ventilation louvre or single opening) must be taken into consideration to determine ventilation flow.

Characteristics	Reference			
Colour RAL-7032	**VF300**	**VF300/115**	**VF300/24DC**	**VF300/48DC**
Colour RAL-7035	**VF300R35**	**VF300/115R35**	**VF300/24DCR35**	**VF300/48DCR35**
Flow rate with filter (m^3/h) (50/60 Hz)	300/350		262	
Flow rate with 1 outlet grill (m^3/h) (50/60 Hz)	260/307		221	
Flow rate with 2 outlet grills (m^3/h) (50/60 Hz)	268/311		229	
Voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	145...253 V	75...126 V	12...30 V	25...60 V
Absorbed power (50/60 Hz)	36/37 W	36/36 W	13 W	11 W
Intensity max. (50/60 Hz)	0.17/0.16 A	0.35/0.32 A	0.53 A	0.24 A
Noise level	55/56 dB (A)			
Bearing	Balls			
IP Degree of protection (with standard filter)	54			
External dimensions (mm)	268 × 248 × 116		268 × 248 × 103,4	
Cut-out dimensions (mm)	223 × 223			
Weight	1.3 kg		1.1 kg	
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0			
Service temperature	–10 a +70 °C		–10 a +70 °C	
Storage temperature	–40 a +70 °C			
100% operating factor	100%			
Maximum static pressure (0 m^3/h airflow)	158 Pa			

Outlet grills

Characteristics	Reference
Colour RAL-7032	**FS165**
Colour RAL-7035	**FS165R35**
IP	54
Outside dimensions (mm) (height × width × depth)	268 × 248 × 18
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0
Service temperature	–20 a +70 °C

Replacement filter

Characteristics	Reference
Standard filter (filtration capacity: G2 conforming to EN 779)	**F165**
OEM filter (oily environment)	**F165OEM**
Fine filter	**FF165**
Anti-insect filter	**FAIN165**

Dimensions (mm)

FIG. 1

Fans VF300-VF300/115

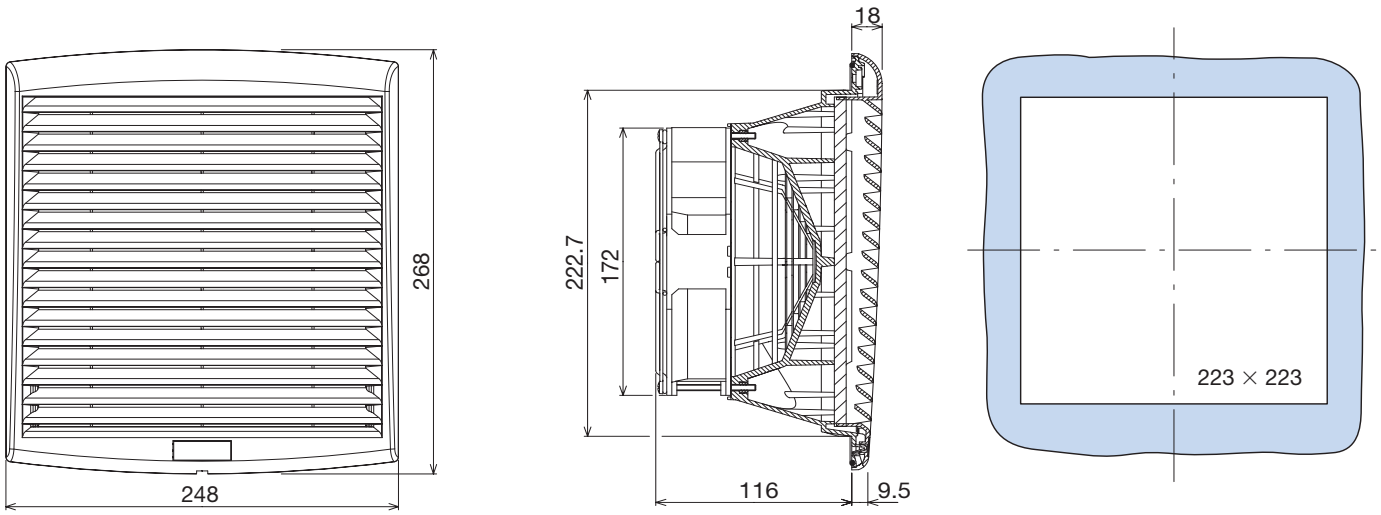
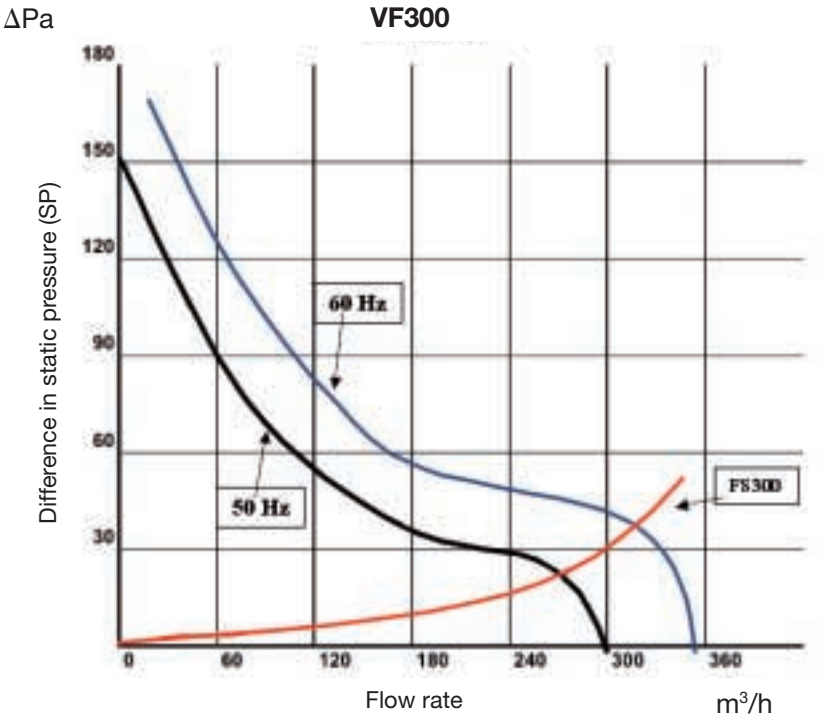


FIG. 2

“Pressure/Flow” Diagram



VF560... and VF850... Fans

General features:

- The Himel fans are comprised of an axial motor, a protection housing for the front and rear sides, and a filter for retaining powder particles.
- The filter can even be replaced during operation, without any risk of contact with the blades or other rotating elements.
- Optionally, the fans can be fitted with a fine filter to provide more efficient protection for dust-sensitive installations.
- The cut-out template included with the standard supply avoids drawing and protects the enclosure surface from the risk of scratches during handling.

Conditions of use:

- The outside temperature Te should be 5 °C below the temperature required Ts in the enclosure.
- The filters the fans are equipped with must be cleaned or replaced periodically.
- The environment should be relatively “clean” and over-frequent filter replacement should be avoided.
- Load losses caused by the outlet element (grill with filter, ventilation louvre or single opening) must be taken into consideration to determine ventilation flow.

Characteristics	Reference				
Colour RAL-7032	**VF560**	**VF560/115**	**VF850**	**VF850/115**	**VF850/400**
Colour RAL-7035	**VF560R35**	**VF560/115R35**	**VF850R35**	**VF850/115R35**	**VF850/400R35**
Flow rate with filter (m^3/h) (50/60 Hz)	562/586		838 (50 Hz) 803 (60 Hz)	983 (50 Hz) 944 (60 Hz)	931 (50 Hz) 803 (60 Hz)
Flow rate with 1 outlet grill (m^3/h) (50/60 Hz)	473/477		718 (50 Hz) 568 (60 Hz)	843 (50 Hz) 642 (60 Hz)	798 (50 Hz) 568 (60 Hz)
Flow rate with 2 outlet grills (m^3/h) (50/60 Hz)	481/485		728 (50 Hz) 585 (60 Hz)	854 (50 Hz) 667 (60 Hz)	809 (50 Hz) 585 (60 Hz)
Voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	230 V (50/60 Hz)	115 V (50/60 Hz)	400 V (50/60 Hz)
Voltage range	207...244 V	103...122 V	207...244 V	103...122 V	396...466 V
Absorbed power (50/60 Hz)	68/85 W	65/83 W	150/195 W	145/182 W	40/40 W
Intensity max. (50/60 Hz)	0.52/0.37 A	0.60/0.72 A	0.65/0.85 A	0.13/1.6 A	0.22/0.23 A
Noise level	59/59 dB (A)		76/75 dB (A)	78/77 dB (A)	77/75 dB (A)
Bearing	Balls				
IP Degree of protection (with standard filter)	54				
External dimensions (mm)	336 × 316 × 161		336 × 316 × 162		
Cut-out dimensions (mm)	291 × 291				
Weight	3.2 kg		4.1 kg		
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0				
Service temperature	–15 a +60 °C				
Storage temperature	–40 a +50 °C				
100% operating factor	100%				
Maximum static pressure (0 m^3/h airflow)	140 Pa		170 Pa		

Outlet grills

Characteristics	Reference
Colour RAL-7032	**FS560**
Colour RAL-7035	**FS560R35**
IP	54
Outside dimensions (mm) (height × width × depth)	336 × 316 × 18
Material	Injected thermoplastic material (ASA PC), self-extinguishing according to UL94 V0
Service temperature	–20 a +70 °C

Replacement filter

Characteristics	Reference
Standard filter (filtration capacity: G2 conforming to EN 779)	**F560**
OEM filter (oily environment)	**F560OEM**
Fine filter	**FF560**
Anti-insect filter	**FAIN560**

Dimensions (mm)

FIG. 1

VF560-VF560/115 Fans

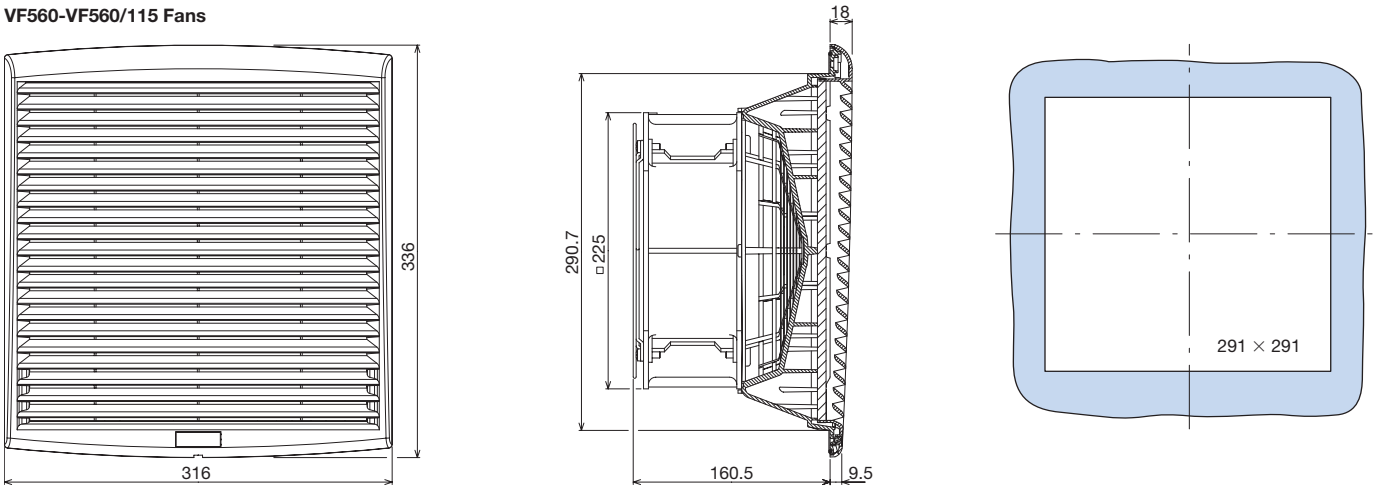


FIG. 2

VF650-VF650/115 Fans

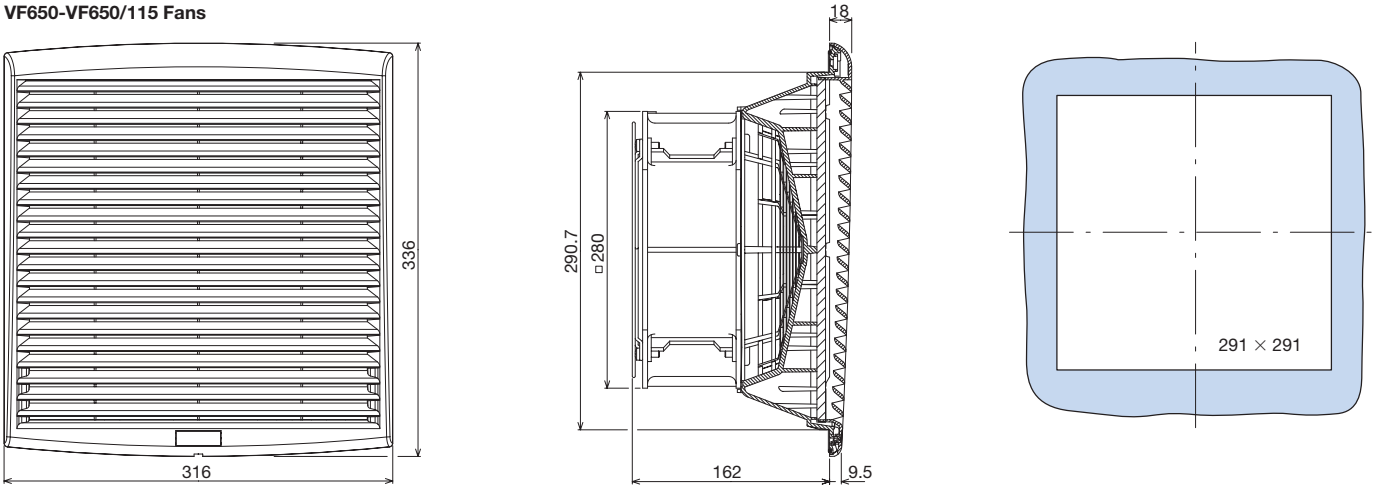


FIG. 3

"Pressure/Flow" Diagram

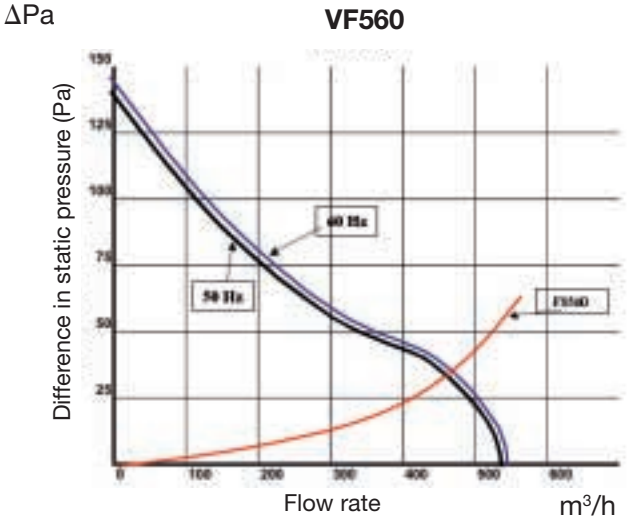
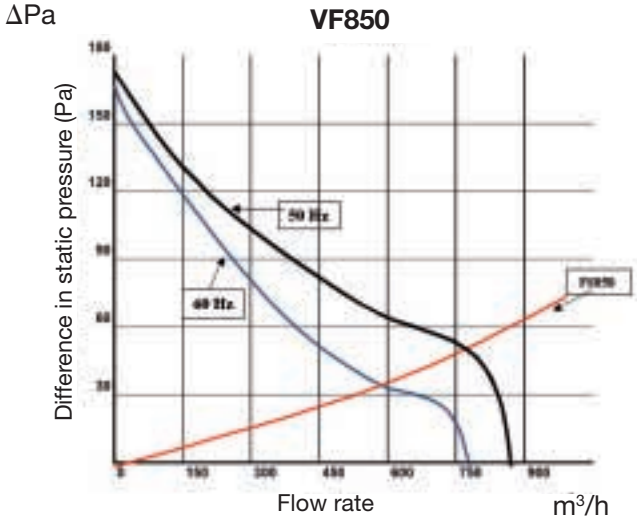


FIG. 4

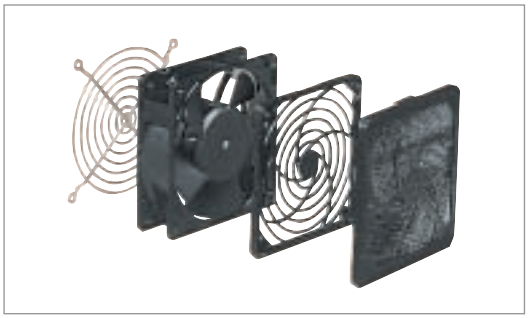


Circulation fan

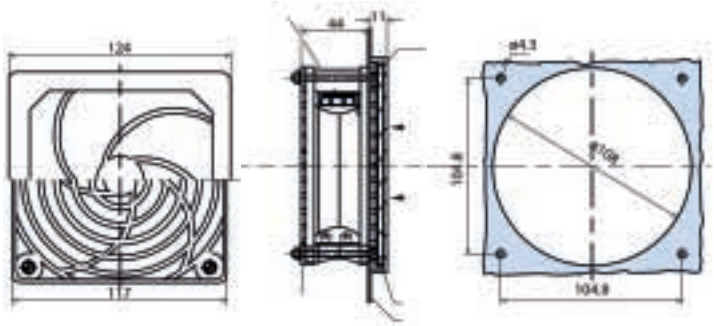
- To circulate the air inside the enclosures.
- Fixing with screws.
- User protection according to DIN 31001.

Reference	Flow rate (m^3/h)	Tension	Electrical power (W)	Weight (kg)
VC150	150	230 V 50 Hz	17	0.82

IP20 Fans

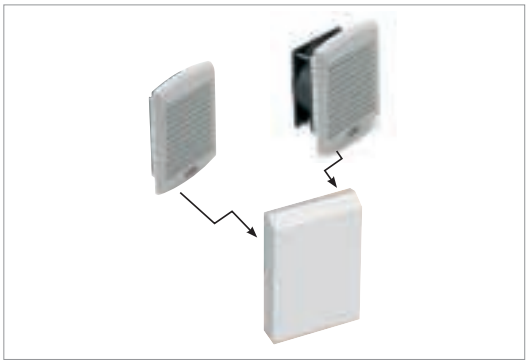


- For uses where a high degree of protection is not required (IP20).
- Self-extinguishing thermoplastic grille with a black finish.
- Fixing to the enclosure with four M4 screws.



Reference	Flow rate (m^3/h)	Tension	Electrical power (W)	Weight (kg)	Dimensions (mm)	Outlet grilles	Standard filter
V65	65	230 V - 50 Hz	17	0.69	124 × 124 × 55	**FS65**	**F65**
V65/115	65	115 V - 50 Hz	17	0.69	124 × 124 × 55	**FS65**	**F65**

EMC external kit IP55



- They are directly mounted onto the fans and grilles to protect the equipment from electromagnetic interference.

Reference	For fans and grilles with dimensions (mm)
VF85/KITIPCEM	170 × 150
VF165/KITIPCEM	268 × 248
VF560/KITIPCEM	336 × 316

Fans for 19” racks

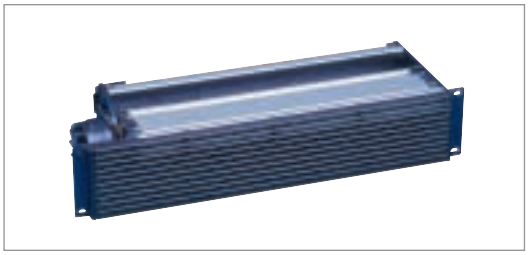
- Height: 1 U.
- Connection cable.

References:
CBMV100 (L = 1 m).
CBMV200 (L = 2 m).

Reference	Specifications	Flow rate* (m^3/h)	Noise dB (A)	Tension (V/Hz)	Electrical power (W)
VR312	With 3 fans with a depth of 180 mm With thermostat and indicator light	312	50	230/50-60	34
VR400	With 3 fans with a depth of 180 mm	400	50	230/50-60	36
VR624	With 3 fans with a depth of 180 mm With thermostat and indicator light	624	50	230/50-60	68
VR800	With 6 fans with a depth of 310 mm	800	52	230/50-61	72
VR1200	With 9 fans with a depth of 445 mm	1200	55	230/50-62	108

*Flow measured without counter-pressure.

19” 2 U tangential fan

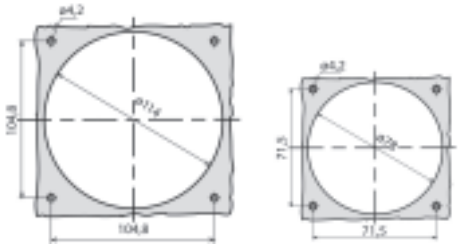


- Fan with air drawn in from the front and vertically channelled through the 19” rack.
- Height: 2 U.

Reference	Flow rate (m^3/h)	Noise dB (A)	Tension (V/Hz)	Electrical power (W)
VTR300	300	53	230/50-60	37

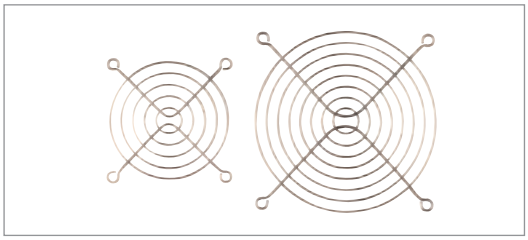
Fans

■ Turbine-type fan motor for ventilation/extraction.



Ventilation filters

■ Outlet filter unit for enclosure ventilation. For fitting to MV fans.



Protective grille

■ Protective grille for enclosure fan motors. For fitting to MV fans.

Power connection cable for fans

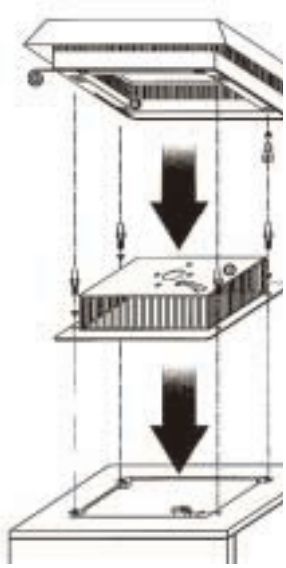
■ For fitting to the connection terminal of the fan motors.

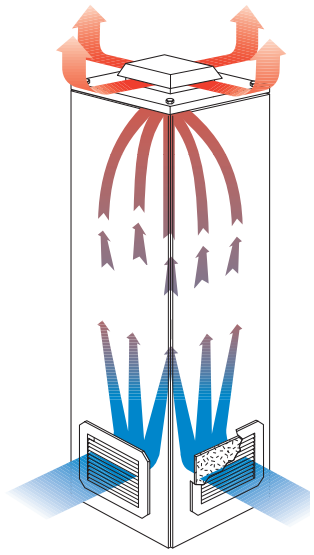
References:
CBMV100 (L = 1 m).
CBMV200 (L = 2 m).

Reference	Flow (m^3/h)	Tension (V/Hz)	Power absorbed (W)	Noise (dB) (A)	External dimensions (mm)	Filter	Grille
MV156	156	230/50-60	17/15	42	120 × 120 × 38	**FS156**	**RV156**
MV156/115	156	120/50-60	17/15	42	120 × 120 × 38	**FS156**	**RV156**
MV35	35	230/50-60	16/14	32	80 × 80 × 25	**FS35**	**RV35**
MV35/115	35	120/50-60	16/14	32	80 × 80 × 25	**FS35**	**RV35**

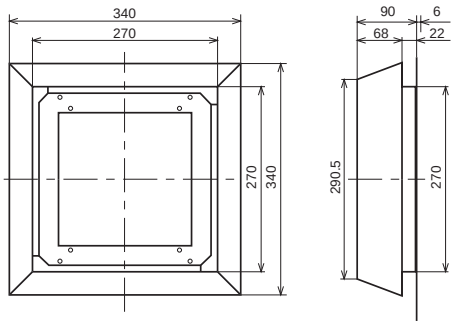
Ceiling ventilation

■ Ventilation accessories to be mounted on the top of **OLN** enclosures..

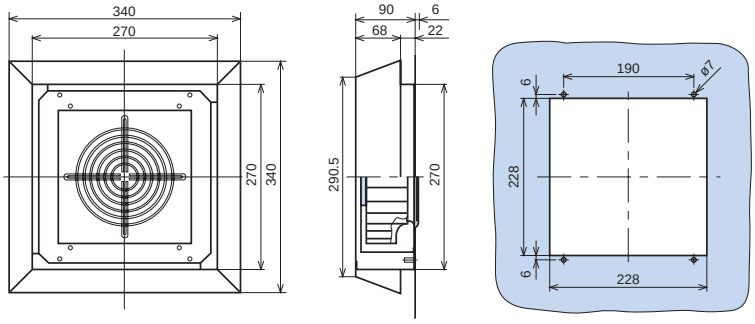




VMT340



VFT400



External dimensions (mm)							
Reference	Description	Height	Width	Depth	Flow rate (m³/h)	Tension (V/Hz)	Electrical power (W)
VMT340	Natural airing device	93	340	340	-	-	-
VFT400	Forced ventilation device (supplied with electric fan)	90	340	340	400	230/50-60	85

Outlet grilles with filter IP54

- Injected thermoplastic, self-extinguishing, conforming to UL94 V0.
- Operating temperature from –10 to +60 °C.
- IP55 with **IP55 watertightness protection kit**.

Reference		Dimensions (mm)	
RAL-7032	RAL-7035	Total (exterior)	Machined
FS38	**FS38R35**	137 × 117	92 × 92
FS85	**FS85R35**	170 × 150	125 × 125
FS165	**FS165R35**	268 × 248	223 × 223
FS560	**FS560R35**	336 × 316	291 × 291

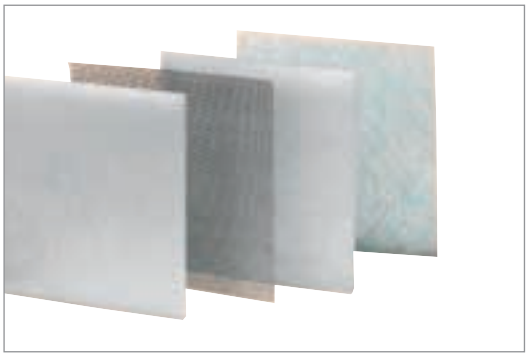
VANDAL PROOF SYSTEM

Reference RAL-7011	Dimensions (mm)	Set of
ANVF	137 × 177	2
ANVF	170 × 150	2
ANVF	268 × 248	2
ANVF	336 × 316	2

POWER CONNECTION CABLE FOR FANS

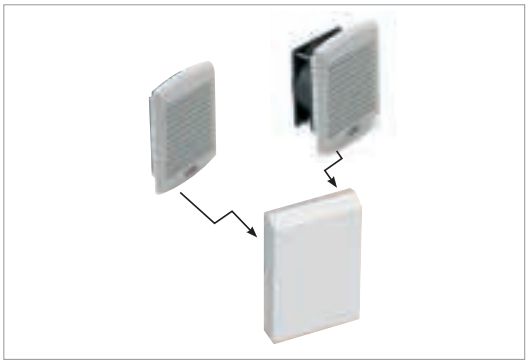
Reference	Length (mm)
CBMV100	1000
CBMV200	2000

Filters



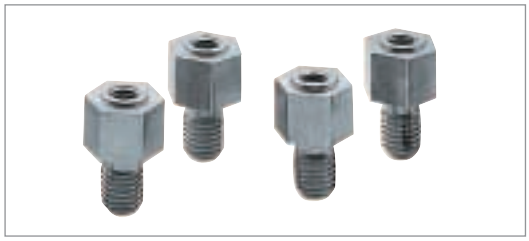
Reference	Concept	For fans and grilles with dimensions (mm)
F38	Standard filter (G2 class conforming to EN 779)	137 × 117
F85		170 × 150
F165		268 × 248
F560		336 × 316
F85OEM	"Greasy environments" OEM filter	170 × 150
F165OEM		268 × 248
F560OEM		336 × 316
FF85	Fine filter (G3 class conforming to EN 779)	170 × 150
FF165		268 × 248
FF560		336 × 316
FAIN38	"Anti-insect" filters	137 × 117
FAIN85		170 × 150
FAIN165		268 × 248
FAIN560		336 × 316

Protection kit IP55



For grilles and fans (mm)	Aluzinc RAL-7032	Aluzinc RAL-7035	Stainless steel	Replacement filter
170 × 150	**VF85/KITIPALZ32**	**VF85/KITIPALZ35**	**VF85/KITIP**	**F85/KITIP**
268 × 248	**VF165/KITIPALZ32**	**VF165/KITIPALZ35**	**VF165/KITIP**	**F165/KITIP**
336 × 316	**VF560/KITIPALZ32**	**VF560/KITIPALZ35**	**VF560/KITIP**	**F560/KITIP**

Lifting screws



■ Lifting screws for the top of the OLN enclosures to improve ventilation

■ Reference: **VET12**.

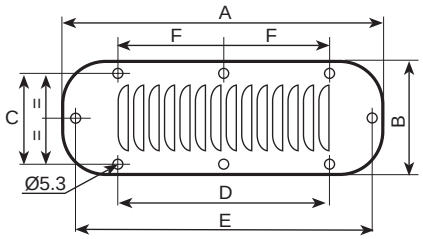
Ventilation devices

■ To connect the inside of the enclosure with the exterior atmosphere and prevent condensation. Can be fixed onto the outside (references **VM25** and **VN27**) or onto the internal sides connected with the rear self-ventilating windows of the POLYMEL enclosures (reference **VM35**).

Reference	Specifications
VM25	For coupling to the exterior of all polyester enclosures
VM27	For coupling to the exterior of all polyester enclosures
VM35	For coupling to the interior of POLYMEL enclosures

Ventilation slots

■ Natural ventilation. Guarantee air circulation inside the enclosure. Texturised RAL-7032 colour



Reference	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
TR1	144	62	36	110	-	-
TR2	208	90	72	94	190	-
TR3	244	90	72	130	226	-
TR4	345	118	100	231	237	115.5
TR5	345	148	130	231	327	115.5
TR6	445	148	130	297	427	148.5