

## **ROOF FANS**

# Standard Temperature

Horizontal Outlet/Side Discharge  
Vertical Outlet/Upward Discharge





The HR and VR standard temperature roof fans for buildings, industries and refurbishment projects are energy efficient, with low sound levels and controllable speed to meet the desired ventilation needs. The roof fans are ErP 2018 compliant.

- 50Hz and 60 Hz option available
- High efficiency EC versions (for VR only) available suitable for open-loop and closed-loop control features
- Protection guard and rain cowl included as standard

Both HR and VR roof fans can handle volume flow rates up to 5 m³/s and static pressure up to 1180Pa.

HR fans discharge horizontally while the VR fans discharge vertically. The fan cowl is made of seawater resistant aluminum for fan sizes up to 500mm; from 560mm onwards they are made of galvanized sheet steel. The centrifugal impeller is made of polyamide material for fan sizes up to 560mm and above that they are made of aluminum.

The roof fans can be connected with a range of accessories like manual shutters, swing-out frames, flat and sloping roof sockets, etc. This allows the fans to be fitted on either flat roofs or sloping roofs depending on the various applications they are suitable for.

The HR and VR AC fans should be used with a speed controller to meet the demand ventilation needs. The VR EC versions are equipped with high efficiency EC motors and can be controlled by a 0-10 V signal potentiometer.

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## ROOF FANS

# Horizontal Outlet Side Discharge



# ROOF FANS - Standard Temperature

## Horizontal Outlet/Side Discharge

### PRODUCT FACTS

- Volume flows up to 4.35 m<sup>3</sup>/s
- Static Pressures up to 1180 Pa
- Both 1 Ph and 3 Ph available
- Low sound level
- High efficiency
- Speed controllable
- ErP 2018 compliant
- Bird Guard and rain cowl included as standard

### ELECTRICAL SUPPLY

- 220-240V / 50Hz / 1Φ & 380-420V / 50Hz / 3Φ

### TEMPERATURE RANGE

- -20°C to +70°C (depending on size)

### SIZES

- 190, 225, 280, 310, 355, 400, 450, 500, 560 and 630 mm

### PRODUCT FACTS

The fan cowl is made of seawater-resistant aluminum up to size 500 mm and from 560 mm onwards it is made of galvanized sheet steel. The motor carrier cage is made of plastic-coated round steel and is designed as a bird guard with contact protection. The fan discharges horizontally

### IMPELLER

The centrifugal impeller has backward curved blades and is manufactured from polyamide (plastic) up to size 560 mm. From 630 onwards, it is made of aluminum.

### INSTALLATION

Fans can be mounted on flat roofs, pent roofs, saddle roofs and shed roofs via either installation frames or alternatively can be fitted directly to the roof base. Fans are suitable for less polluted air.

### SPEED CONTROLLER

The fans are available with speed controls and can be controlled using a separate transformer speed control or with Electronic controllers.

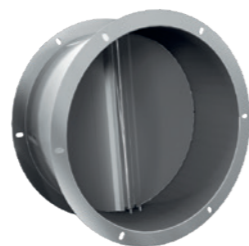
### PRODUCT CODES EXPLAINED

HR 123-4-5 678

- HR – Horizontal Discharge
- 123 – Impeller Diameter e.g., 190
- 4 – Pole Speed, e.g., 2/4/6
- 5 – Electrical Phase, e.g., 1/3
- 678 – Motor code and Stack Length

### ACCESSORIES - CONTROLLERS

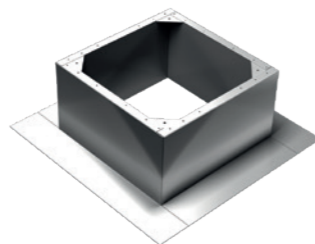
The range of accessories include manual and automatic shutters, swing-out frame, flat roof socket, flexible connectors, outlet covers and insulating connections.



Shutters



Swing-out

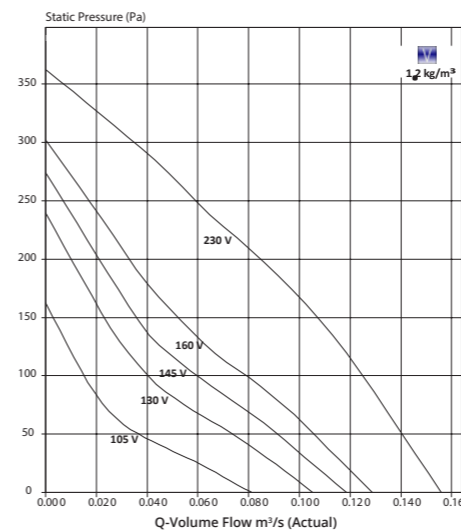


Roof Socket

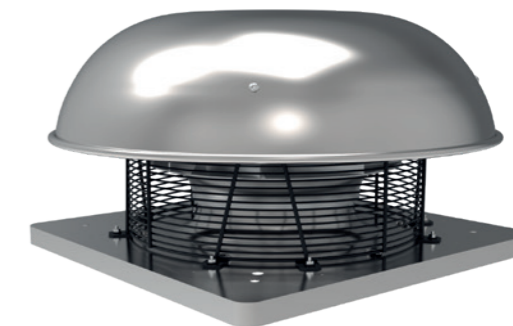


Speed Controller

Note: The ErP legislation Reg 1253 states that a multi-speed drive or a variable speed drive must be used with this range of products



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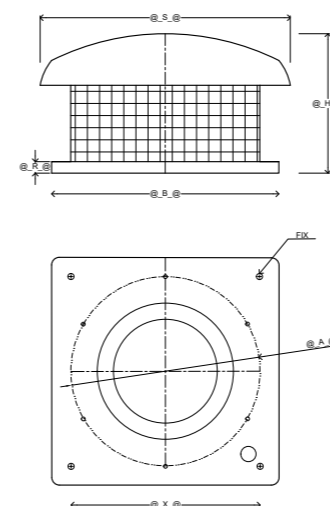


Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 190-2-1 3BE	RH190201	220-240V/50Hz/1pH	0.07	0.3	IP44	2420	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 190-2-1 3BE	Inlet	-	-27	-16	-12	-12	-16	-18	-23
HR 190-2-1 3BE	Outlet	-	-22	-9	-6	-6	-6	-11	-15

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 190-2-1 3BE	213	335	140	30	370	245	4 x Ø10	3.8

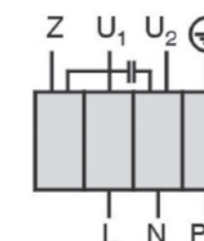
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



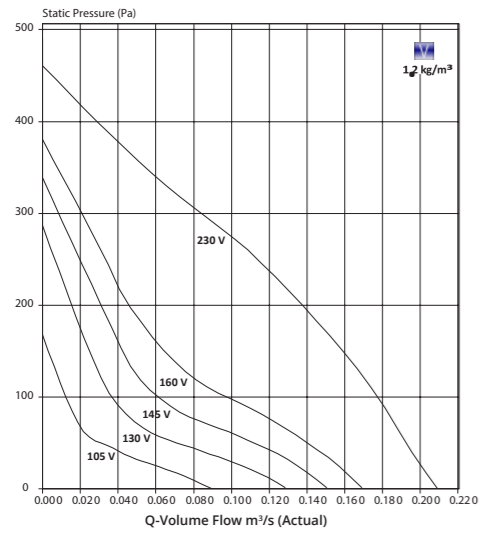
# HR 225-2-1 3CF

1 PH, AC FANS

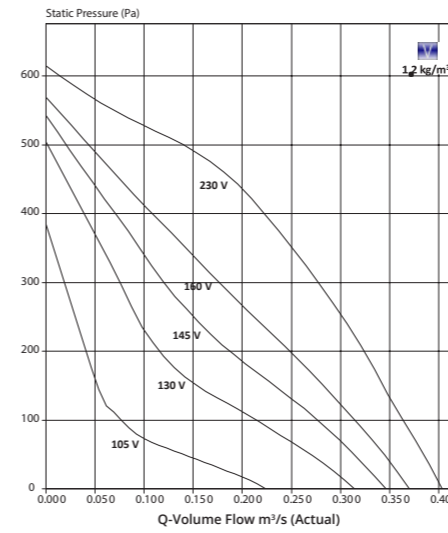
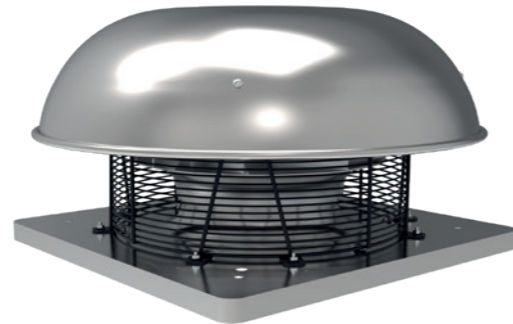


# HR 280-2-1 3EF

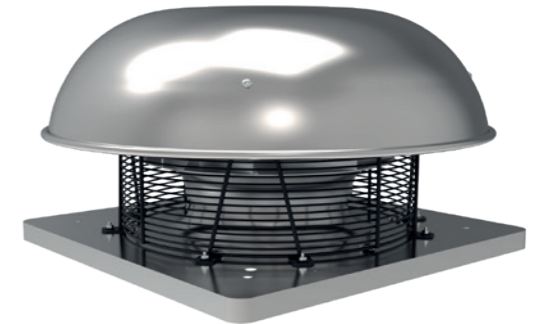
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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 225-2-1 3CF	RH225201	220-240V/50Hz/1pH	0.11	0.51	IP44	2580	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 280-2-1 3EF	RH280209	220-240V/50Hz/1pH	0.21	0.91	IP44	2640	70

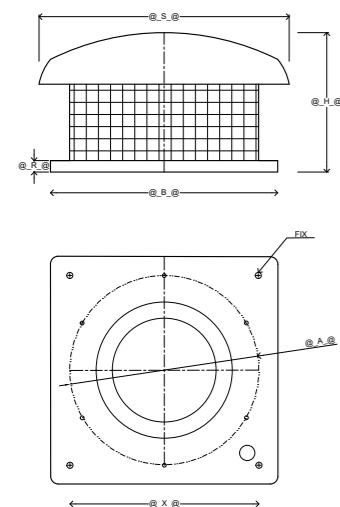
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 225-2-1 3CF	Inlet	-	-27	-20	-12	-12	-16	-18	-23
HR 225-2-1 3CF	Outlet	-	-22	-9	-6	-6	-6	-11	-15

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 280-2-1 3EF	Inlet	-39	-29	-14	-11	-8	-11	-15	14
HR 280-2-1 3EF	Outlet	-37	-29	-11	-7	-5	-5	-11	-21

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 225-2-1 3CF	213	335	140	30	370	245	4 x Ø10	5

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 280-2-1 3EF	286	435	260	30	550	330	4 x Ø10	10.5

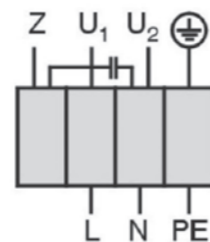
## DRAWINGS AND DIMENSIONS



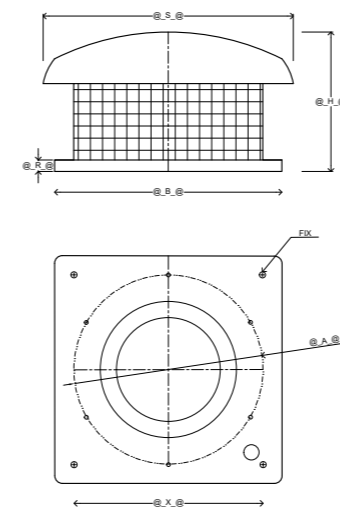
## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



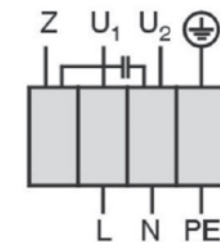
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green





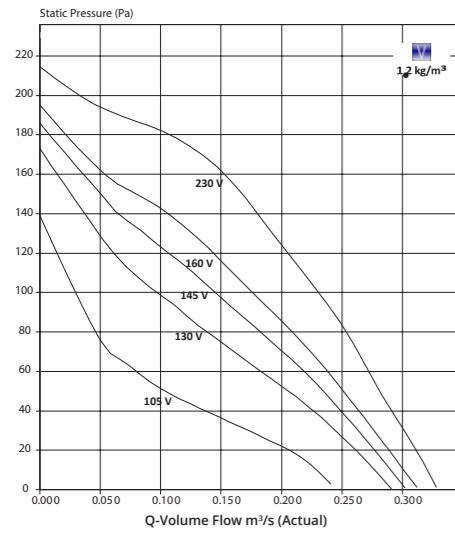
# HR 280-4-1 3EF

1 PH, AC FANS

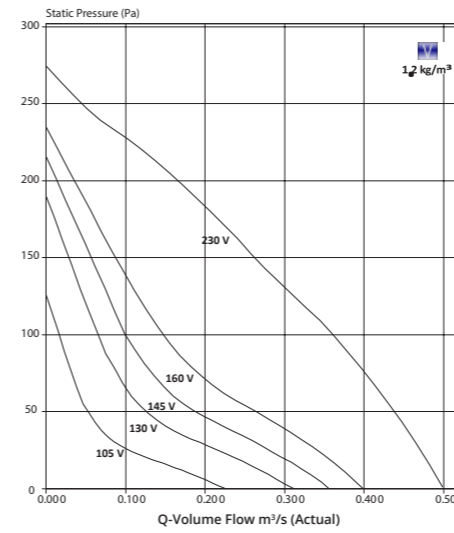
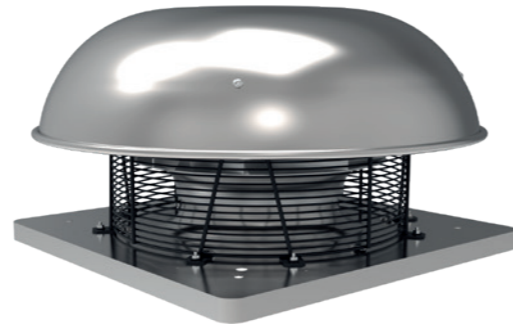


# HR 310-4-1 3EF

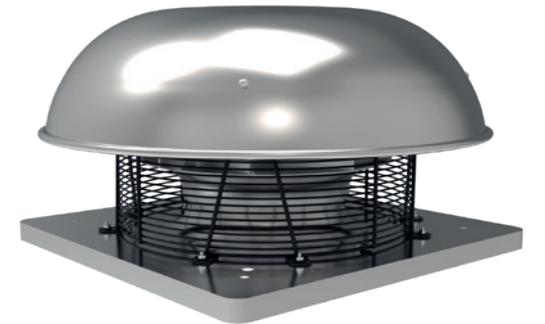
1 PH, AC FANS



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 280-4-1 3EF	RH280408	220-240V/50Hz/1pH	0.11	0.47	IP44	1290	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 310-4-1 3EF	RH310400	220-240V/50Hz/1pH	0.12	0.54	IP44	1230	70

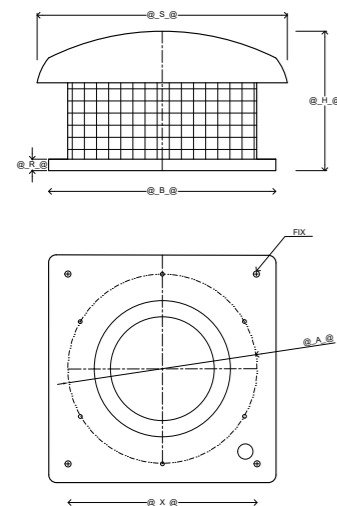
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 280-4-1 3EF	Inlet	-	-25	-14	-10	-10	-14	-16	-21
HR 280-4-1 3EF	Outlet	-	-22	-9	-6	-6	-6	-11	-15

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 310-4-1 3EF	Inlet	-34	-25	-13	-10	-11	-12	18	-24
HR 310-4-1 3EF	Outlet	-34	-24	-11	-5	-4	-8	-15	-22

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 280-4-1 3EF	286	435	260	30	550	330	4 x Ø10	9.5

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 310-4-1 3EF	286	435	260	30	550	330	4 x Ø10	10

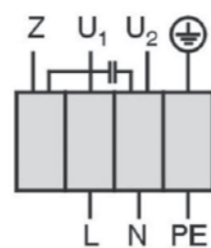
## DRAWINGS AND DIMENSIONS



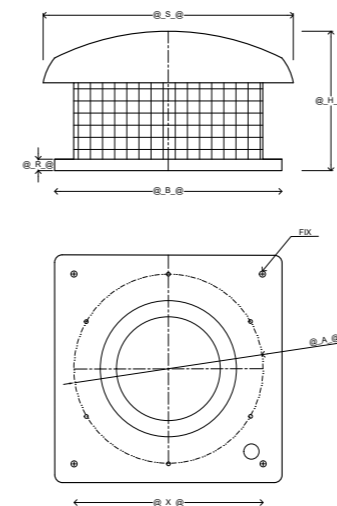
## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



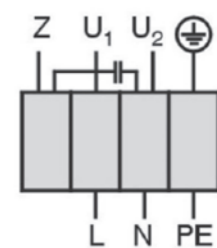
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



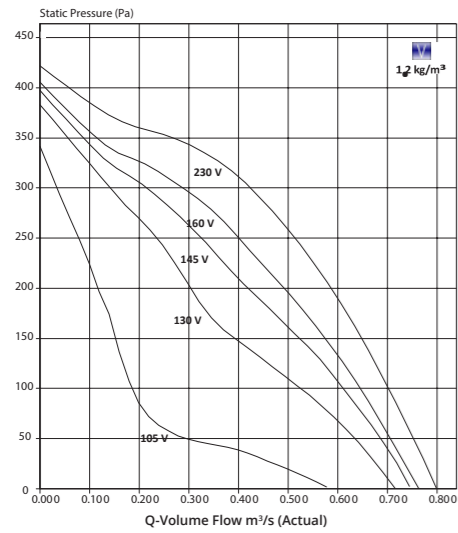
# HR 355-4-1 5FA

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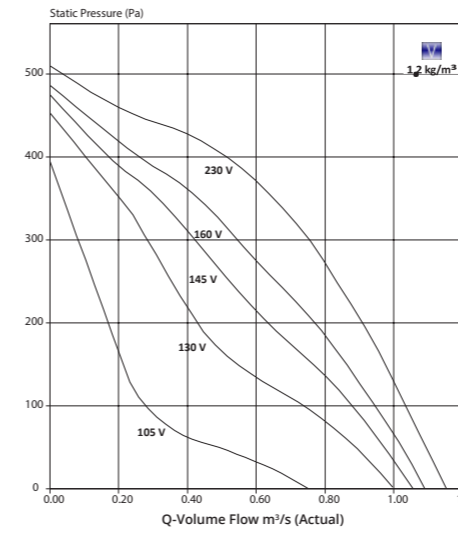
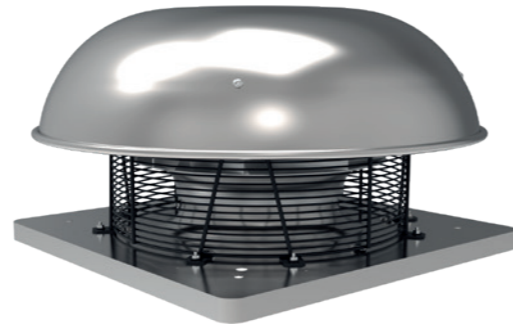


# HR 400-4-1 5HA

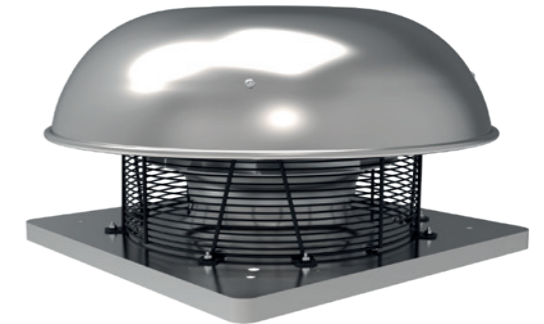
1 PH, AC FANS



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 355-4-1 5FA	RH355400	220-240V/50Hz/1pH	0.28	1.4	IP54	1370	70

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 400-4-1 5HA	RH400400	220-240V/50Hz/1pH	0.49	2.3	IP54	1360	45

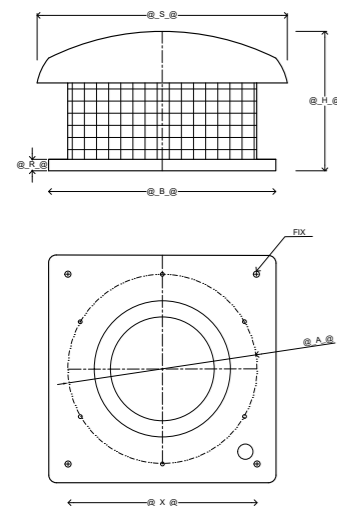
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 355-4-1 5FA	Inlet	-35	-22	-14	-11	-12	-14	-18	-23
HR 355-4-1 5FA	Outlet	-22	-16	-8	-5	-5	-8	-19	-20

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 400-4-1 5HA	Inlet	-35	-22	-14	-11	-12	-14	-18	-23

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 355-4-1 5FA	438	595	365	30	710	450	4 x Ø12	23.5

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 400-4-1 5HA	438	595	365	30	710	450	4 x Ø12	23

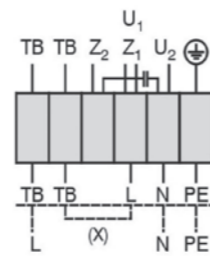
## DRAWINGS AND DIMENSIONS



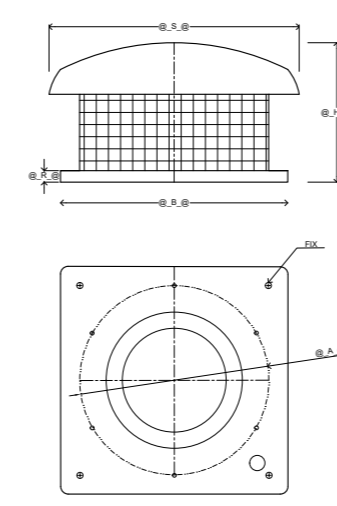
## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



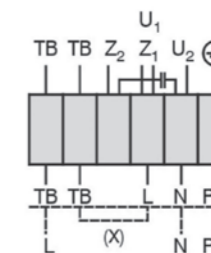
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



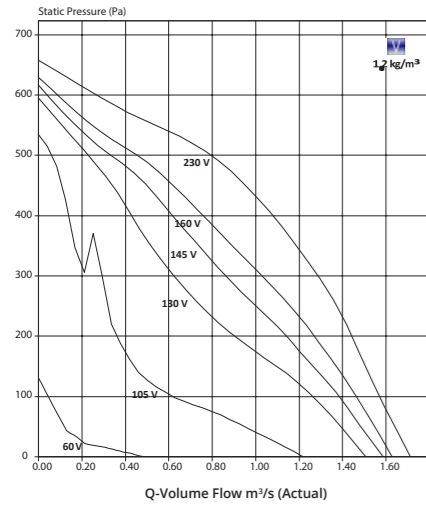
# HR 450-4-1 6FA

1 PH, AC FANS

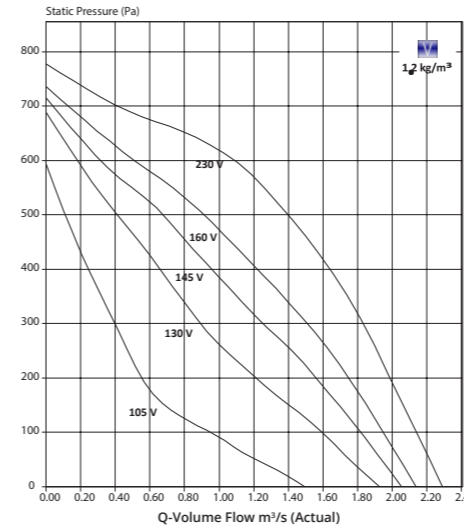
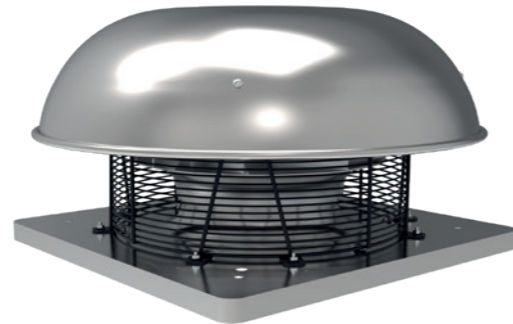


# HR 500-4-1 6HF

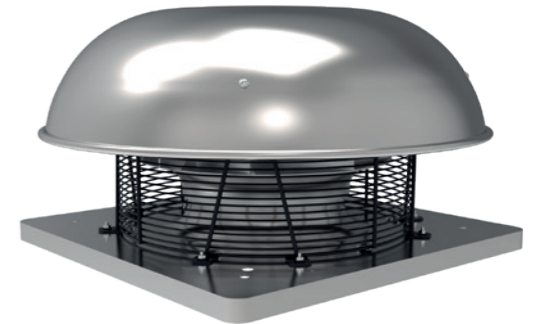
1 PH, AC FANS



PERFORMANCE CHART



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 450-4-1 6FA	RH450400	220-240V/50Hz/1pH	0.89	4.3	IP54	1400	45

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 500-4-1 6HF	RH500400	220-240V/50Hz/1pH	1.42	6.4	IP54	1395	40

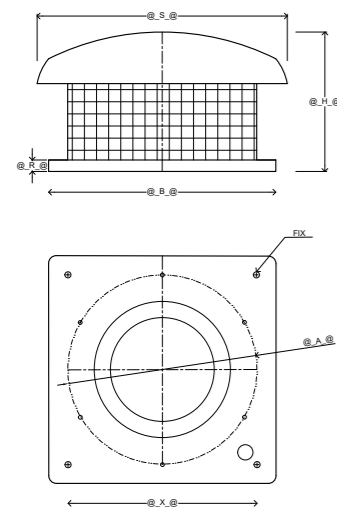
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 450-4-1 6FA	Inlet	-36	-21	-14	-12	-12	-13	-17	-22
HR 450-4-1 6FA	Outlet	-35	-15	-9	-5	-4	-10	-16	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 500-4-1 6HF	Inlet	-36	-21	-14	-12	-12	-13	-17	-22
HR 500-4-1 6HF	Outlet	-35	-15	-9	-5	-4	-10	-16	-22

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 450-4-1 6FA	438	665	440	30	820	535	4 x Ø12	34.8

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 500-4-1 6HF	438	665	440	30	820	535	4 x Ø12	41

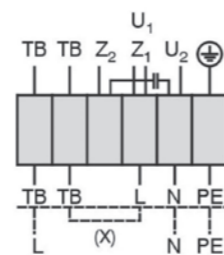
## DRAWINGS AND DIMENSIONS



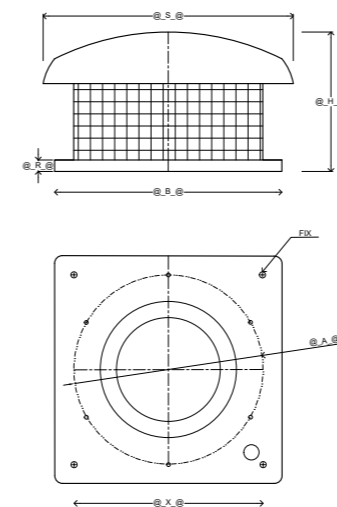
## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



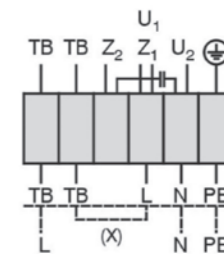
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



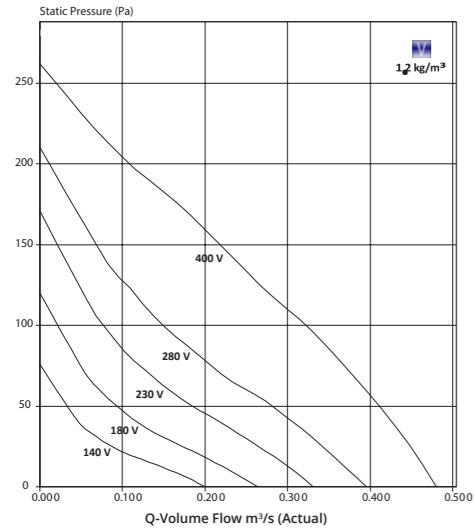
# HR 310-4-3 3EF

3 PH, AC FANS

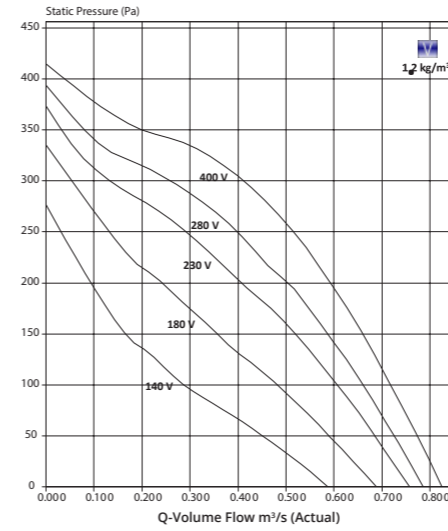
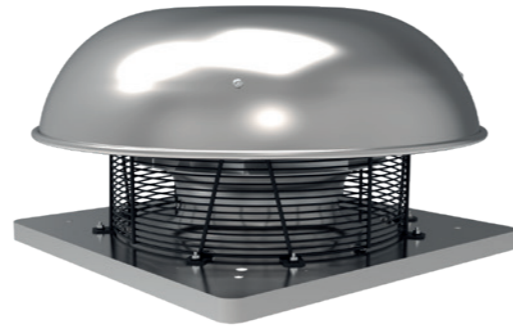


# HR 355-4-3 5DF

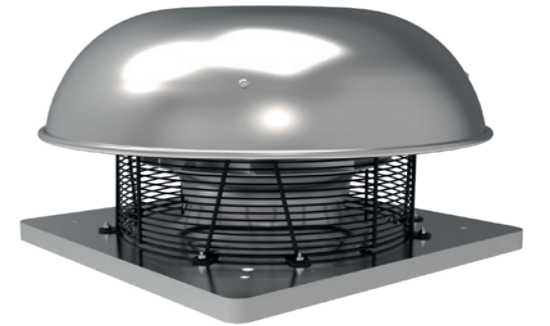
3 PH, AC FANS



PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 310-4-3 3EF	RH310401	380-420V/50Hz/3pH	0.11	0.21	IP54	1145	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 355-4-3 5DF	RH355401	380-420V/50Hz/3pH	0.29	0.69	IP54	1390	60

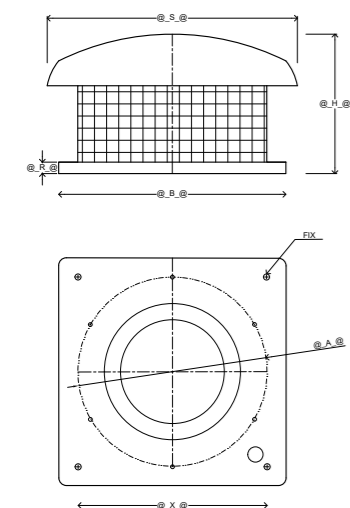
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 310-4-3 3EF	Inlet	-34	-25	-13	-10	-11	-12	-18	-24
HR 310-4-3 3EF	Outlet	-34	-24	-11	-5	-4	-8	-15	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 355-4-3 5DF	Inlet	-	-21	-13	-10	-10	-10	-15	-22
HR 355-4-3 5DF	Outlet	-	-16	-6	-6	-6	-8	-13	-21

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 310-4-3 3EF	286	435	260	30	550	330	4 x Ø10	10

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 355-4-3 5DF	438	595	365	30	710	450	4 x Ø12	19

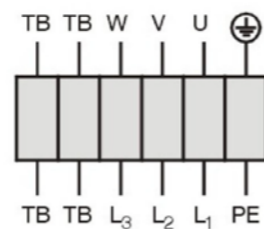
## DRAWINGS AND DIMENSIONS



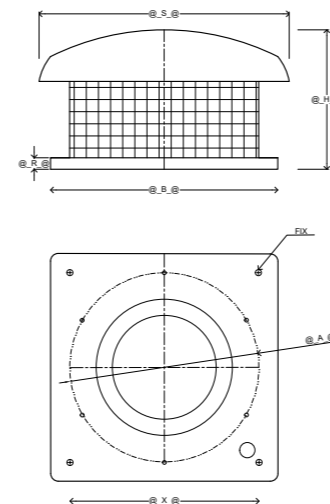
## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).

- U Brown
- V Blue or Grey
- W Black
- TB White
- PE Yellow-Green



## DRAWINGS AND DIMENSIONS

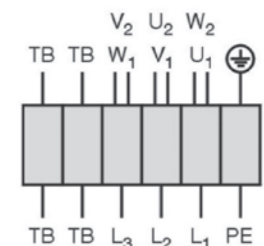


## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).

Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green





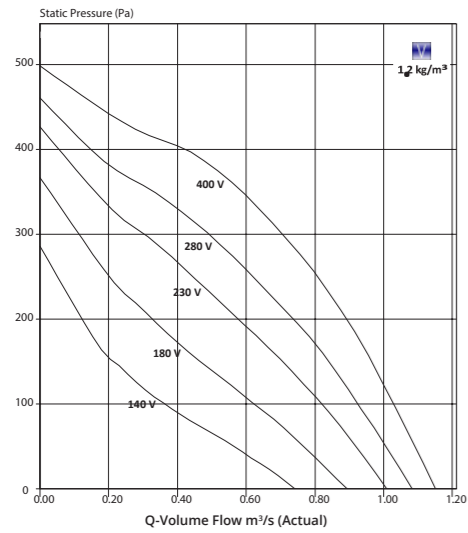
# HR 400-4-3 5FA

3 PH, AC FANS

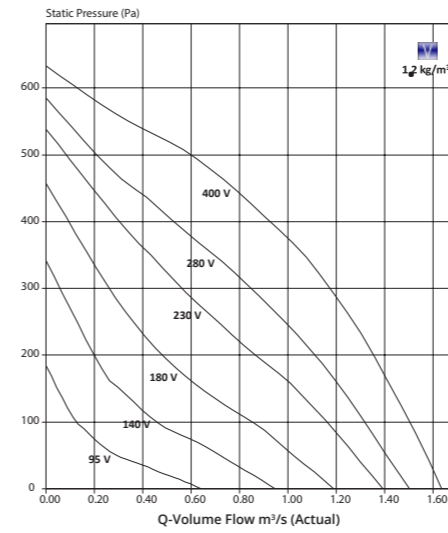
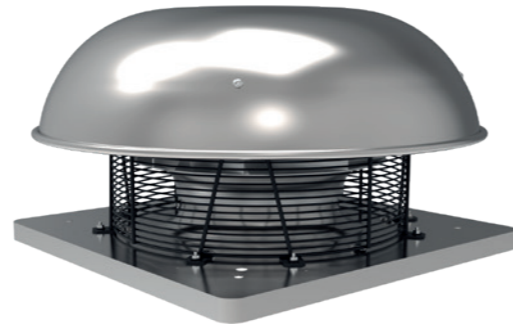


# HR 450-4-3 5HA

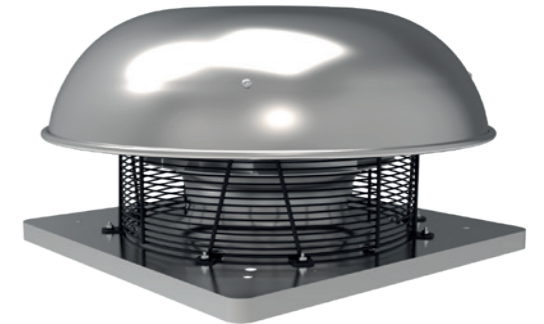
3 PH, AC FANS



PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 400-4-3 5FA	RH400401	380-420V/50Hz/3pH	0.45	0.92	IP54	1360	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 450-4-3 5HA	RH450401	380-420V/50Hz/3pH	0.78	1.56	IP54	1340	55

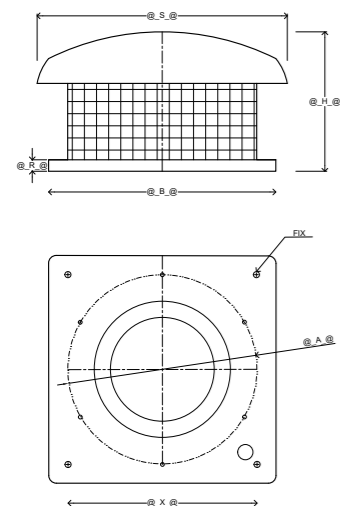
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 400-4-3 5FA	Inlet	-	-22	-13	-10	-10	-10	-15	-21
HR 400-4-3 5FA	Outlet	-	-19	-6	-5	-6	-10	-14	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 450-4-3 5HA	Inlet	-	-15	-12	-10	-9	-12	-19	-27
HR 450-4-3 5HA	Outlet	-	-15	-7	-5	-7	-7	-14	-18

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 400-4-3 5HA	438	595	365	30	710	450	4 x Ø12	24.5

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 450-4-3 5HA	438	665	440	30	820	535	4 x Ø12	30.4

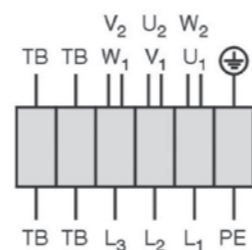
## DRAWINGS AND DIMENSIONS



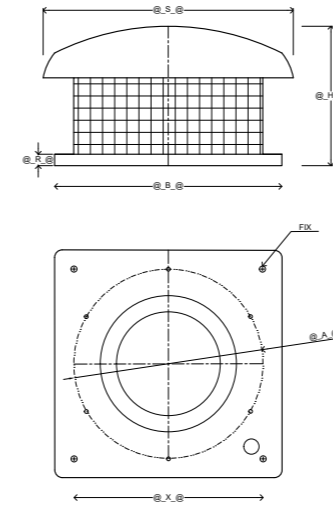
## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



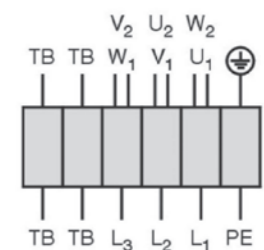
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



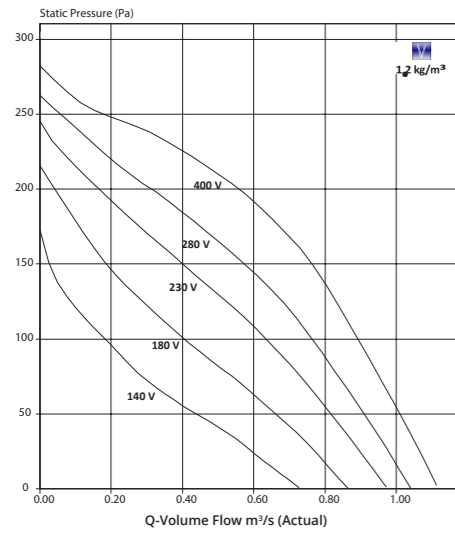
# HR 450-6-3 5HA

3 PH, AC FANS

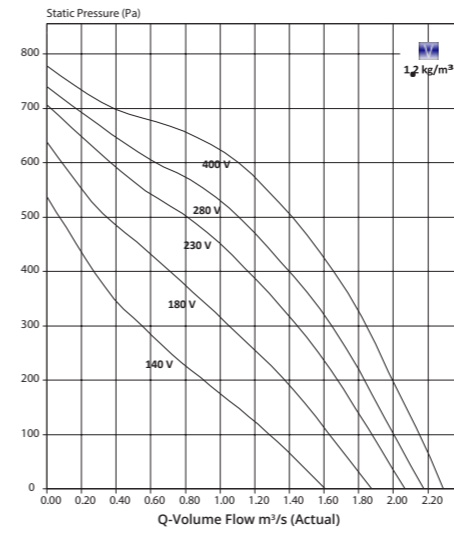
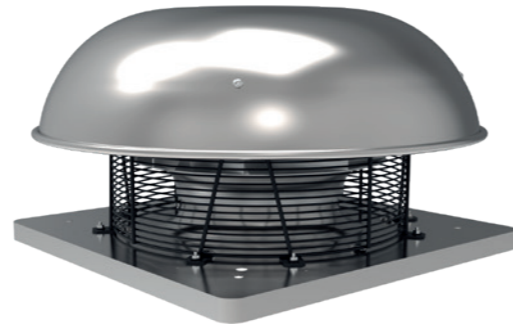


# HR 500-4-3 6HF

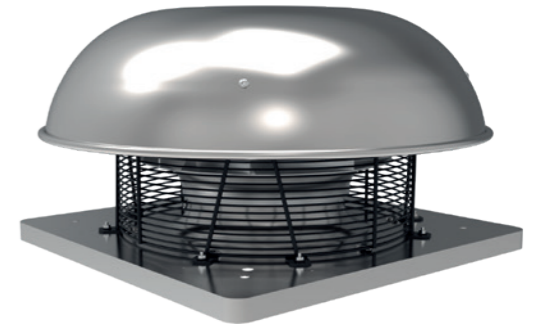
3 PH, AC FANS



PERFORMANCE CHART



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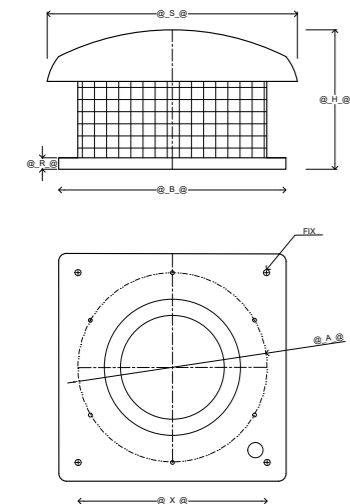


Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 450-6-3 5HA	RH450602	380-420V/50Hz/3pH	0.27	0.61	IP54	905	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 450-6-3 5HA	Inlet	-	-15	-12	-10	-9	-12	-19	-27
HR 450-6-3 5HA	Outlet	-	-15	-7	-5	-7	-7	-14	-18

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 450-6-3 5HA	438	665	440	30	820	535	4 x Ø12	30.4

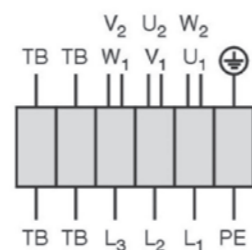
## DRAWINGS AND DIMENSIONS



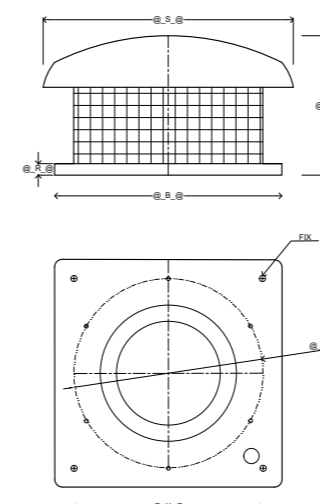
## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



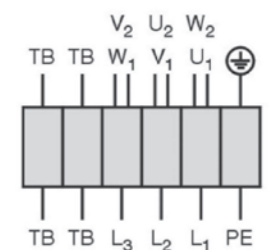
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



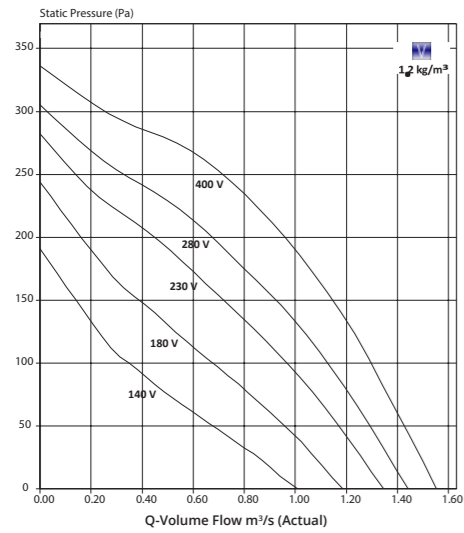
# HR 500-6-3 6DF

3 PH, AC FANS

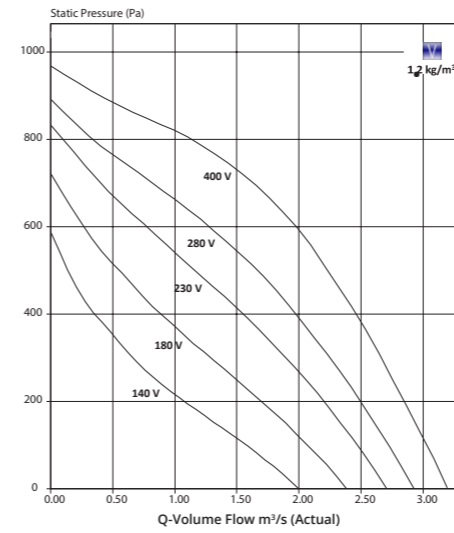
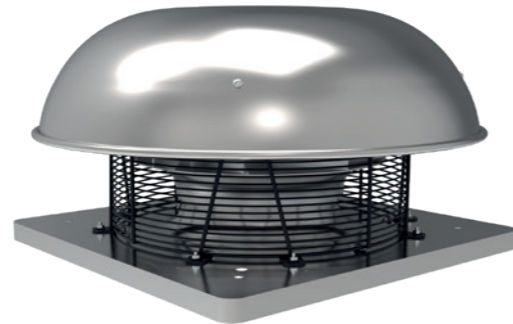


# HR 560-4-3 6LA

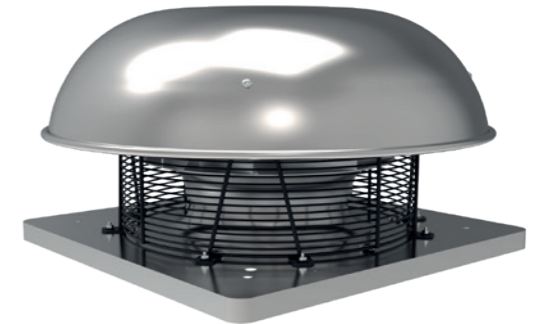
3 PH, AC FANS



PERFORMANCE CHART



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 500-6-3 6DF	RH500602	380-420V/50Hz/3pH	0.43	1.05	IP54	900	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 560-4-3 6LA	RH560400	380-420V/50Hz/3pH	2.18	4.25	IP54	1345	50

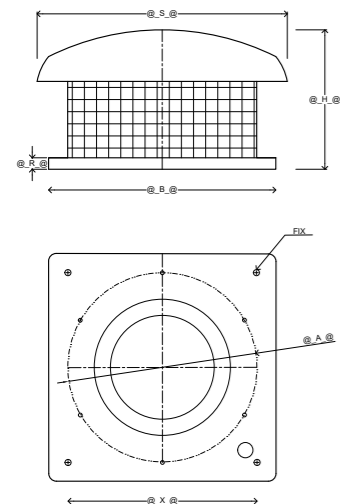
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 500-6-3 6DF	Inlet	-	-15	-10	-10	-11	-12	-17	-23
HR 500-6-3 6DF	Outlet	-	-9	-8	-8	-4	-9	-16	-23

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 560-4-3 6LA	Inlet	-	-14	-10	-12	-12	-15	-19	-23
HR 560-4-3 6LA	Outlet	-	-8	-7	-7	-5	-10	-19	-26

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 500-6-3 6DF	438	665	440	30	820	535	4 x Ø12	39

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 560-4-3 6LA	605	939	505	30	1100	750	4 x Ø14	57

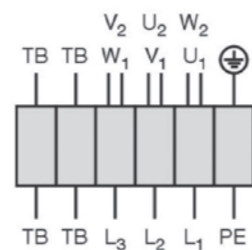
## DRAWINGS AND DIMENSIONS



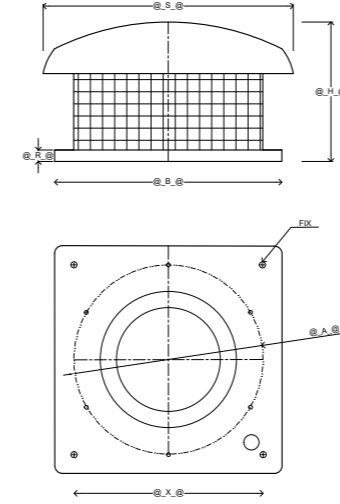
## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



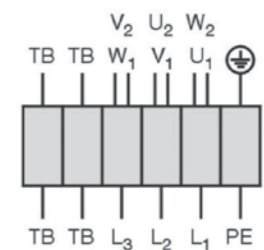
## DRAWINGS AND DIMENSIONS



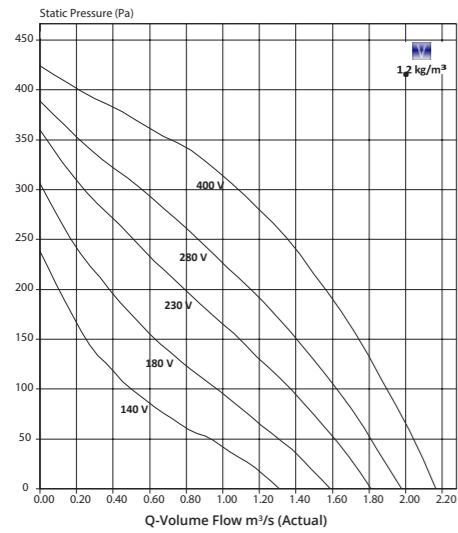
## WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

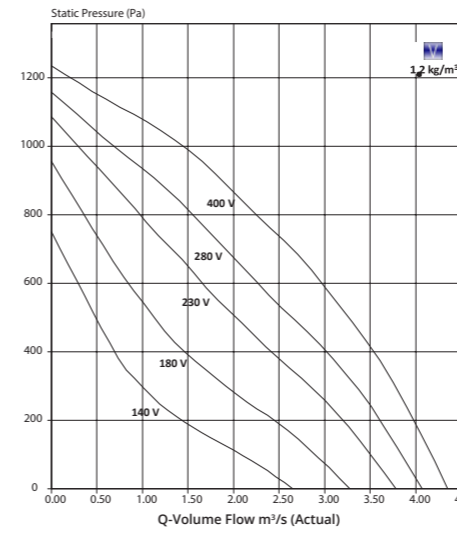
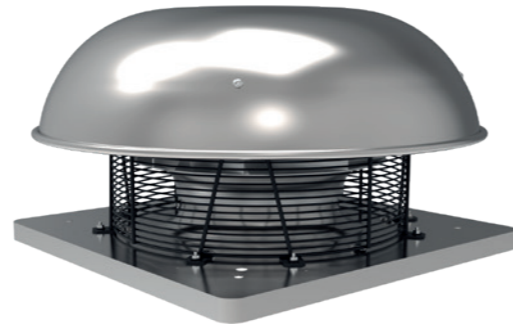
- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



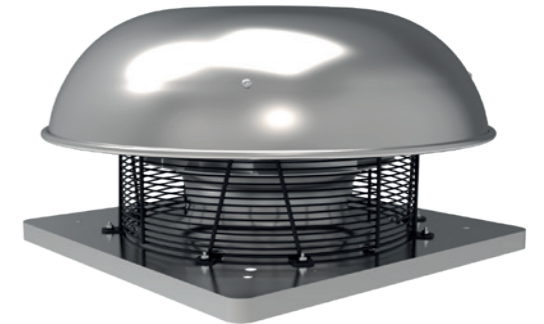




PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 560-6-3 6FA	RH560601	380-420V/50Hz/3pH	0.67	1.5	IP54	880	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 630-4-3 7KF	RH630400	380-420V/50Hz/3pH	3.55	6.41	IP54	1385	40

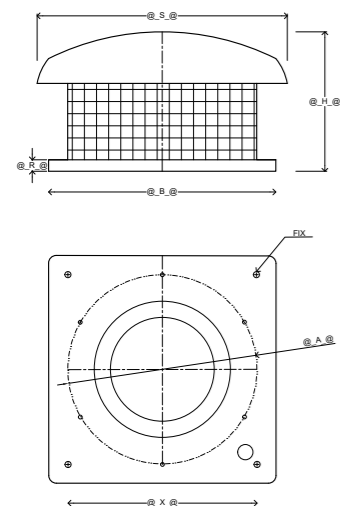
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 560-6-3 6FA	Inlet	-	-14	-10	-12	-12	-15	-19	-23
HR 560-6-3 6FA	Outlet	-	-8	-7	-7	-5	-10	-19	-26

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 630-4-3 7KF	Inlet	-	-21	-16	-15	-10	-12	-17	-25
HR 630-4-3 7KF	Outlet	-	-16	-9	-5	-5	-8	-13	-21

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 560-6-3 6DF	438	665	440	30	820	535	4 x Ø12	59

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 630-4-3 7KF	605	939	505	30	1100	750	4 x Ø14	81.5

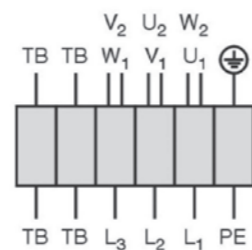
### DRAWINGS AND DIMENSIONS



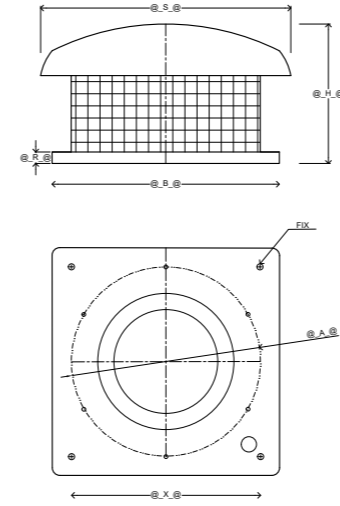
### WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



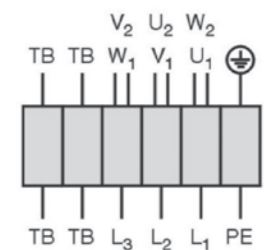
### DRAWINGS AND DIMENSIONS

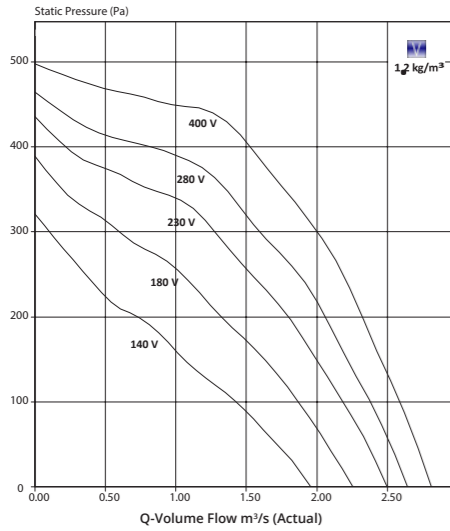


### WIRING DIAGRAMS

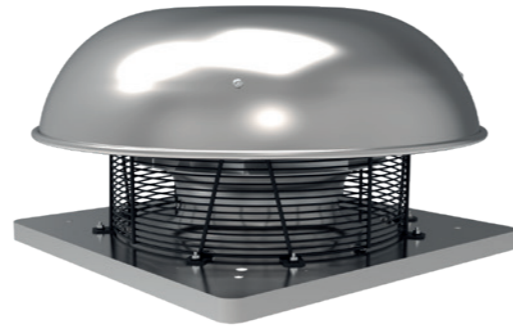
Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green





PERFORMANCE CHART



## ROOF FANS

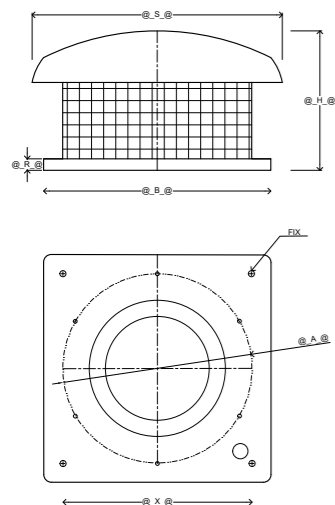
# Vertical Outlet Upward Discharge

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 630-6-3 6LA	RH630601	380-420V/50Hz/3pH	1.2	3.15	IP54	920	65

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 630-6-3 6LA	Inlet	-	-21	-16	-15	-10	-12	-17	-25
HR 630-6-3 6LA	Outlet	-	-16	-9	-5	-5	-8	-13	-21

Fan Size	A	B	H	R	S	X	FIX	Weight
HR 630-6-3 6LA	605	939	505	30	1100	750	4 x Ø14	74

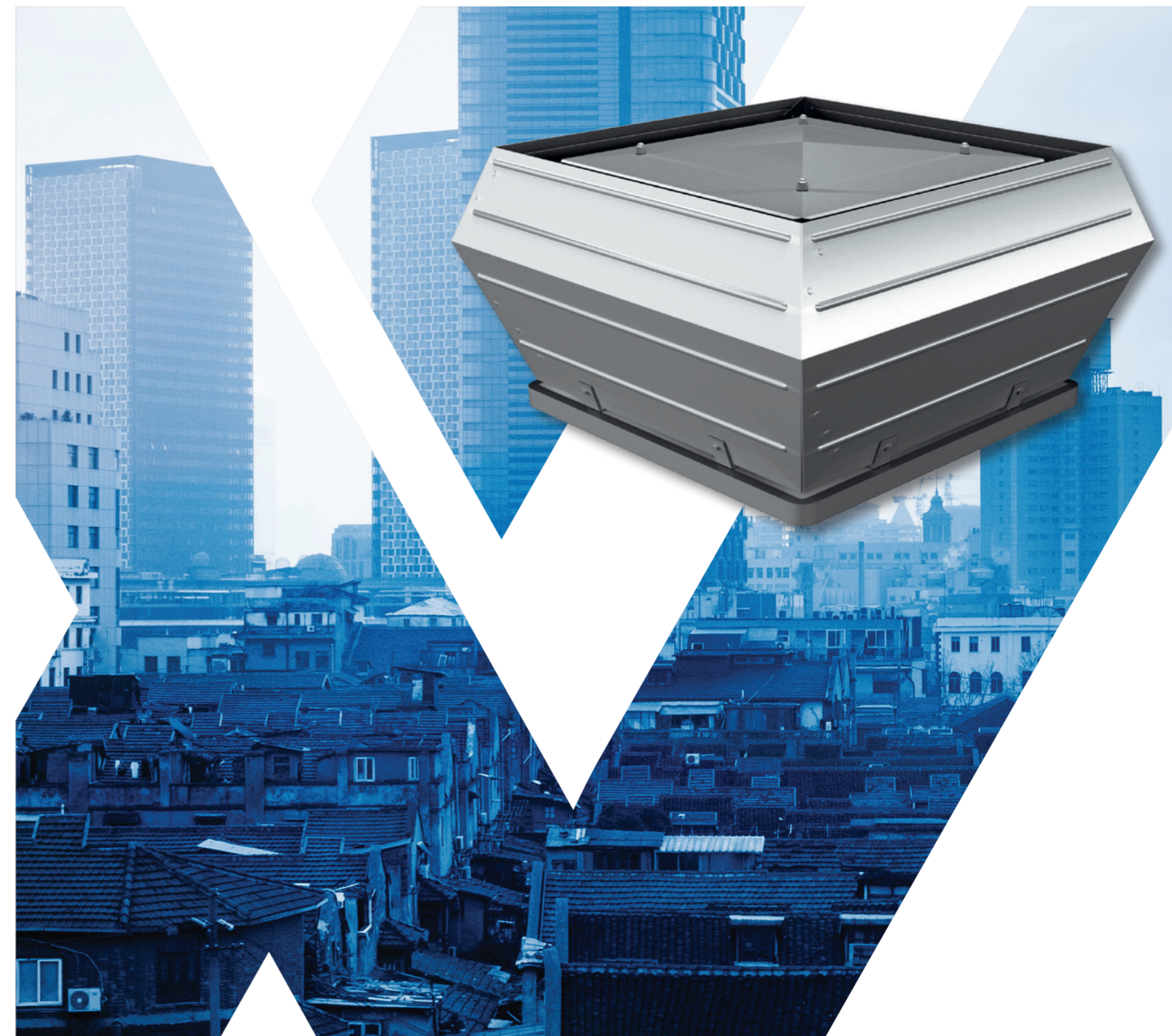
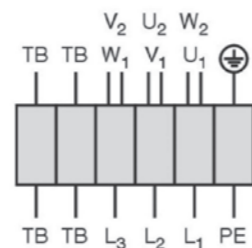
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Three phase motor in delta connection with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases.

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green





# ROOF FANS - Standard Temperature

## Vertical Outlet/Upward Discharge

### PRODUCT FACTS

- Volume flows up to 5 m³/s
- Static Pressures up to 1180 Pa
- Both AC and EC version available
- Low sound level
- High efficiency
- Speed controllable
- ErP 2018 compliant

### ELECTRICAL SUPPLY

- 220-240V / 50Hz / 1Φ & 380-420V / 50Hz / 3Φ

### TEMPERATURE RANGE

- -20°C to +70°C (depending on size)

### SIZES

- 190, 225, 280, 310, 355, 400, 450, 500, 560, 630, 710 and 800 mm

### CONSTRUCTION

The rain protection cover is made of seawater-resistant aluminum up to size 500 mm and from 560 mm onwards it is made of galvanized sheet steel. The motor carrier cage is made of plastic-coated round steel and is designed as a bird guard with contact protection. The fan discharges vertically.

### IMPELLER

The centrifugal impeller has backward curved blades and is manufactured from polyamide (plastic) up to size 560 mm. From 630 onwards, it is made of aluminum.

### INSTALLATION

Fans can be mounted on flat roofs, pent roofs, saddle roofs and shed roofs via either installation frames or alternatively can be fitted directly to the roof base. Fans are suitable for less polluted air.

### SPEED CONTROLLER

The fans are available with speed controls and can be controlled using a separate transformer speed control or with Electronic controllers.

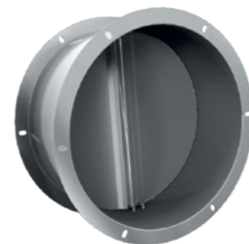
### PRODUCT CODES EXPLAINED

VR 123-4-5 678A

- VR – Vertical Discharge
- 123 – Impeller Diameter e.g., 190
- 4 – Pole Speed, e.g., 2/4/6
- 5 – Electrical Phase, e.g., 1/3
- 678 – Motor code and Stack Length
- A – Closed loop control option for variant with EC motor

### ACCESSORIES - CONTROLLERS

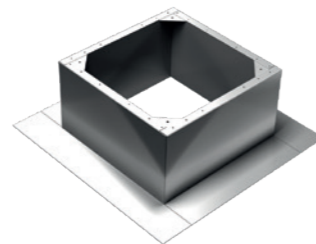
The range of accessories include manual and automatic shutters, swing-out frame, flat roof socket, flexible connectors, outlet covers and insulating connections.



Shutters



Swing-out

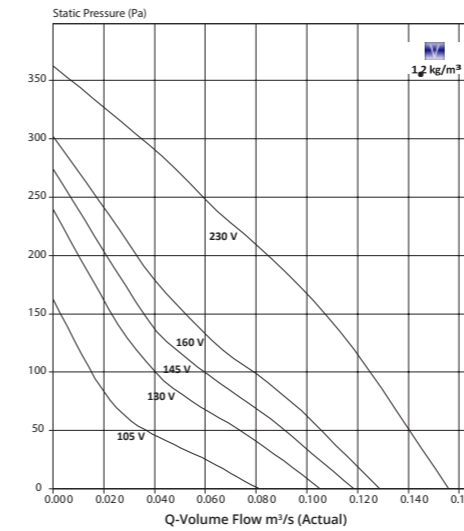


Roof Socket



Speed Controller

Note: The ErP legislation Reg 1253 states that a multi-speed drive or a variable speed drive must be used with this range of products



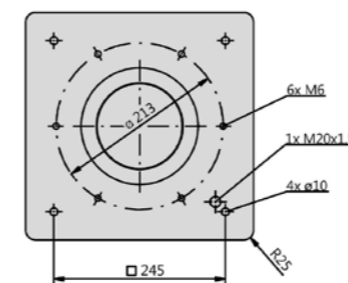
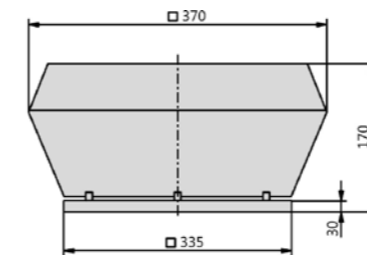
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 190-2-1 3BE	RV190201	220-240V/50Hz/1ph	0.058	0.25	IP44	2305	70

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 190-2-1 3BE	Inlet	-	-27	-16	-12	-12	-16	-18	-23
VR 190-2-1 3BE	Outlet	-	-22	-9	-6	-6	-6	-11	-15

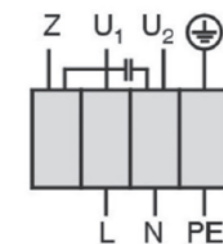
### DRAWINGS AND DIMENSIONS



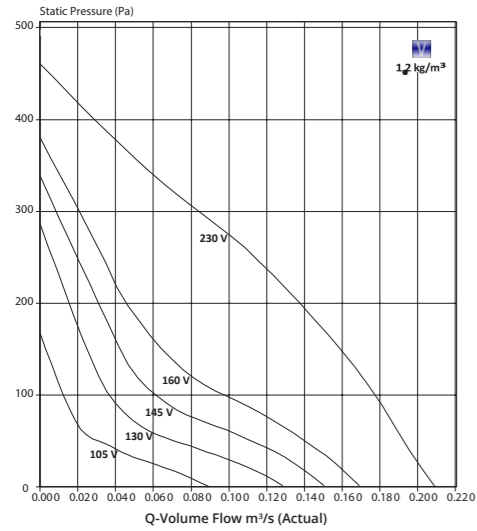
### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

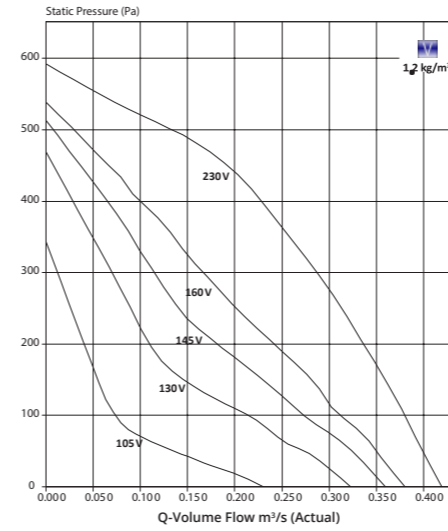
- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green







PERFORMANCE CHART



PERFORMANCE CHART



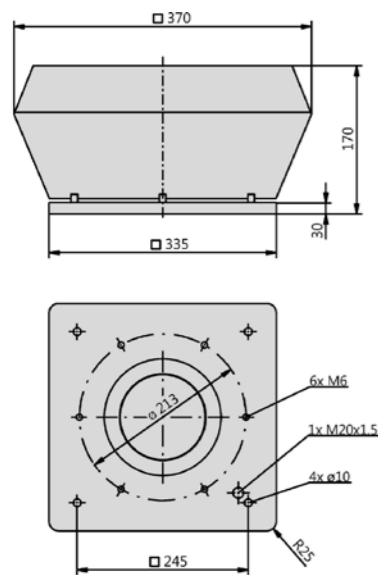
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 225-2-1 3CF	RV225201	220-240V/50Hz/1ph	0.09	0.41	IP44	2340	70

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
HR 280-2-1 3EF	RH280209	220-240V/50Hz/1ph	0.195	0.85	IP44	2665	70

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 225-2-1 3CF	Inlet	-	-27	-20	-12	-12	-16	-18	-23
VR 225-2-1 3CF	Outlet	-100	-22	-9	-6	-6	-6	-11	-15

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
HR 280-2-1 3EF	Inlet	-39	-29	-14	-11	-8	-11	-15	-22
HR 280-2-1 3EF	Outlet	-37	-29	-11	-7	-5	-5	-11	-21

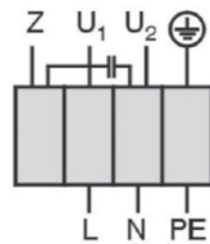
### DRAWINGS AND DIMENSIONS



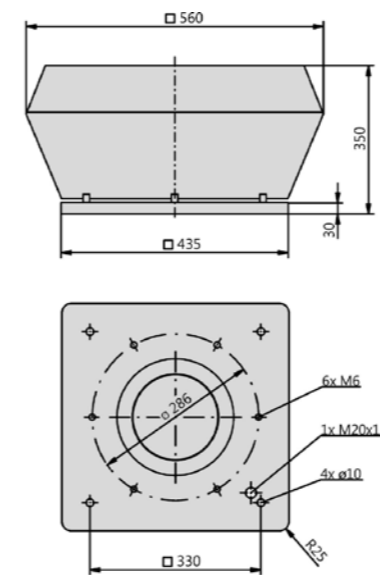
### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch.  
Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



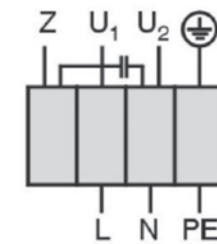
### DRAWINGS AND DIMENSIONS

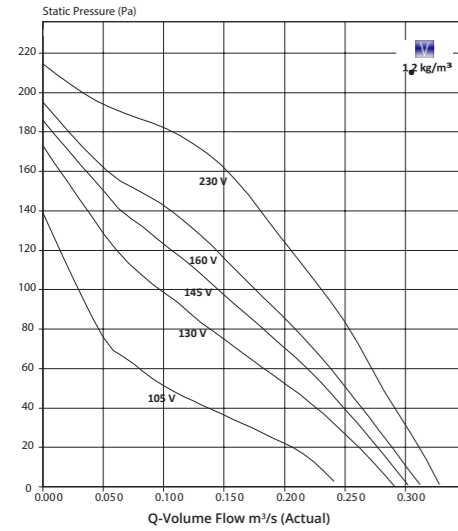


### WIRING DIAGRAMS

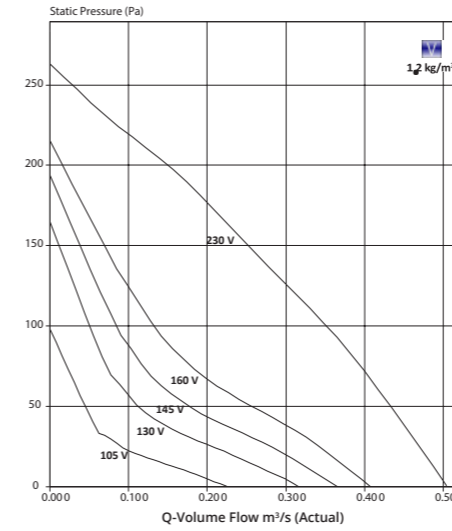
Single phase A.C. motor with operating capacitor and thermostatic switch.  
Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> ---
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green





PERFORMANCE CHART



PERFORMANCE CHART



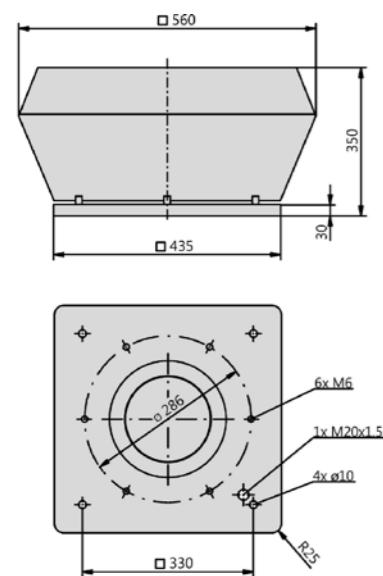
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 280-4-1 3EF	RV280408	220-240V/50Hz/1ph	0.09	0.43	IP44	1350	70

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 310-4-1 3EF	RV310400	220-240V/50Hz/1ph	0.12	0.55	IP44	1200	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 280-4-1 3EF	Inlet	-39	-29	-14	-11	-8	-11	-15	-22
VR 280-4-1 3EF	Outlet	-37	-29	-11	-7	-5	-5	-11	-21

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 310-4-1 3EF	Inlet	-	-25	-13	-10	-11	-12	18	-24
VR 310-4-1 3EF	Outlet	-	-24	-11	-5	-4	-8	-15	-22

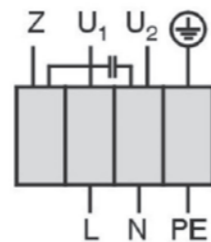
### DRAWINGS AND DIMENSIONS



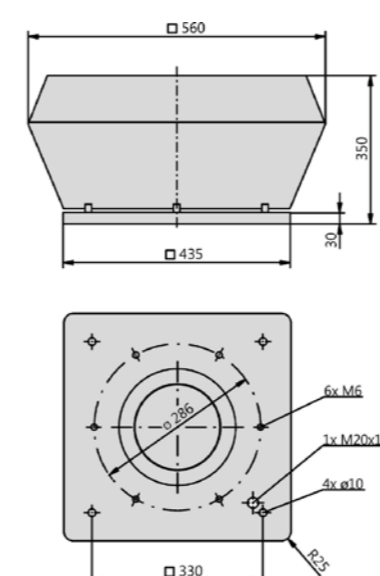
### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>1</sub> Blue
- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green



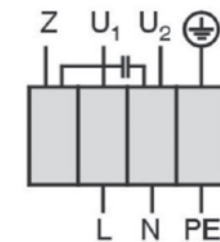
### DRAWINGS AND DIMENSIONS

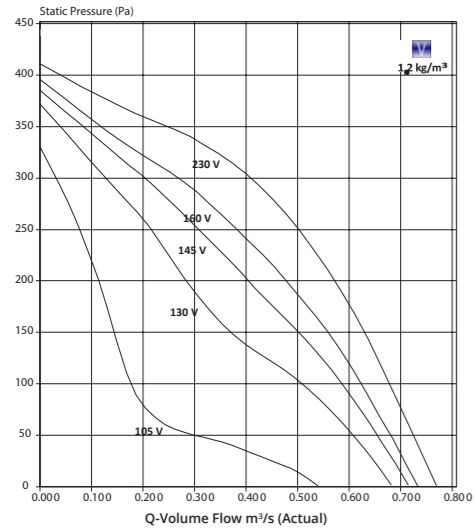


### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch internal wired in series with windings.

- U<sub>2</sub> Black
- Z Brown
- PE Yellow-Green





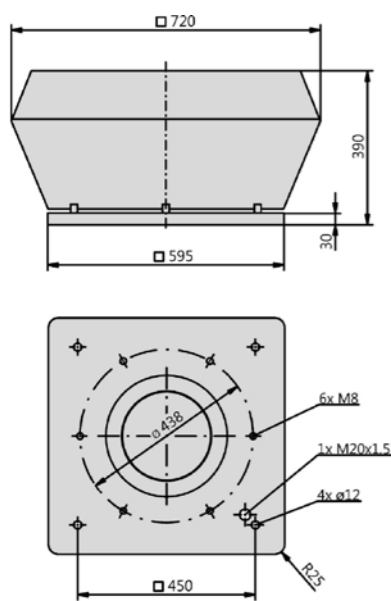
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-4-1 5FA	RV355400	220-240V/50Hz/1ph	0.29	1.4	IP54	1415	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 355-4-1 5FA	Inlet	-	-21	-13	-10	-10	-10	-15	-22
VR 355-4-1 5FA	Outlet	-	-16	-6	-6	-6	-8	-13	-21

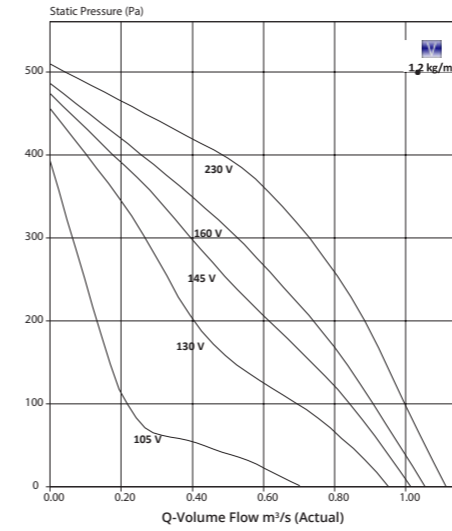
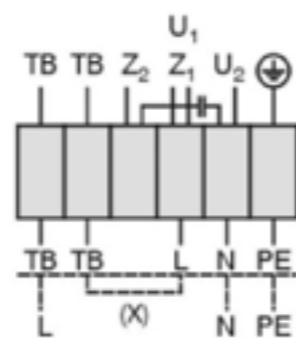
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



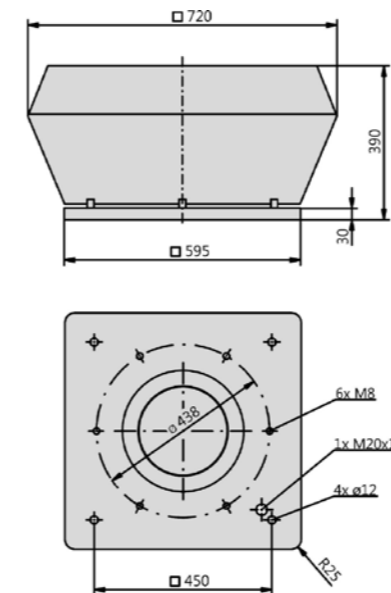
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-4-1 5HA	RV400400	220-240V/50Hz/1ph	0.52	2.55	IP54	1405	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-4-1 5HA	Inlet	-	-23	-14	-11	-11	-11	-18	-22
VR 400-4-1 5HA	Outlet	-	-19	-6	-6	-5	-9	-15	-22

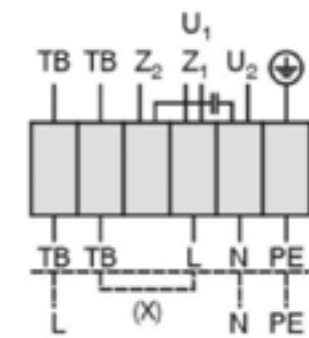
### DRAWINGS AND DIMENSIONS



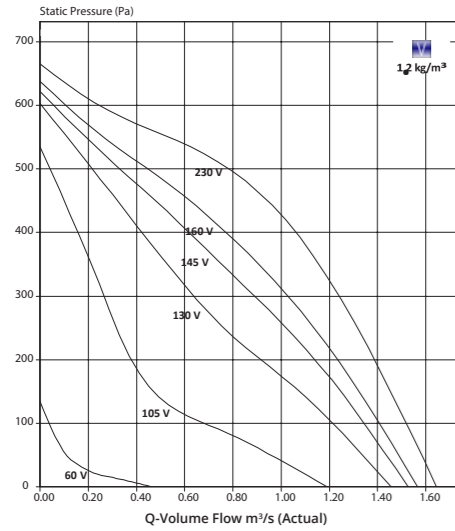
### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green







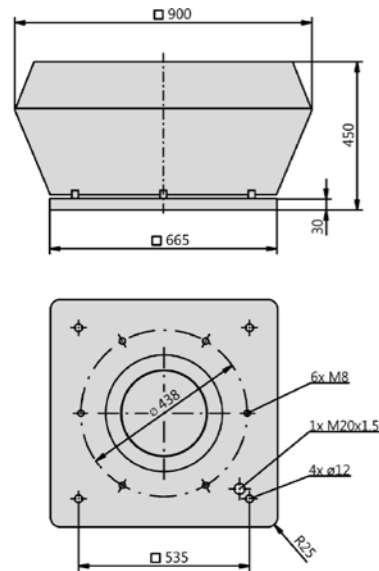
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-4-1 6FA	RV450400	220-240V/50Hz/1ph	0.89	4.3	IP54	1400	45

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-4-1 6FA	Inlet	-	-15	-12	-10	-9	-12	-19	-27
VR 450-4-1 6FA	Outlet	-	-15	-7	-5	-7	-7	-14	-18

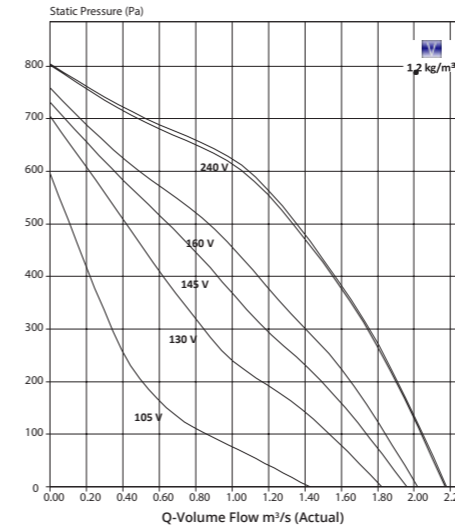
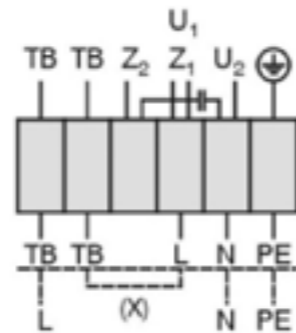
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



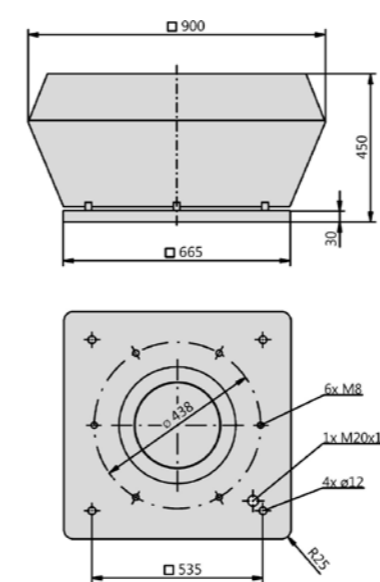
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-4-1 6HF	RV500400	220-240V/50Hz/1ph	1.42	6.4	IP54	1395	40

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-4-1 6HF	Inlet	-	-15	-10	-10	-11	-12	-17	-23
VR 500-4-1 6HF	Outlet	-	-9	-8	-8	-4	-9	-16	-23

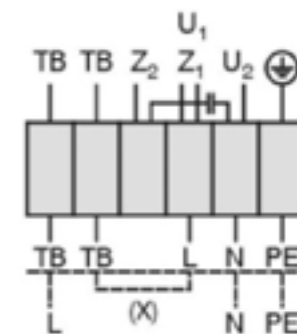
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Single phase A.C. motor with operating capacitor and thermostatic switch. Thermostatic switch wired in series with windings if RE controllers are used. Insert bridge (x) and wire connections shown as dash-line on the drawing.

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



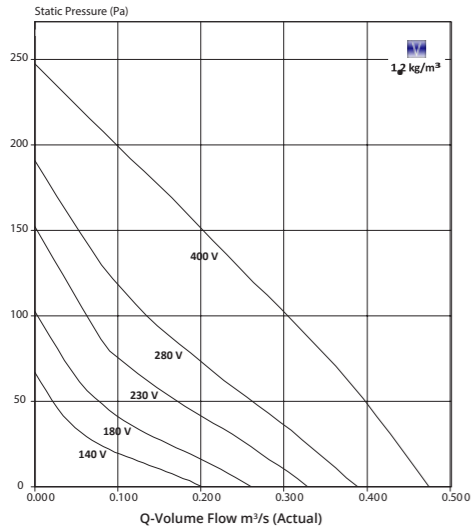
# VR 310-4-3 3EF

3 PH, AC FANS

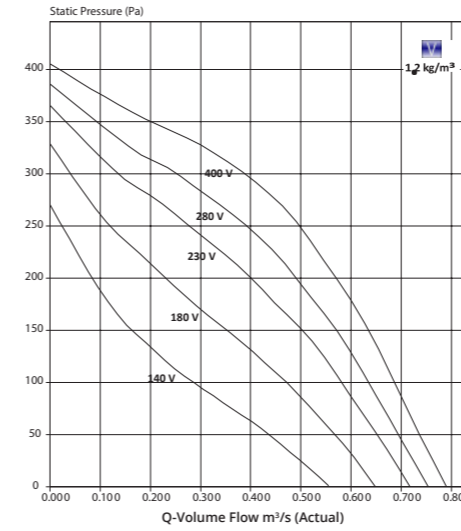


# VR 355-4-3 5DF

3 PH, AC FANS



PERFORMANCE CHART



PERFORMANCE CHART



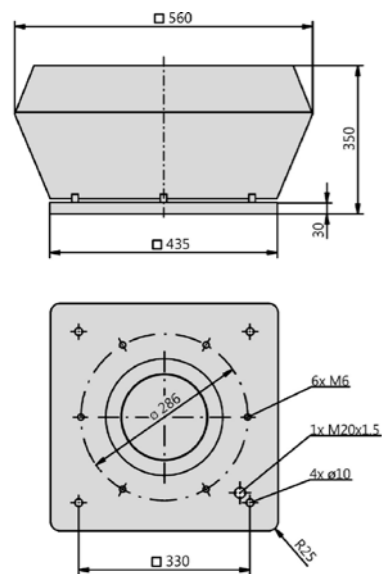
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 310-4-3 3EF	RV310401	380-420V/50Hz/3ph	0.11	0.21	IP54	1145	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-4-3 5DF	RV355401	380-420V/50Hz/3ph	0.285	0.68	IP54	1390	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 310-4-3 3EF	Inlet	-	-25	-13	-10	-11	-12	-18	-24
VR 310-4-3 3EF	Outlet	-	-24	-11	-5	-4	-8	-15	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 355-4-3 5DF	Inlet	-	-21	-13	-10	-10	-10	-15	-22
VR 355-4-3 5DF	Outlet	-	-16	-6	-6	-6	-8	-13	-21

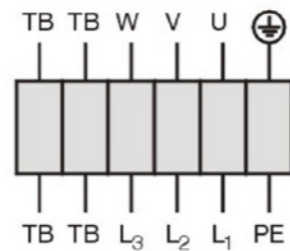
## DRAWINGS AND DIMENSIONS



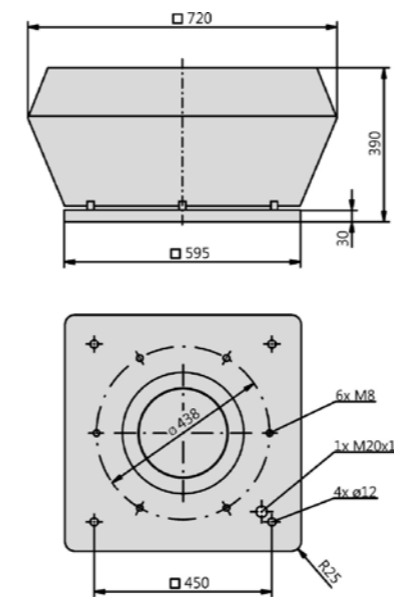
## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green



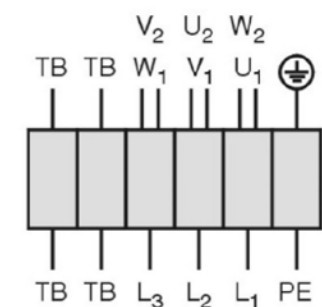
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



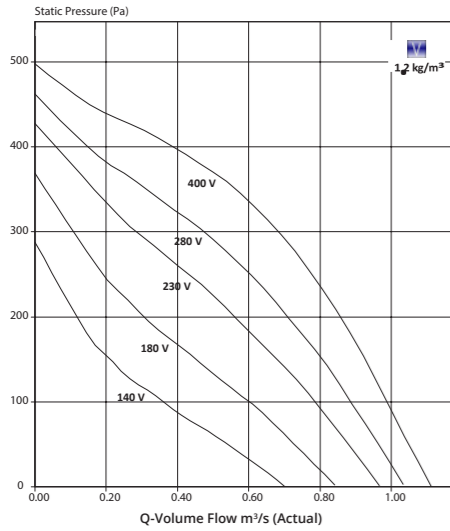
# VR 400-4-3 5FA

3 PH, AC FANS

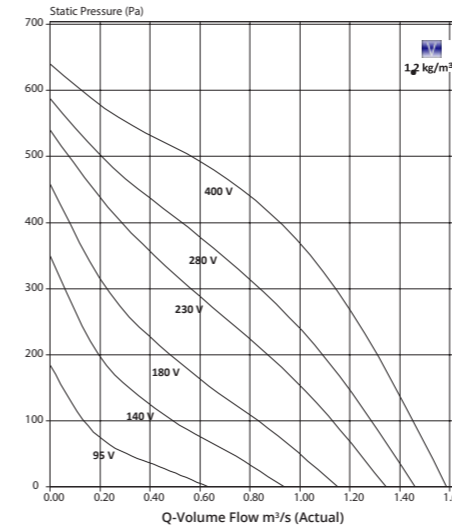


# VR 450-4-3 5HA

3 PH, AC FANS



PERFORMANCE CHART



PERFORMANCE CHART



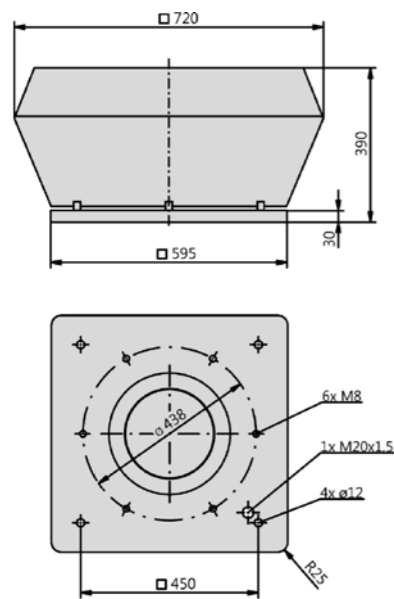
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-4-3 5FA	RV400401	380-420V/50Hz/3ph	0.445	0.90	IP54	1360	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-4-3 5HA	RV450401	380-420V/50Hz/3ph	0.78	1.56	IP54	1340	55

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)								
		63	125	250	500	1000	2000	4000	8000	
VR 400-4-3 5FA	Inlet	-	-22	-13	-10	-10	-10	-15	-21	
VR 400-4-3 5FA	Outlet	-	-19	-6	-5	-6	-10	-14	-22	

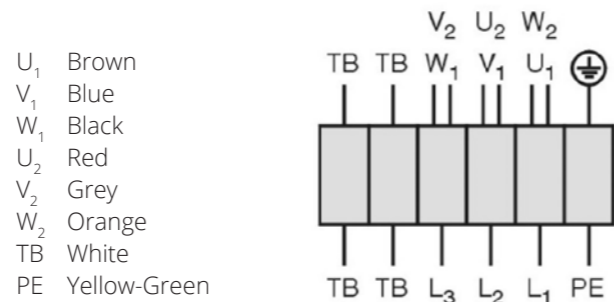
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)								
		63	125	250	500	1000	2000	4000	8000	
VR 450-4-3 5HA	Inlet	-	-15	-12	-10	-9	-12	-19	-27	
VR 450-4-3 5HA	Outlet	-	-15	-7	-5	-7	-7	-14	-18	

## DRAWINGS AND DIMENSIONS

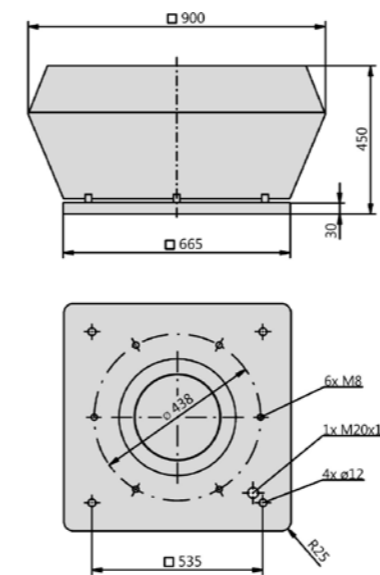


## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

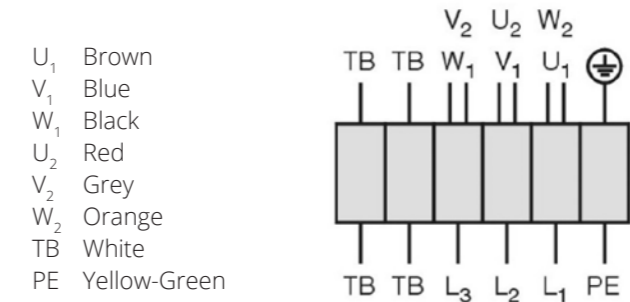


## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases





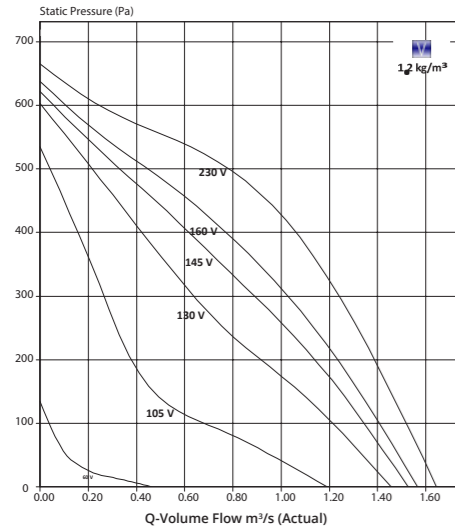
# VR 450-6-3 5HA

3 PH, AC FANS

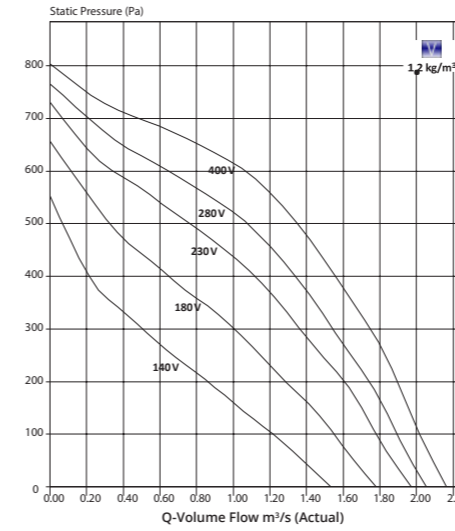


# VR 500-4-3 6HF

3 PH, AC FANS



PERFORMANCE CHART



PERFORMANCE CHART



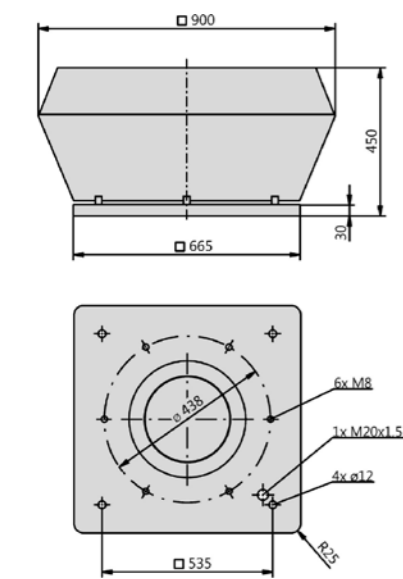
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-6-3 5HA	RV450402	380-420V/50Hz/3ph	0.26	0.60	IP54	910	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-4-3 6HF	RV500401	380-420V/50Hz/3ph	1.32	2.8	IP54	1400	70

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-6-3 5HA	Inlet	-	-15	-12	-10	-9	-12	-19	-27
VR 450-6-3 5HA	Outlet	-	-15	-7	-5	-7	-7	-14	-18

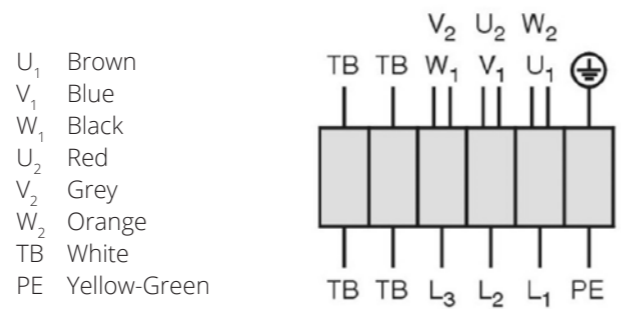
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-4-3 6HF	Inlet	-40	-21	-11	-10	-10	-11	-16	-23
VR 500-4-3 6HF	Outlet	-27	-13	-8	-5	-5	-9	-16	-25

## DRAWINGS AND DIMENSIONS

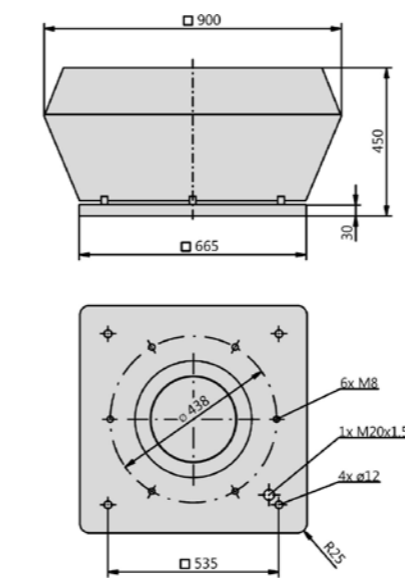


## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

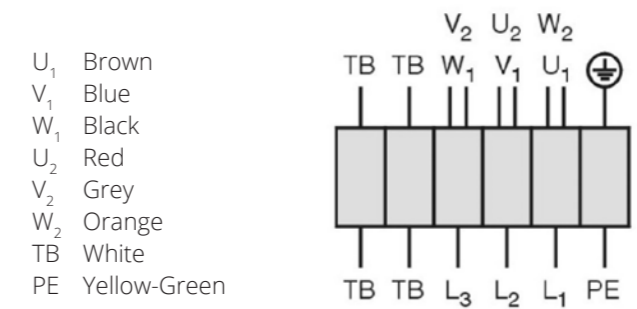


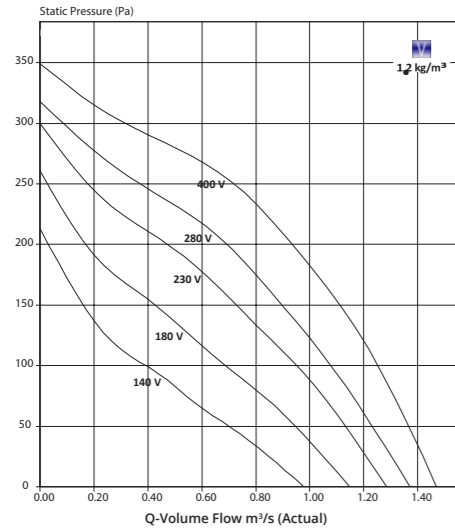
## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases





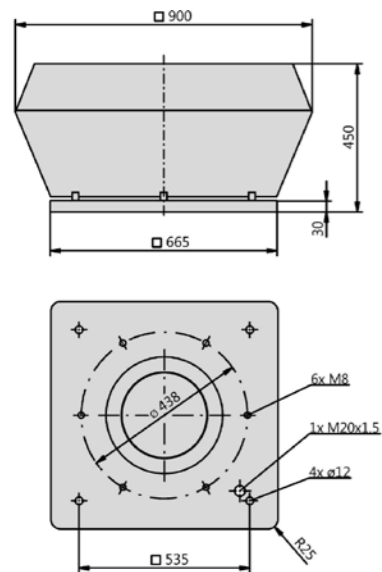
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-6-3 6DF	RV500402	380-420V/50Hz/3ph	0.41	1.05	IP54	905	60

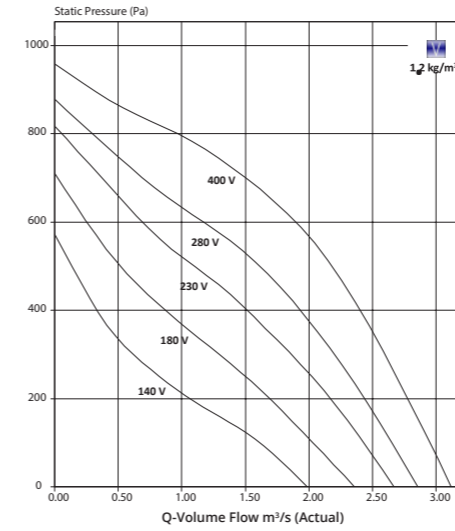
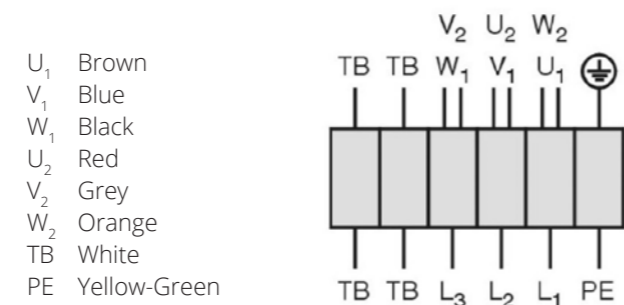
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-6-3 6DF	Inlet	-	-15	-10	-10	-11	-12	-17	-23
VR 500-6-3 6DF	Outlet	-	-9	-8	-8	-4	-9	-16	-23

### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases



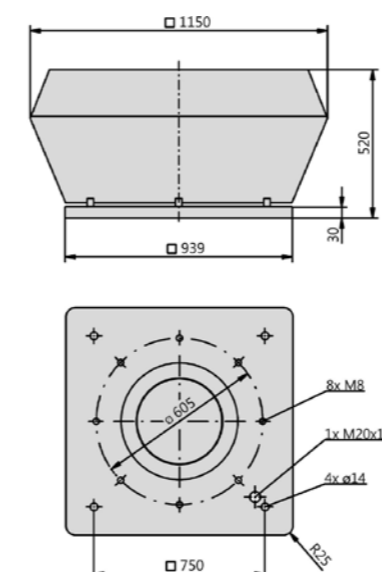
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 560-4-3 6LA	RV560400	380-420V/50Hz/3ph	2.17	4.20	IP54	1345	50

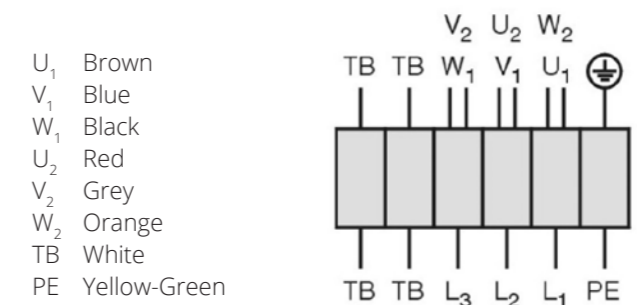
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 560-4-3 6LA	Inlet	-	-14	-10	-12	-12	-15	-19	-23
VR 560-4-3 6LA	Outlet	-	-8	-7	-7	-5	-10	-19	-26

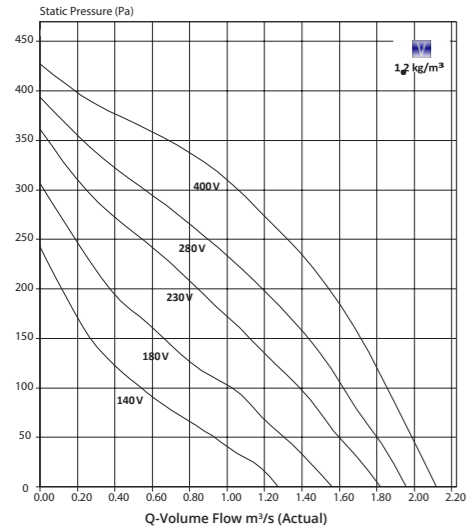
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases





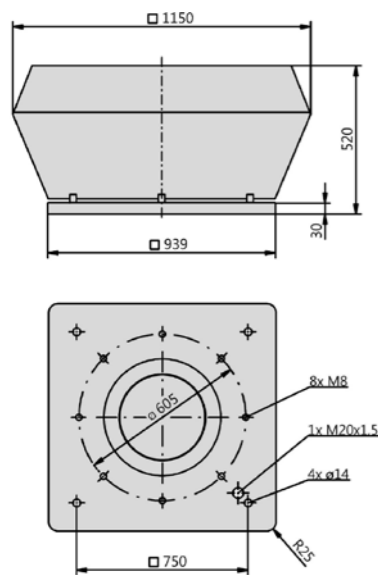
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 560-6-3 6FA	RV560401	380-420V/50Hz/3ph	0.68	1.55	IP54	885	50

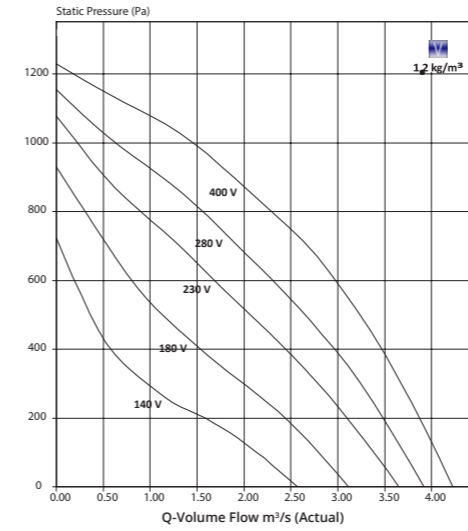
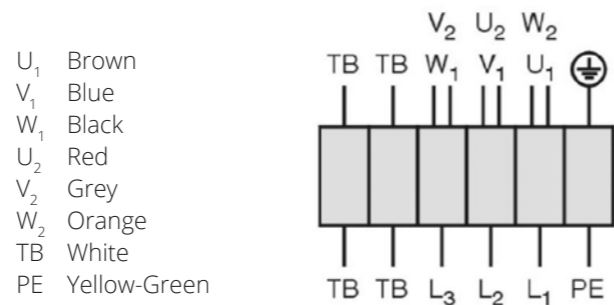
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 560-6-3 6FA	Inlet	-	-14	-10	-12	-12	-15	-19	-23
VR 560-6-3 6FA	Outlet	-	-8	-7	-7	-5	-10	-19	-26

**DRAWINGS AND DIMENSIONS**



**WIRING DIAGRAMS**

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases



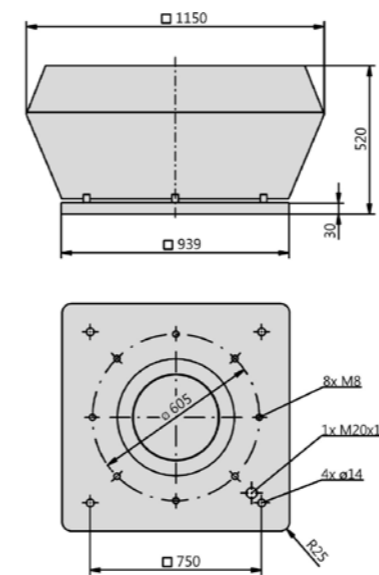
PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 630-4-3 7KF	RV630400	380-420V/50Hz/3ph	3.61	6.40	IP54	1380	40

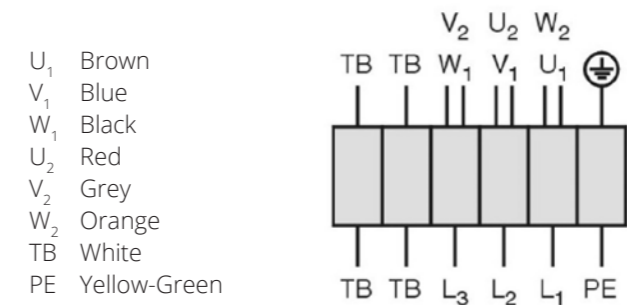
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 630-4-3 7KF	Inlet	-	-15	-13	-12	-11	-12	-16	-23
VR 630-4-3 7KF	Outlet	-	-11	-9	-7	-5	-7	-12	-20

**DRAWINGS AND DIMENSIONS**

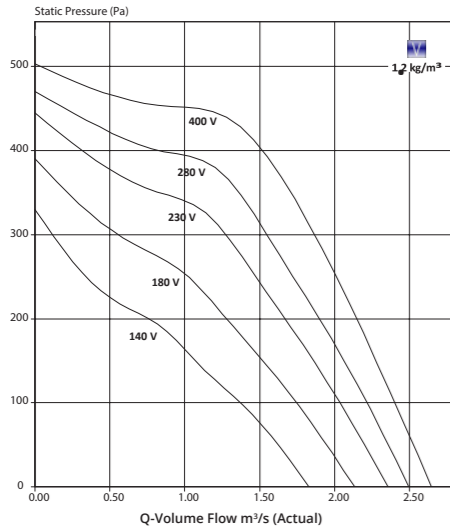


**WIRING DIAGRAMS**

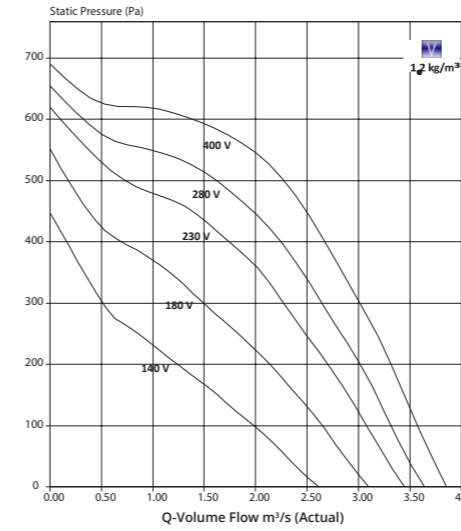
Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases







PERFORMANCE CHART



PERFORMANCE CHART



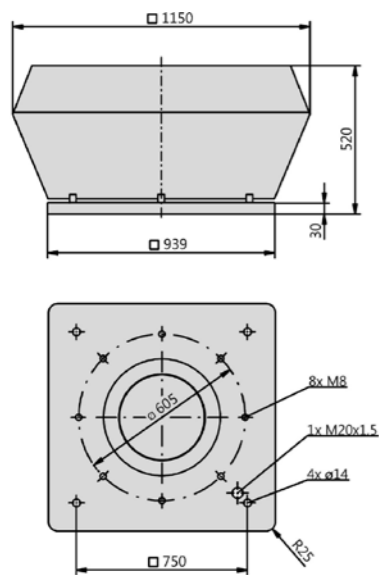
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 630-6-3 6LA	RV630401	380-420V/50Hz/3ph	1.18	3.15	IP54	920	65

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 710-6-3 7NA	RV710403	380-420V/50Hz/3ph	2.03	4.5	IP54	935	70

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 630-6-3 6LA	Inlet	-	-15	-8	-11	-12	-14	-18	-22
VR 630-6-3 6LA	Outlet	-	-13	-6	-4	-7	-12	-16	-24

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 710-6-3 7NA	Inlet	-25	-18	-14	-13	-13	-13	-14	-25
VR 710-6-3 7NA	Outlet	-26	-16	-7	-6	-6	-7	-12	-20

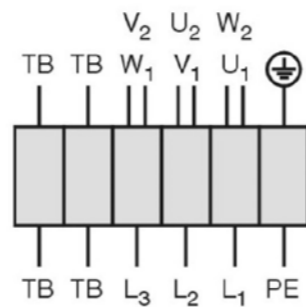
### DRAWINGS AND DIMENSIONS



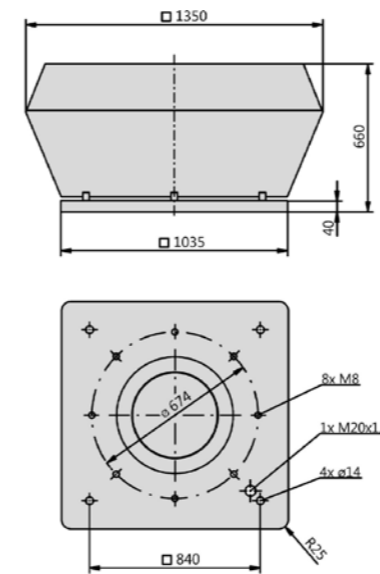
### WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



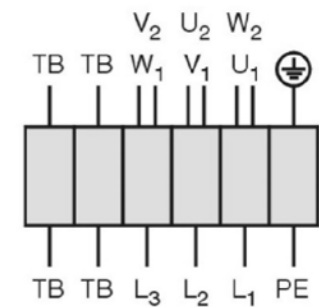
### DRAWINGS AND DIMENSIONS



### WIRING DIAGRAMS

Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases

- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green



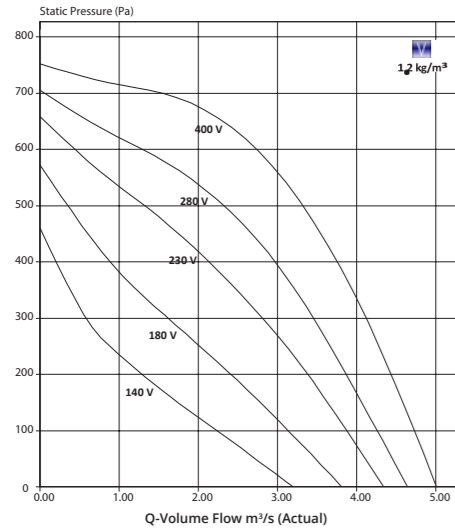
# VR 800-6-3 7NA

3 PH, AC FANS

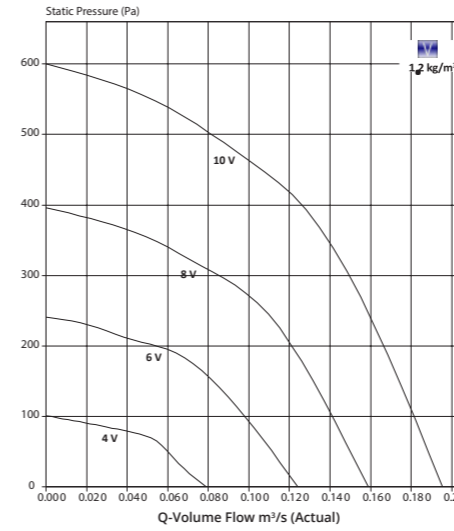


# VR 190-E-1 3BK

1 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



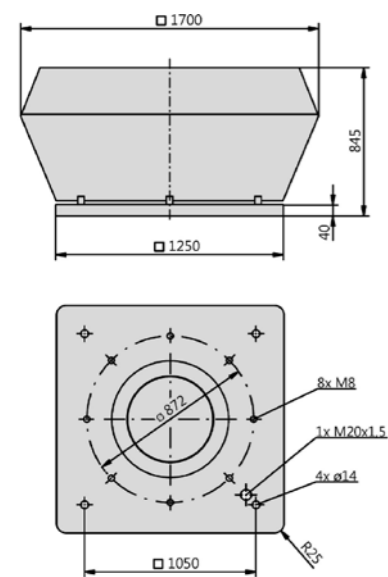
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 800-6-3 7NA	RV800400	380-420V/50Hz/3ph	2.8	5.5	IP54	910	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 190-E-1 3BK	RV190000	220-240V/50Hz/1ph	0.12	1.0	IP44	3470	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 800-6-3 7NA	Inlet	-	-15	-12	-12	-11	-9	-15	-24
VR 800-6-3 7NA	Outlet	-	-12	-10	-7	-6	-5	-13	-21

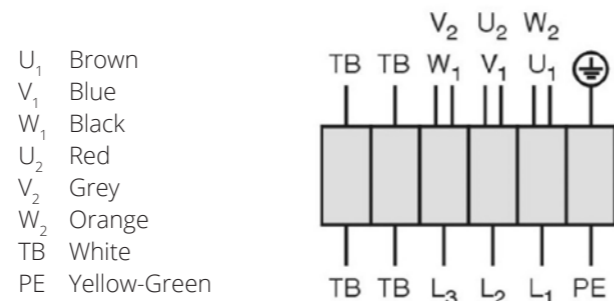
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 190-E-1 3BK	Inlet	-	-25	-13	-9	-9	-9	-13	-17
VR 190-E-1 3BK	Outlet	-	-24	-12	-6	-6	-5	-11	-15

## DRAWINGS AND DIMENSIONS

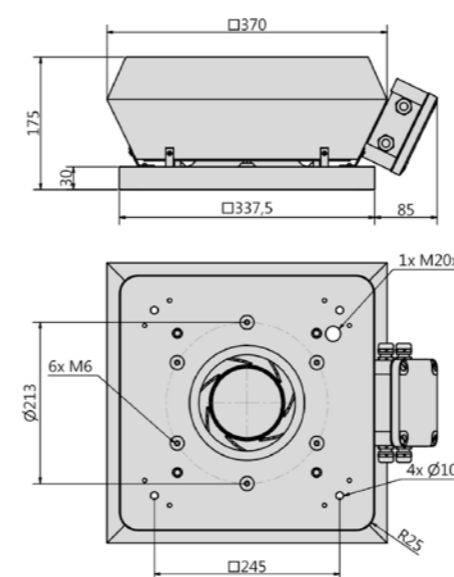


## WIRING DIAGRAMS

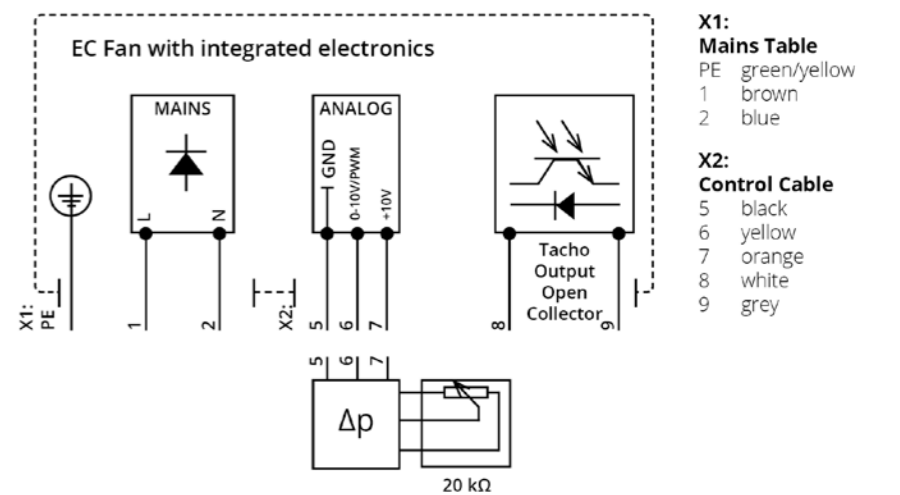
Three phase motor with thermostatic switch (TB).  
Changing of rotation direction by interchanging of 2 phases



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



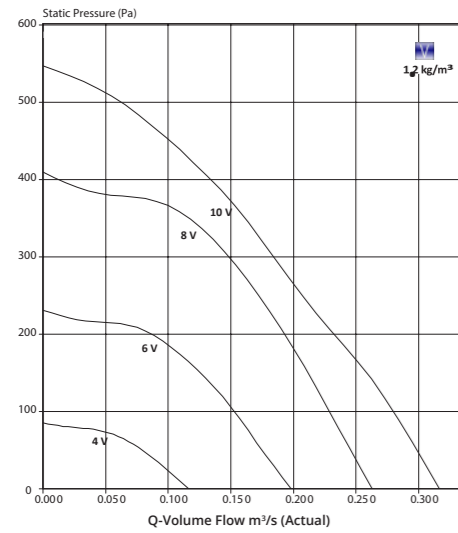
# VR 225-E-1 3BK

1 PH, EC FANS (OPEN LOOP)

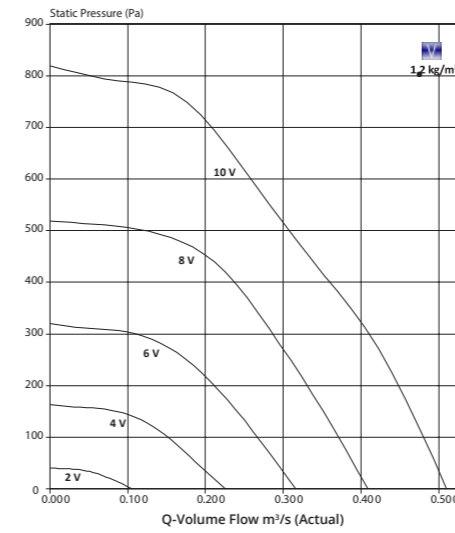


# VR 250-E-1 3DI

1 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



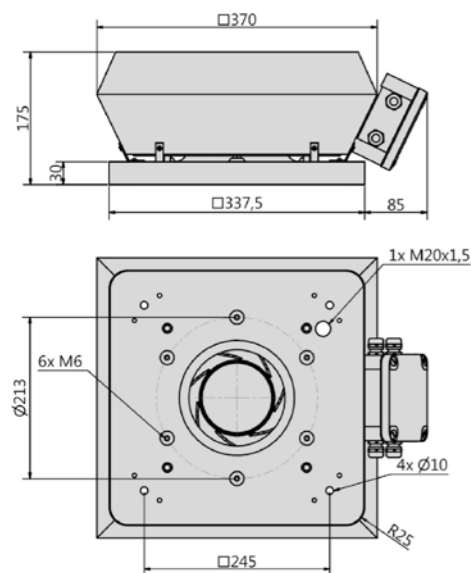
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 225-E-1 3BK	RV225000	220-240V/50Hz/1ph	0.12	0.98	IP44	2750	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 250-E-1 3DI	RV250000	220-240V/50Hz/1ph	0.31	1.37	IP54	3250	50

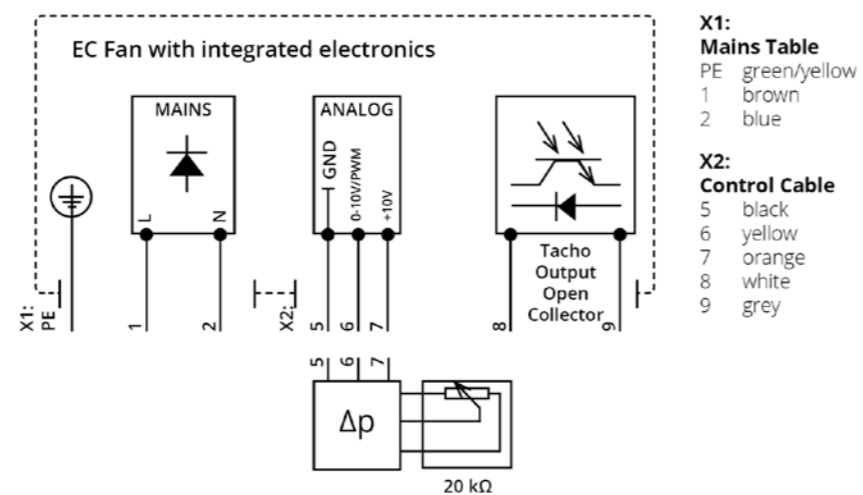
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 225-E-1 3BK	Inlet	-	-31	-16	-11	-8	-12	-13	-17
VR 225-E-1 3BK	Outlet	-	-30	-9	-7	-6	-6	-9	-13

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 250-E-1 3DI	Inlet	-	-28	-15	-10	-9	-9	-10	-18
VR 250-E-1 3DI	Outlet	-	-26	-15	-8	-5	-5	-8	-18

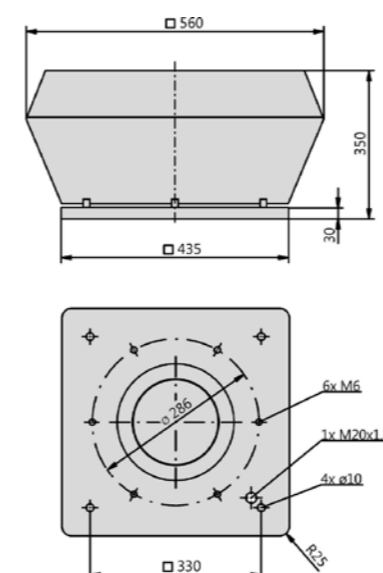
## DRAWINGS AND DIMENSIONS



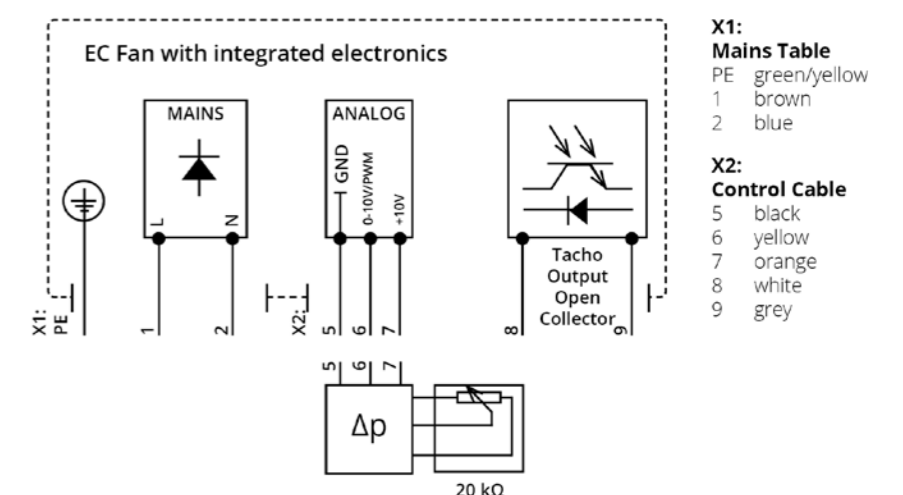
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS





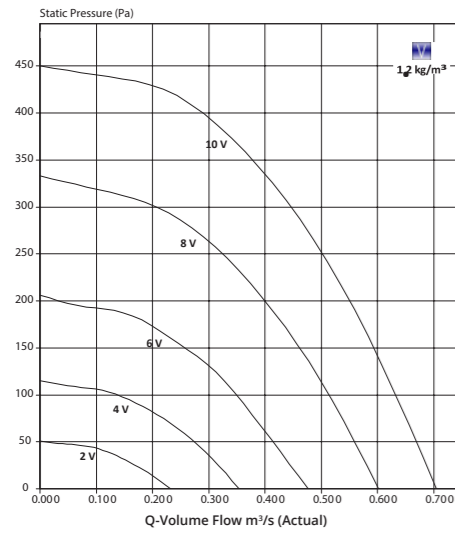
# VR 310-E-1 3DI

1 PH, EC FANS (OPEN LOOP)

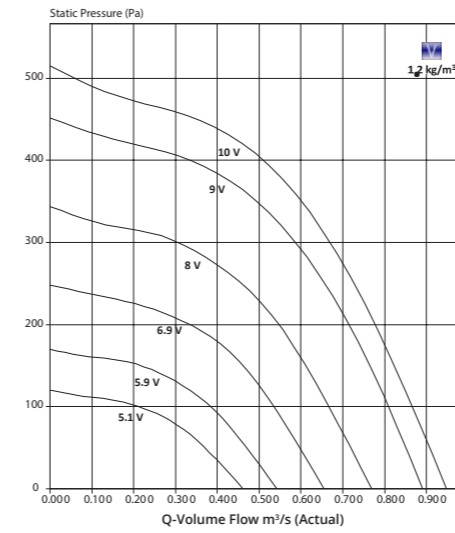


# VR 355-E-1 4EA

1 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART

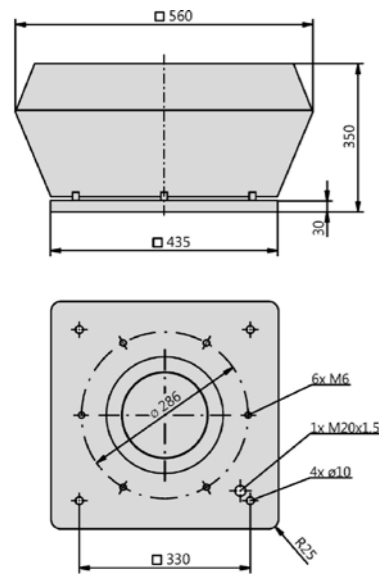
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 310-E-1 3DI	RV310044	220-240V/50Hz/1ph	0.26	1.15	IP54	1810	50

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-E-1 4EA	RV355042	220-240V/50Hz/1ph	0.42	1.86	IP54	1650	45

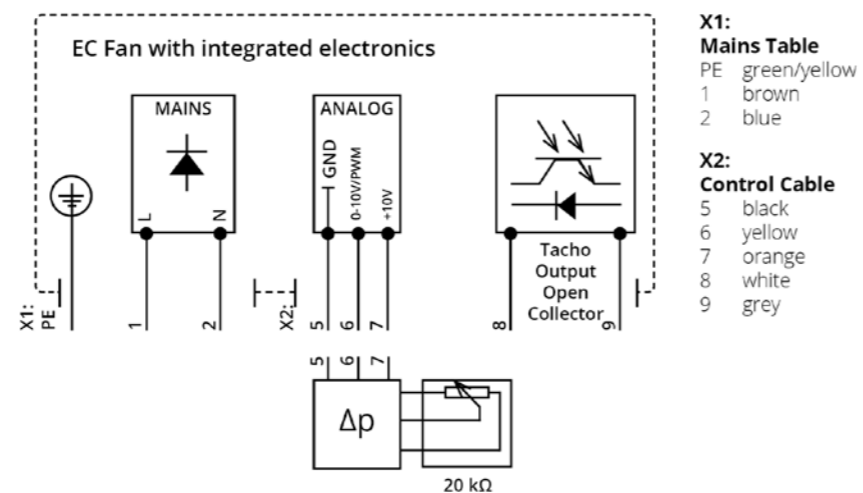
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 310-E-1 3DI	Inlet	-	-25	-13	-10	-11	-12	-18	-24
VR 310-E-1 3DI	Outlet	-	-24	-11	-5	-4	-8	-15	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 355-E-1 4EA	Inlet	-	-21	-13	-10	-10	-10	-16	-18
VR 355-E-1 4EA	Outlet	-	-20	-7	-5	-5	-9	-16	-19

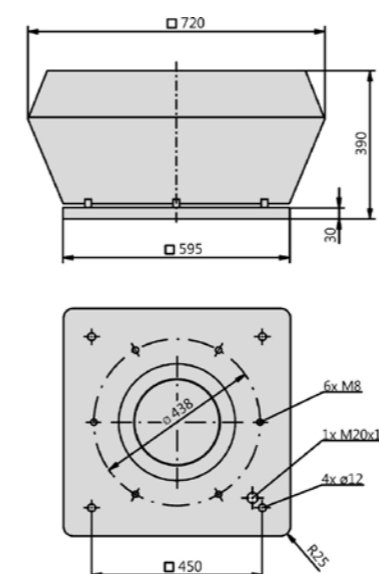
## DRAWINGS AND DIMENSIONS



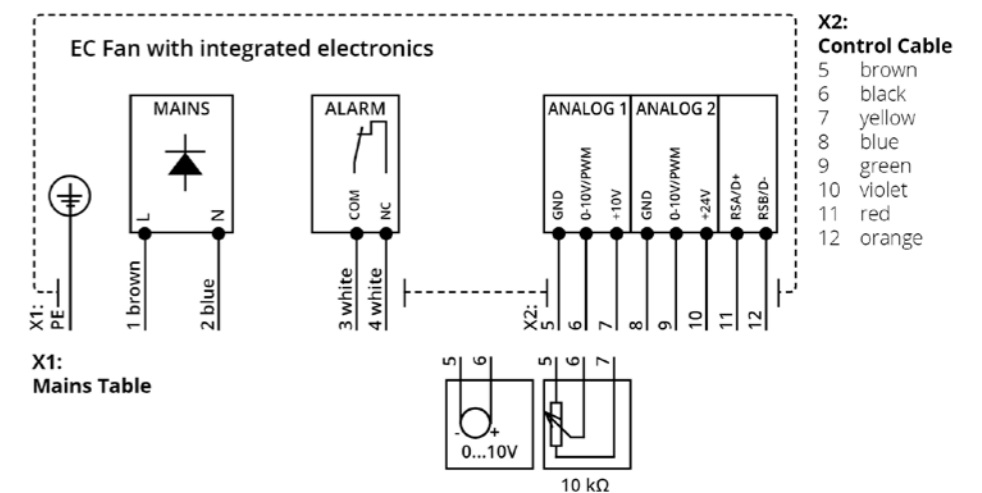
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



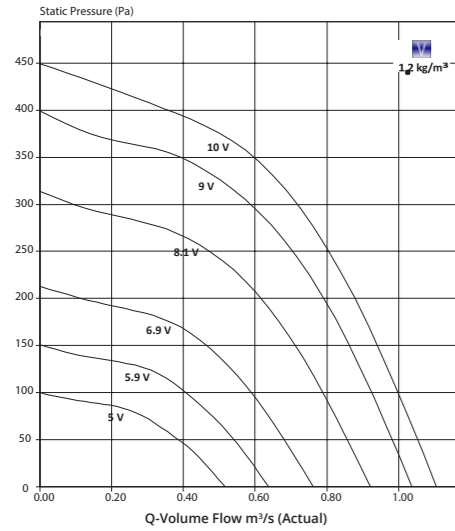
# VR 400-E-1 4FF

1 PH, EC FANS (OPEN LOOP)

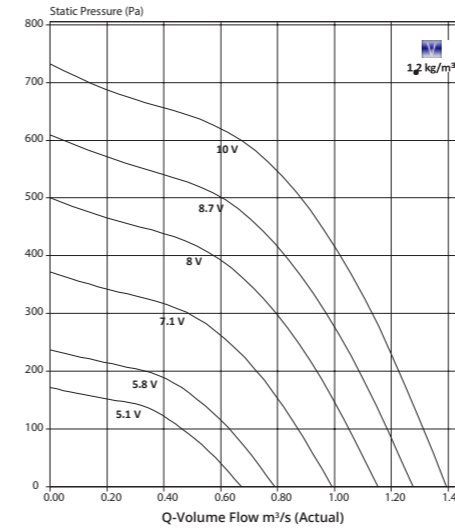


# VR 400-E-1 5FA

1 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



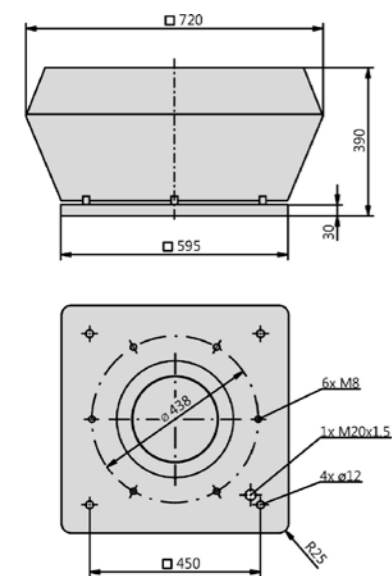
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 4FF	RV400042	220-240V/50Hz/1ph	0.45	2.0	IP54	1380	45

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 5FA	RV400046	220-240V/50Hz/1ph	0.86	3.81	IP54	1755	50

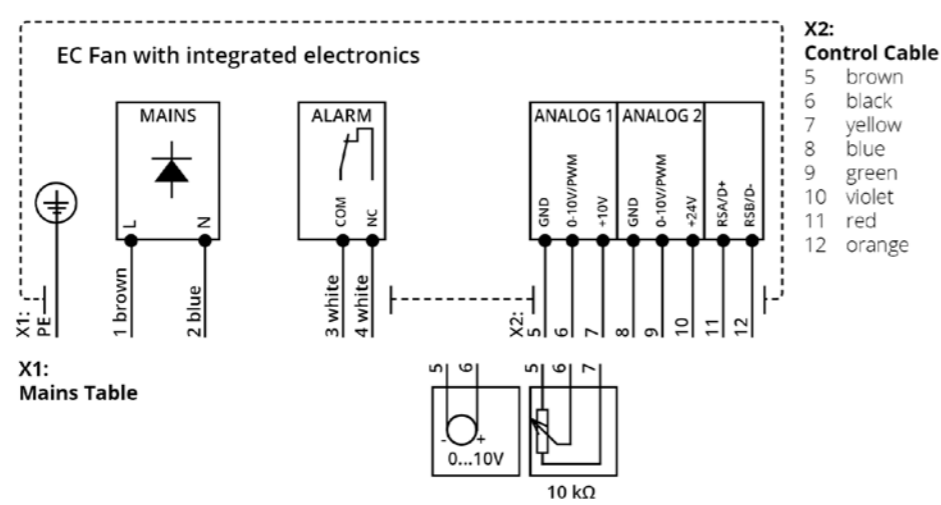
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-E-1 4FF	Inlet	-	-21	-14	-9	-10	-10	-18	-22
VR 400-E-1 4FF	Outlet	-	-12	-6	-6	-6	-8	-17	-21

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-E-1 5FA	Inlet	-	-22	-13	-10	-10	-10	-15	-21
VR 400-E-1 5FA	Outlet	-	-19	-6	-6	-5	-9	-15	-22

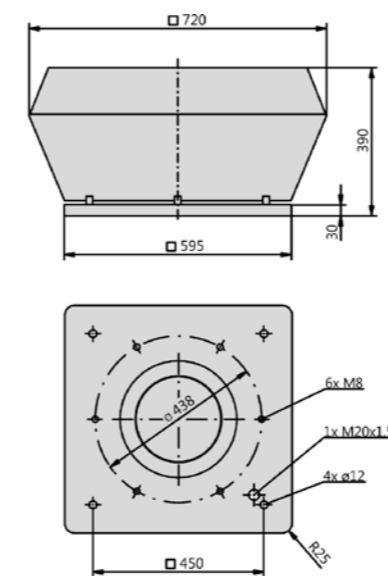
## DRAWINGS AND DIMENSIONS



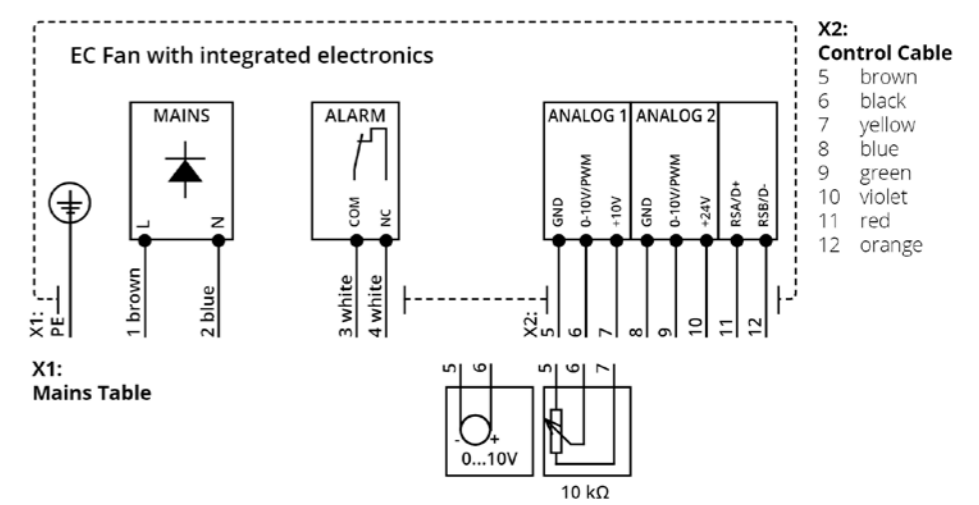
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



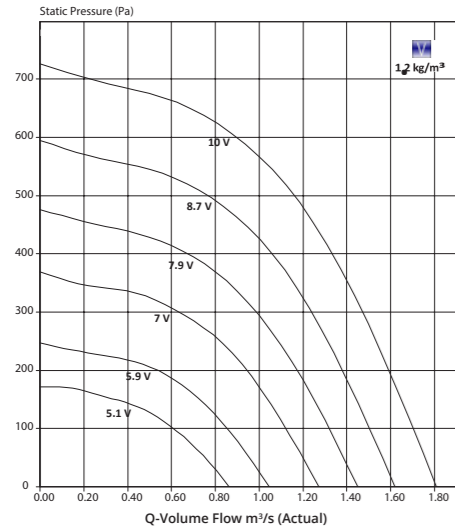
# VR 450-E-1 5FA

1 PH, EC FANS (OPEN LOOP)

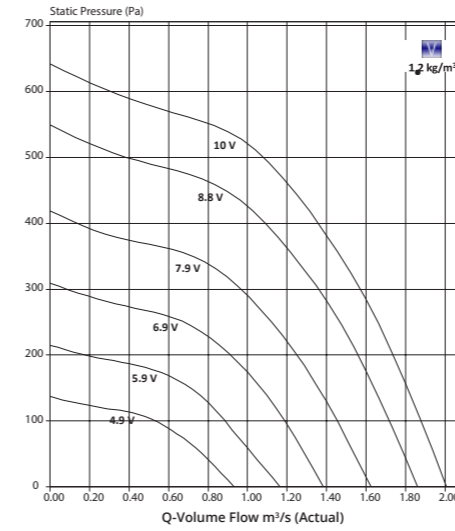


# VR 500-E-1 5HF

1 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



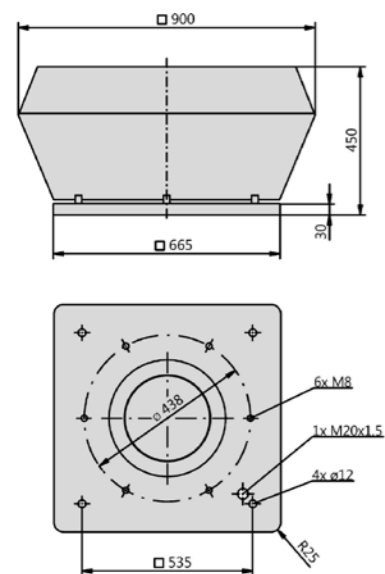
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-E-1 5FA	RV450042	220-240V/50Hz/1ph	1.05	4.7	IP54	1550	45

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-1 5HF	RV500042	220-240V/50Hz/1ph	1.06	4.7	IP54	1300	45

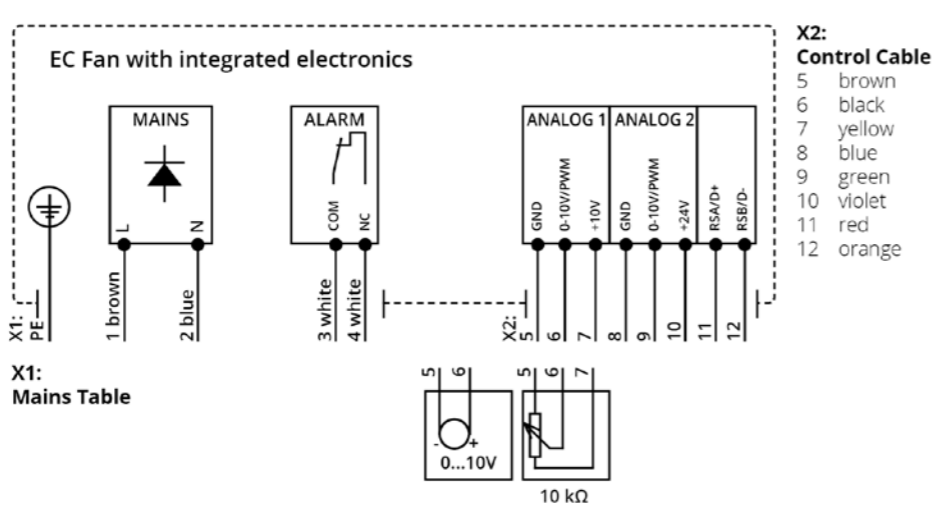
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-E-1 5FA	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 450-E-1 5FA	Outlet	-	-19	-7	-5	-5	-9	-15	-23

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-1 5HF	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 500-E-1 5HF	Outlet	-	-13	-8	-5	-5	-9	-16	-25

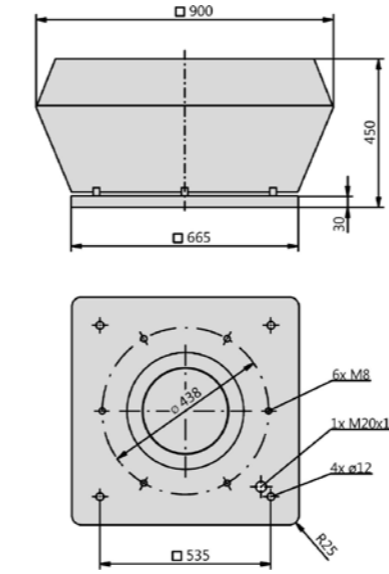
## DRAWINGS AND DIMENSIONS



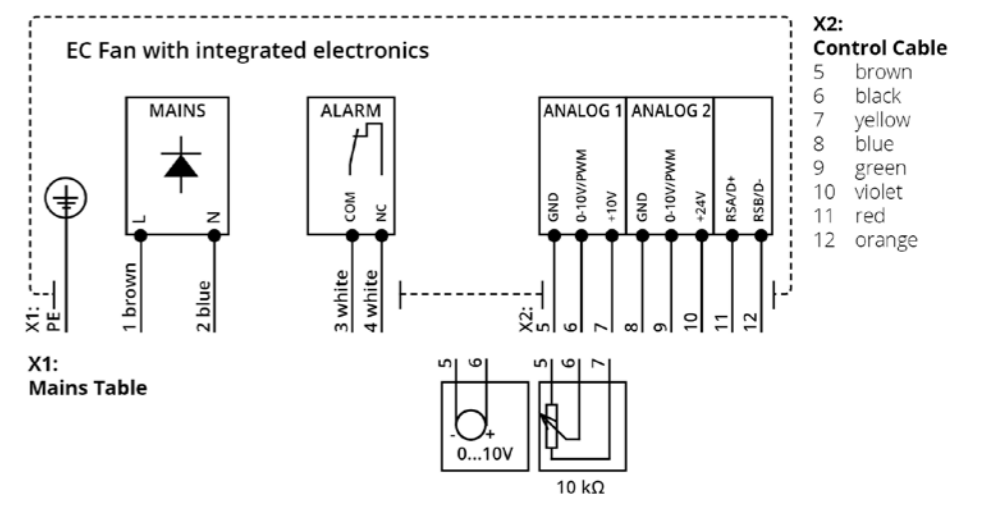
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS





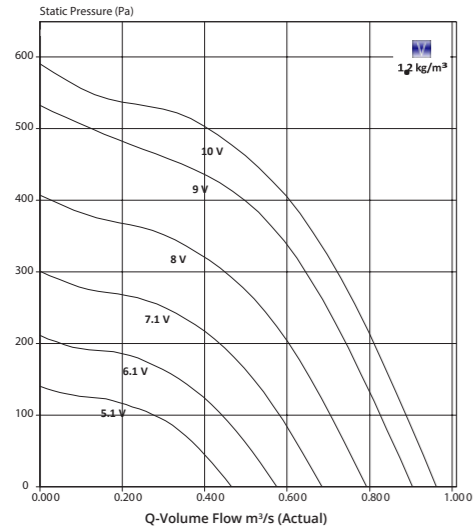
# VR 355-E-1 5FA

3 PH, EC FANS (OPEN LOOP)

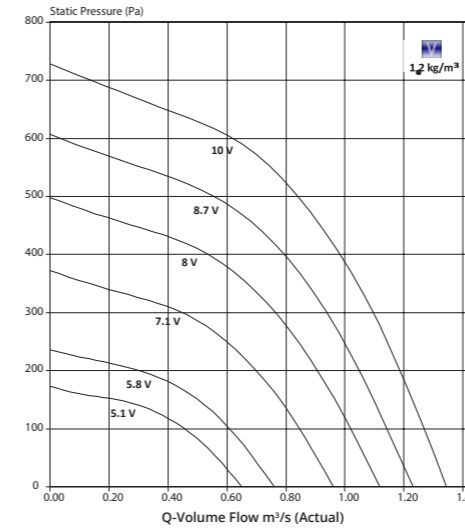


# VR 400-E-1 5HF

3 PH, EC FANS (OPEN LOOP)



PERFORMANCE CHART



PERFORMANCE CHART

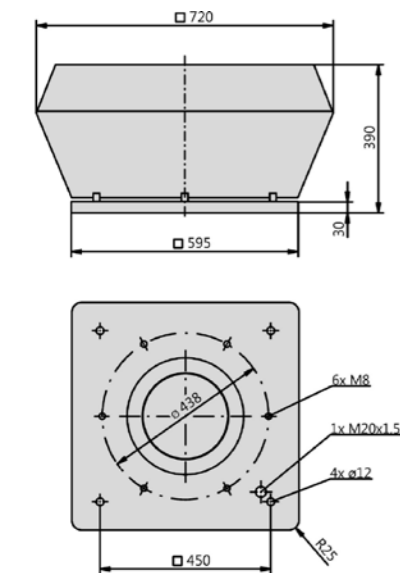
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-E-1 5FA	RV355046	380-420V/50Hz/3ph	0.49	1.0	IP54	1750	60

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 5HF	RV400051	380-420V/50Hz/3ph	0.9	1.5	IP54	1755	55

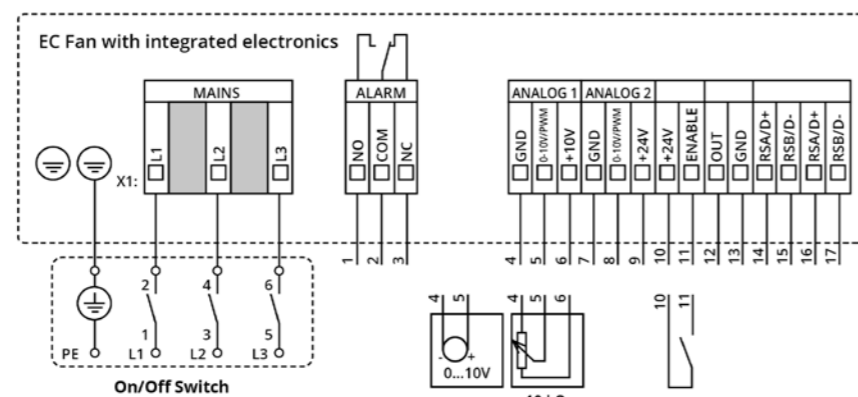
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 355-E-1 5FA	Inlet	-	-21	-13	-10	-10	-10	-15	-22
VR 355-E-1 5FA	Outlet	-	-16	-6	-6	-6	-8	-13	-21

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-E-1 5HF	Inlet	-	-23	-14	-11	-11	-11	-16	-22
VR 400-E-1 5HF	Outlet	-	-19	-6	-6	-5	-9	-15	-22

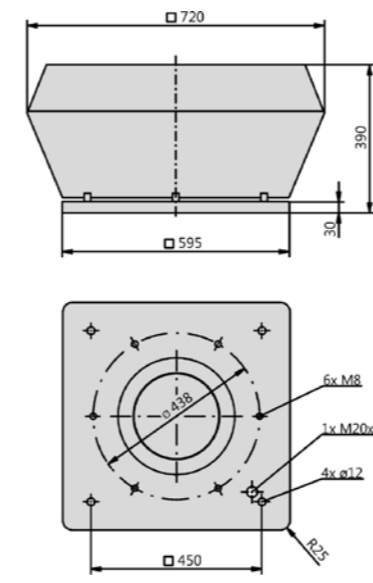
## DRAWINGS AND DIMENSIONS



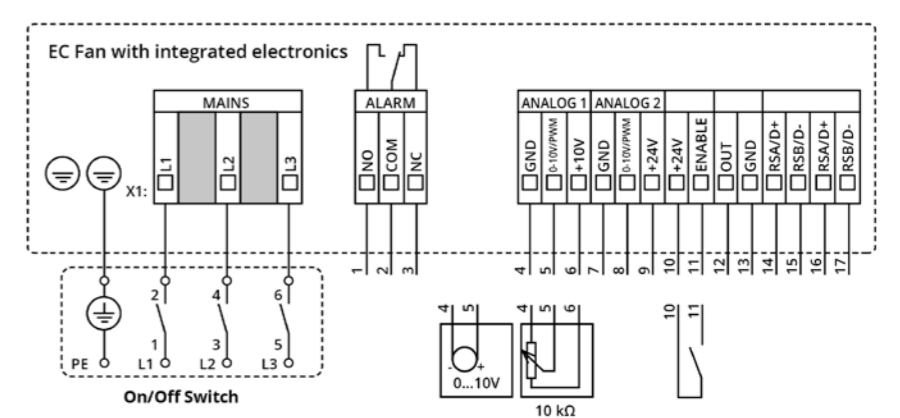
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



# VR 450-E-1 5HF

3 PH, EC FANS (OPEN LOOP)

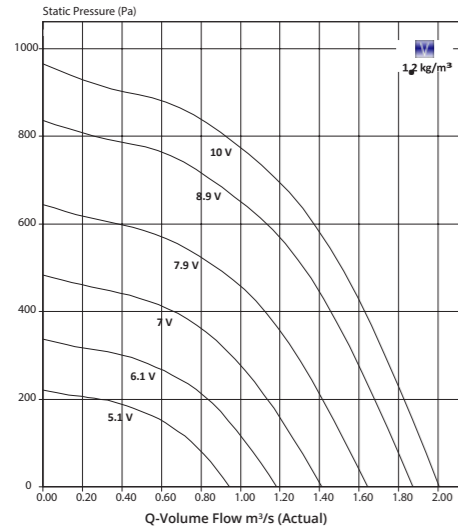


# VR 500-E-1 5HF

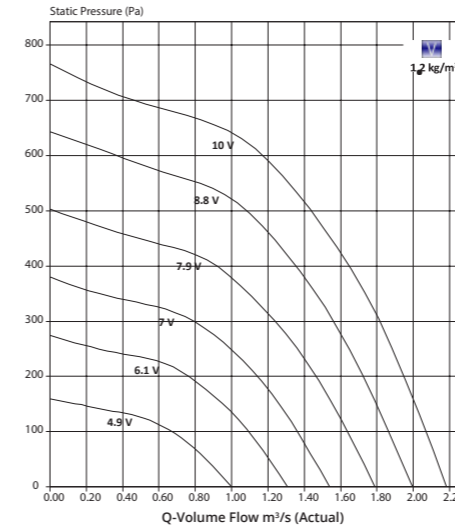
3 PH, EC FANS (OPEN LOOP)



VR 500-E-3 5HF 3 PH, EC FANS (OPEN LOOP)



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-E-1 5HF	RV450046	380-420V/50Hz/3ph	1.6	2.6	IP54	1775	40

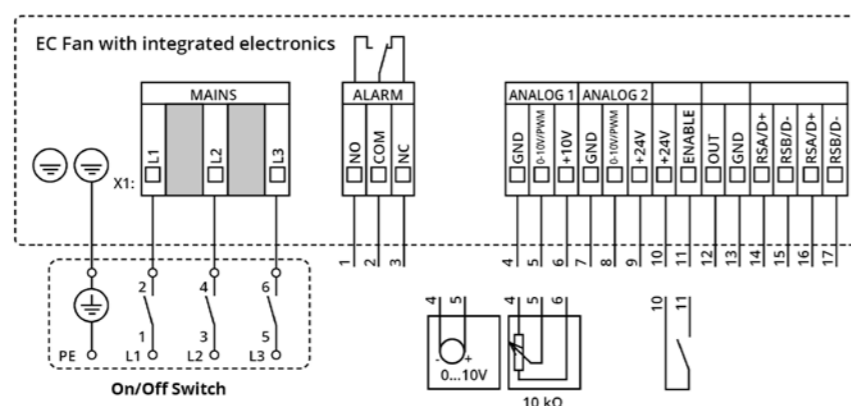
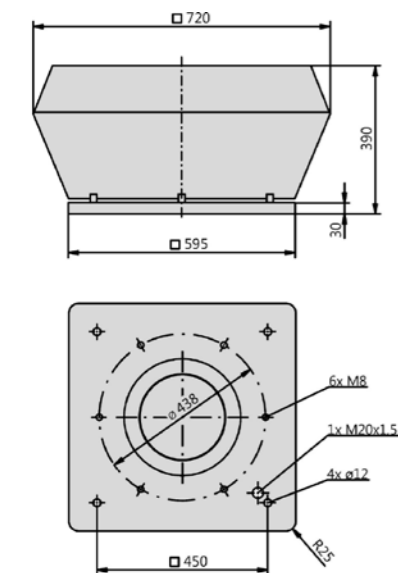
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-3 5HF	RV500046	380-420V/50Hz/3ph	1.4	2.2	IP54	1425	45

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-E-1 5HF	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 450-E-1 5HF	Outlet	-	-19	-7	-5	-5	-9	-15	-23

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-3 5HF	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 500-E-3 5HF	Outlet	-	-13	-8	-5	-5	-9	-16	-25

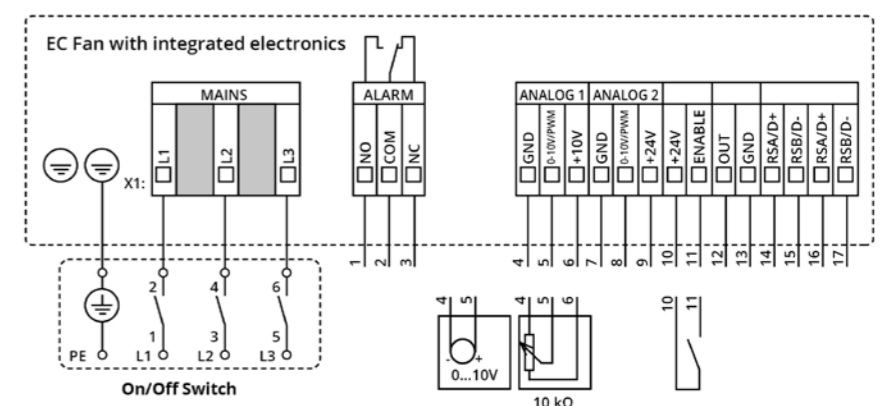
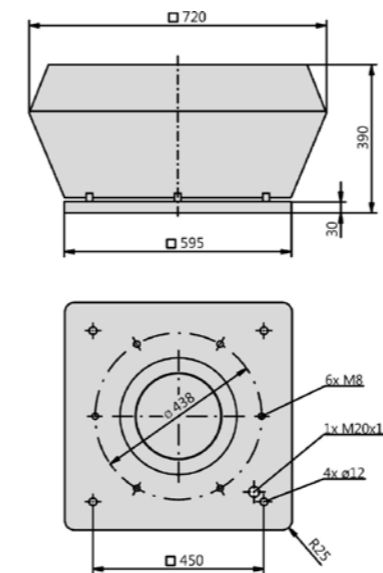
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



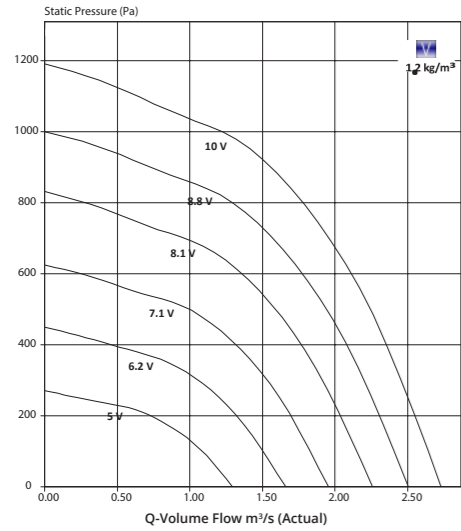
# VR 500-E-3 6FF

3 PH, EC FANS (OPEN LOOP)

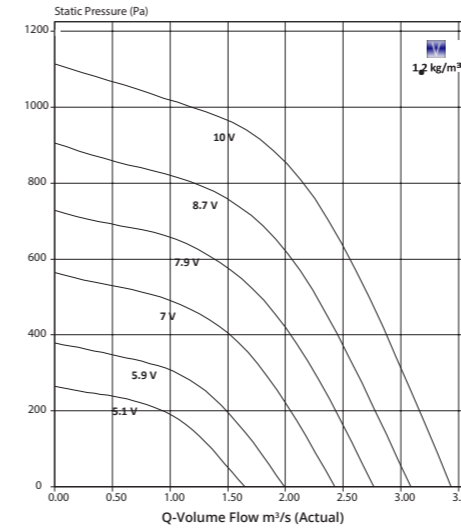


# VR 560-E-3 6IF

3 PH, EC FANS (OPEN LOOP)



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PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-3 6FF	RV500050	380-420V/50Hz/3ph	2.82	4.2	IP54	1800	60

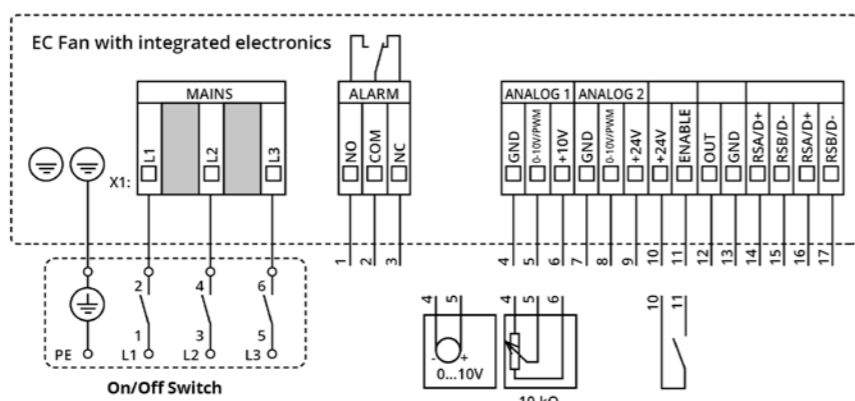
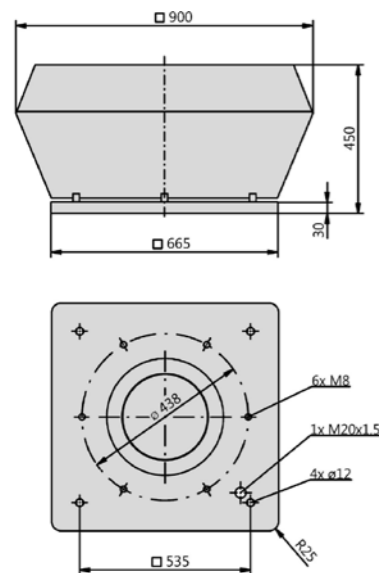
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 560-E-3 6IF	RV560042	380-420V/50Hz/3ph	3.15	4.7	IP54	1550	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-3 6FF	Inlet	-41	-16	-11	-11	-12	-13	-18	-24
VR 500-E-3 6FF	Outlet	-27	-8	-7	-7	-6	-8	-16	-23

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 560-E-3 6IF	Inlet	-	-20	-12	-12	-12	-14	-21	-25
VR 560-E-3 6IF	Outlet	-	-13	-5	-5	-5	-9	-17	-23

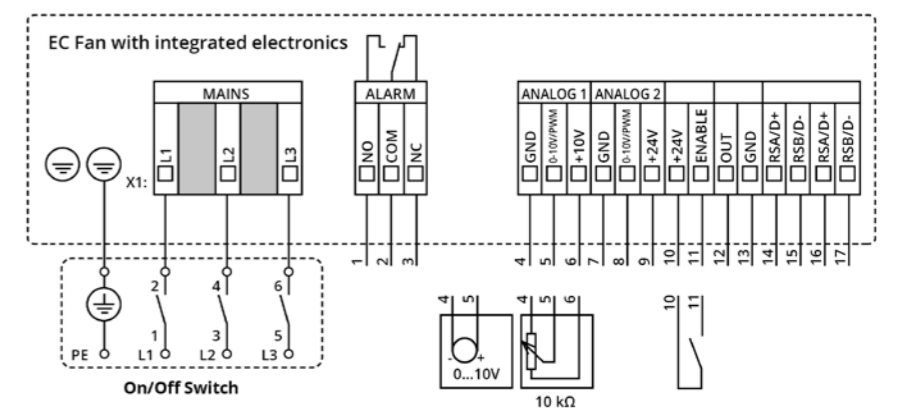
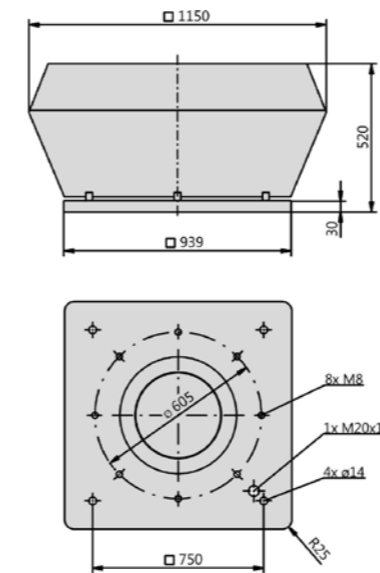
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



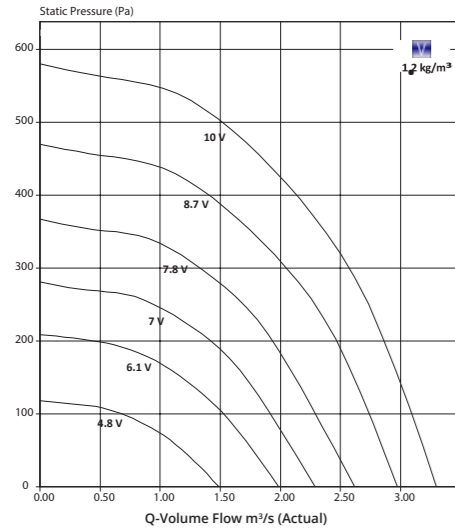
# VR 630-E-3 6IF

3 PH, EC FANS (OPEN LOOP)

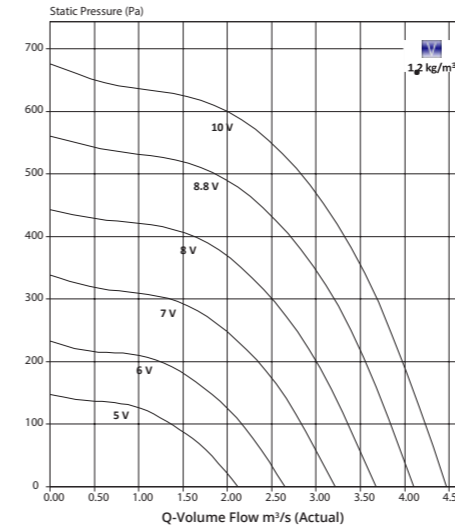


# VR 710-E-3 6NA

3 PH, EC FANS (OPEN LOOP)



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PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 630-E-3 6IF	RV630010	380-420V/50Hz/3ph	1.8	2.9	IP54	1000	50

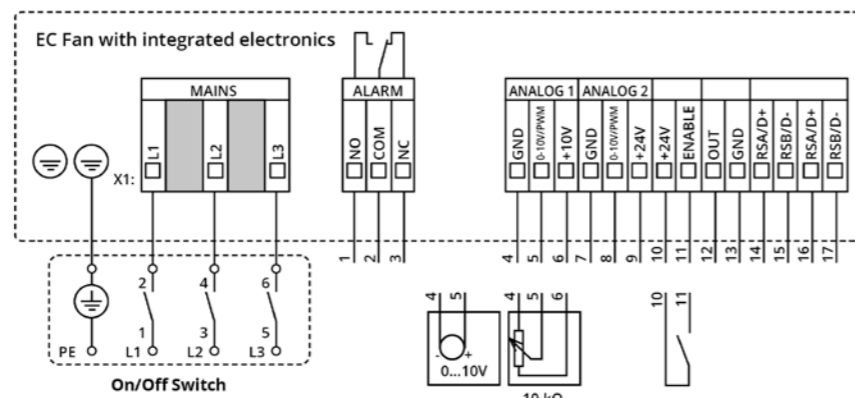
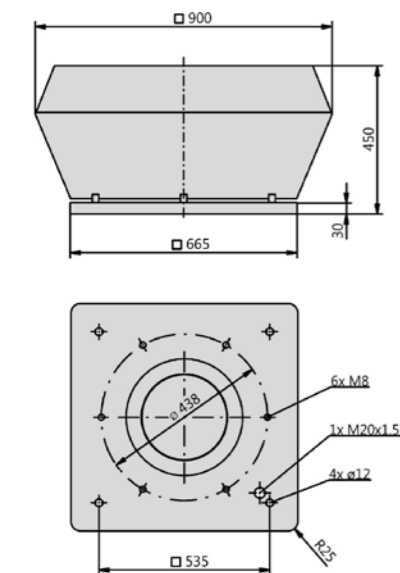
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 710-E-3 6NA	RV710010	380-420V/50Hz/3ph	2.65	4.1	IP54	940	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 630-E-3 6IF	Inlet	-	-13	-8	-6	-16	-20	-24	-31
VR 630-E-3 6IF	Outlet	-	-16	-9	-5	-5	-8	-13	-21

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 710-E-3 6NA	Inlet	-	-18	-13	-8	-7	-12	-20	-29
VR 710-E-3 6NA	Outlet	-	-16	-9	-5	-5	-8	-13	-21

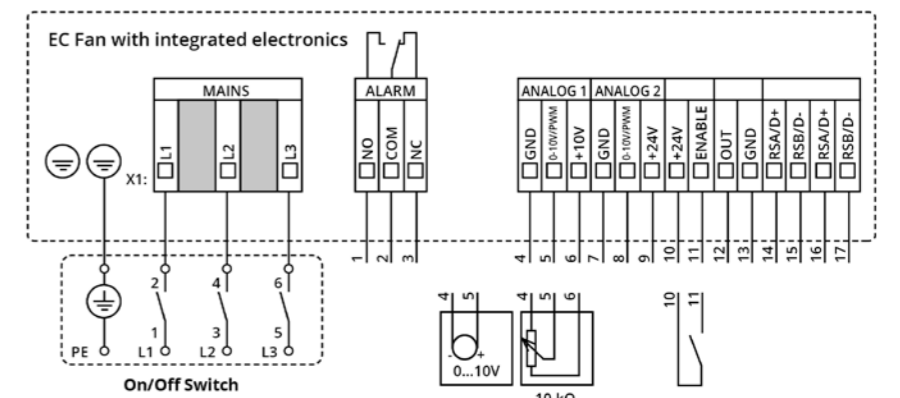
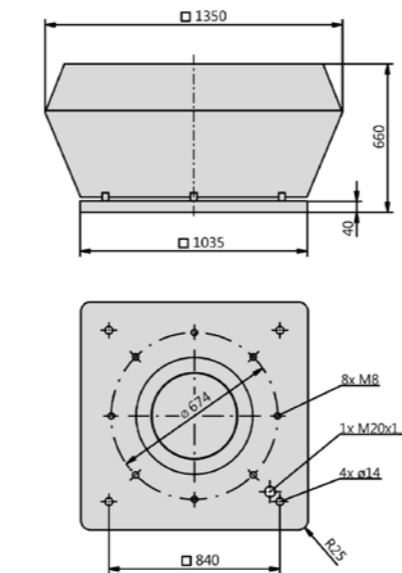
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS





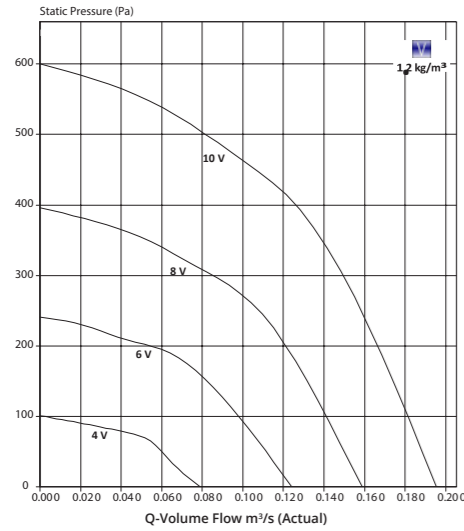
# VR 190-E-1 3BKA

1 PH, EC FANS (CLOSED LOOP)

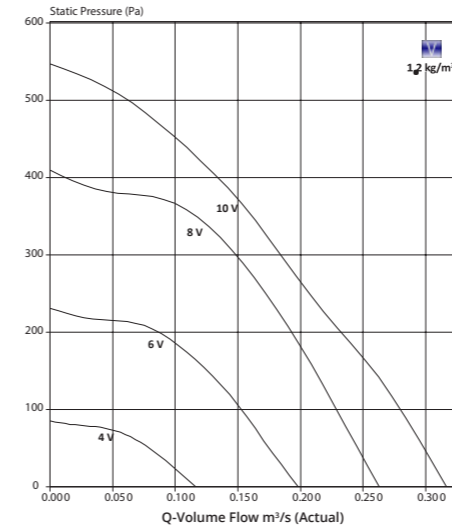


# VR 225-E-1 3BKA

1 PH, EC FANS (CLOSED LOOP)



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PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 190-E-1 3BKA	RV190002	220-240V/50Hz/1ph	0.12	1.0	IP44	3470	50

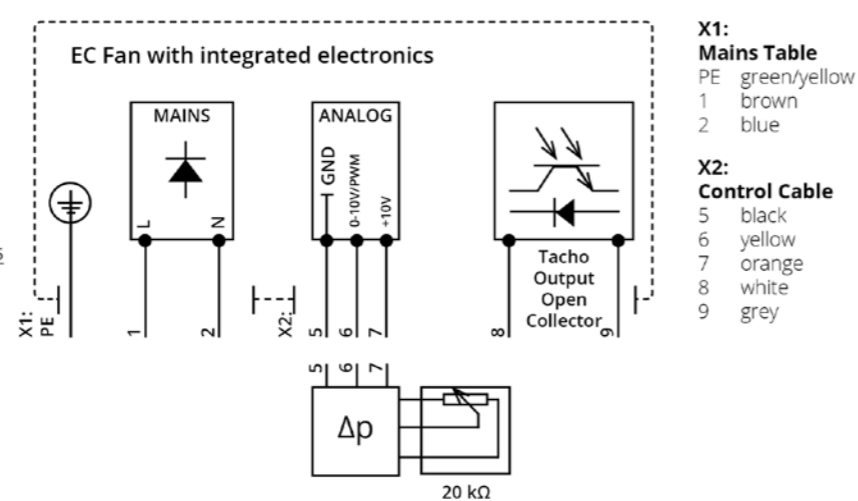
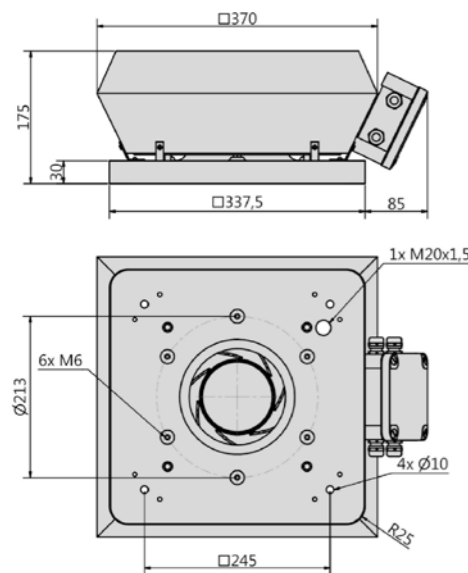
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 225-E-1 3BKA	RV225002	220-240V/50Hz/1ph	0.12	0.98	IP44	2750	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 190-E-1 3BKA	Inlet	-	-25	-13	-9	-9	-9	-13	-17
VR 190-E-1 3BKA	Outlet	-	-24	-12	-6	-6	-5	-11	-15

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 225-E-1 3BKA	Inlet	-	-31	-16	-11	-8	-12	-13	-17
VR 225-E-1 3BKA	Outlet	-	-30	-9	-7	-6	-6	-9	-13

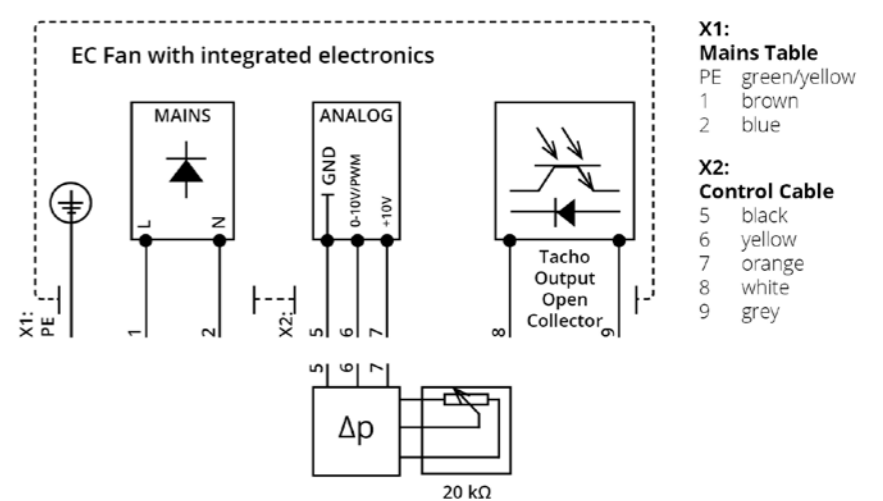
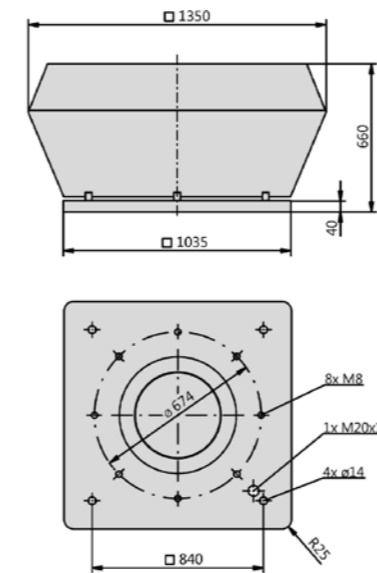
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



# VR 250-E-1 3DIA

1 PH, EC FANS (CLOSED LOOP)

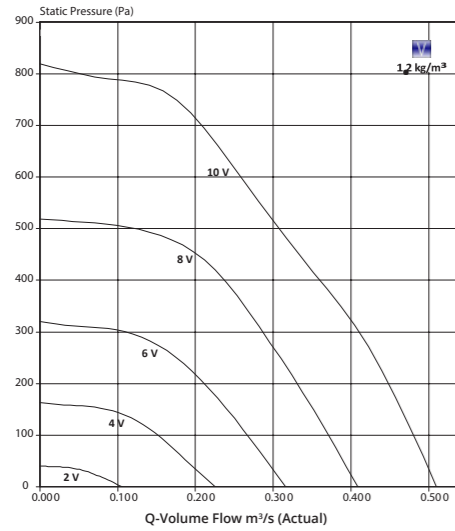


# VR 310-E-1 3DIA

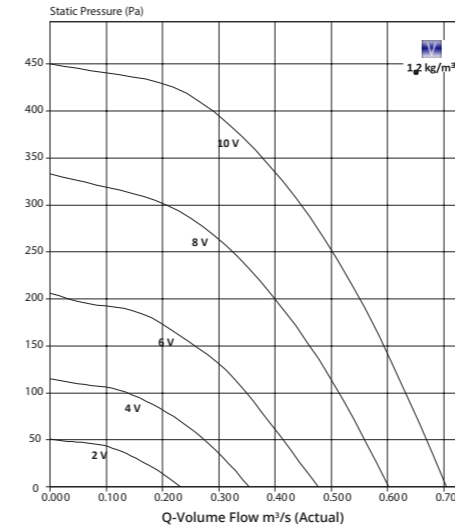
1 PH, EC FANS (CLOSED LOOP)



VR 310-E-1 3DIA 1 PH, EC FANS (CLOSED LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 250-E-1 3DIA	RV250001	220-240V/50Hz/1ph	0.31	1.37	IP54	3250	50

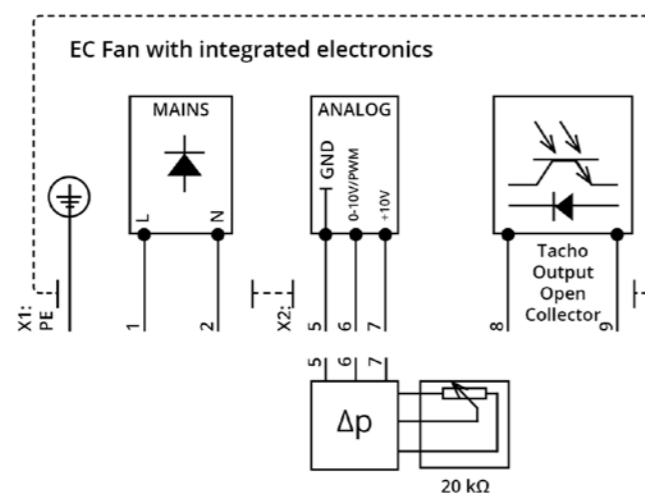
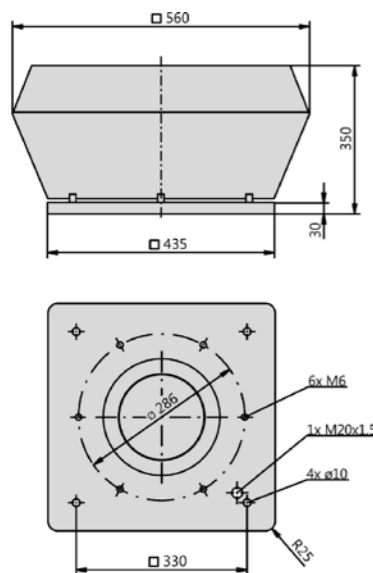
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 310-E-1 3DIA	RV310046	220-240V/50Hz/1ph	0.26	1.15	IP54	1810	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 250-E-1 3DIA	Inlet	-	-28	-15	-10	-9	-9	-10	-18
VR 250-E-1 3DIA	Outlet	-	-26	-15	-8	-5	-5	-8	-18

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 310-E-1 3DIA	Inlet	-	-25	-13	-10	-11	-12	-18	-24
VR 310-E-1 3DIA	Outlet	-	-24	-11	-5	-4	-8	-15	-22

## DRAWINGS AND DIMENSIONS

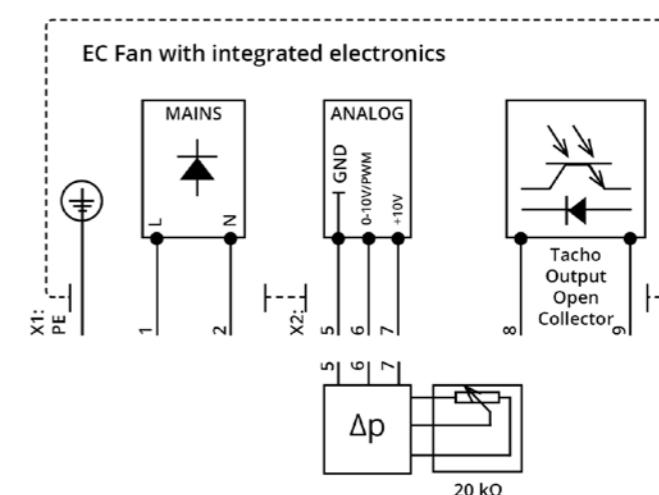
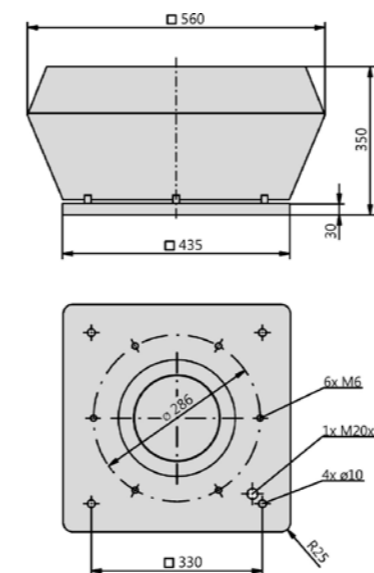
## WIRING DIAGRAMS



- X1:**  
**Mains Table**  
 PE green/yellow  
 1 brown  
 2 blue
- X2:**  
**Control Cable**  
 5 black  
 6 yellow  
 7 orange  
 8 white  
 9 grey

## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



- X1:**  
**Mains Table**  
 PE green/yellow  
 1 brown  
 2 blue
- X2:**  
**Control Cable**  
 5 black  
 6 yellow  
 7 orange  
 8 white  
 9 grey

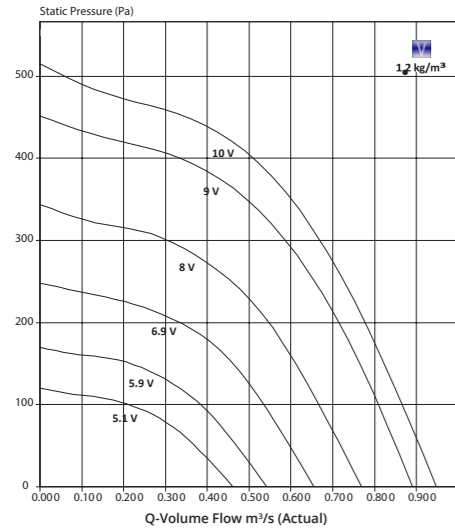
# VR 355-E-1 4EAA

1 PH, EC FANS (LOSED LOOP)

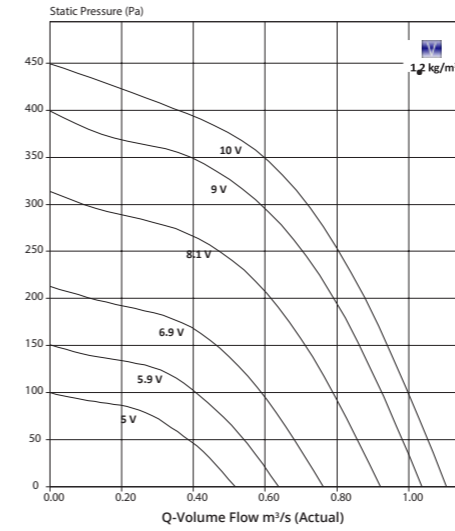


# VR 400-E-1 4FFA

1 PH, EC FANS (CLOSED LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



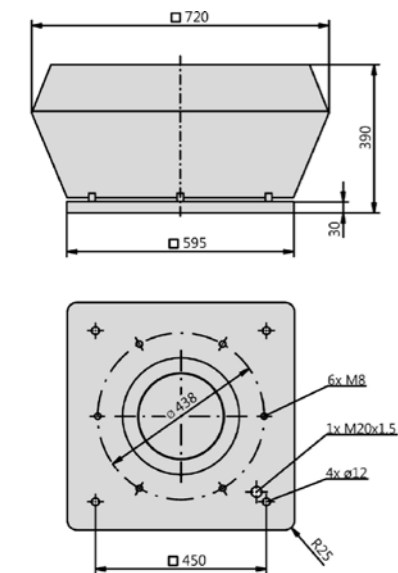
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-E-1 4EAA	RV355040	220-240V/50Hz/1ph	0.42	1.86	IP54	1650	45

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 4FFA	RV400040	220-240V/50Hz/1ph	0.45	2.0	IP54	1380	45

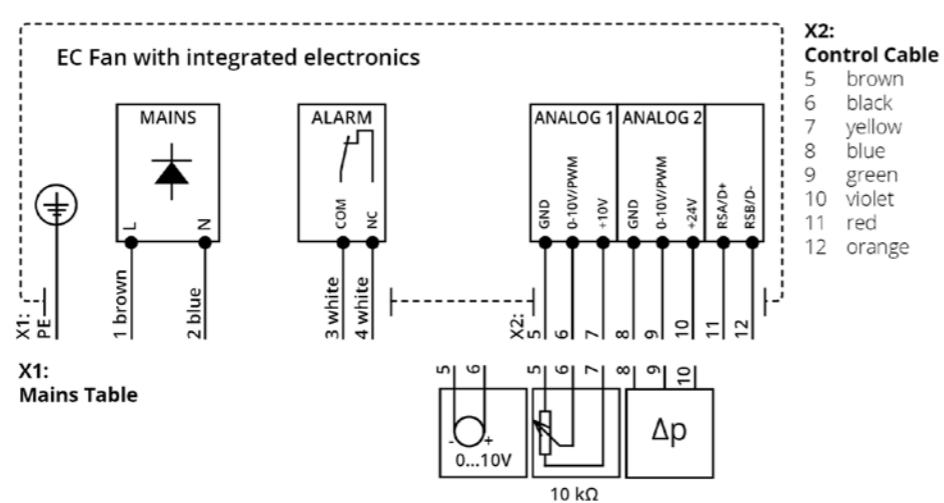
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)								
		63	125	250	500	1000	2000	4000	8000	
VR 355-E-1 4EAA	Inlet	-	-21	-13	-10	-10	-10	-16	-18	
VR 355-E-1 4EAA	Outlet	-	-20	-7	-5	-5	-9	-16	-19	

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)								
		63	125	250	500	1000	2000	4000	8000	
VR 400-E-1 4FFA	Inlet	-	-21	-14	-9	-10	-10	-18	-22	
VR 400-E-1 4FFA	Outlet	-	-12	-6	-6	-6	-8	-17	-21	

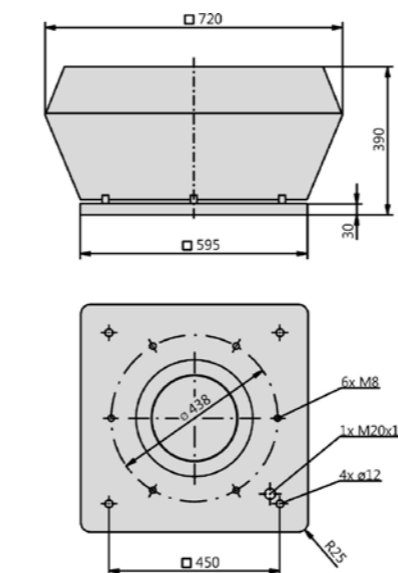
## DRAWINGS AND DIMENSIONS



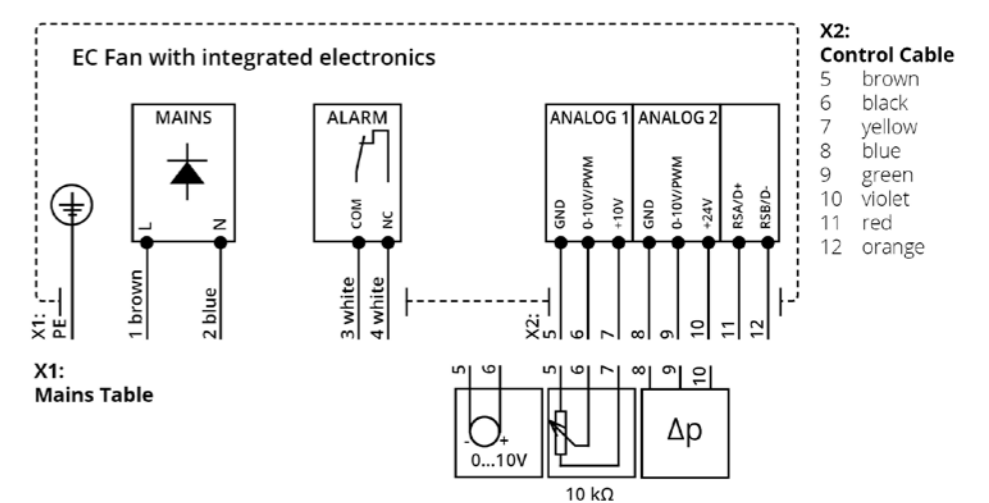
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



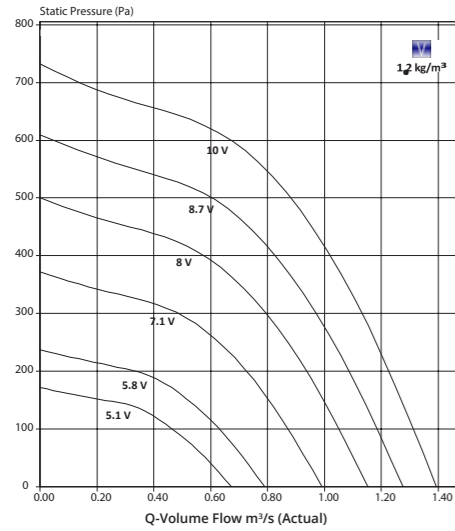
# VR 400-E-1 5FAA

1 PH, EC FANS (CLOSED LOOP)

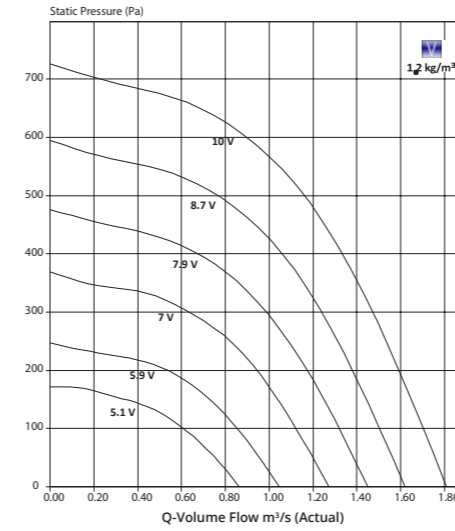


# VR 450-E-1 5FAA

1 PH, EC FANS (CLOSED LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 5FAA	RV400044	220-240V/50Hz/1ph	0.86	3.81	IP54	1755	50

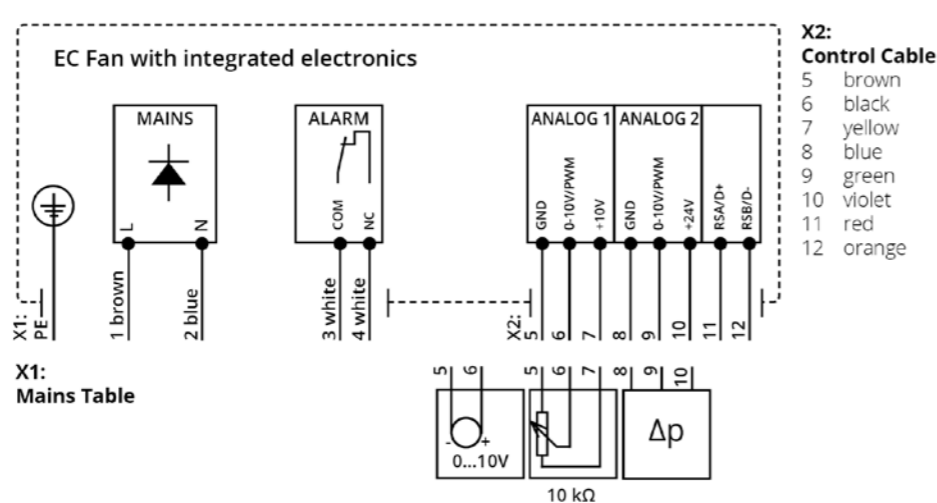
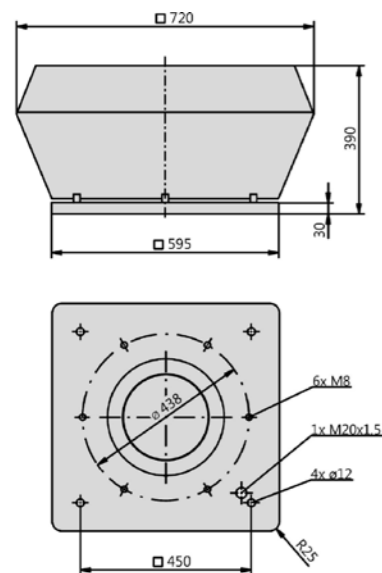
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-E-1 5FAA	RV450040	220-240V/50Hz/1ph	1.05	4.7	IP54	1550	45

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-E-1 5FAA	Inlet	-	-22	-13	-10	-10	-10	-15	-21
VR 400-E-1 5FAA	Outlet	-	-19	-6	-6	-5	-9	-15	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-E-1 5FAA	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 450-E-1 5FAA	Outlet	-	-19	-7	-5	-5	-9	-15	-23

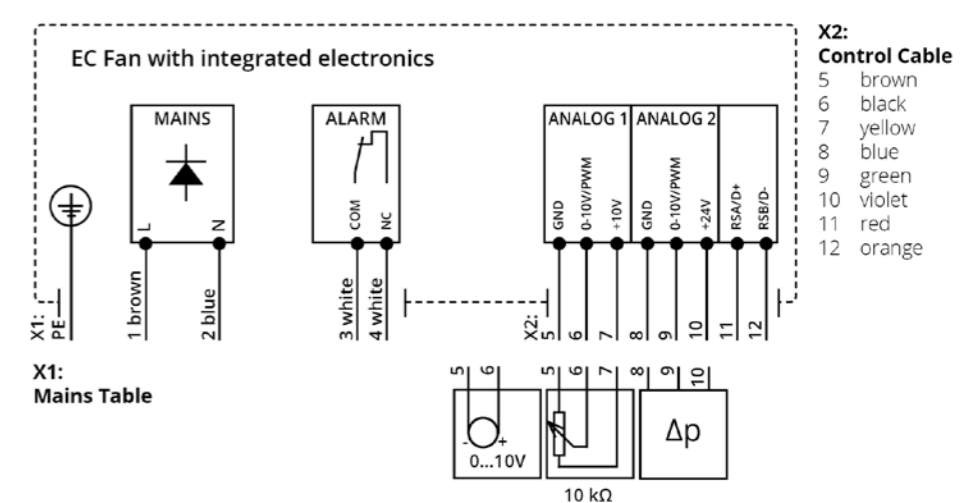
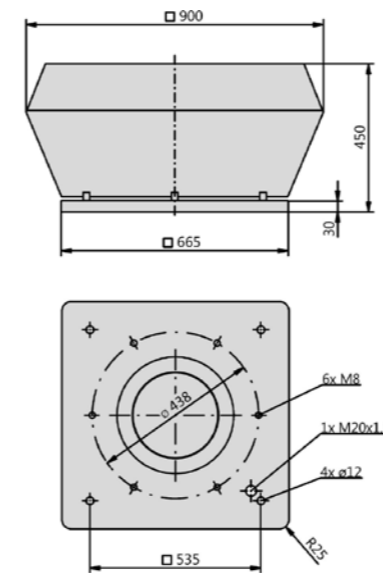
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS





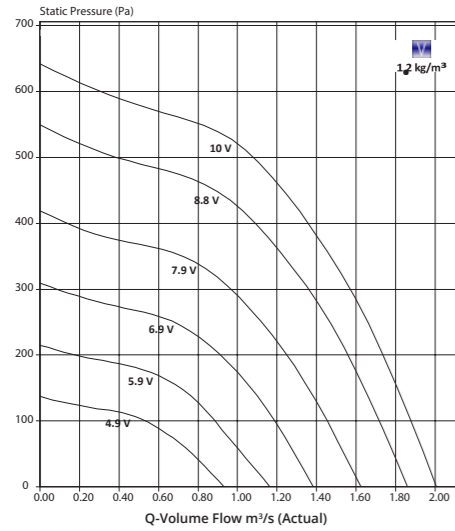
# VR 500-E-1 5HFA

1 PH, EC FANS (CLOSED LOOP)

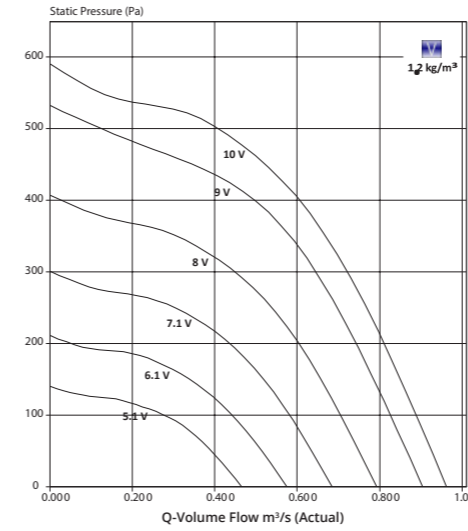


# VR 355-E-1 5FAA

3 PH, EC FANS (CLOSED LOOP)



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PERFORMANCE CHART



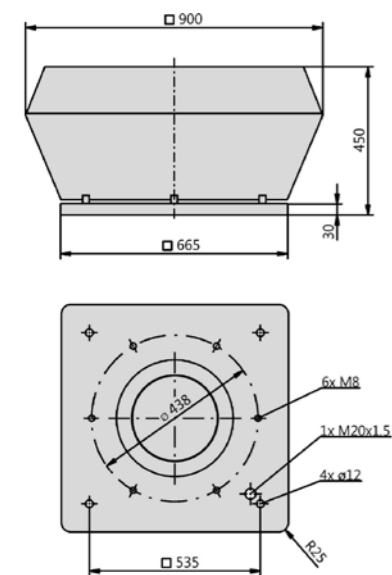
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-1 5HFA	RV500040	220-240V/50Hz/1ph	1.06	4.7	IP54	1300	45

Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 355-E-1 5FAA	RV355044	380-420V/50Hz/3ph	0.49	1.0	IP54	1750	60

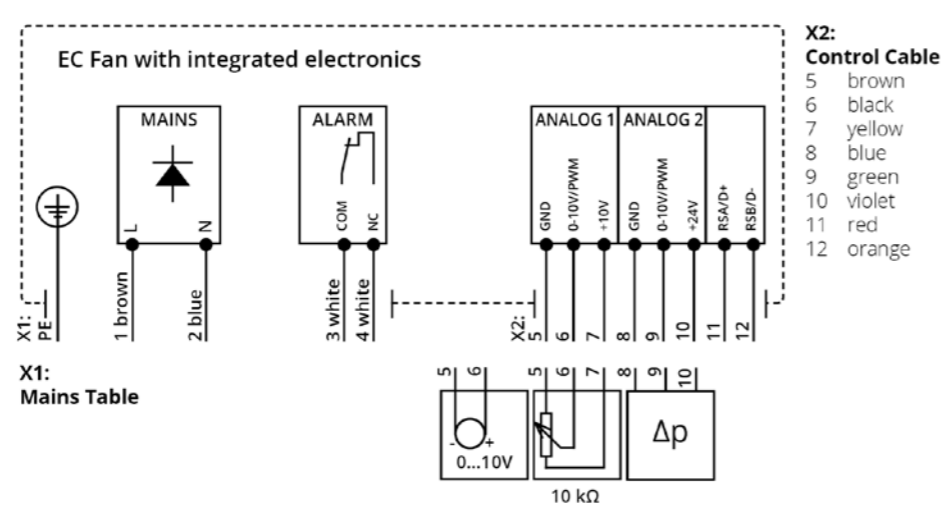
Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-1 5HFA	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 500-E-1 5HFA	Outlet	-	-13	-8	-5	-5	-9	-16	-25

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 355-E-1 5FAA	Inlet	-	-21	-13	-10	-10	-10	-15	-22
VR 355-E-1 5FAA	Outlet	-	-16	-6	-6	-6	-8	-13	-21

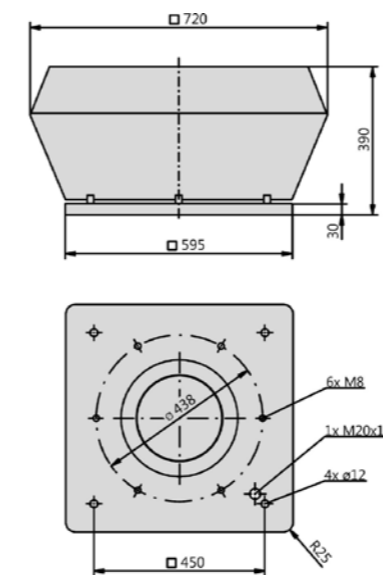
## DRAWINGS AND DIMENSIONS



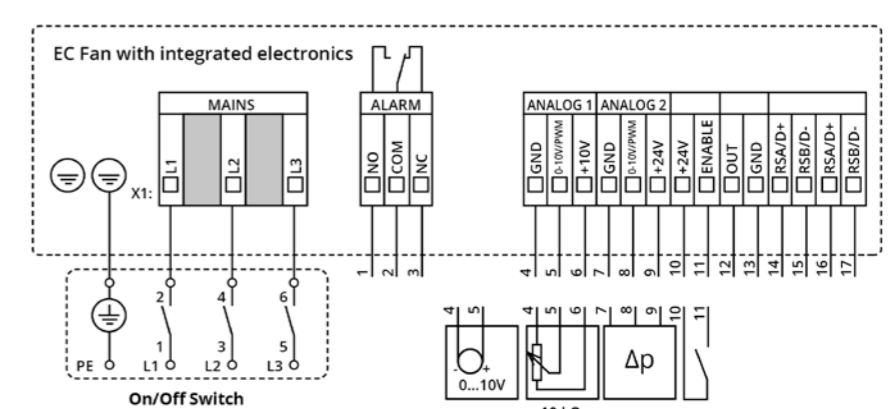
## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS



## WIRING DIAGRAMS



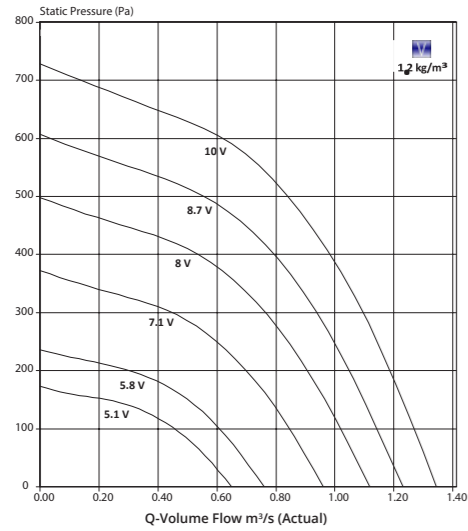
# VR 400-E-1 5HFA

3 PH, EC FANS (CLOSED LOOP)

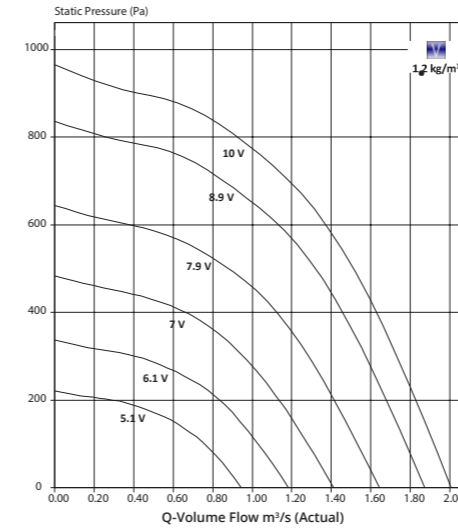


# VR 450-E-1 5HFA

3 PH, EC FANS (CLOSED LOOP)



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 400-E-1 5HFA	RV400048	380-420V/50Hz/3ph	0.9	1.5	IP54	1755	55

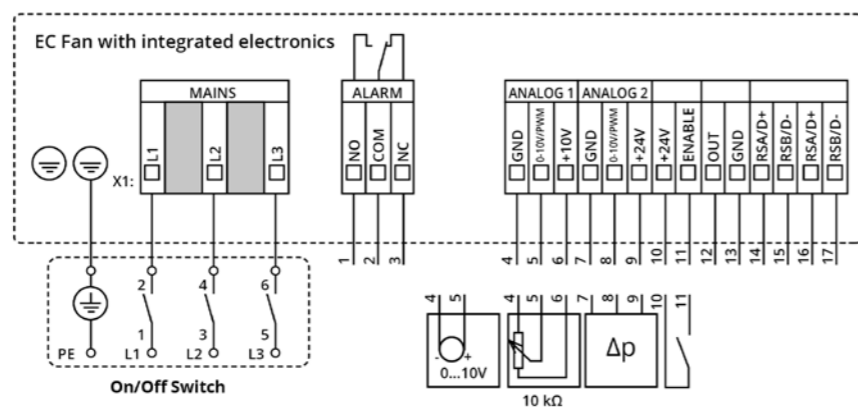
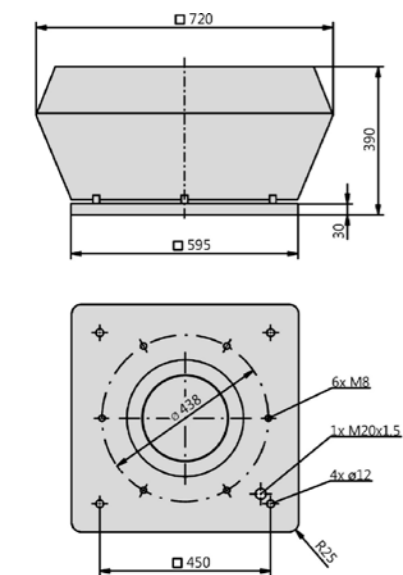
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 450-E-1 5HFA	RV450044	380-420V/50Hz/3ph	1.6	2.6	IP54	1775	40

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 400-E-1 5HFA	Inlet	-	-23	-14	-11	-11	-11	-16	-22
VR 400-E-1 5HFA	Outlet	-	-19	-6	-6	-5	-9	-15	-22

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 450-E-1 5HFA	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 450-E-1 5HFA	Outlet	-	-19	-7	-5	-5	-9	-15	-23

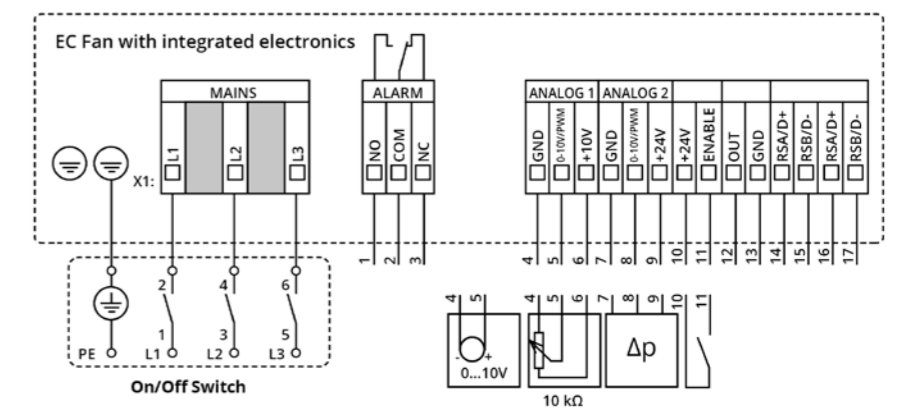
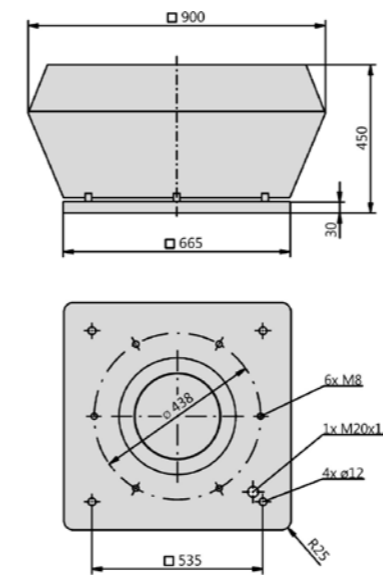
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



# VR 500-E-3 5HFA

3 PH, EC FANS (CLOSED LOOP)

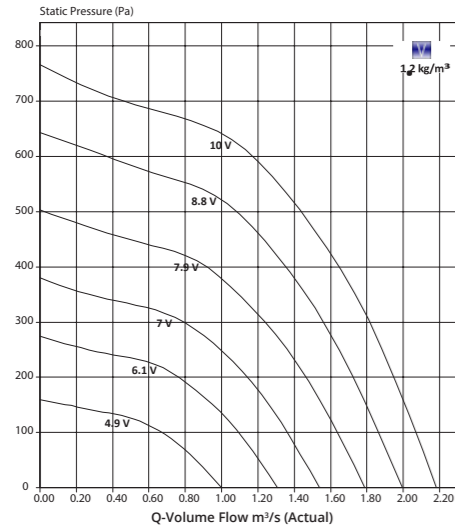


# VR 500-E-3 6FFA

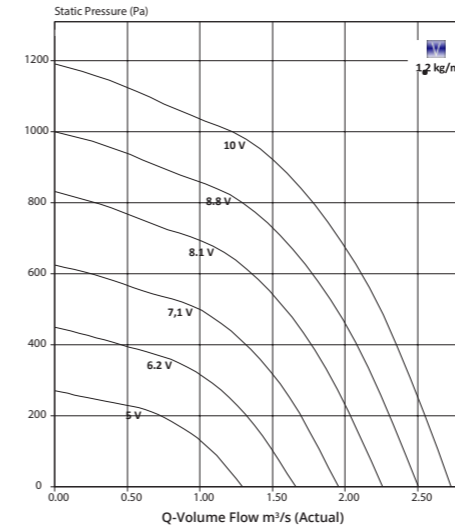
3 PH, EC FANS (CLOSED LOOP)



VR 500-E-3 6FFA 3 PH, EC FANS (CLOSED LOOP)



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Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-3 5HFA	RV500044	380-420V/50Hz/3ph	1.4	2.2	IP54	1425	45

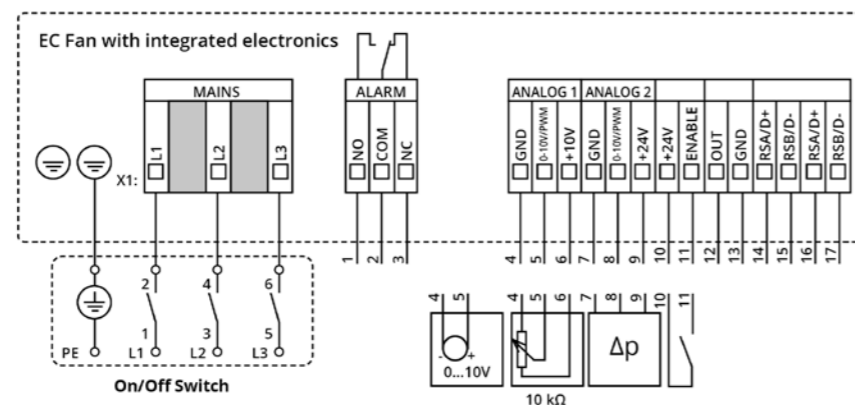
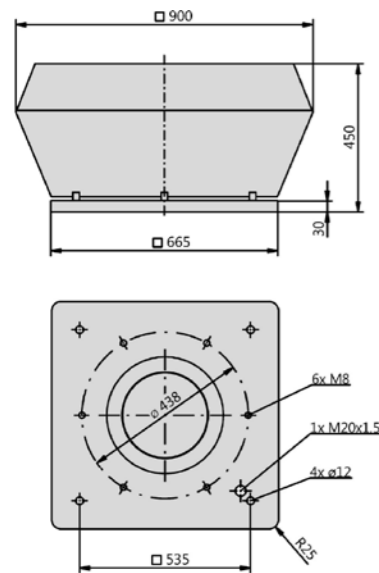
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 500-E-3 6FFA	RV500048	380-420V/50Hz/3ph	2.82	4.2	IP54	1800	60

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-3 5HFA	Inlet	-	-22	-12	-11	-11	-12	-17	-24
VR 500-E-3 5HFA	Outlet	-	-13	-8	-5	-5	-9	-16	-25

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 500-E-3 6FFA	Inlet	-41	-16	-11	-11	-12	-13	-18	-24
VR 500-E-3 6FFA	Outlet	-27	-8	-7	-7	-6	-8	-16	-23

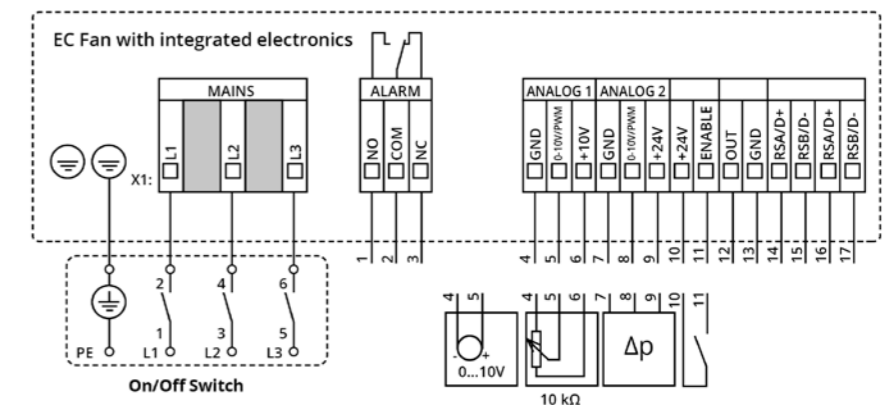
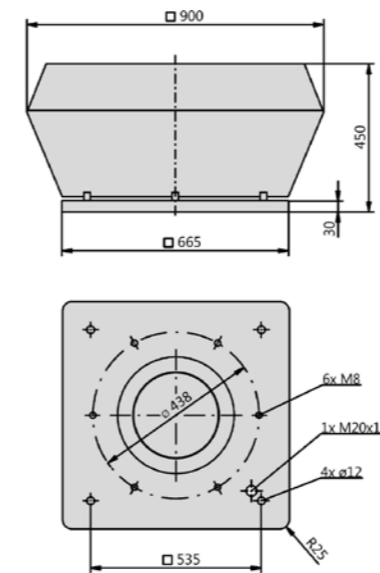
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS



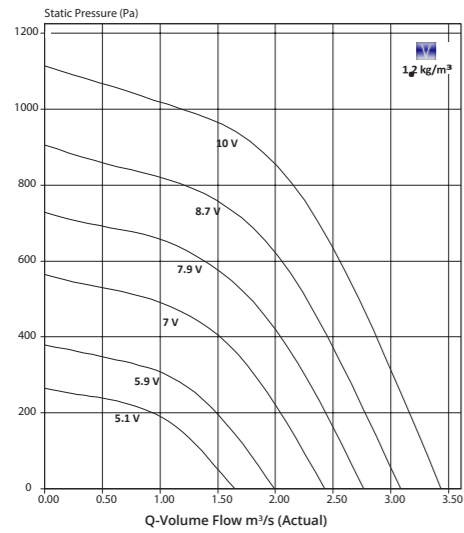
# VR 560-E-3 6IFA

3 PH, EC FANS (CLOSED LOOP)

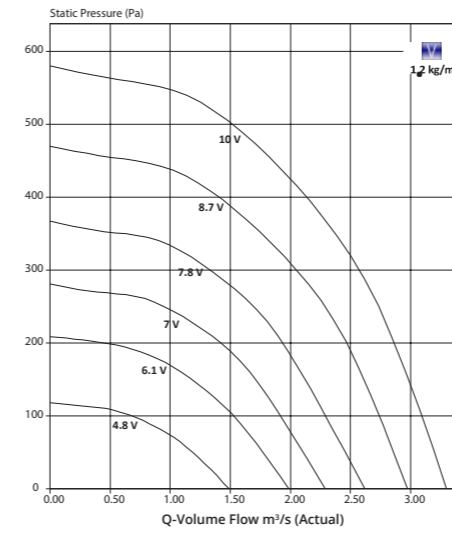


# VR 630-E-3 6IFA

3 PH, EC FANS (CLOSED LOOP)



PERFORMANCE CHART



PERFORMANCE CHART



Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 560-E-3 6IFA	RV560040	380-420V/50Hz/3ph	3.15	4.7	IP54	1550	50

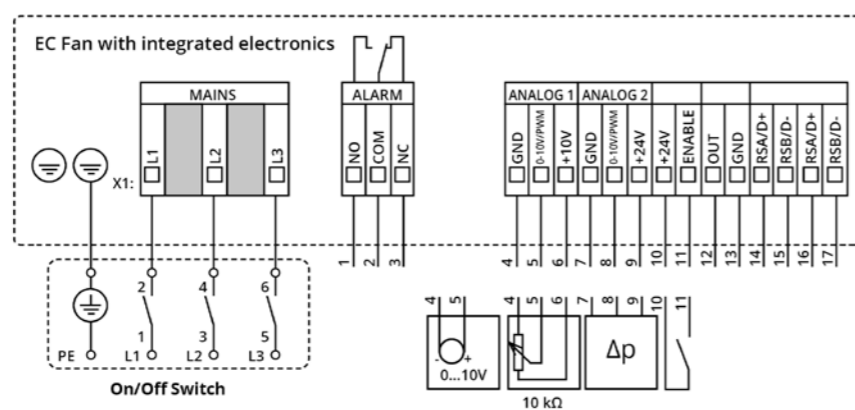
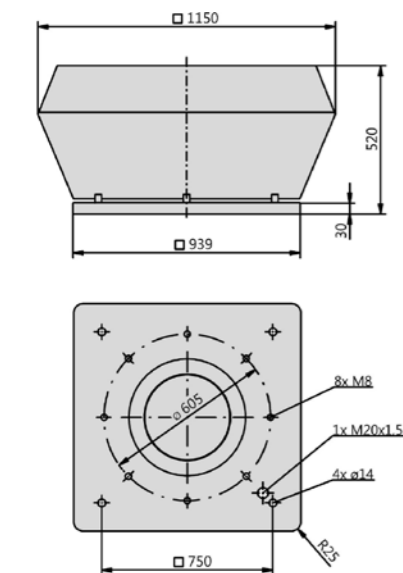
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 630-E-3 6IFA	RV630000	380-420V/50Hz/3ph	1.8	2.9	IP54	1000	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 560-E-3 6IFA	Inlet	-	-20	-12	-12	-12	-14	-21	-25
VR 560-E-3 6IFA	Outlet	-	-13	-5	-5	-5	-9	-17	-23

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 630-E-3 6IFA	Inlet	-	-13	-8	-6	-16	-20	-24	-31
VR 630-E-3 6IFA	Outlet	-	-16	-9	-5	-5	-8	-13	-21

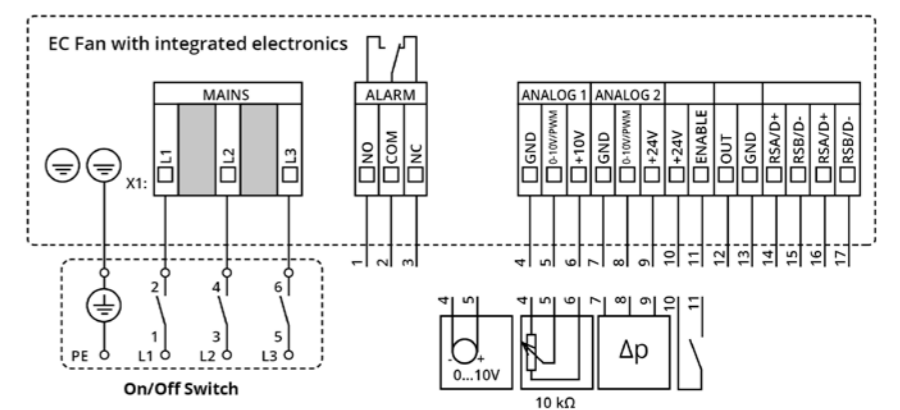
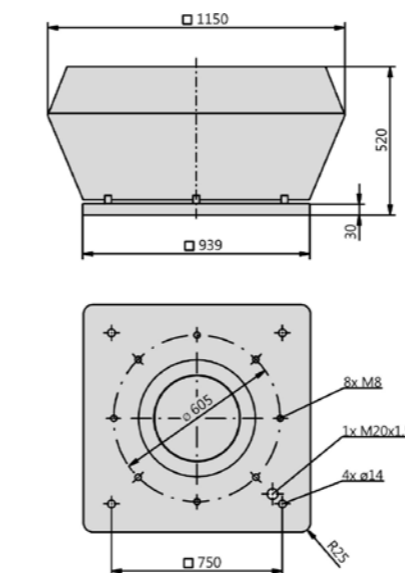
## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS

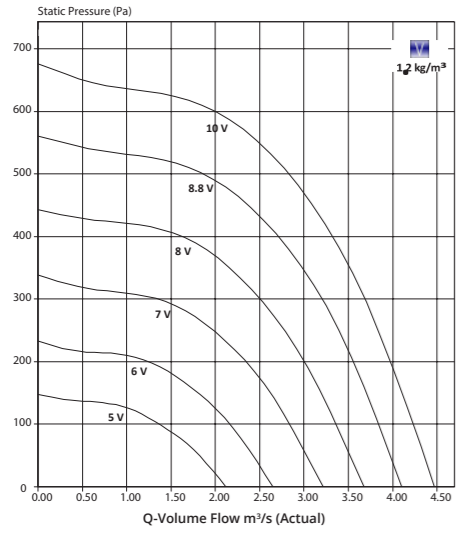


## DRAWINGS AND DIMENSIONS

## WIRING DIAGRAMS





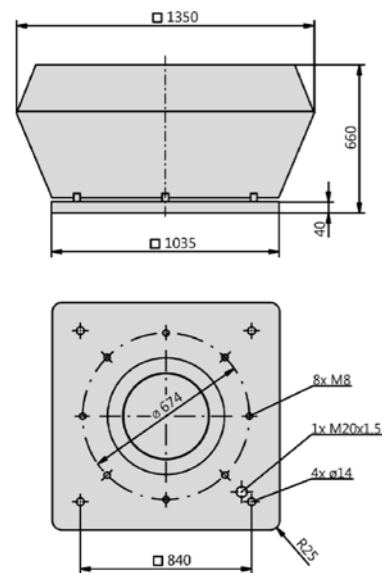


PERFORMANCE CHART

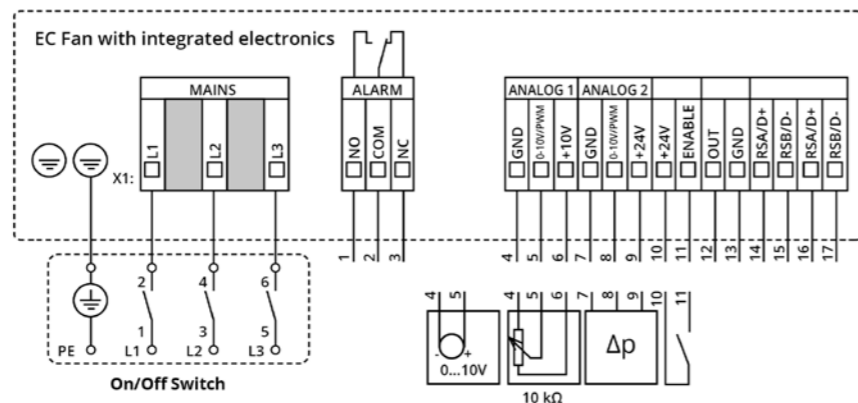
Model Name	Part Code	Motor Nominal data at 50Hz supply voltage	Power (kW)	Max Current (A)	IP Class	Speed (rpm)	Max Operating Temp (°C)
VR 710-E-3 6NAA	RV710000	380-420V/50Hz/3ph	2.65	4.1	IP54	940	50

Model Name	Sound Path [dB(A)]	Octave Correction factors (Hz)							
		63	125	250	500	1000	2000	4000	8000
VR 710-E-3 6NAA	Inlet	-	-18	-13	-8	-7	-12	-20	-29
VR 710-E-3 6NAA	Outlet	-	-16	-9	-5	-5	-8	-13	-21

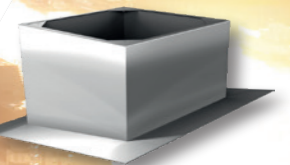
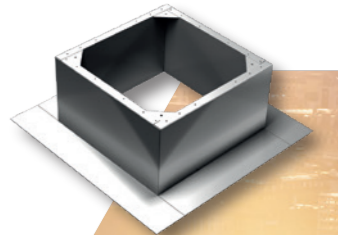
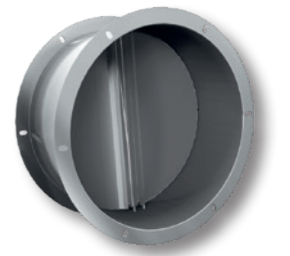
DRAWINGS AND DIMENSIONS

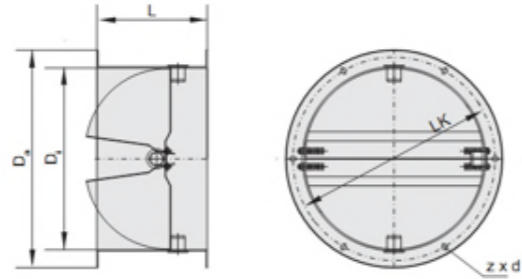
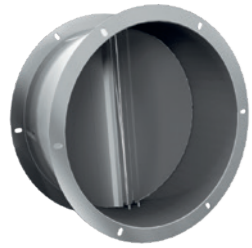


WIRING DIAGRAMS



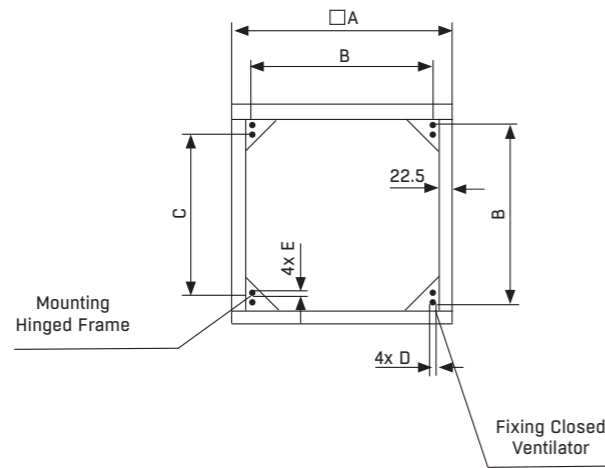
## ROOF FANS Accessories





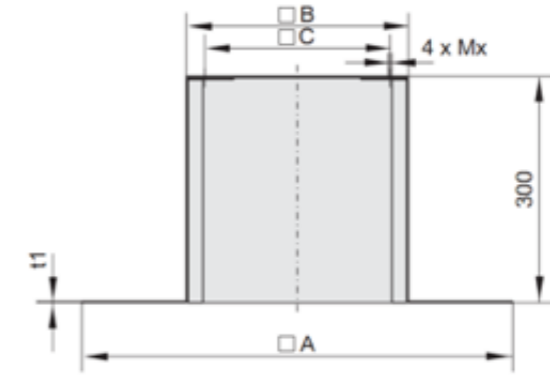
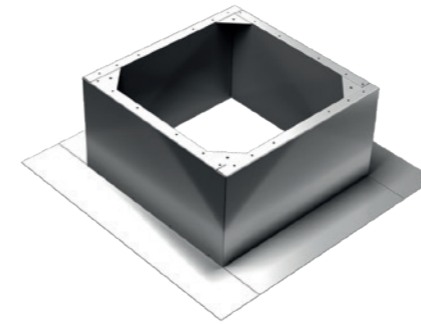
SHUTTERS

Size	Part Number	Da (mm)	LK (mm)	Di (mm)	L (mm)	z x d (mm)	Weight (kg)
190/225	VS019000	235	213	186	115	6x Φ8	1.0
280/310	VS031000	306	286	256	156	6x Φ8	2.0
355/400 450/500	VS035500	464	438	402	220	6x Φ10	4.5
560/630	VS056000	639	605	569	255	8x Φ10	6.5
710	VS071000	708	674	635	250	8x Φ10	7.5
800/900	VS080000	910	872	797	340	8x Φ10	15.5



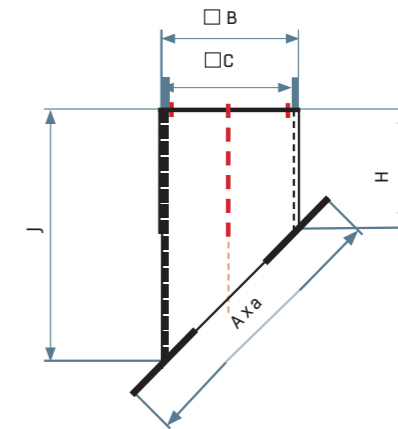
SWING OUT

Size	Part Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)
190/225	KR019000	294	245	215	M6	M6	2.6
280/310	KR031000	395	330	290	M6	M6	4.5
355/400	KR035500	555	450	410	M10	M8	8.0
450/500	KR045000	625	535	485	M10	M8	11.5
560/630	KR056000	895	750	690	M10	M8	27.5



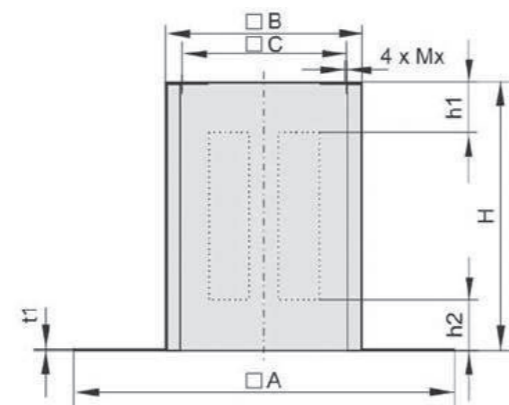
FLAT ROOF SOCKET

Size	Part Number	A (mm)	B (mm)	C (mm)	Mx (mm)	t1 (mm)	Weight (kg)
190/225	FS019000	571	294	245	M6	2.0	3.5
280/310	FS031000	657	395	330	M6	2.0	4.5
355/400	FS035500	817	555	450	M10	2.0	6.5
455/500	FS045000	877	625	535	M10	2.0	7.0
560/630	FS056000	1200	895	750	M10	2.0	10.0
710	FS071000	1300	985	840	M10	2.0	12.0
800/900	FS080000	1490	1205	1050	M12	4.0	15.0



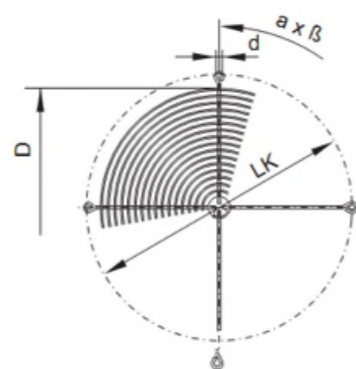
BASE FOR SLOPING ROOF (5-45°)

Size	Part Number	A (mm)	a (mm)	B (mm)	C (mm)	H (mm)	J (mm)	Weight (kg)
190/225	FS019050	X	571	294	245	300	X	3.5-5.5
280/310	FS031050	X	657	395	330	300	X	4.5-6.5
355/400	FS035550	X	817	555	450	300	X	6.5-8.5
450/500	FS045050	X	877	625	535	300	X	7.0-10.0
560/630	FS056050	X	1200	895	750	300	X	10.0-13.0
700	FS071050	X	1300	985	840	300	X	12.0-15.0
800/900	FS080050	X	1490	1205	1050	300	X	15.0-18.0



SOCKET SOUND ATTENUATOR

Size	Part Number	A (mm)	B (mm)	C (mm)	H (mm)	Mx (mm)	t1 (mm)	h1 (mm)	h2 (mm)	Weight (kg)
190/225	SD019021	571	294	245	600	M6	2	150	150	9
280/310	SD031021	710	395	330	700	M6	2	180	150	16
355/400	SD035521	874	555	450	900	M10	2	250	200	24
450/500	SD045021	900	625	535	900	M10	2	270	250	26
560/630	SD056021	1200	895	750	1070	M10	2	320	320	39
700	SD071018	1300	985	840	1160	M10	2	300	360	45
800/900	SD080000	1740	1205	1050	1230	M12	4	405	125	154



PROTECTION GUARD

Size	Part Number	D (mm)	LK (mm)	d (mm)	a x B (mm)	Weight (kg)
190/225	BG019020	190	213	7	3 x 120°	0.3
280/310	BG025020	230	286	7	3 x 120°	0.3
355/400 450/500	BG040002	412	438	8.5	3 x 120°	0.6
560/630	BG056003	570	605	11.5	8 x 45°	1.5
710	BG063003	630	674	11.5	4 x 45°	1.8





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