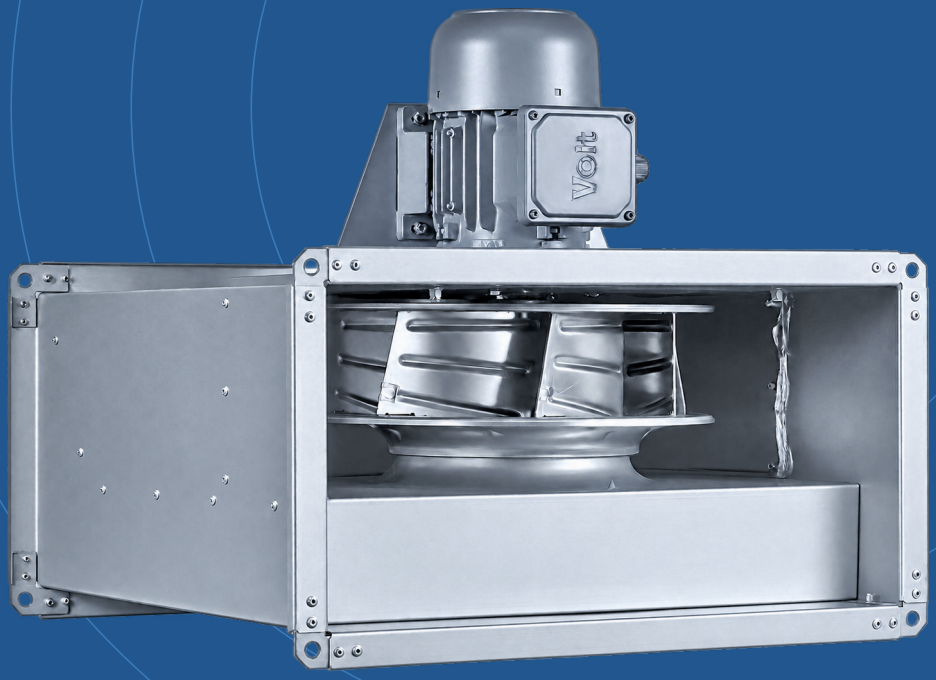
VBF-R SERIES

Rectangular inline centrifugal duct fans

VBF-R

MOTOR OUTSIDE THE AIRSTREAM

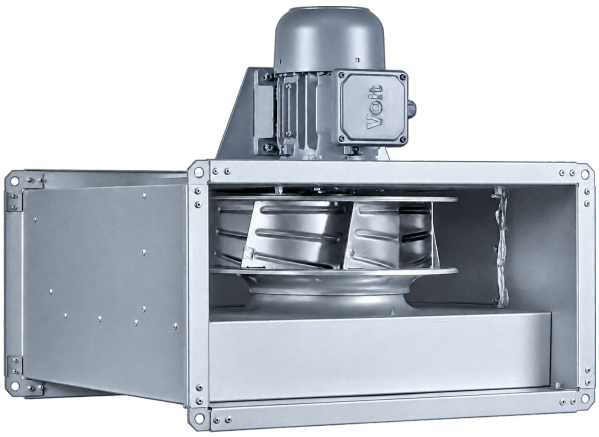
GALVANIZED STEEL CASING



500 x 250 - 1000 x 500	07	50 Hz
Duct size range / mm	Models in the range	Three-phase AC

01 / PRODUCT & TECHNICAL DATA

Compact form. Clear construction.



01 **Motor outside the airstream**

Motor positioned outside the transported-air path, with external access for inspection.

02 **Centrifugal impeller**

Direct motor drive. Materials: galvanized sheet metal and aluminium.

03 **Galvanized steel casing**

Rectangular duct connections and an inspection hatch for cleaning and maintenance. No additional casing coating.

MODEL SPECIFICATIONS

Nominal reference values / 50 Hz

Model	Duct / mm	Max. airflow* m^3/h	Reference power W / at 0 Pa	Reference speed rpm / at 0 Pa	Supply V / phase
VBF-R 280	500x250	1100	180	1450	380 / 3
VBF-R 315	500x250	1600	250	1469	380 / 3
VBF-R 355	600x300	2300	370	1471	380 / 3
VBF-R 400	600x350	3300	550	1478	380 / 3
VBF-R 450	700x400	5000	750	1454	380 / 3
VBF-R 500	800x500	7000	1100	1462	380 / 3
VBF-R 560	1000x500	9800	1500	1464	380 / 3

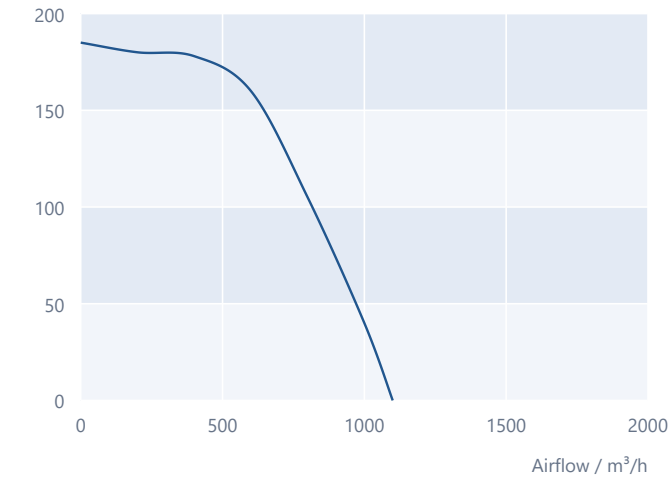
* Maximum airflow is the upper limit of the supplied performance-curve range, rounded to whole m^3/h; it is not a selected duty-point value. Other values are 50 Hz catalogue references at 0 Pa. Actual input power and speed depend on the duty point. Motor current and unit weight were not supplied.

02 / AIR PERFORMANCE / 01

Fan Performance Curves

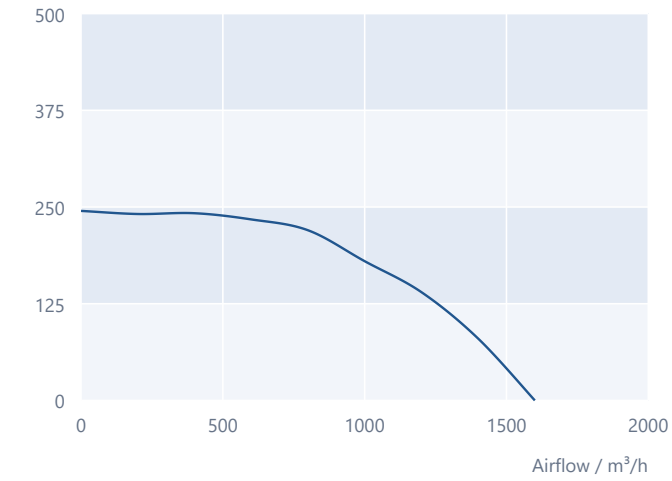
VBF-R 280

3~380 V / 50 Hz



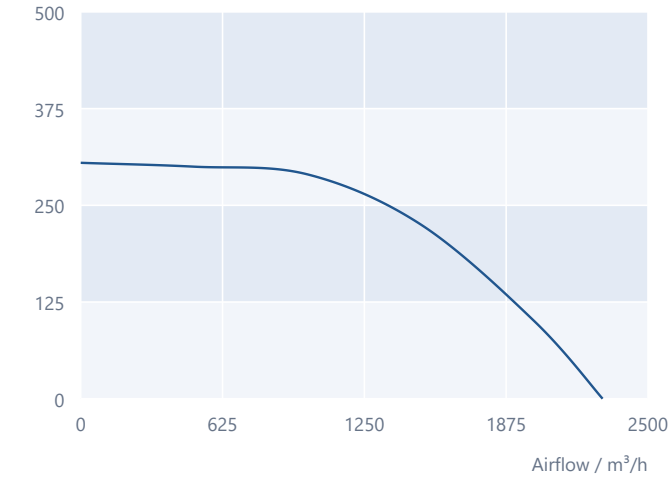
VBF-R 315

3~380 V / 50 Hz



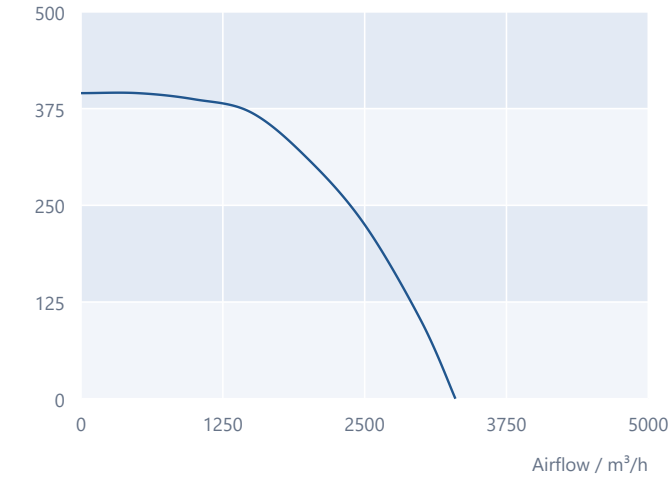
VBF-R 355

3~380 V / 50 Hz



VBF-R 400

3~380 V / 50 Hz



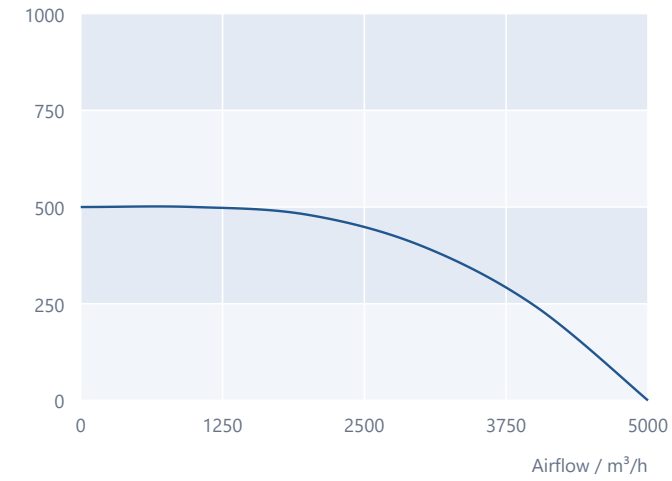
Model-specific axis scales. Listed 50 Hz curves shown only within their ranges. Maximum airflow and pressure are separate endpoints.

02 / AIR PERFORMANCE / 02

Fan Performance Curves

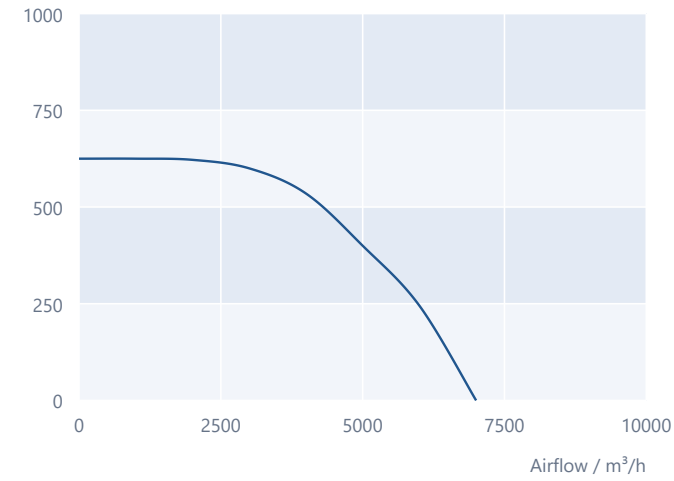
VBF-R 450

3~380 V / 50 Hz



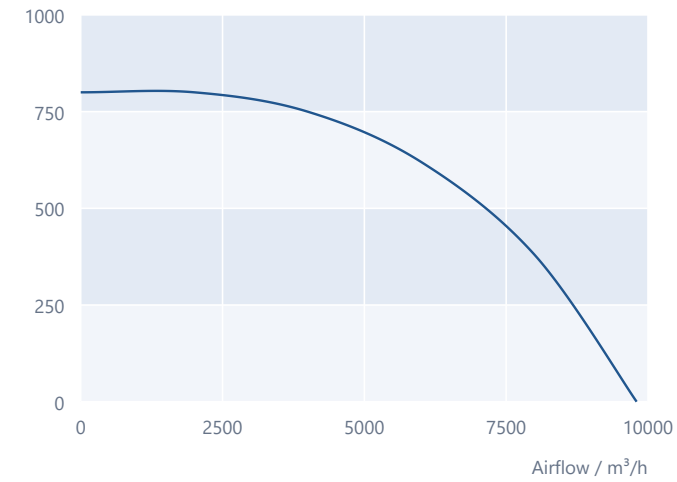
VBF-R 500

3~380 V / 50 Hz



VBF-R 560

3~380 V / 50 Hz



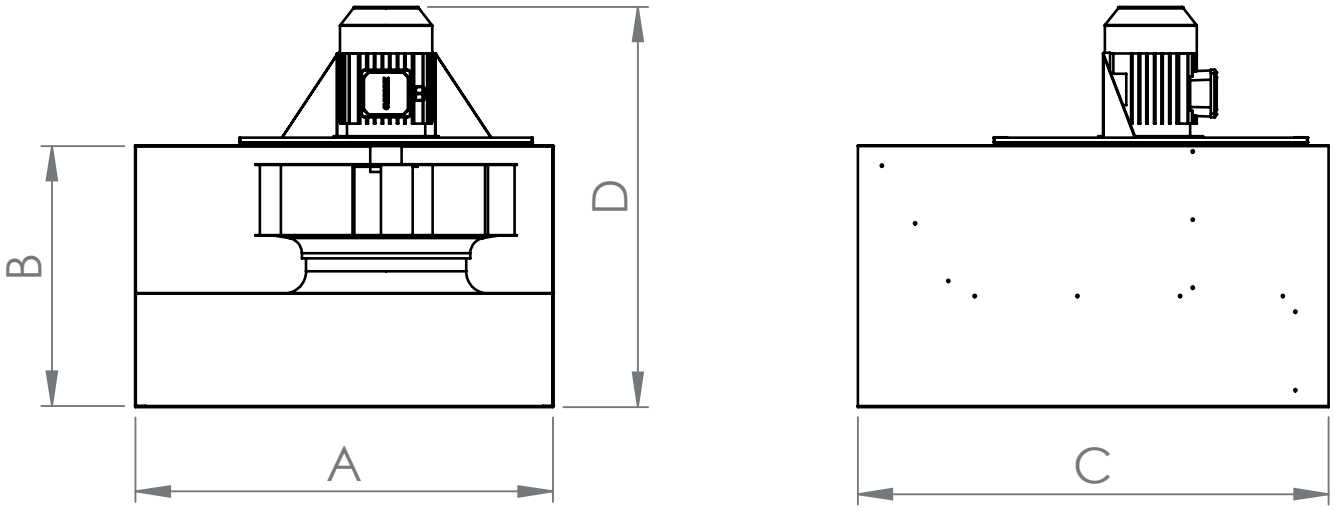
Model-specific axis scales. Listed 50 Hz curves shown only within their ranges. Maximum airflow and pressure are separate endpoints.

03 / DIMENSIONAL DATA

Plan the installation.

FAMILY DRAWING

All dimensions in mm



Model	A	B	C	D
VBF-R 280	500	250	565	450
VBF-R 315	500	250	565	476
VBF-R 355	600	300	760	526
VBF-R 400	600	350	750	590
VBF-R 450	700	400	790	641
VBF-R 500	800	500	900	765
VBF-R 560	1000	500	1050	790

VBF-R series / rectangular duct connections 500 x 250 to 1000 x 500 mm

Family drawing. Dimension values follow the model records in Voltvent Selection Software.

04 / INSTALLATION & MOTOR DATA

Plan for access and service.

01 Duct connection

Match the rectangular A x B connection to the selected model. Use dimensions A-D to plan the casing envelope and mounting space.

02 Installation & access

Support the cabinet securely. Allow clearance around the external motor and inspection hatch for access, cleaning and maintenance.

03 Applications

Duct exhaust and kitchen ventilation applications. Keep the airflow path clear and respect the stated operating temperature range.

MOTOR & OPERATING CONDITIONS

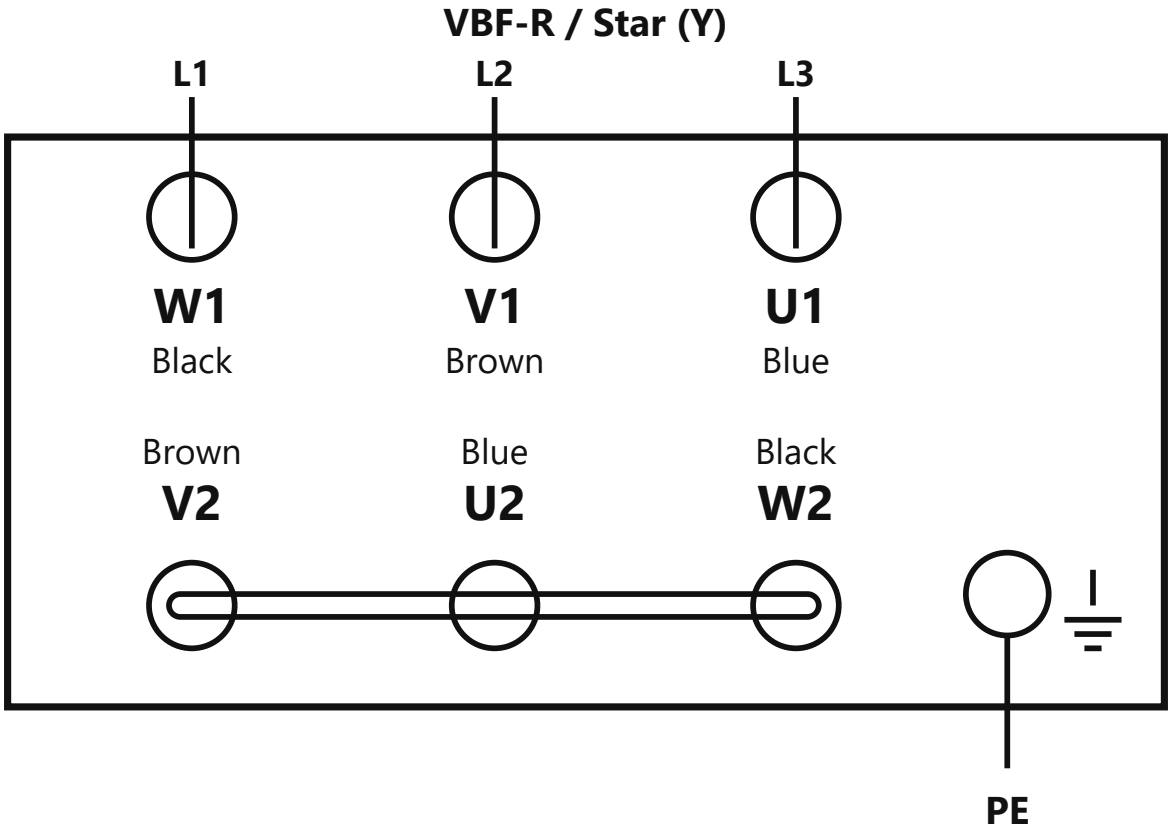
Parameter	Catalogue reference
Electrical supply	3~380 V / 50 Hz
Insulation / protection	Class F / IP55
Motor efficiency class	IE3
Duty classification	S1
Operating temperature	-20 to +50 °C

Use the electrical connection diagram supplied with the actual unit. The supplied star (Y) connection diagram is on the next page. Disconnect the supply before servicing.

05 / ELECTRICAL CONNECTION

Three-phase star connection.

VBF-R / 380 V / 50 Hz - STAR (Y)



CONNECTION KEY

Marking	Function
L1 / L2 / L3	Phase supply
W1 / V1 / U1	Supply-connected terminals, in the shown order
V2 / U2 / W2	Star point / terminals linked as shown
PE	Protective earth

Terminal codes, conductor colours and the star-point link follow the supplied drawing. Use the actual motor nameplate and supplied terminal diagram. Disconnect the electrical supply before servicing.

VBF-R

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