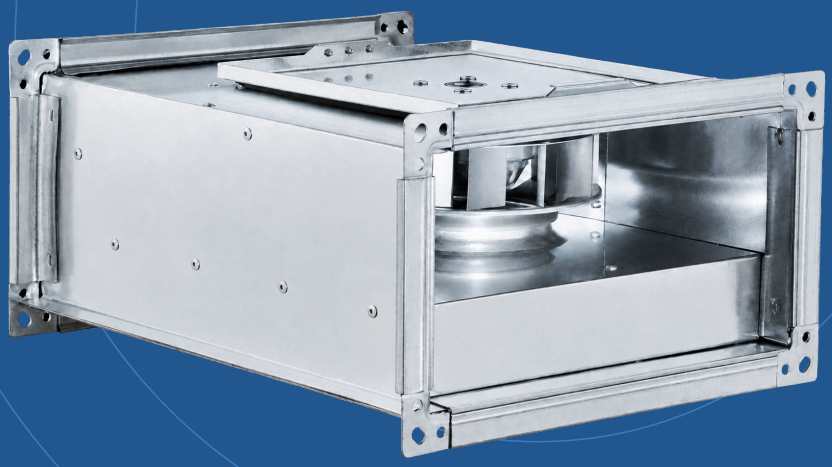
VBF-EC SERIES

Rectangular inline EC duct fans

VBF-EC

BACKWARD-CURVED IMPELLER

GALVANIZED STEEL CASING

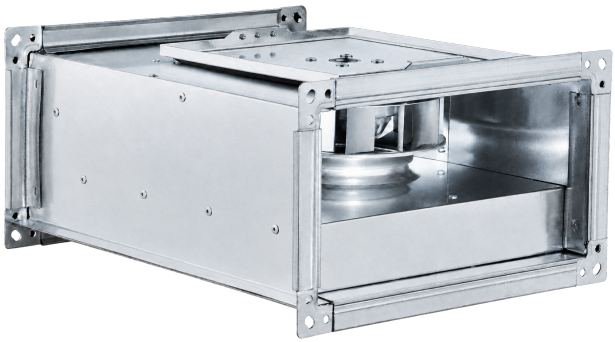


800-14500	07	10 V
Curve airflow limits / m^3/h	EC configurations	Performance setting

01 / PRODUCT OVERVIEW

Rectangular ducts. EC control.

Rectangular inline
EC duct fan



01 Built for rectangular ductwork

Galvanized-steel rectangular casing with a backward-curved centrifugal impeller. Match the duct opening and fixing points to the dimension drawing.

02 Integrated EC control

Integrated EC electronics provide speed regulation. The performance curves apply to the published 10 V setting and retain each configuration's available range.

03 Access for inspection

Keep the hinged lid clear for inspection and cleaning. Support the fan and duct connections without stressing the casing or obstructing the service opening.

INLINE VENTILATION / SERVICE ACCESS

For rectangular duct systems with limited space for a separate fan assembly. Leave room to open the lid and reach the electrical connection.

SERIES AT A GLANCE

Selection parameter	Series reference
Mains supply	230 V / 1 phase or 400 V / 3 phase
EC performance setting	10 V / 50 Hz nominal mains
Motor protection / insulation	IP54 / class F
Maximum operating temperature	50 °C

An EC-specific wiring diagram and terminal assignments are unavailable in the verified record. Use the electrical documentation supplied with the ordered fan.

02 / TECHNICAL DATA

Match the rectangular duct duty.

AVAILABLE CURVE LIMITS & RATED MOTOR DATA

Model	Curve airflow limit m^3/h	Rated input W	Rated current A	Rated speed rpm	Max. static Pa	Mass kg
VBF-EC M 30-15	800	170	1.3	4300	800	7
VBF-EC M 40-20	1700	225	1.45	2800	650	10.5
VBF-EC M 60-35	3000	550	2.42	2200	735	31
VBF-EC M 70-40	4000	400	1.72	1650	486	44
VBF-EC T 70-40	7400	1000	1.73	1500	660	44
VBF-EC T 80-50	13000	3300	4.95	1800	1300	72
VBF-EC T 100-50	14500	2900	5.4	1500	1200	84

Airflow limits in the table match the available curves. M 60-35 has a separate declared maximum of 4000 m^3/h, but its available curve ends at 3000 m^3/h. No curve is extended to the separate declaration.

SUPPLY & ACOUSTIC REFERENCE / 50 Hz

Model	Mains supply	LpA at 3 m / dB(A)
VBF-EC M 30-15	230 V / 1 phase	69
VBF-EC M 40-20	230 V / 1 phase	63
VBF-EC M 60-35	230 V / 1 phase	63
VBF-EC M 70-40	230 V / 1 phase	57
VBF-EC T 70-40	400 V / 3 phase	62
VBF-EC T 80-50	400 V / 3 phase	61
VBF-EC T 100-50	400 V / 3 phase	60

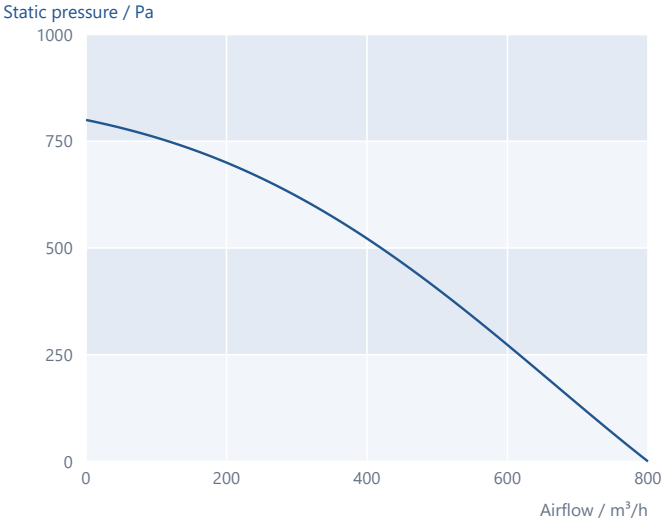
T 80-50 has a declared rated speed of 1800 rpm; its listed performance curve has a 1100 rpm speed reference. These remain distinct. Rated motor values are separate from selected-duty readings.

03 / AIR PERFORMANCE

Fan Performance Curves

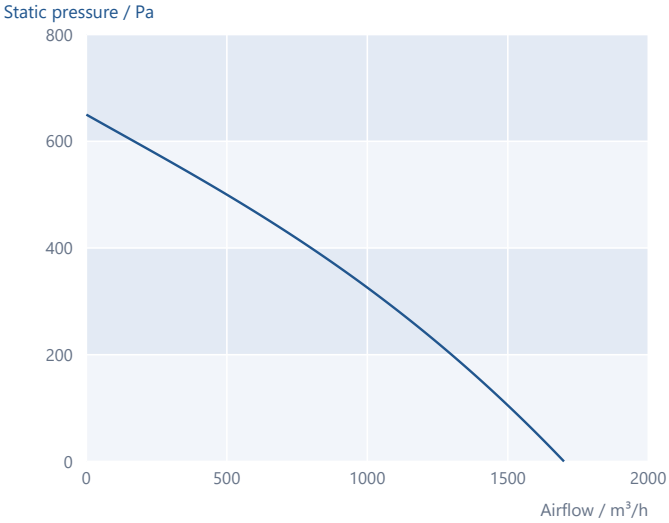
VBF-EC M 30-15

230 V / 1 phase / 50 Hz / 10 V setting



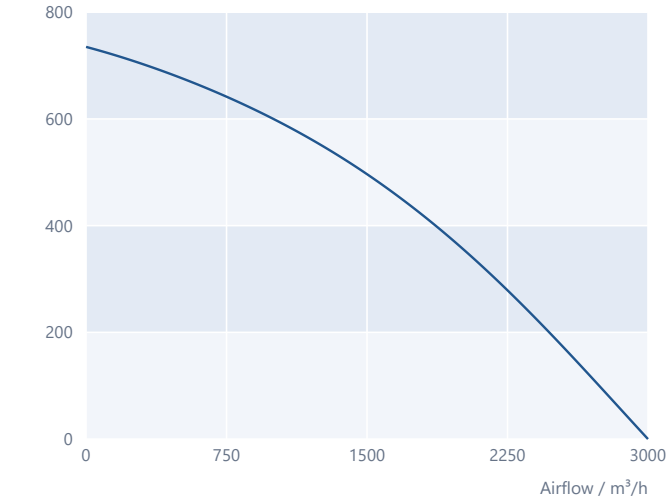
VBF-EC M 40-20

230 V / 1 phase / 50 Hz / 10 V setting



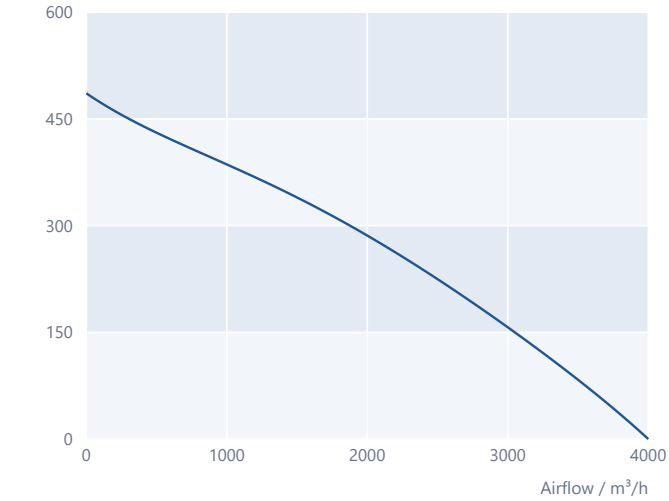
VBF-EC M 60-35

230 V / 1 phase / 50 Hz / 10 V setting



VBF-EC M 70-40

230 V / 1 phase / 50 Hz / 10 V setting



Curves retain the published 10 V setting and airflow range. Each configuration uses its own scales. No re-fitting, speed conversion or extrapolation is applied.

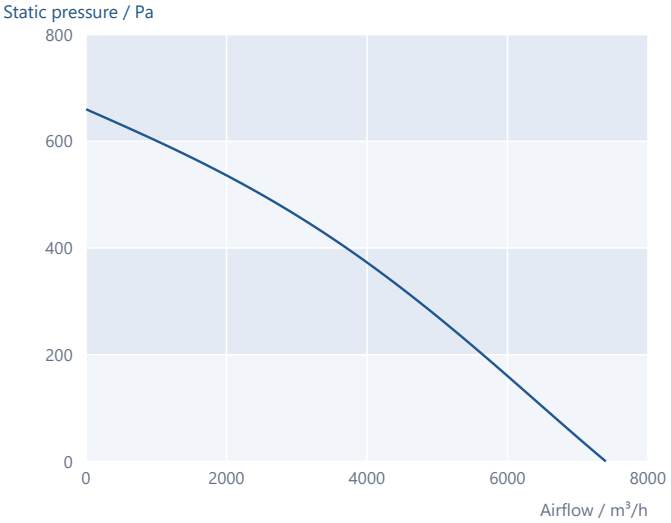
M 60-35 is limited to the available 3000 m³/h curve; its separate 4000 m³/h declaration is not plotted.

03 / AIR PERFORMANCE

Fan Performance Curves

VBF-EC T 70-40

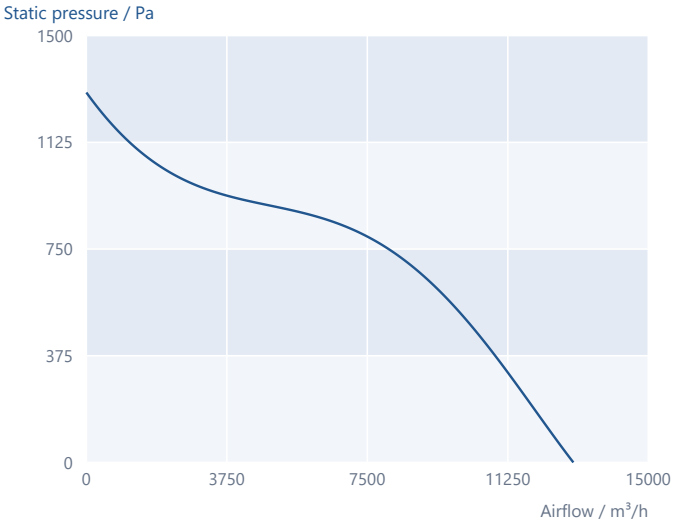
400 V / 3 phase / 50 Hz / 10 V setting



VBF-EC T 80-50

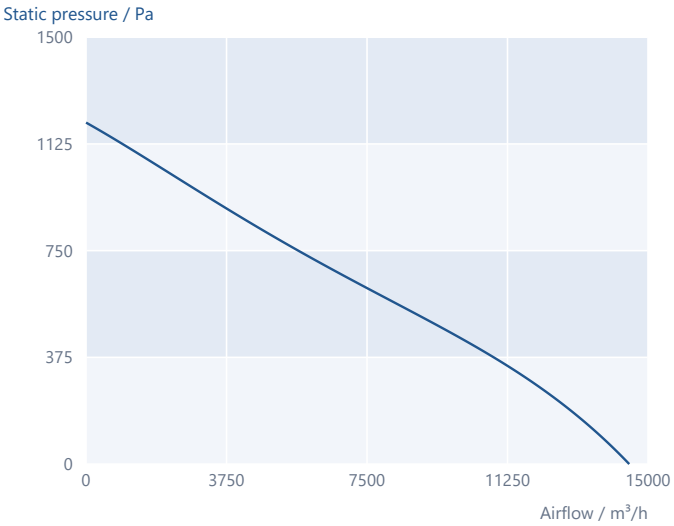
400 V / 3 phase / 50 Hz / 10 V setting

Curve speed reference: 1100 rpm



VBF-EC T 100-50

400 V / 3 phase / 50 Hz / 10 V setting



PERFORMANCE REFERENCES

T 80-50: the curve-speed reference is 1100 rpm. The separate rated motor speed is 1800 rpm; no speed conversion is applied.

T 70-40: the published curve starts at 1 m³/h. Its positive lower limit is retained.

Curves retain the published 10 V setting and airflow range. Each configuration uses its own scales. No re-fitting, speed conversion or extrapolation is applied.

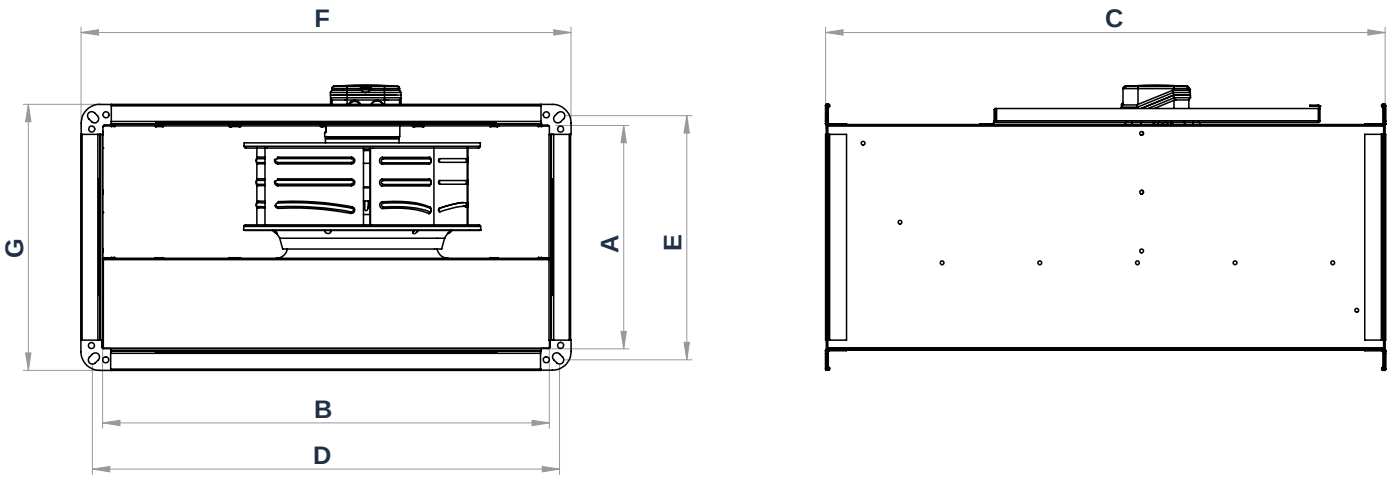
M 60-35 is limited to the available 3000 m³/h curve; its separate 4000 m³/h declaration is not plotted.

04 / DIMENSIONS

Coordinate the duct connections.

REPRESENTATIVE SERIES OUTLINE

All dimensions in mm



Model	A	B	C	D	E	F	G
VBF-EC M 30-15	150	300	400	320	170	350	200
VBF-EC M 40-20	200	400	500	420	220	450	250
VBF-EC M 60-35	350	600	750	620	370	660	410
VBF-EC M 70-40	400	700	800	720	420	770	470
VBF-EC T 70-40	400	700	800	720	420	770	470
VBF-EC T 80-50	500	800	920	820	520	870	570
VBF-EC T 100-50	500	1000	1050	1030	530	1070	570

Use the dimensions for the selected model. The representative outline uses generic letters and is not drawn to scale. Keep the hinged access lid and electrical connection accessible.

05 / ACOUSTICS

Understand the sound profile.

OCTAVE-BAND SOUND POWER / dB(A)

Model	Path	65 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
VBF-EC M 30-15	Inlet	44	56	64	56	55	53	47	38	66
VBF-EC M 30-15	Outlet	48	53	66	63	61	58	51	43	69
VBF-EC M 30-15	Housing	26	33	47	44	42	41	35	27	50
VBF-EC M 40-20	Inlet	44	54	66	58	61	59	55	47	69
VBF-EC M 40-20	Outlet	44	53	67	64	63	66	61	58	72
VBF-EC M 40-20	Housing	20	34	53	45	44	44	38	35	55
VBF-EC M 60-35	Inlet	50	65	61	63	60	61	56	48	70
VBF-EC M 60-35	Outlet	54	72	68	69	68	67	62	54	76
VBF-EC M 60-35	Housing	27	57	53	50	49	48	49	37	60
VBF-EC M 70-40	Inlet	60	70	68	69	66	66	62	52	75
VBF-EC M 70-40	Outlet	60	71	71	73	74	71	38	55	79
VBF-EC M 70-40	Housing	41	62	58	56	56	49	42	36	65
VBF-EC T 70-40	Inlet	60	70	68	69	66	66	62	52	75
VBF-EC T 70-40	Outlet	60	71	71	73	74	71	38	55	79
VBF-EC T 70-40	Housing	41	62	58	56	56	49	42	36	65
VBF-EC T 80-50	Inlet	61	72	71	73	71	71	66	58	79
VBF-EC T 80-50	Outlet	66	75	76	77	79	75	70	61	84
VBF-EC T 80-50	Housing	45	68	64	61	61	60	54	43	71
VBF-EC T 100-50	Inlet	70	77	76	78	78	75	71	65	84
VBF-EC T 100-50	Outlet	71	80	81	82	83	80	74	65	89
VBF-EC T 100-50	Housing	58	69	64	62	60	56	52	50	72

Declared inlet, outlet and housing sound-power references. Band labels, repeated references and totals are preserved as supplied, including the first band at 65 Hz. Totals are not arithmetic sums.

Sound power and sound pressure are different quantities. The 3 m sound-pressure references are on page 3; no installation-specific or selected-duty noise calculation is implied.

VBF-EC

ec MOTOR

Rectangular inline EC duct fans

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VENTILATION SYSTEMS