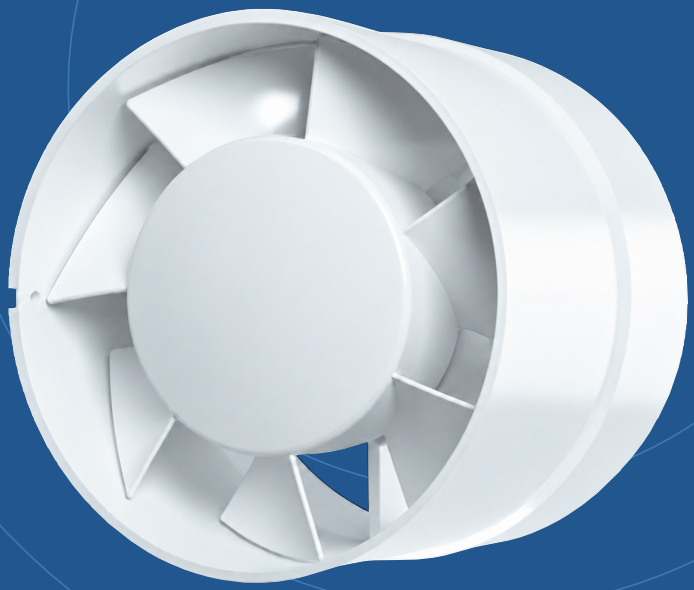
VBDF SERIES

Inline bathroom extractor fans

VBDF

AXIAL AIRFLOW

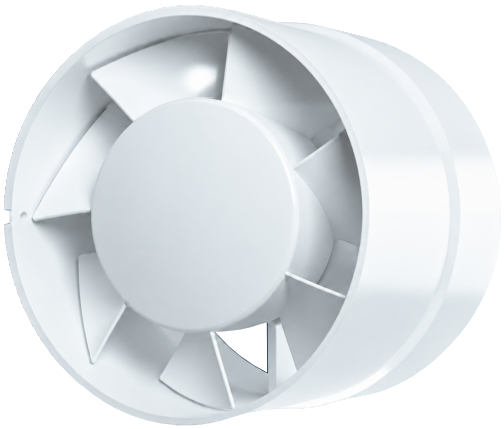
ABS PLASTIC CASING



100-300	03	50 Hz
Nominal airflow / m^3/h	Models in the range	230 V / Single phase

01 / PRODUCT & TECHNICAL DATA

Compact fan. Short duct runs.



01 Compact axial design

A cylindrical ABS plastic casing for local extraction through rigid or flexible ducts.

02 Short duct ventilation

For low static pressure duties in small or medium spaces. Use a straight duct shorter than 1.5 m.

03 Single-phase operation

Three 50 Hz models with a 230 V supply. Select airflow against the resistance of the connected duct system.

NOMINAL RATINGS / 50 Hz

Model	Airflow m^3/h	Power W	Speed rpm	Current A	Weight kg	LpA dB(A) / 3 m
VBDF 100	100	13	2600	0.09	0.45	40
VBDF 125	200	14	2400	0.09	0.5	41
VBDF 150	300	21	2000	0.13	0.55	43

Airflow is the nominal maximum, not a selected duty point. Nominal motor ratings differ from operating-point power, speed and current in FSP. Sound pressure is the supplied reference at 3 m.

COMMON MOTOR & OPERATING DATA

230 V / 1 phase / 50 Hz / 2 poles / Class B / IP20. Motor operating range: -20 to +40 °C. Maximum transported-air temperature: +40 °C. Installation suitability follows the actual unit rating.

Current FSP ratings and listed curves are used throughout this catalogue.

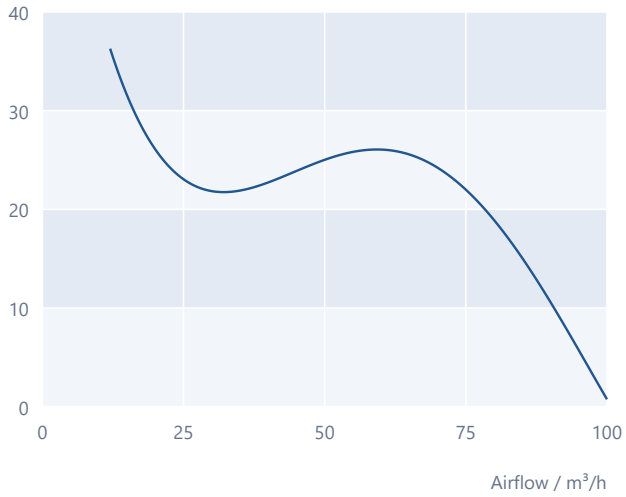
02 / AIR PERFORMANCE

Fan Performance Curves

VBDF 100

230 V / 1 phase / 50 Hz

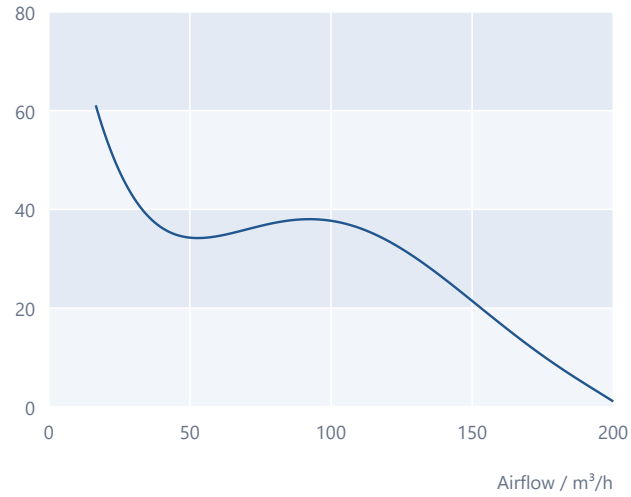
Static pressure / Pa



VBDF 125

230 V / 1 phase / 50 Hz

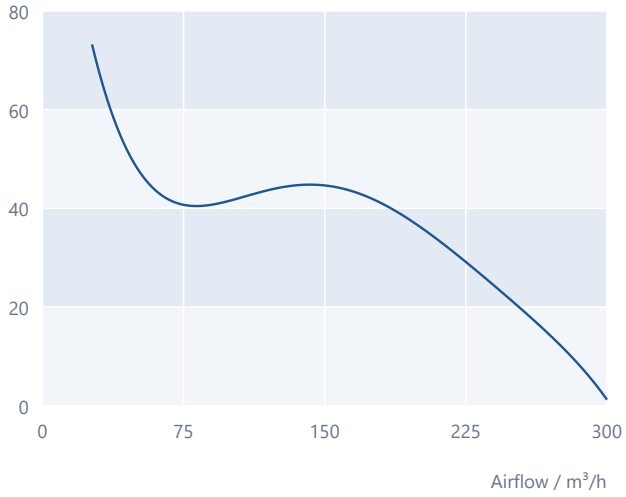
Static pressure / Pa



VBDF 150

230 V / 1 phase / 50 Hz

Static pressure / Pa



SELECT THE DUTY POINT

Airflow meets resistance.

Choose a model where the required airflow and system pressure meet its curve. Allow for losses through the duct, bends and discharge terminal.

READING THE CURVES

Each model uses its own pressure scale. Curves retain their shape and supplied flow domain; no zero-flow extrapolation is added. The curve endpoints remain slightly above zero pressure.

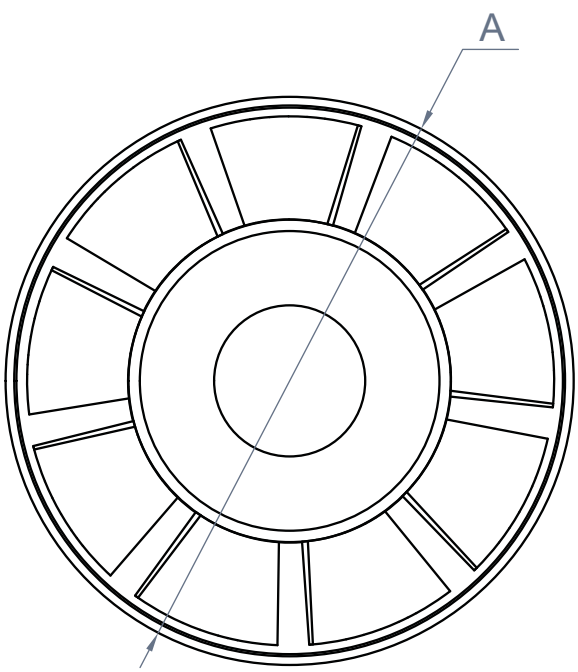
50 Hz curves follow the VBDF FSP record, including the shared VBRF curve basis.

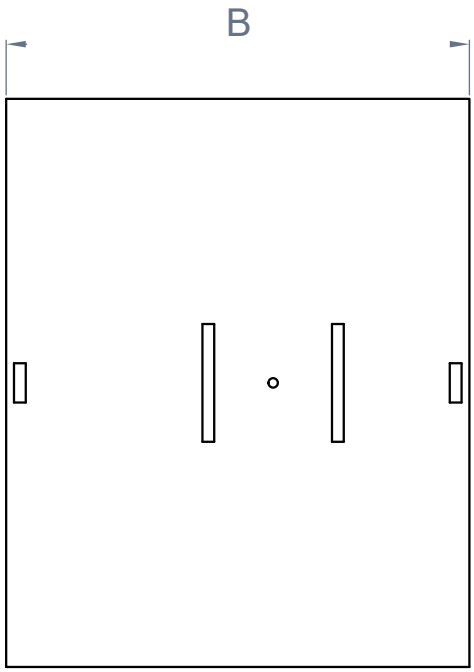
03 / DIMENSIONAL DATA

Plan the duct connection.

SERIES DIMENSION DRAWING / A-B

All dimensions in mm





Model	Nominal size	ØA	B
VBDF 100	100	96.5	105.5
VBDF 125	125	117.5	111.5
VBDF 150	150	145	118

ØA: cylindrical casing diameter. B: overall casing length. Model names denote nominal connection size; the drawing gives the actual casing value, so VBDF 125 retains ØA = 117.5 mm.

Use the selected model's dimension row for the connection. The drawing is a series reference; confirm the actual unit and mating duct before installation.

04 / INSTALLATION & ACOUSTICS

Keep the airflow path clear.

01 Direct or short duct extraction

Mount the fan within the connected duct with an unobstructed airflow path. Use a straight duct shorter than 1.5 m, allowing access for cleaning. Select the fan at the system duty rather than nominal airflow alone.

02 Motor and service conditions

Supply: 230 V single phase / 50 Hz. Current FSP rating: Class B / IP20. Motor ambient range: -20 to +40 °C; transported air: maximum +40 °C. Isolate the supply before servicing.

REFERENCE SOUND POWER / INLET & OUTLET

Octave-band LwA / dB(A)

Model	Side	65 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	Total
VBDF 100	Inlet	11	35	41	43	40	36	34	27	47
VBDF 100	Outlet	36	49	52	52	42	38	34	25	56
VBDF 125	Inlet	15	41	42	41	40	38	31	24	48
VBDF 125	Outlet	56	52	53	50	43	40	29	22	59
VBDF 150	Inlet	18	37	45	45	43	40	33	25	50
VBDF 150	Outlet	36	49	55	49	40	40	32	20	57

The chart labels its lowest frequency band as 65 Hz; this label is retained. Inlet/outlet sound power is distinct from sound pressure at 3 m on page 2. These are reference values, not a predicted installed-room sound level.

ELECTRICAL CONNECTION

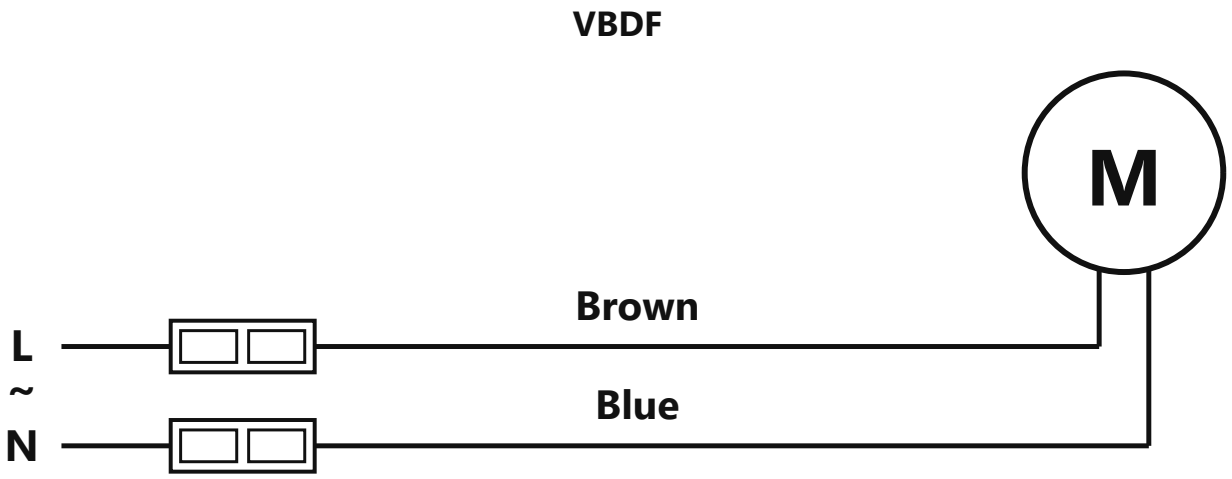
The English connection diagram on page 6 reproduces the supplied VBDF two-wire arrangement. Match the actual unit terminal identification before connection.

05 / ELECTRICAL CONNECTION

Electrical Connection Diagram

VBDF 100 / VBDF 125 / VBDF 150

230 V / 1 phase / 50 Hz



CONNECTION KEY

Marking	Conductor / function
L	Brown / live
N	Blue / neutral
M	Fan motor

This diagram reproduces the wiring supplied for the VBDF series. Brown and Blue identify the two conductors in that diagram. No additional terminals, capacitor or protective-earth conductor are added to the supplied arrangement.

Connect according to the actual fan nameplate and terminal identification. Isolate the supply before making or inspecting connections.

VBDF

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