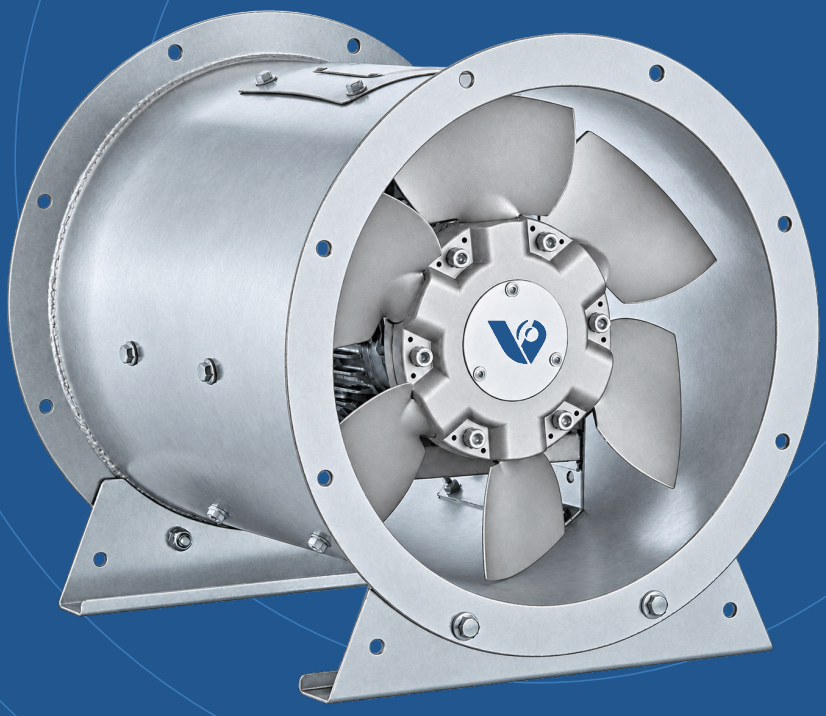
VLF-T-EX SERIES

Ex-proof tube axial fans

VLF-T-EX

CAST-ALUMINIUM AIRFOIL IMPELLER

DIRECT-DRIVE EX-PROOF MOTOR



3173-115000	16	50 Hz
Curve upper limits / m^3/h	Models in the range	Performance frequency

01 / PRODUCT OVERVIEW

Axial airflow. Ex-proof configuration.

Ex-proof tube
axial fan



01 Tube casing and airfoil blades

Coated steel tube casing and a cast-aluminium airfoil impeller for ducted axial ventilation.

02 Motor and impeller clearance

A direct-drive Ex-proof motor is supported within the casing. An aluminium liner at the blade clearance reduces mechanical sparking risk.

03 Pitch and installation

Use the selected model-specific blade angle, flanges and supports. Keep blade pitch fixed during operation and provide inspection access.

CONFIGURE THE COMPLETE ASSEMBLY

Match the supplied assembly to the intended application. The motor reference and complete fan marking are separate records. Product photographs illustrate the series construction.

Selection parameter	Series reference
Mains reference	400 V / 3 phase / 50 Hz
Motor protection / insulation reference	IP55 / class F
Operating temperature	-20 to 40 °C
Maximum medium temperature	40 °C

Dedicated motor reference: II 2G Ex d IIC T4 Gb. Complete fan marking and certificate: to be confirmed.

02 / TECHNICAL DATA

Select the diameter and blade pitch.

16 CONFIGURATIONS / 400 V / 3 PHASE / 50 Hz

Model: diameter / blades-angle / motor / poles	Nominal Q m^3/h	Curve Q min. m^3/h	Curve Q max. m^3/h	Rated input W	Rated A	Rated rpm	Ps max. Pa
VLF-T-EX 400/6-20°/0.37kW/4P	3500	2150	3173	370	1.2	1390	116
VLF-T-EX 450/6-20°/0.55kW/4P	5300	3400	5240	550	1.6	1365	157
VLF-T-EX 500/6-20°/0.55kW/4P	7000	4375	7300	550	1.6	1365	204
VLF-T-EX 560/6-18°/0.75kW/4P	10000	5875	10350	750	2.1	1405	270
VLF-T-EX 630/6-16°/1.1kW/4P	14000	6500	13600	1100	2.6	1410	368
VLF-T-EX 710/6-14°/1.5kW/4P	17500	3500	17500	1500	3.5	1410	608
VLF-T-EX 800/6-10°/2.2kW/4P	23000	5500	20000	2200	5	1425	608
VLF-T-EX 800/6-14°/3kW/4P	25000	8500	24000	3000	6.6	1425	589
VLF-T-EX 900/6-12°/4kW/4P	35000	11000	31000	4000	8.4	1440	726
VLF-T-EX 900/6-16°/5.5kW/4P	40000	16000	38800	5500	11.2	1465	687
VLF-T-EX 1000/6-14°/7.5kW/4P	50000	18000	48000	7500	15.4	1465	804
VLF-T-EX 1000/6-20°/11kW/4P	60000	32000	59000	11000	21.3	1465	668
VLF-T-EX 1000/6-24°/15kW/4P	70000	40000	69400	15000	29.4	1465	657
VLF-T-EX 1000/6-28°/18.5kW/4P	80000	49000	77700	18500	34.5	1470	649
VLF-T-EX 1250/6-14°/22kW/4P	100000	39000	96800	22000	42.5	1470	981
VLF-T-EX 1250/6-20°/30kW/4P	115000	74000	115000	30000	55	1470	746

Nominal airflow is a separate declaration. The performance curves retain their original minimum and maximum airflow limits; no extrapolation to zero flow or to nominal airflow is applied. Rated motor speeds and polynomial curve-speed references are independent.

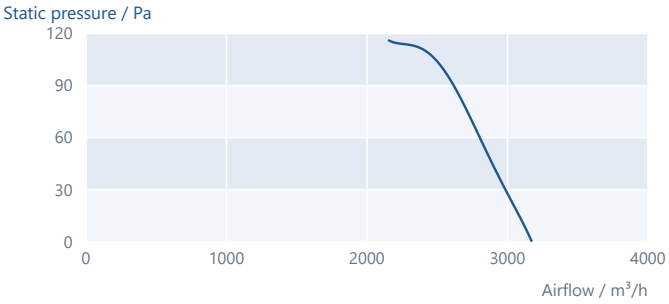
Model code: nominal diameter / number of blades - blade angle / rated motor power / motor poles. All dimensions, mass and published sound-pressure totals are listed separately.

03 / AIR PERFORMANCE

Fan Performance Curves

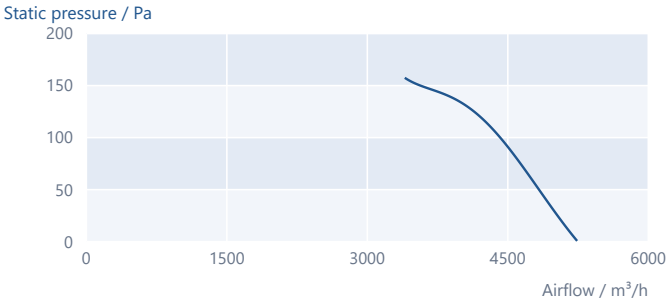
VLF-T-EX 400/6-20°/0.37kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



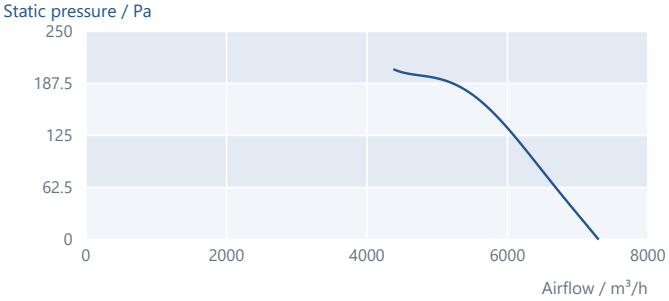
VLF-T-EX 450/6-20°/0.55kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



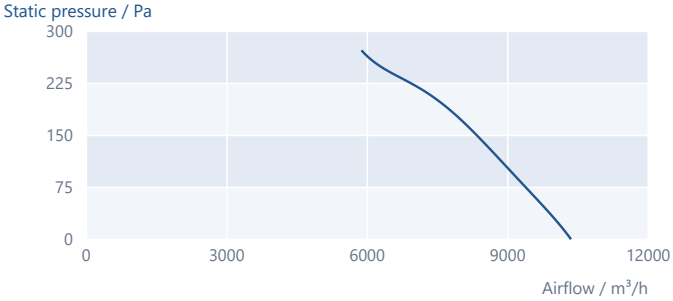
VLF-T-EX 500/6-20°/0.55kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



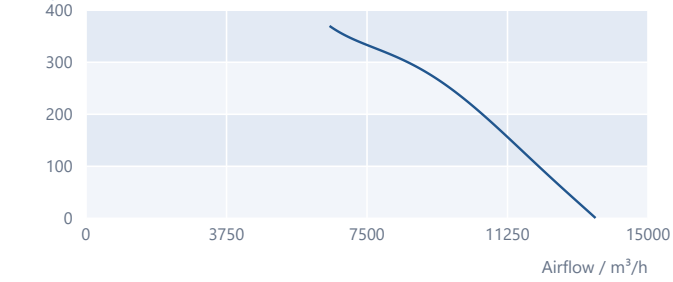
VLF-T-EX 560/6-18°/0.75kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



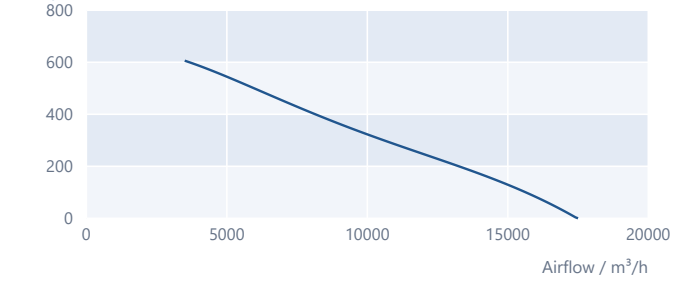
VLF-T-EX 630/6-16°/1.1kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



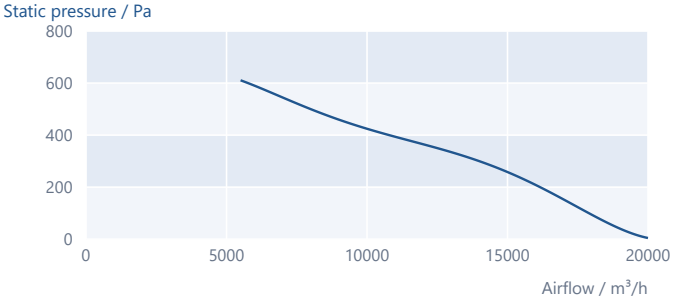
VLF-T-EX 710/6-14°/1.5kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



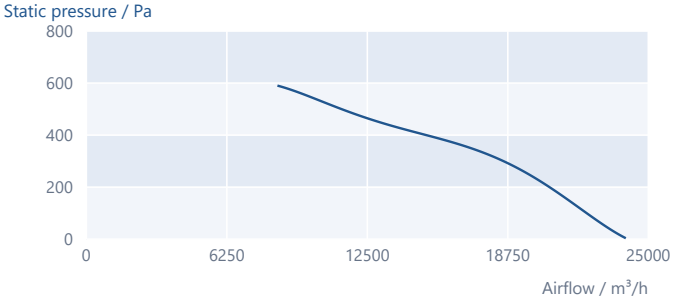
VLF-T-EX 800/6-10°/2.2kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



VLF-T-EX 800/6-14°/3kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



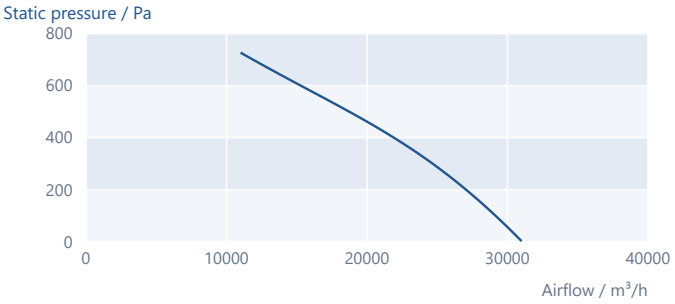
Exact 50 Hz coefficients and airflow domains retained. Model-specific scales. No speed conversion or re-fitting. Curves start at their supplied minimum airflow; blank areas are not extrapolated.

03 / AIR PERFORMANCE

Fan Performance Curves

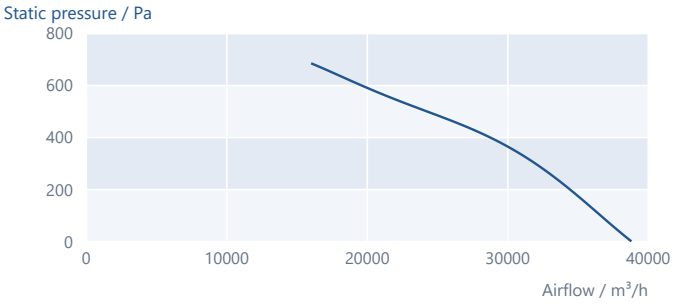
VLF-T-EX 900/6-12°/4kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



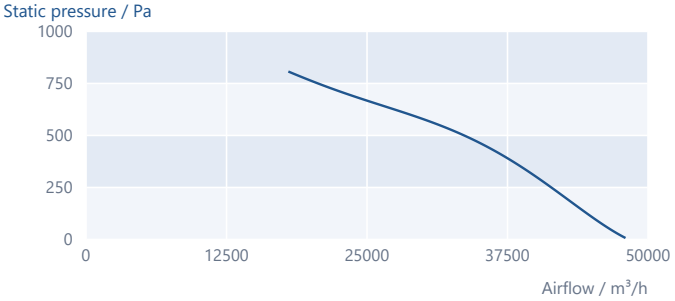
VLF-T-EX 900/6-16°/5.5kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



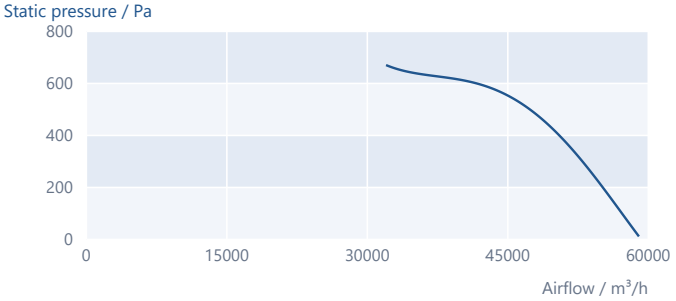
VLF-T-EX 1000/6-14°/7.5kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



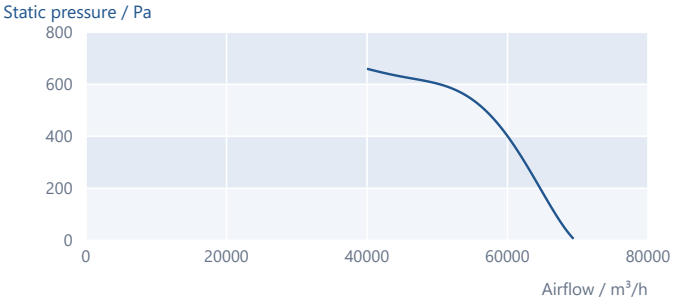
VLF-T-EX 1000/6-20°/11kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



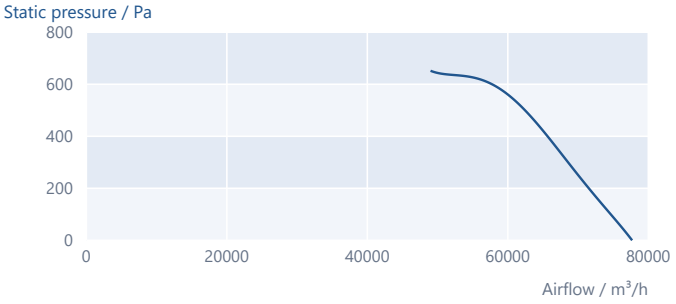
VLF-T-EX 1000/6-24°/15kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



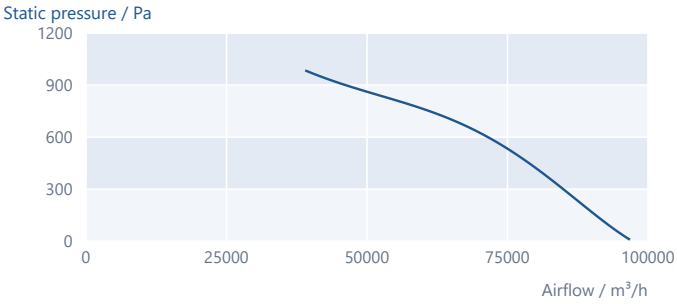
VLF-T-EX 1000/6-28°/18.5kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



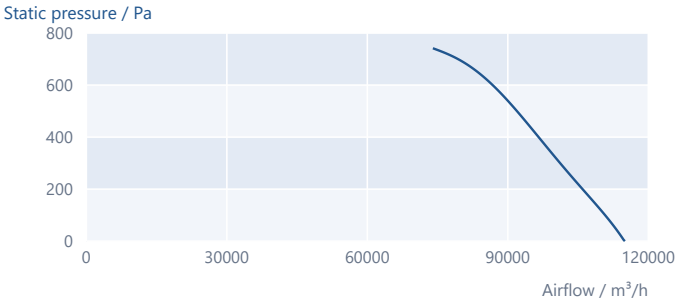
VLF-T-EX 1250/6-14°/22kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



VLF-T-EX 1250/6-20°/30kW/4P

400 V / 3 phase / 50 Hz / Dedicated Ex-proof data



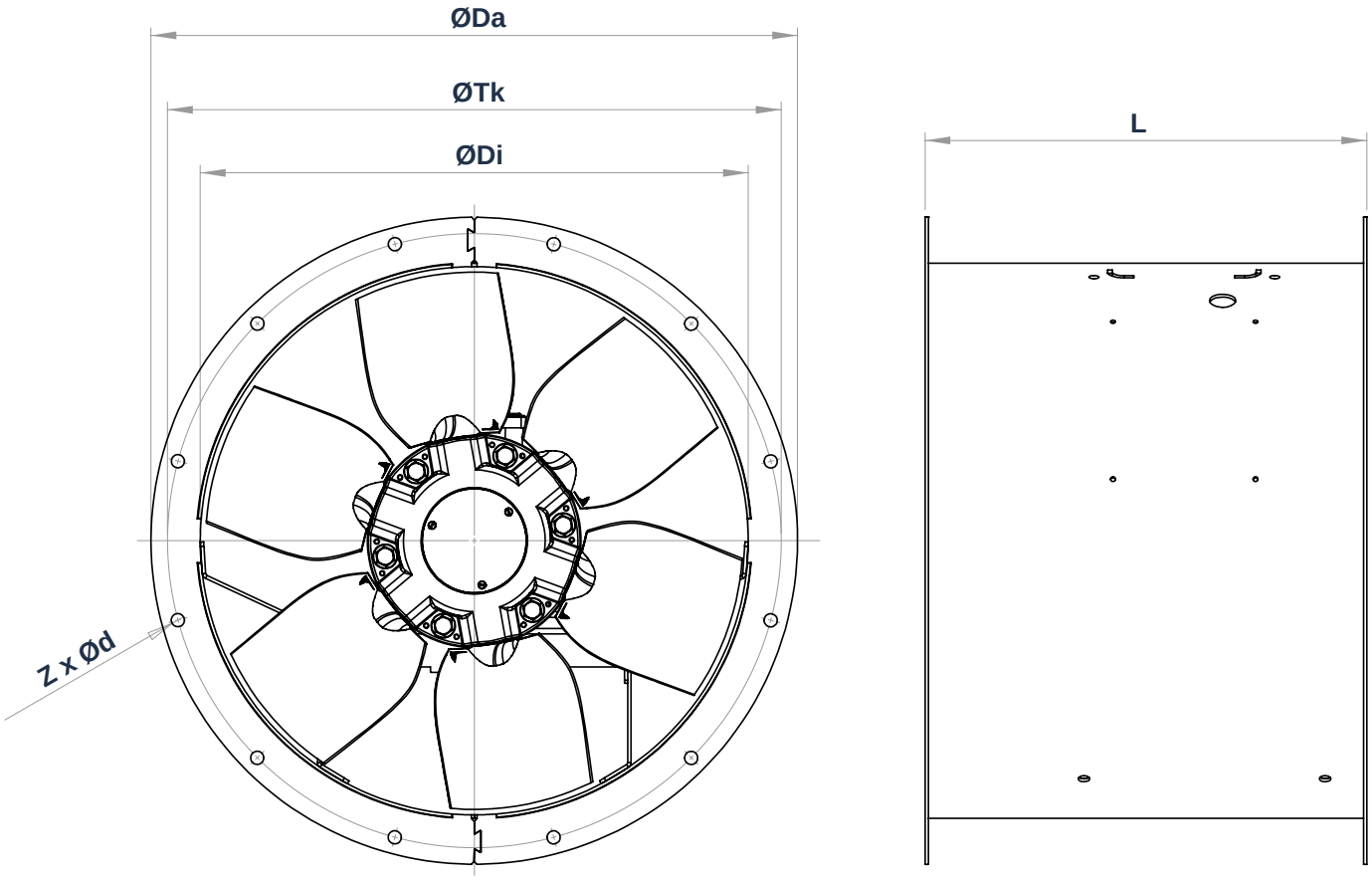
Exact 50 Hz coefficients and airflow domains retained. Model-specific scales. No speed conversion or re-fitting. Curves start at their supplied minimum airflow; blank areas are not extrapolated.

04 / DIMENSIONS

Coordinate the axial connection.

REPRESENTATIVE SERIES OUTLINE

Dimensions in mm; Z = hole count



Outline label	Meaning
ØDa	Outside flange diameter
ØTk	Fixing pitch-circle diameter
ØDi	Internal duct diameter
Z x Ød	Number of fixing holes x hole diameter
L	Casing length

Use the following model-specific table for the selected diameter and motor configuration. The outline is representative and is not drawn to scale.

04 / DIMENSIONS

Match the model to the interface.

MODEL-SPECIFIC FLANGE AND CASING DATA

Model	ØDa	ØTk	ØDi	Z	Ød	L
VLF-T-EX 400/6-20°/0.37kW/4P	480	450	400	8	12	350
VLF-T-EX 450/6-20°/0.55kW/4P	530	500	450	8	12	350
VLF-T-EX 500/6-20°/0.55kW/4P	590	560	500	12	12	400
VLF-T-EX 560/6-18°/0.75kW/4P	650	620	560	12	12	400
VLF-T-EX 630/6-16°/1.1kW/4P	720	690	630	12	12	400
VLF-T-EX 710/6-14°/1.5kW/4P	800	770	710	16	12	450
VLF-T-EX 800/6-10°/2.2kW/4P	890	860	800	16	12	500
VLF-T-EX 800/6-14°/3kW/4P	890	860	800	16	12	500
VLF-T-EX 900/6-12°/4kW/4P	1005	970	900	16	15	550
VLF-T-EX 900/6-16°/5.5kW/4P	1005	970	900	16	15	550
VLF-T-EX 1000/6-14°/7.5kW/4P	1105	1070	1000	16	15	700
VLF-T-EX 1000/6-20°/11kW/4P	1105	1070	1000	16	15	700
VLF-T-EX 1000/6-24°/15kW/4P	1105	1070	1000	16	15	700
VLF-T-EX 1000/6-28°/18.5kW/4P	1105	1070	1000	16	15	700
VLF-T-EX 1250/6-14°/22kW/4P	1390	1320	1250	20	15	850
VLF-T-EX 1250/6-20°/30kW/4P	1390	1320	1250	20	15	850

Dimensions in mm, except Z (number of fixing holes). Equal flange dimensions do not make different blade-angle and motor configurations interchangeable. Retain the full model identity when ordering.

05 / ACOUSTIC DATA

Sound references for each model.

PUBLISHED SOUND-PRESSURE TOTALS / 3 m

Model	Mass kg	LpA dB(A)	Distance m
VLF-T-EX 400/6-20°/0.37kW/4P	30	60	3
VLF-T-EX 450/6-20°/0.55kW/4P	32	62	3
VLF-T-EX 500/6-20°/0.55kW/4P	50	66	3
VLF-T-EX 560/6-18°/0.75kW/4P	55	63	3
VLF-T-EX 630/6-16°/1.1kW/4P	66	70	3
VLF-T-EX 710/6-14°/1.5kW/4P	75	71	3
VLF-T-EX 800/6-10°/2.2kW/4P	103	74	3
VLF-T-EX 800/6-14°/3kW/4P	110	76	3
VLF-T-EX 900/6-12°/4kW/4P	160	79	3
VLF-T-EX 900/6-16°/5.5kW/4P	170	81	3
VLF-T-EX 1000/6-14°/7.5kW/4P	205	84	3
VLF-T-EX 1000/6-20°/11kW/4P	242	86	3
VLF-T-EX 1000/6-24°/15kW/4P	262	87	3
VLF-T-EX 1000/6-28°/18.5kW/4P	302	88	3
VLF-T-EX 1250/6-14°/22kW/4P	373	94	3
VLF-T-EX 1250/6-20°/30kW/4P	388	94	3

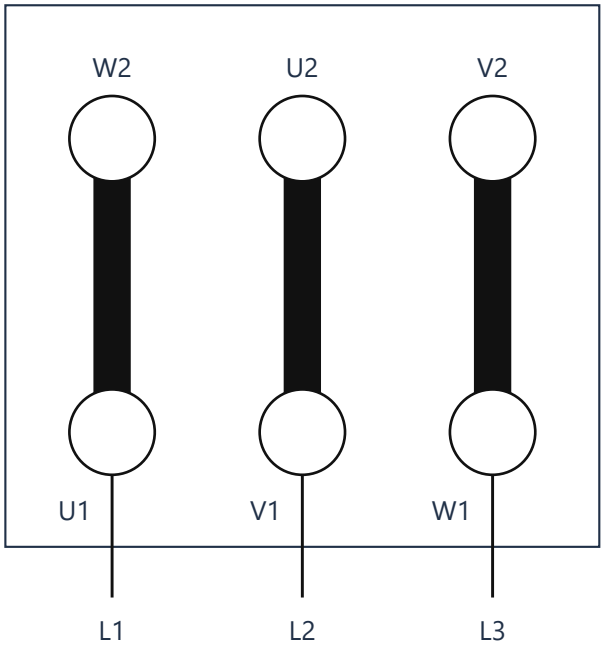
Published sound-pressure totals are retained at their 3 m reference distance. Usable octave-band spectra are not supplied for this Ex-proof series, so no inlet, outlet or housing spectrum is inferred. Installation-specific sound levels require the actual system conditions.

06 / ELECTRICAL & EX-PROOF SCOPE

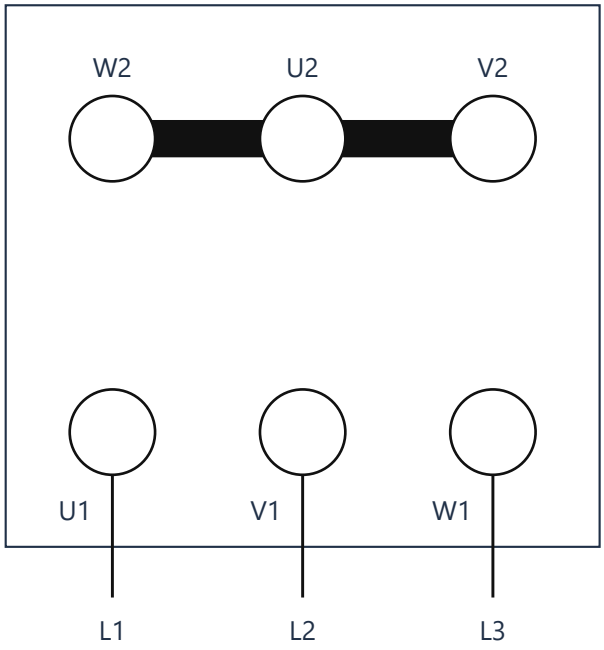
Connect the specified motor.

TERMINAL TOPOLOGY REFERENCE / VLF-T-EX

DELTA CONNECTION



STAR CONNECTION



Terminal topology reference only. Select the final star/delta connection from the supplied Ex-proof motor nameplate and instructions; 400 V alone does not determine the bridge arrangement. Connect protective earth and equipotential bonding as specified.

Reference	Configuration status
Published Ex-proof motor reference	II 2G Ex d IIC T4 Gb
Complete fan marking	To be confirmed
Complete fan certificate	To be confirmed

The motor reference concerns gas; dust approval is not established. Use the speed controller and motor protection permitted for the supplied Ex-proof assembly. Confirm its marking, certificate, temperature class and installation zone against the supplied documentation.

VLF-T-EX

Ex-proof tube axial fans

VOLTVENT®
VENTILATION SYSTEMS

info@voltvent.com | voltvent.com