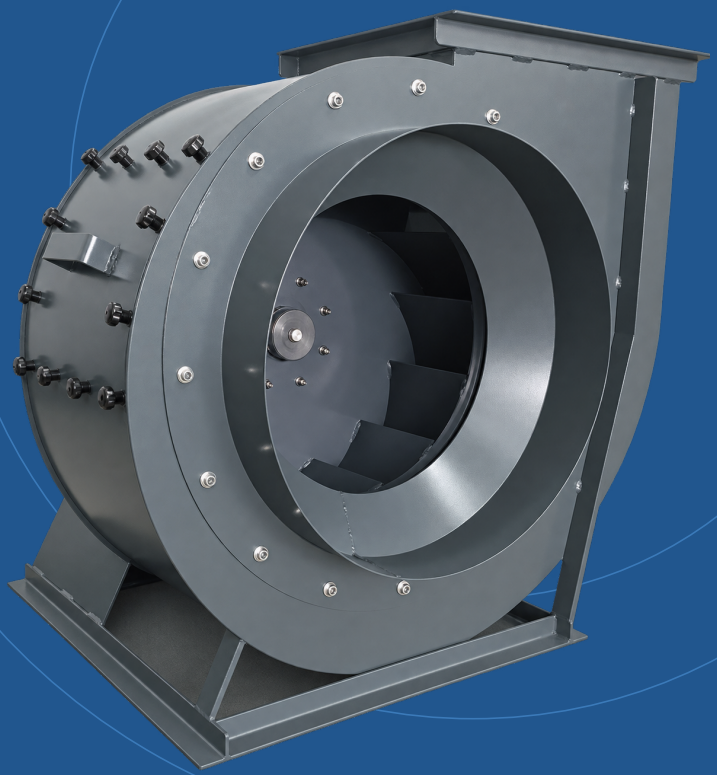
VLPF-EX SERIES

Ex-proof low-pressure centrifugal fans

VLPF-EX

BACKWARD-CURVED IMPELLER

COATED STEEL SCROLL CASING



2500-40000	13	50 Hz
Airflow references / m^3/h	3 Ex-proof / 10 preliminary	Performance frequency

01 / PRODUCT OVERVIEW

Low-pressure duty. Ex-proof construction.

Ex-proof low-pressure centrifugal fan



01 Scroll casing and impeller

Coated steel scroll casing, circular inlet and rectangular discharge. A backward-curved impeller and copper inlet form the Ex-proof arrangement.

02 Installation and service

Support the fan on a rigid base. Avoid duct loads on the casing and provide access for impeller cleaning and motor service.

03 Two performance statuses

Models 6, 11 and 13 have dedicated Ex-proof data. The other ten models retain clearly labelled preliminary standard references.

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	Upper operating limit: to be confirmed
Maximum medium temperature	55 °C for dedicated models only
Performance basis	3 dedicated Ex-proof / 10 preliminary references

Dedicated motor reference: II 2G Ex d IIC T4 Gb. Complete fan marking and certificate: to be confirmed. Preliminary models also require Ex-proof motor ratings and limits to be confirmed.

02 / TECHNICAL DATA

Select with the data status in view.

13 CONFIGURATIONS / 400 V / 3 PHASE / 50 Hz

Model	Basis	Nominal Q m^3/h	Curve Q max. m^3/h	Max. static Pa	Rated input W	Rated rpm	Rated A	Mass kg
VLPF-EX 1	P	2500	2500	400	250	1380	0.87	67
VLPF-EX 2	P	3500	4300	525	550	1365	1.6	78
VLPF-EX 3	P	5000	5000	600	750	1410	1.92	91
VLPF-EX 4	P	7000	7000	815	1500	1400	3.5	104
VLPF-EX 5	P	10000	10000	1050	2200	1420	4.9	145
VLPF-EX 6	D	12000	12000	1051	3000	1430	6.7	158
VLPF-EX 7	P	15000	15000	1320	4000	1440	8.4	175
VLPF-EX 8	P	18000	18000	1350	5500	1450	11.5	225
VLPF-EX 9	P	20000	20000	1630	7500	1455	16	240
VLPF-EX 10	P	23000	23000	1650	11000	1465	21.3	255
VLPF-EX 11	D	25000	25000	1700	15000	1470	29.4	325
VLPF-EX 12	P	30000	30000	2200	18500	1470	34.5	375
VLPF-EX 13	D	40000	40000	2400	22000	1475	43	410

D = dedicated Ex-proof data: models 6, 11 and 13. P = preliminary reference from the corresponding standard model. Every value in a P row, including motor ratings and mass, requires confirmation for the final Ex-proof assembly.

Model 2: nominal airflow is 3500 m^3/h; its preliminary curve extends to 4300 m^3/h. The nominal static reference is 525 Pa, while the polynomial starts at approximately 800 Pa. Both supplied records are retained. No curve scaling or re-fitting is applied.

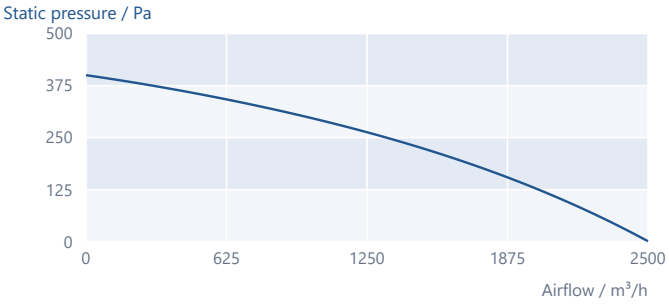
Dedicated model upper operating-temperature limits are not established. The 55 °C medium limit applies only to dedicated Ex-proof models; it does not confirm an ambient temperature limit.

03 / AIR PERFORMANCE

Fan Performance Curves

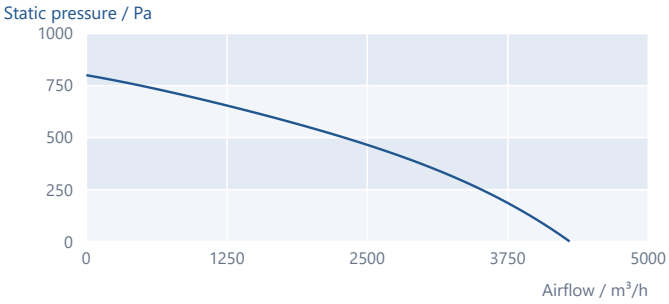
VLPF-EX 1

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



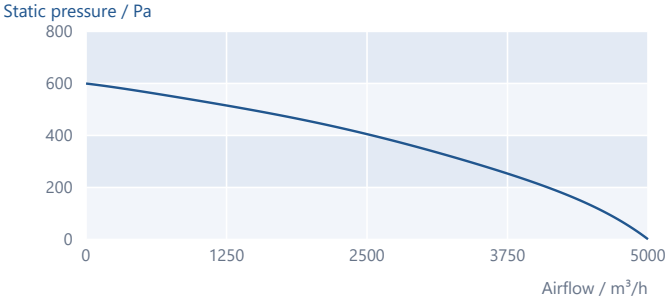
VLPF-EX 2

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



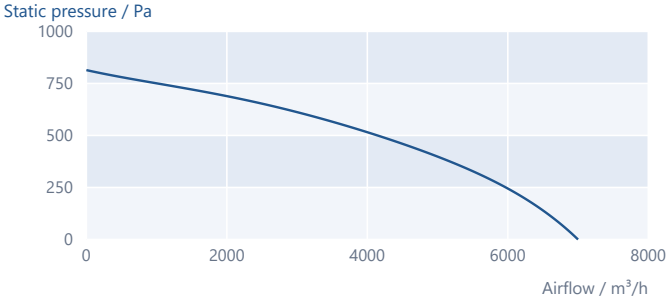
VLPF-EX 3

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



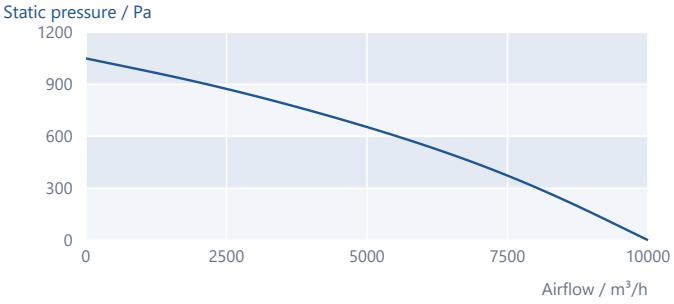
VLPF-EX 4

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



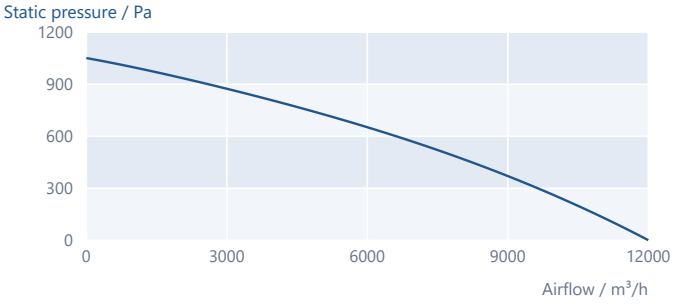
VLPF-EX 5

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



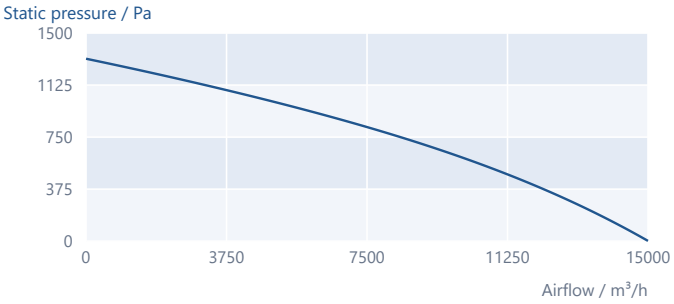
VLPF-EX 6

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



VLPF-EX 7

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



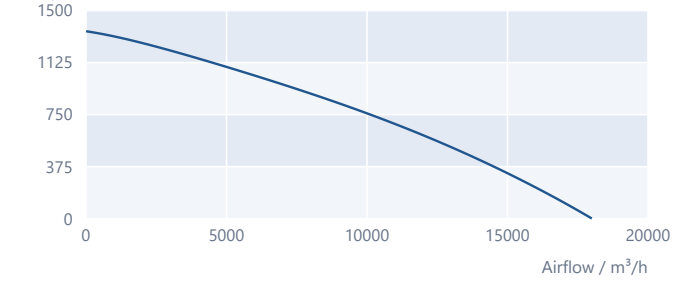
Exact 50 Hz coefficients and airflow domains retained. Model-specific scales. No speed conversion or re-fitting. PRELIMINARY curves are standard references; Ex-proof performance requires confirmation.

03 / AIR PERFORMANCE

Fan Performance Curves

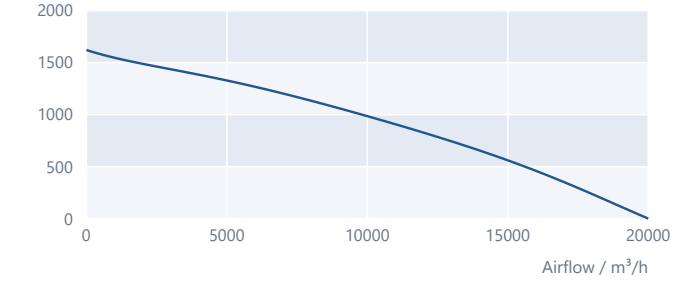
VLPF-EX 8

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



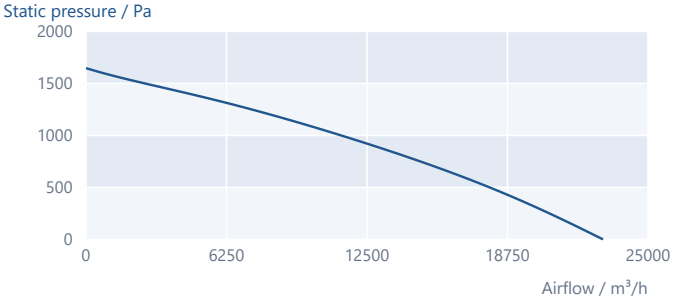
VLPF-EX 9

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



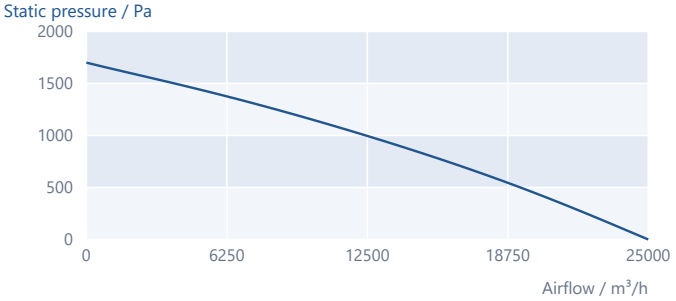
VLPF-EX 10

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



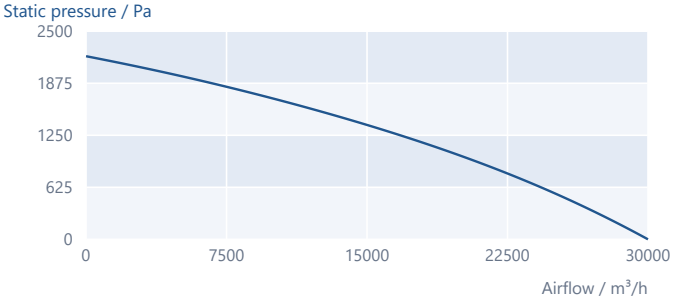
VLPF-EX 11

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



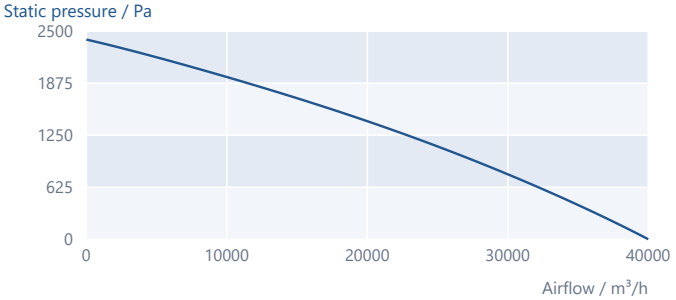
VLPF-EX 12

400 V / 3 phase / 50 Hz / PRELIMINARY STANDARD REFERENCE



VLPF-EX 13

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



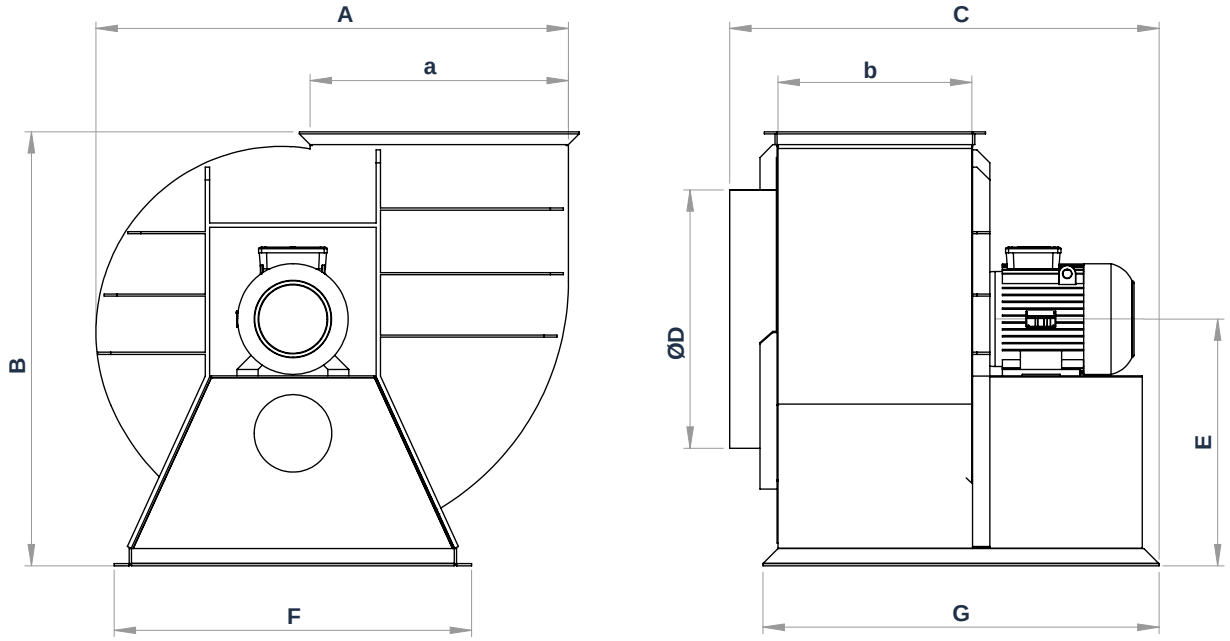
Exact 50 Hz coefficients and airflow domains retained. Model-specific scales. No speed conversion or re-fitting. PRELIMINARY curves are standard references; Ex-proof performance requires confirmation.

04 / DIMENSIONS

Coordinate the casing and flanges.

REPRESENTATIVE SERIES OUTLINE

All dimensions in mm



Model	Basis	A	a	B	b	C	ØD	E	F	G
VLPF-EX 1	P	515	195	507	185	474	225	291	420	445
VLPF-EX 2	P	580	225	584	205	495	260	325	460	460
VLPF-EX 3	P	699	335	680	275	650	310	386	560	590
VLPF-EX 4	P	782	377	760	300	685	350	435	635	615
VLPF-EX 5	P	872	414	883	320	771	400	520	733	696
VLPF-EX 6	D	925	436	900	350	826	450	515	755	755
VLPF-EX 7	P	1040	522	1015	396	886	500	602	740	825
VLPF-EX 8	P	1100	588	1008	450	997	600	573	830	920
VLPF-EX 9	P	1130	588	1080	500	1047	650	632	990	980
VLPF-EX 10	P	1272	664	1205	550	1176	700	703	1030	1105
VLPF-EX 11	D	1390	786	1265	600	1219	750	763	980	1145
VLPF-EX 12	P	1450	788	1365	600	1275	800	815	1050	1275
VLPF-EX 13	D	1576	826	1465	600	1275	850	847	1160	1290

D = dedicated Ex-proof dimensions; P = preliminary standard-model dimensions. Confirm final Ex-proof assembly dimensions before manufacture or installation. Representative outline; not to scale.

05 / ACOUSTIC DATA

Sound references for each model.

OCTAVE-BAND SOUND POWER / dB(A)

Model	Basis	Path	65 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
VLPF-EX 1	P	Housing	37	48	61	65	64	63	61	57	70
VLPF-EX 2	P	Housing	40	51	64	68	67	66	64	60	73
VLPF-EX 3	P	Housing	44	55	68	72	71	70	68	64	77
VLPF-EX 4	P	Housing	48	59	72	76	75	74	72	68	81
VLPF-EX 5	P	Housing	51	62	75	79	78	77	75	71	84
VLPF-EX 6	D	Housing	53	64	77	81	80	79	77	73	86
VLPF-EX 7	P	Housing	56	67	80	84	83	82	80	76	89
VLPF-EX 8	P	Housing	57	68	81	85	84	83	81	77	90
VLPF-EX 9	P	Housing	59	70	83	87	86	85	83	79	92
VLPF-EX 10	P	Housing	61	72	85	89	88	87	85	81	94
VLPF-EX 11	D	Not supplied	--	--	--	--	--	--	--	--	--
VLPF-EX 12	P	Housing	63	74	87	91	90	89	87	83	96
VLPF-EX 13	D	Housing	65	76	89	93	92	91	89	85	98

D = dedicated Ex-proof acoustic reference. P = preliminary acoustic data from the standard model; Ex-proof values require confirmation. Model 11 has no usable octave spectrum. The first band remains 65 Hz as supplied; totals are not arithmetic sums.

PUBLISHED LpA / 3 m / dB(A)

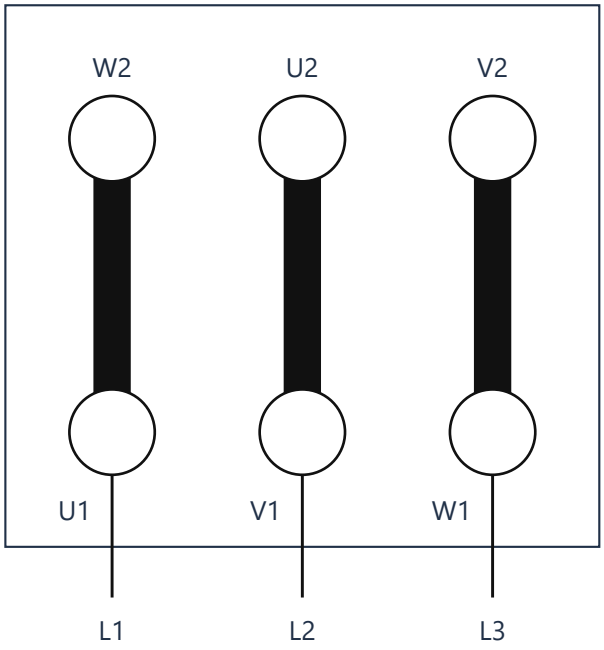
VLPF-EX 1 (P): 70
VLPF-EX 2 (P): 72
VLPF-EX 3 (P): 75
VLPF-EX 4 (P): 85
VLPF-EX 5 (P): 88
VLPF-EX 6 (D): 92
VLPF-EX 7 (P): 95
VLPF-EX 8 (P): 98
VLPF-EX 9 (P): 100
VLPF-EX 10 (P): 102
VLPF-EX 11 (D): 103
VLPF-EX 12 (P): 105
VLPF-EX 13 (D): 105

06 / ELECTRICAL & EX-PROOF SCOPE

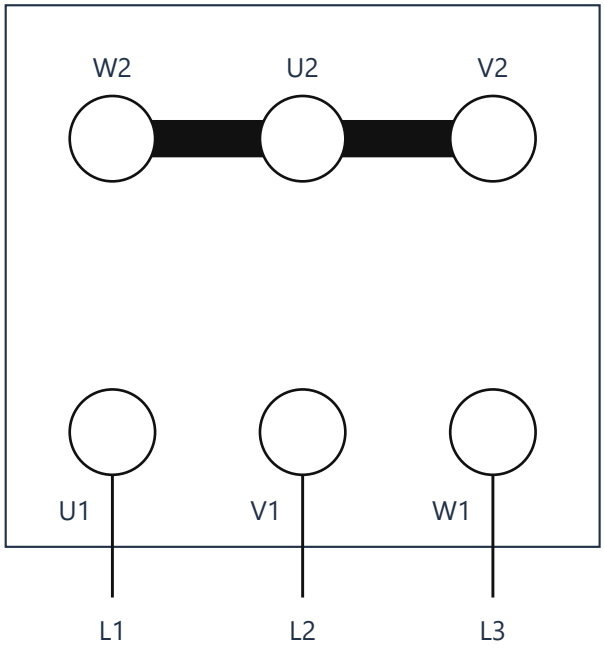
Connect the specified motor.

TERMINAL TOPOLOGY REFERENCE / VLPF-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
Motor reference: dedicated models	II 2G Ex d IIC T4 Gb
Motor reference: preliminary models	To be confirmed
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.

VLPF-EX

Ex-proof low-pressure centrifugal fans

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