VYF-EX SERIES

Ex-proof centrifugal roof fans

VYF-EX

BACKWARD-CURVED IMPELLER

MOTOR OUTSIDE THE AIRSTREAM



1000-17000	10	50 Hz
Maximum airflow / m^3/h	Models in the range	Performance frequency

01 / PRODUCT OVERVIEW

Roof extraction. Ex-proof configuration.

Ex-proof centrifugal roof fan



01 Motor outside the airflow

A directly driven centrifugal roof fan with a three-phase Ex-proof motor outside the transported-air path.

02 Casing and impeller

Sheet-steel casing, mounting plate and backward-curved impeller. A brass-plated inlet reduces mechanical sparking risk.

03 Roof installation & service

Coordinate the roof curb, weather sealing and supports. Keep the discharge clear and provide inspection access to the motor and impeller.

CONFIGURE THE COMPLETE ASSEMBLY

Match the supplied fan assembly and its documentation to the intended application. The published motor reference and the complete fan marking are separate records.

SERIES AT A GLANCE

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

Published motor reference: II 2G Ex d IIC T4 Gb. Complete fan marking and certificate: to be confirmed. Refer to the electrical and Ex-proof scope section.

02 / TECHNICAL DATA

Select the roof extraction duty.

THREE-PHASE EX-PROOF CONFIGURATIONS / 50 Hz

Model	Max. airflow m^3/h	Rated input W	Rated A	Rated speed rpm	Max. static Pa	Mass kg	LpA / 3 m dB(A)
VYF-EX 280T-4P	1000	250	0.87	1380	240	35	53
VYF-EX 315T-4P	1950	250	0.87	1380	250	42	53
VYF-EX 355T-4P	2900	250	0.87	1380	330	50	55
VYF-EX 400T-4P	4000	370	1.2	1390	549	55	60
VYF-EX 450T-4P	5550	550	1.6	1365	549	62	62
VYF-EX 500T-4P	8300	1100	2.6	1410	751	68	64
VYF-EX 560T-4P	10800	2200	4.9	1420	950	75	66
VYF-EX 630T-4P	13000	3000	6.6	1425	511	127	60
VYF-EX 710T-4P	15000	4000	8.4	1440	591	150	63
VYF-EX 800T-4P	17000	7500	15.4	1465	700	216	67

Maximum airflow, maximum static reference and rated motor values are separate records. Static references follow the highest supplied curve point; separate nominal declarations may differ by 1 Pa. Polynomial approximations can also differ slightly. Rated and curve speeds remain independent; no rescaling is applied.

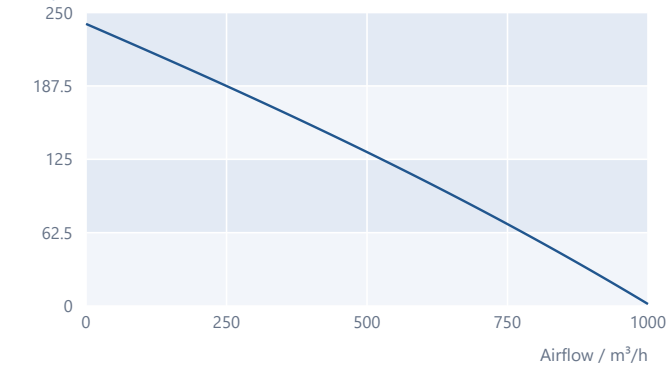
Reference	Available data
Performance basis	Dedicated Ex-proof configuration curves
Sound pressure reference	3 m; published totals
Outlet sound-power spectrum	Not supplied

03 / AIR PERFORMANCE

Fan Performance Curves

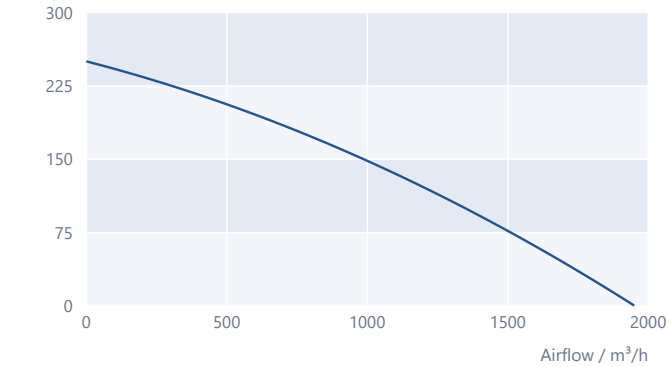
VYF-EX 280T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



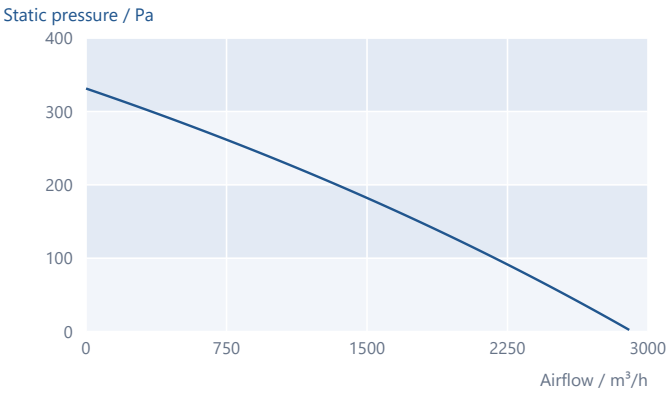
VYF-EX 315T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



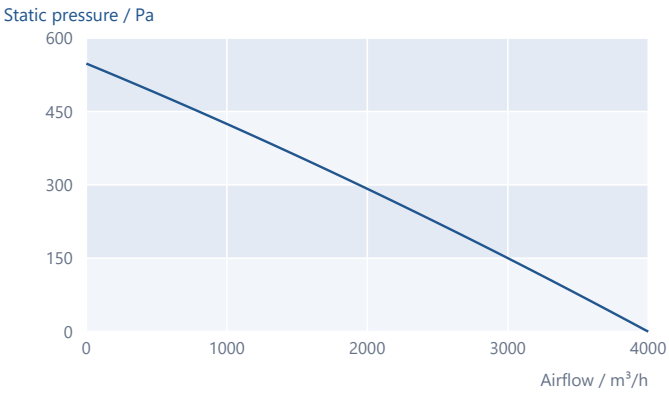
VYF-EX 355T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



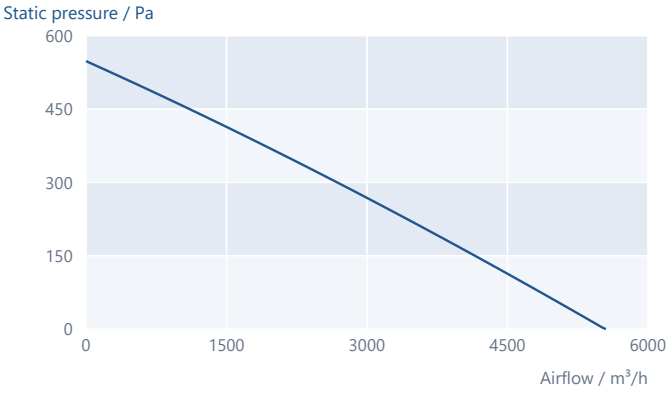
VYF-EX 400T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



VYF-EX 450T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



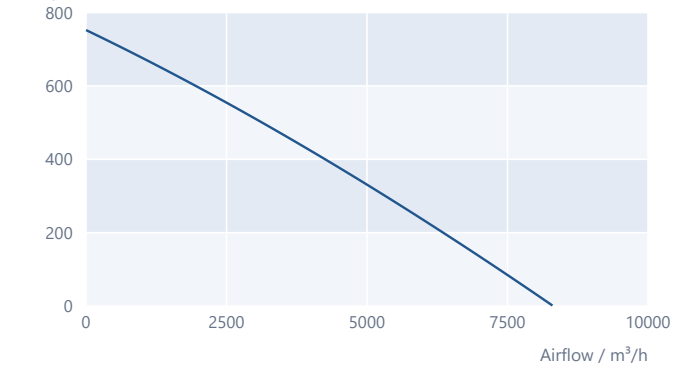
Original 50 Hz Ex-proof pressure data and airflow limits are retained. Rated motor parameters are separate references; no speed scaling or curve re-fitting is applied. Model-specific scales.

03 / AIR PERFORMANCE

Fan Performance Curves

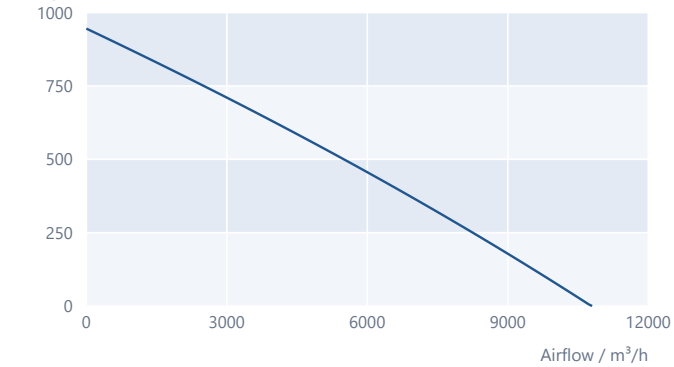
VYF-EX 500T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



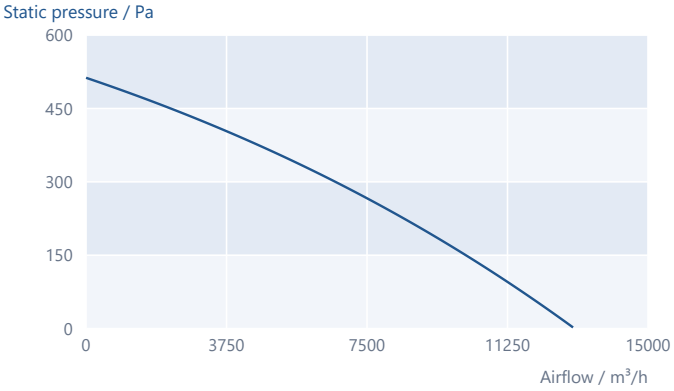
VYF-EX 560T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



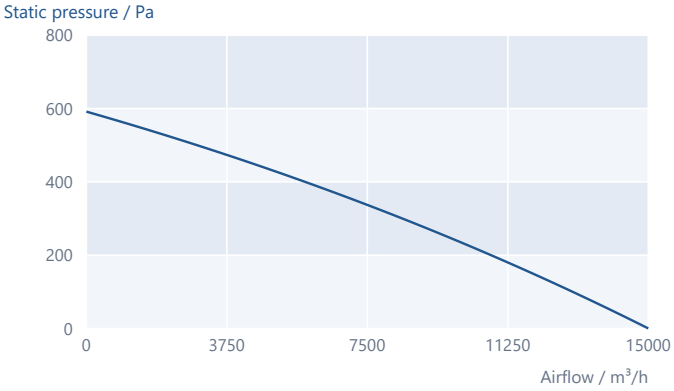
VYF-EX 630T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



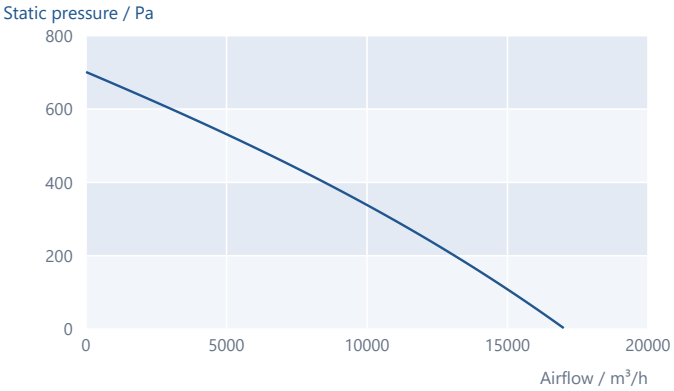
VYF-EX 710T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



VYF-EX 800T-4P

400 V / 3 phase / 50 Hz / Ex-proof configuration



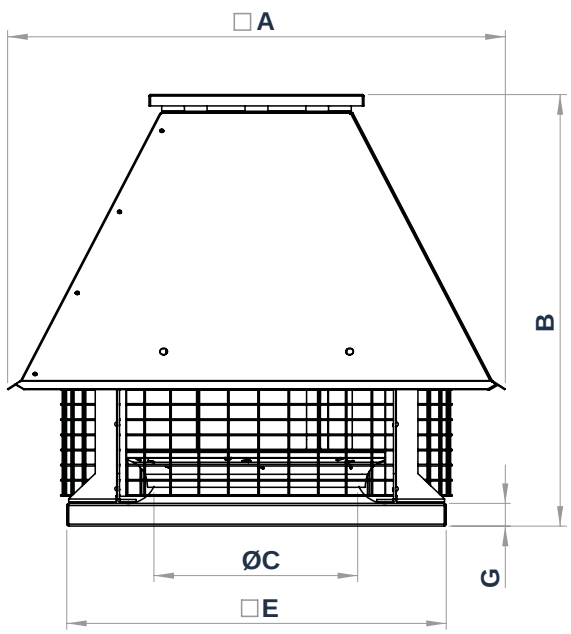
Original 50 Hz Ex-proof pressure data and airflow limits are retained. Rated motor parameters are separate references; no speed scaling or curve re-fitting is applied. Model-specific scales.

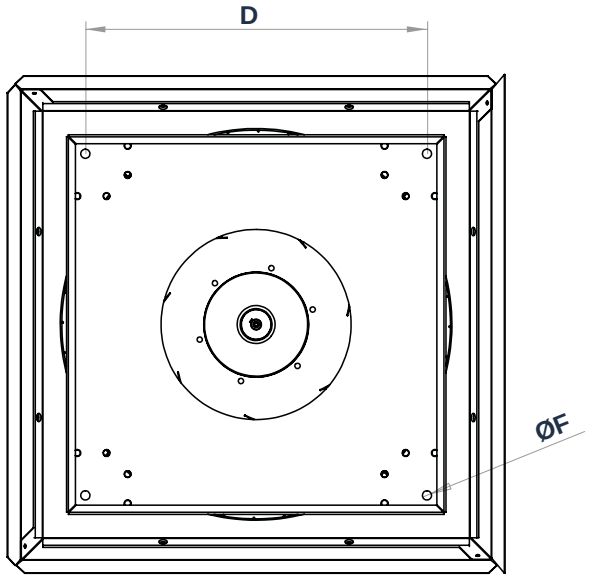
04 / DIMENSIONS

Coordinate the roof interface.

REPRESENTATIVE SERIES OUTLINE

All dimensions in mm





Model	A	B	ØC	D	E	ØF	G
VYF-EX 280T-4P	522	495	165	354	404	10	30
VYF-EX 315T-4P	595	555	198	404	454	10	30
VYF-EX 355T-4P	656	555	234	450	500	10	30
VYF-EX 400T-4P	656	585	268	450	500	12	30
VYF-EX 450T-4P	656	616	303	530	580	12	44
VYF-EX 500T-4P	766	660	342	590	640	12	44
VYF-EX 560T-4P	828	723	380	650	700	12	44
VYF-EX 630T-4P	997	922	445	680	730	12	54
VYF-EX 710T-4P	1095	991	500	710	780	12	54
VYF-EX 800T-4P	1205	1172	542	850	900	12	54

Use the row for the selected model. The original outline is representative and is not drawn to scale. Coordinate the roof opening, fixing points, weather sealing and inspection access.

05 / ACOUSTIC DATA

Sound power by radiation path.

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
VYF-EX 280T-4P	Inlet	45	63	67	69	68	65	60	53	74
VYF-EX 280T-4P	Housing	47	65	69	71	70	67	62	55	76
VYF-EX 315T-4P	Inlet	46	63	68	69	68	64	59	55	74
VYF-EX 315T-4P	Housing	45	66	70	70	71	67	63	55	76
VYF-EX 355T-4P	Inlet	47	65	69	71	70	67	62	55	76
VYF-EX 355T-4P	Housing	49	67	69	73	72	69	64	57	78
VYF-EX 400T-4P	Inlet	68	69	74	76	75	72	68	60	81
VYF-EX 400T-4P	Housing	70	72	76	78	77	74	69	62	83
VYF-EX 450T-4P	Inlet	69	73	75	77	76	73	68	63	82
VYF-EX 450T-4P	Housing	73	73	77	79	78	75	70	73	85
VYF-EX 500T-4P	Inlet	67	69	73	75	74	71	76	59	82
VYF-EX 500T-4P	Housing	74	76	81	82	81	78	73	66	87
VYF-EX 560T-4P	Inlet	74	76	80	82	81	78	73	66	87
VYF-EX 560T-4P	Housing	76	78	82	84	83	80	75	68	89
VYF-EX 630T-4P	Inlet	67	70	73	75	74	71	66	60	80
VYF-EX 630T-4P	Housing	69	72	75	78	76	73	68	57	83
VYF-EX 710T-4P	Inlet	70	73	76	78	77	74	69	63	83
VYF-EX 710T-4P	Housing	72	75	78	81	79	76	71	60	86
VYF-EX 800T-4P	Inlet	75	77	81	83	82	79	74	67	88
VYF-EX 800T-4P	Housing	77	79	83	85	84	81	76	69	90

The supplied inlet and housing sound-power bands and totals are retained for each model. The first band remains 65 Hz as supplied. Totals are not arithmetic sums. An outlet sound-power spectrum is not supplied.

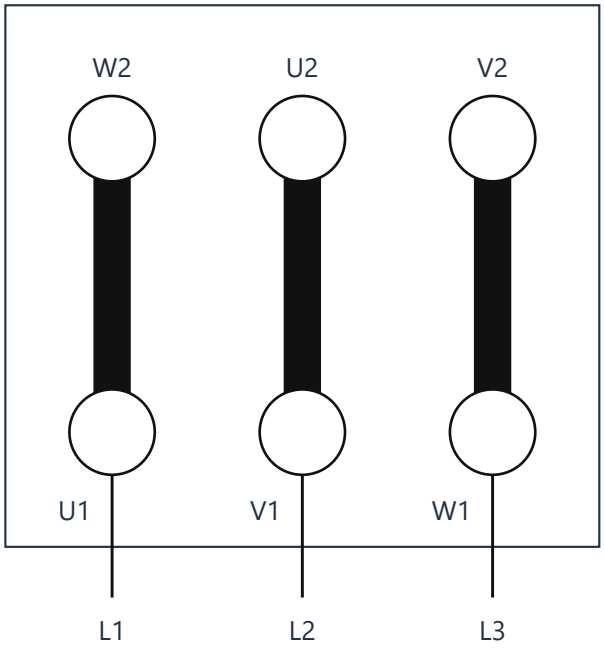
Published sound-pressure totals at 3 m appear in the technical table. Sound-pressure octave bands and installation-specific acoustic predictions are not inferred.

06 / ELECTRICAL & EX-PROOF SCOPE

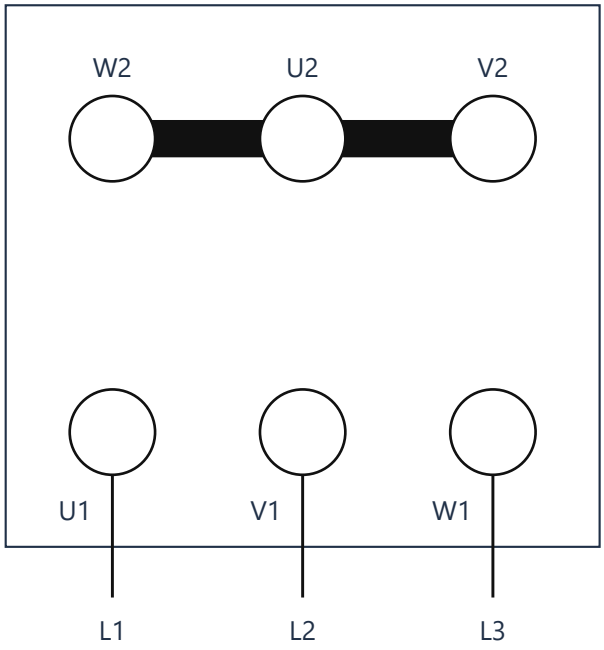
Connect the specified motor.

TERMINAL TOPOLOGY REFERENCE / VYF-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.

VYF-EX

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