**VYF-EC SERIES**

# Horizontal discharge EC roof fans

# VYF-EC

ec MOTOR

**HORIZONTAL AIR DISCHARGE**

**INTEGRATED EC CONTROL**



| 2500-25000 | 09 | 10 V |
|---|---|---|
| Maximum airflow / $m^3/h$ | EC configurations | Performance setting |

01 / PRODUCT OVERVIEW

# Roof extraction. EC control.

Horizontal discharge
EC roof fan



## 01 Horizontal roof discharge

A centrifugal roof-mounted fan with sideways exhaust at roof level. Keep the surrounding outlet area clear so the discharge path remains unobstructed.

## 02 Integrated EC control

EC motor electronics provide speed regulation. Each performance curve applies to the published 10 V setting for its own configuration.

## 03 Coordinate roof and service access

Match the roof opening and supporting curb to the base dimensions. Provide access around the fan and electrical connection for inspection and cleaning.

### KEEP THE OUTLET AREA CLEAR

For building extract-air systems with horizontal roof discharge. Coordinate the support, duct opening and maintenance access before installation.

### 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** | IP55 / class F |
| **Operating temperature limit** | 50 / 55 / 60 °C, by configuration |

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

02 / TECHNICAL DATA

# Choose the roof-fan duty.

## NINE EC CONFIGURATIONS / 50 Hz / 10 V SETTING

| Model / configuration | Supply V / phase | Max. airflow $m^3/h$ | Rated input W | Speed rpm | Max. static Pa | T max. °C | LpA at 3 m dB(A) |
|---|---|---|---|---|---|---|---|
| **VYF-EC 355M** | 230 / 1 | 2500 | 250 | 1500 | 300 | 50 | 51 |
| **VYF-EC 400M** | 230 / 1 | 2600 | 260 | 1500 | 300 | 50 | 51 |
| **VYF-EC 450T** | 400 / 3 | 4500 | 450 | 940 | 260 | 55 | - |
| **VYF-EC 500M** | 230 / 1 | 5500 | 760 | 1500 | 530 | 50 | 54 |
| **VYF-EC 500T / 930 rpm** | 400 / 3 | 7000 | 750 | 930 | 410 | 55 | 54 |
| **VYF-EC 500T / 1500 rpm** | 400 / 3 | 5500 | 770 | 1500 | 530 | 60 | 54 |
| **VYF-EC 560T** | 400 / 3 | 10500 | 1200 | 990 | 470 | 55 | - |
| **VYF-EC 710T** | 400 / 3 | 20000 | 2200 | 750 | 450 | 55 | - |
| **VYF-EC 800T** | 400 / 3 | 25000 | 3300 | 730 | 600 | 55 | - |

The two VYF-EC 500T configurations are distinguished by rated speed: 930 rpm and 1500 rpm. Their original curves, airflow limits, power ratings and temperature limits remain separate.

## RATING BASIS

Maximum airflow and maximum static pressure are separate envelope limits. Rated motor input and speed are declared references, not simultaneous duty-point readings. Temperature limits apply to each configuration as shown.

## UNAVAILABLE VALUES

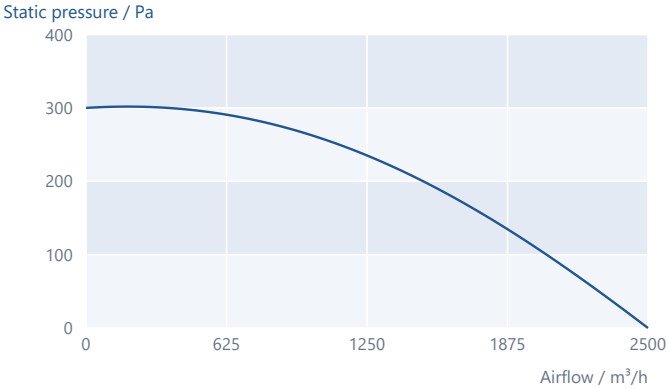
Rated current and mass are not supplied for this series. A dash in the sound-pressure column indicates an unavailable value; no missing value is replaced with zero. Acoustic sound-power bands are listed separately on page 7.

03 / AIR PERFORMANCE

# Fan Performance Curves

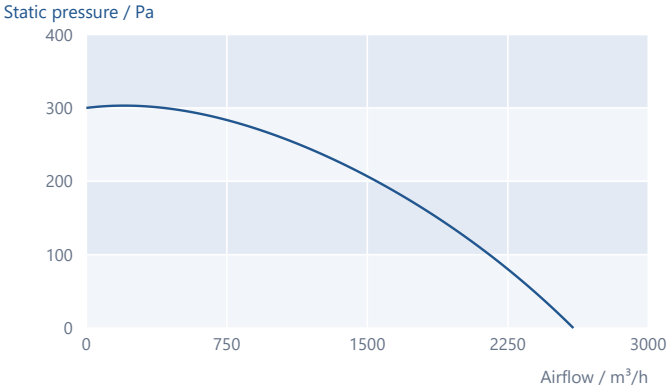
## VYF-EC 355M

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



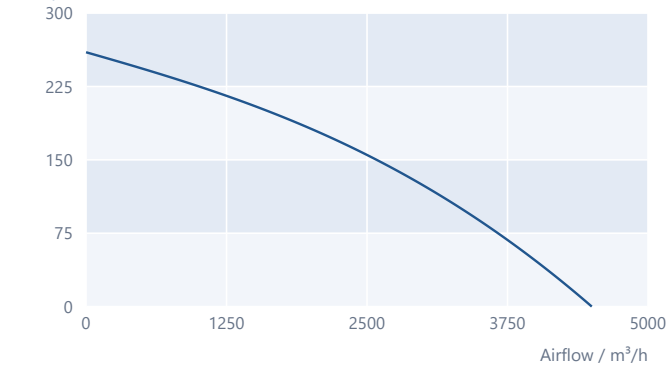

## VYF-EC 400M

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



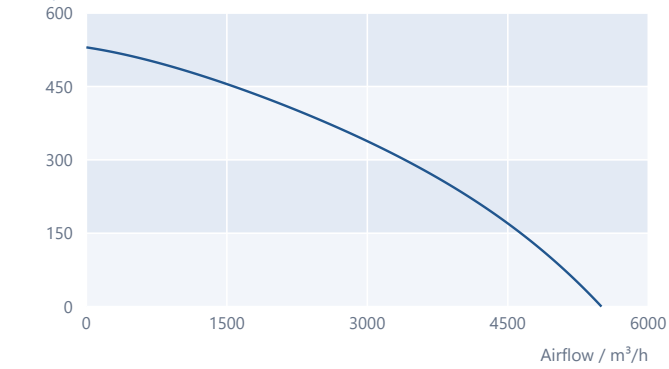

## VYF-EC 450T

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



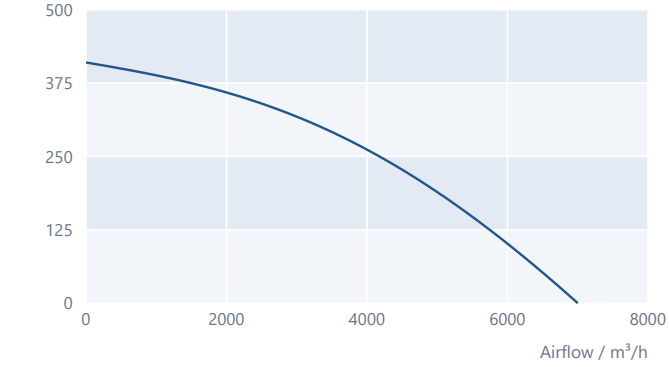

## VYF-EC 500M

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




## VYF-EC 500T / 930 rpm

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




### 500T / TWO DISTINCT CONFIGURATIONS

Use the rated-speed qualifier to select the correct 500T curve. The 930 rpm and 1500 rpm options retain independent ratings and airflow limits.

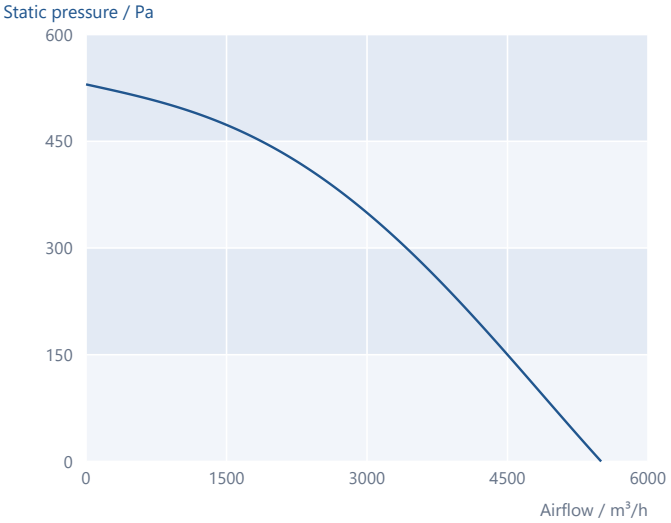
Curves retain the published 10 V setting and airflow range. Each model uses its own scales. No speed adjustment, curve re-fitting or extrapolation is applied.

03 / AIR PERFORMANCE

# Fan Performance Curves

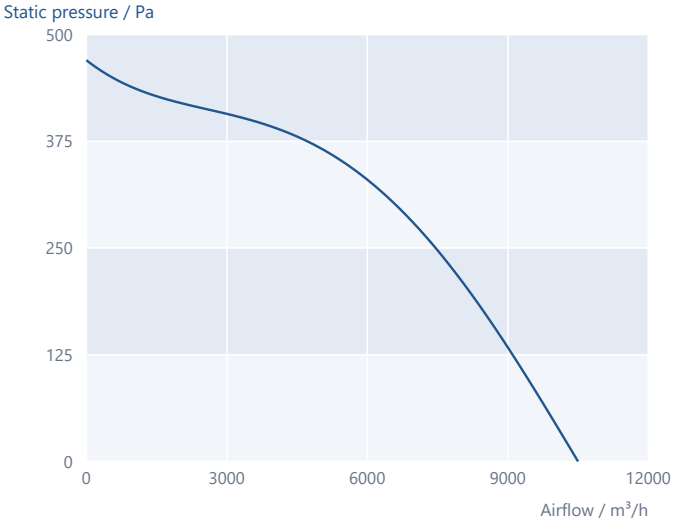
## VYF-EC 500T / 1500 rpm

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



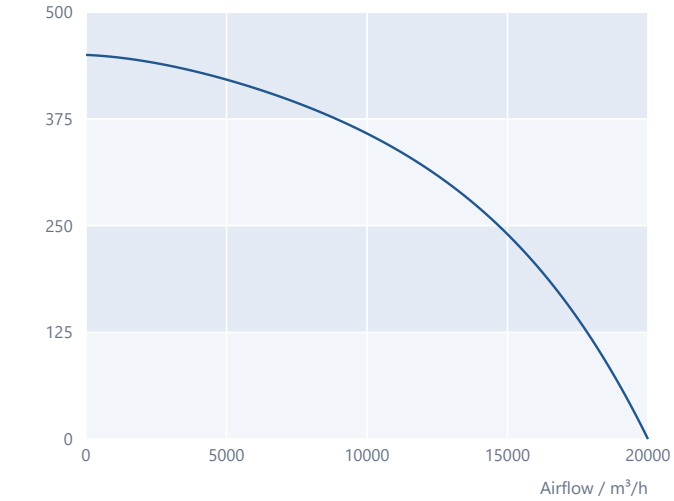

## VYF-EC 560T

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



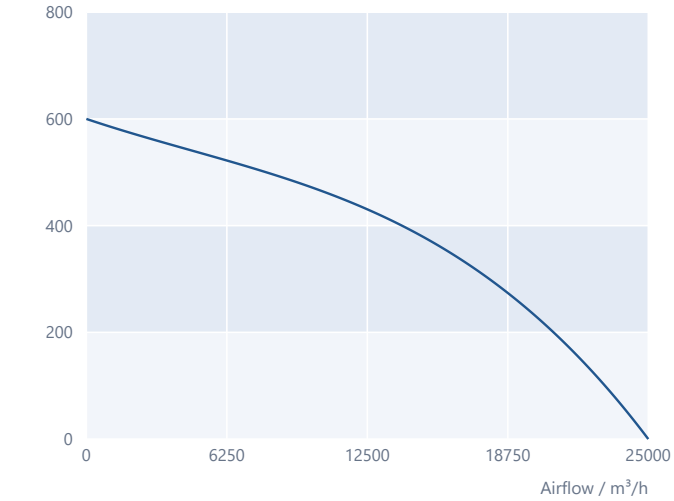

## VYF-EC 710T

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




## VYF-EC 800T

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




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

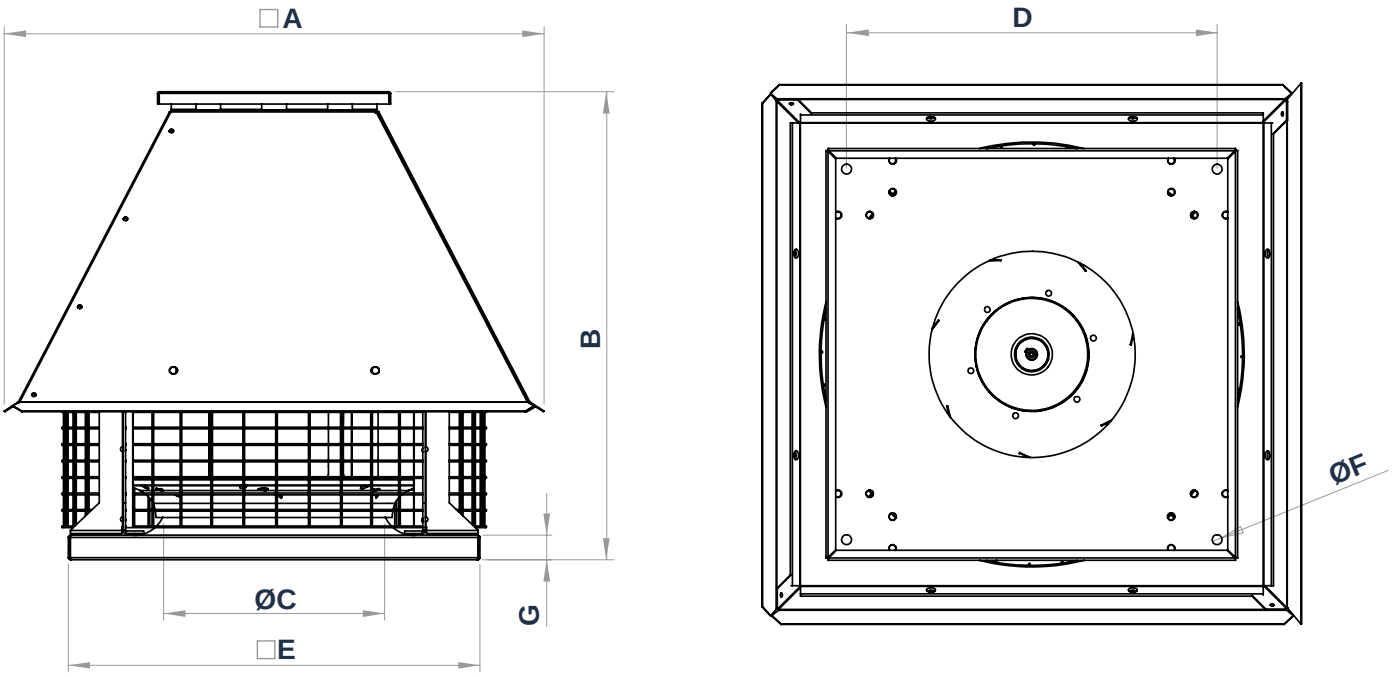
Select the configuration and operating point against the system resistance.

04 / DIMENSIONS

# Plan the roof connection.

## REPRESENTATIVE SERIES OUTLINE

All dimensions in mm




| Model / configuration | A | B | ØC | D | E | ØF | G |
|---|---|---|---|---|---|---|---|
| **VYF-EC 355M** | 656 | 555 | 234 | 450 | 500 | 12 | 30 |
| **VYF-EC 400M** | 656 | 555 | 234 | 450 | 500 | 12 | 30 |
| **VYF-EC 450T** | 656 | 616 | 303 | 530 | 580 | 12 | 44 |
| **VYF-EC 500M** | 766 | 660 | 342 | 590 | 640 | 12 | 44 |
| **VYF-EC 500T / 930 rpm** | 766 | 660 | 342 | 590 | 640 | 12 | 44 |
| **VYF-EC 500T / 1500 rpm** | 766 | 660 | 342 | 590 | 640 | 12 | 44 |
| **VYF-EC 560T** | 828 | 723 | 380 | 650 | 700 | 12 | 54 |
| **VYF-EC 710T** | 1205 | 1172 | 540 | 850 | 900 | 12 | 54 |
| **VYF-EC 800T** | 1400 | 1380 | 550 | 1050 | 1100 | 12 | 54 |

Use the dimension row for the chosen configuration. The outline is representative and uses generic labels; do not scale the drawing. Coordinate the base, roof opening and supporting curb.

05 / ACOUSTICS

# Understand the sound profile.

## OCTAVE-BAND SOUND POWER / dB(A)

| Model / configuration | Path | 65 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **VYF-EC 355M** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 355M** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 355M** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 400M** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 400M** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 400M** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 450T** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 450T** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 450T** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 500M** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500M** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500M** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 500T / 930 rpm** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500T / 930 rpm** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500T / 930 rpm** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 500T / 1500 rpm** | Inlet | 60 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500T / 1500 rpm** | Outlet | 61 | 66 | 66 | 67 | 66 | 65 | 61 | 55 | 74 |
| **VYF-EC 500T / 1500 rpm** | Housing | 58 | 65 | 64 | 62 | 60 | 56 | 52 | 50 | 70 |
| **VYF-EC 560T** | Inlet | 61 | 67 | 67 | 68 | 67 | 66 | 62 | 57 | 75 |
| **VYF-EC 560T** | Outlet | 62 | 67 | 67 | 68 | 67 | 66 | 62 | 60 | 75 |
| **VYF-EC 560T** | Housing | 60 | 66 | 65 | 63 | 61 | 58 | 54 | 52 | 73 |
| **VYF-EC 710T** | Inlet | 69 | 73 | 74 | 75 | 74 | 73 | 68 | 62 | 82 |
| **VYF-EC 710T** | Outlet | 69 | 74 | 74 | 75 | 74 | 73 | 68 | 63 | 82 |
| **VYF-EC 710T** | Housing | 60 | 66 | 65 | 63 | 62 | 57 | 55 | 50 | 72 |
| **VYF-EC 800T** | Inlet | 70 | 76 | 76 | 77 | 76 | 75 | 70 | 65 | 84 |
| **VYF-EC 800T** | Outlet | 71 | 76 | 76 | 77 | 76 | 75 | 70 | 65 | 84 |
| **VYF-EC 800T** | Housing | 62 | 67 | 66 | 64 | 62 | 58 | 55 | 51 | 74 |

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

The available 3 m sound-pressure references are on page 3. These data do not imply an installation-specific or selected-duty acoustic calculation.

# VYF-EC

ec MOTOR

## Horizontal discharge
## EC roof fans

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