

Primo EC

Inline mixed flow fans with AC and EC motors

Use

- Inline fans for supply and exhaust ventilation of various commercial and industrial premises requiring powerful air flow.
- The fans are compatible with Ø 355 and 400 mm air ducts.
- Combines wide capabilities and high performance features of axial and centrifugal fans, providing powerful air flow.



Air flow:
up to 5700 m³/h
1583 l/s



Power:
from 126 W



Noise level:
from 38 dBA



Design

- The fan casing is made of polymer and reinforced with a metal housing. Due to the conically shaped polymer impeller with specially profiled blades, the air stream circular velocity increases, which results in higher air flow and pressure, as compared to characteristics of standard axial fans.
- The specially designed diffuser, impeller and airflow rectifier at the fan outlet provide smooth air flow distribution and enable the best combination of high capacity, powerful pressure and low noise.
- The fan casing is equipped with an airtight terminal box for connection to power mains.

Motor

- Equipped with energy efficient EC motors.
- 220–240 V single phase at 50 Hz.
- Equipped with ball bearings for longer service life (up to 40 000 hours).
- All motors have manual reset thermal overload protection.

Overall Dimensions [mm]

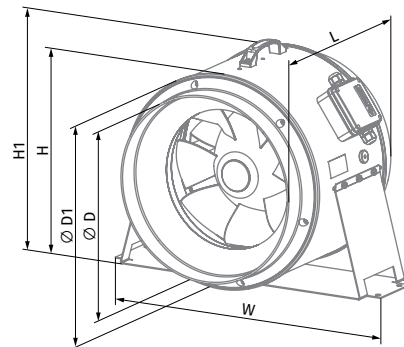
| Model | Ø D | Ø D1 | H | H1 | L | W |
|--------------|-----|------|-----|-----|-----|-----|
| Primo EC 355 | 355 | 406 | 408 | 439 | 372 | 566 |
| Primo EC 400 | 400 | 451 | 453 | 484 | 415 | 623 |

Speed control

- The fan speed is regulated by a smooth 0-10 V controller.

Mounting

- The fans can be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air capacity or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for suspended mounting.
- The fans can be mounted using a **UM Primo** bracket of the appropriate size (ordered separately).



Designation key

| Series | Motor type | Duct diameter [mm] | Modifications |
|--------------|--|--------------------|--|
| Primo | EC: electronically commutated motor | 355; 400 | FR1: smooth speed controller adjustable from 0 to 100% G1: speed controller, temperature controller with external temperature sensor, power cable with mains plug W1: power cable with mains plug |

Technical Data

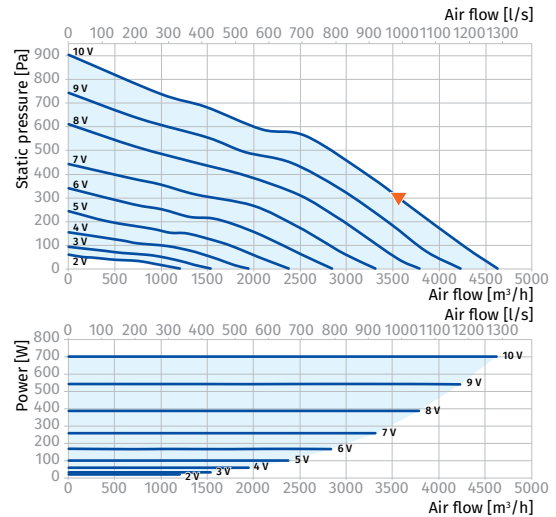
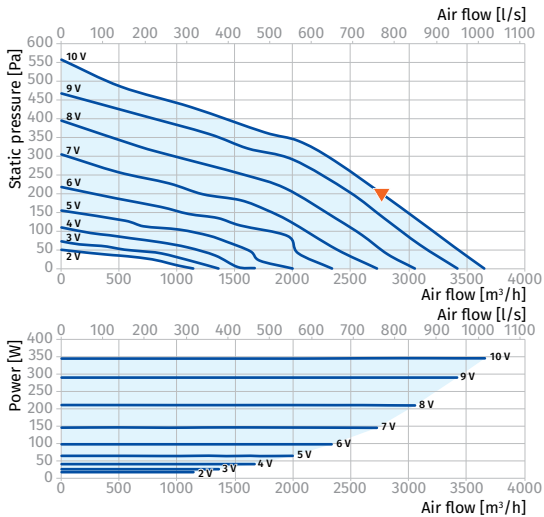
| Parameters | Primo EC 355 | Primo EC 355 max | Primo EC 400 |
|----------------------------------|--------------|------------------|--------------|
| Voltage [V / 50 Hz] | 1~ 230 | 1~ 230 | 1~ 230 |
| Power [W] | 346 | 701 | 726 |
| Current [A] | 1.54 | 3.10 | 3.23 |
| Maximum air flow [m³/h (l/s)] | 3685 (1024) | 4630 (1286) | 5700 (1583) |
| RPM [min⁻¹] | 2470 | 3175 | 2580 |
| Sound pressure at 3 m [dBA] | 33-63 | 35-68 | 33-66 |
| Transported air temperature [°C] | -25...+55 | -25...+55 | -25...+55 |
| Protection rating | IPX4 | IPX4 | IPX4 |
| Motor protection rating | IP44 | IP44 | IP44 |
| Erp compliance | 2018 | 2018 | 2018 |

PRIMO EC 355

| Sound power level, A-weighted | Total | Octave frequency bands [Hz] | | | | | | | LpA 3 m | LpA 1 m | |
|-------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|---------|---------|------|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | | | 8000 |
| LWA to inlet [dBA] | 83 | 73 | 76 | 75 | 75 | 78 | 74 | 69 | 61 | 63 | 73 |
| LWA to outlet [dBA] | 85 | 70 | 79 | 75 | 77 | 81 | 76 | 71 | 64 | 65 | 75 |
| LWA to environment [dBA] | 76 | 56 | 64 | 67 | 70 | 71 | 68 | 63 | 53 | 55 | 65 |

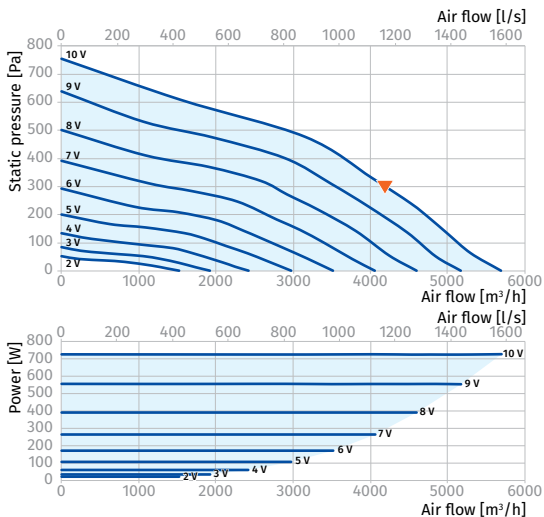
PRIMO EC 355 MAX

| Sound power level, A-weighted | Total | Octave frequency bands [Hz] | | | | | | | LpA 3 m | LpA 1 m | |
|-------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|---------|---------|------|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | | | 8000 |
| LWA to inlet [dBA] | 88 | 74 | 82 | 79 | 79 | 83 | 80 | 75 | 66 | 68 | 78 |
| LWA to outlet [dBA] | 90 | 72 | 83 | 79 | 81 | 86 | 82 | 77 | 70 | 70 | 80 |
| LWA to environment [dBA] | 80 | 45 | 63 | 66 | 73 | 77 | 74 | 68 | 57 | 60 | 70 |



PRIMO EC 400

| Sound power level, A-weighted | Total | Octave frequency bands [Hz] | | | | | | | LpA 3 m | LpA 1 m | |
|-------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|---------|---------|------|
| | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | | | 8000 |
| LWA to inlet [dBA] | 87 | 70 | 77 | 78 | 81 | 81 | 79 | 74 | 67 | 66 | 76 |
| LWA to outlet [dBA] | 88 | 62 | 76 | 78 | 83 | 84 | 80 | 75 | 66 | 68 | 78 |
| LWA to environment [dBA] | 80 | 59 | 66 | 69 | 74 | 77 | 72 | 67 | 58 | 60 | 70 |



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