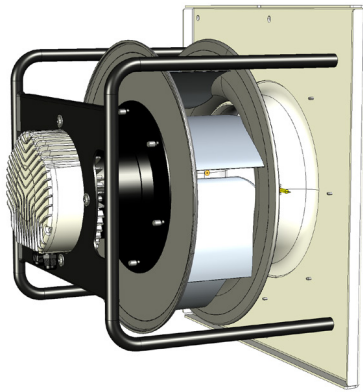


Appearance



Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LWA according to ISO 13347.

General specification

| | |
|------------------------------|-----------------------------|
| Fan Set Model | SR-FS-A-355-2.5 |
| Rated Voltage | 3×380-480 VAC / 50-60 Hz |
| Rated Current | 3.6 A |
| Nominal Input Power | 2.4 kW |
| Revolutions: Min / Nominal | 300 ÷ 3000 RPM |
| CAV K-factor | 127.0 |
| Storage temperature range | -30°C to 50°C |
| Operating temperatures range | -25°C to 40°C |
| Support plate material | Galvanized steel |
| Support brackets material | Black painted steel |
| Mass | 21.9 kg |
| Installation position | Horizontal / Vertical shaft |

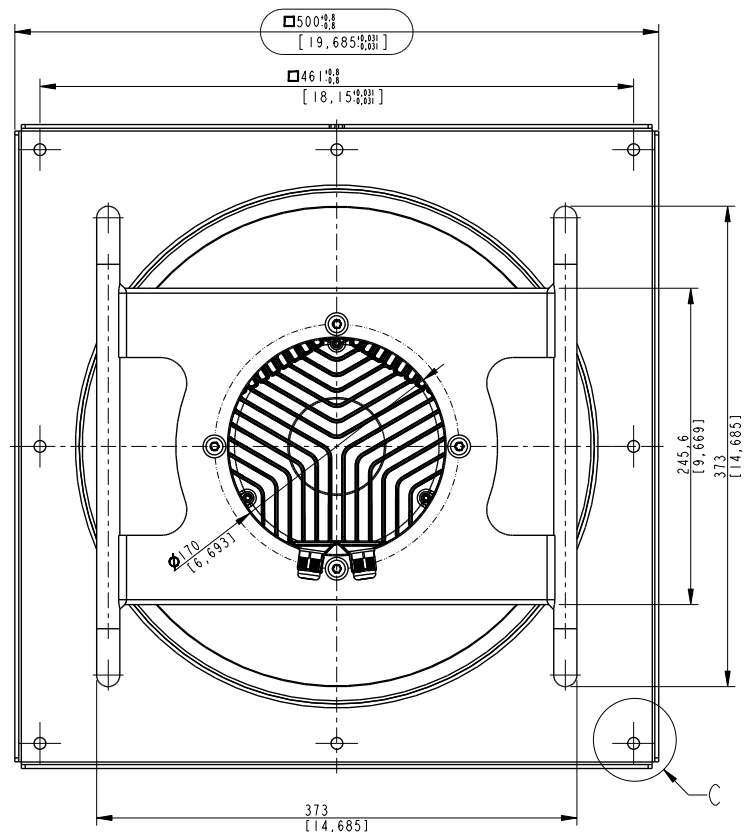
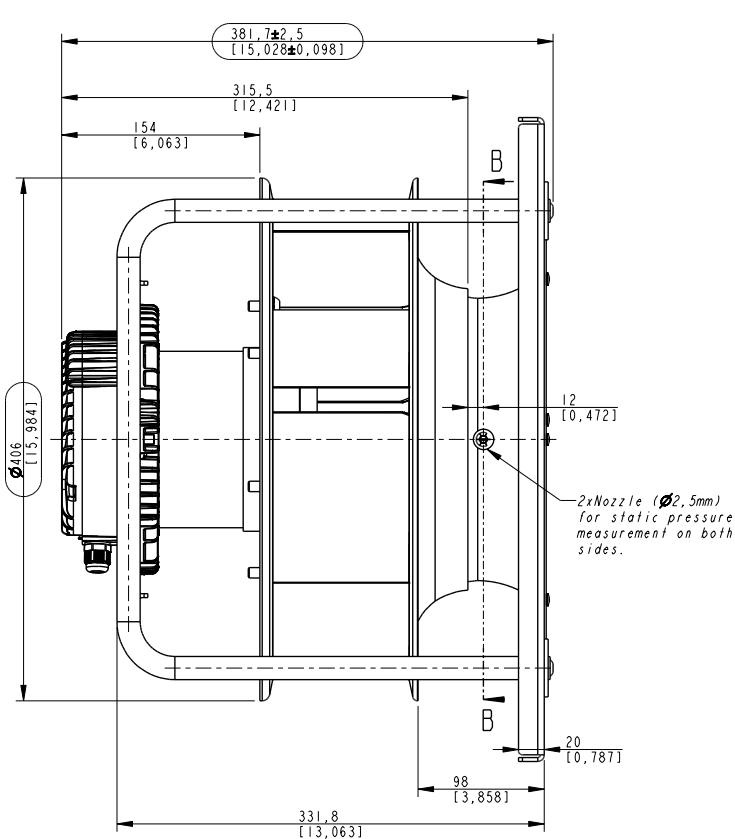
Motor

| | |
|---------------------|----------------------------------------|
| Type | Electronically Comutated, Brushless DC |
| Housing | Die-cast aluminum |
| Protection Degree | IP 54 |
| Overload protection | Inbuilt thermal limit |
| Speed Control | 0~10VDC / Modbus RTU |
| Bearings | Ball type |

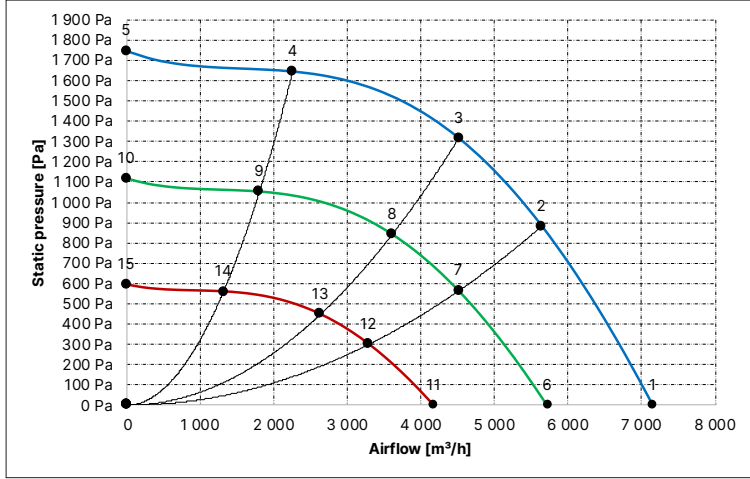
Impeller

| | |
|-----------------------------|-----------------------------------------------|
| Fan Impeller Size | 355 mm |
| Blade design / No of blades | Aerofoil / 7 |
| Spinning direction | Clockwise, wiewed from air inlet |
| Impeller material | Aluminum |
| Inlet funnel material | Hot-dip galvanized steel |
| Balance grade | G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989) |

Installation Dimensions



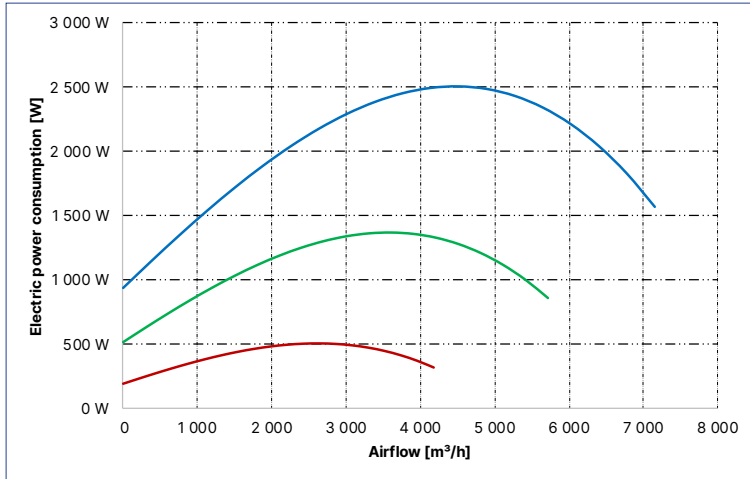
dP = f(V)



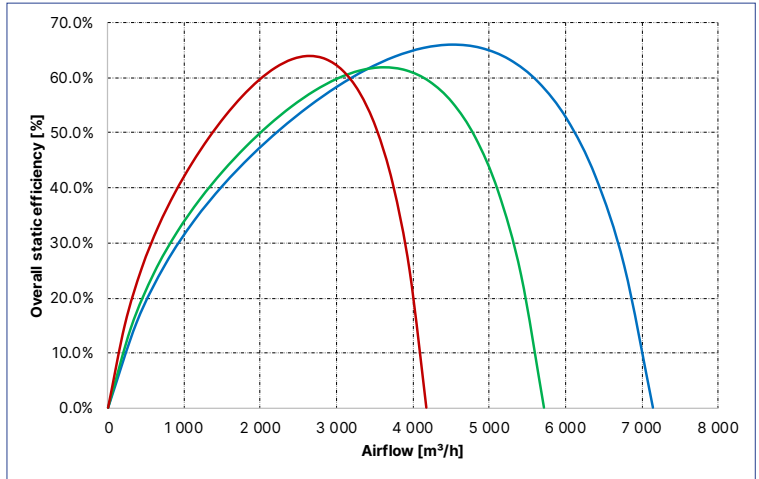
Measurment Points

| Point # | n RPM | EPC [kW] | I[A] | L _p A _{in} dB(A) | L _w A _{in} dB(A) | L _w A _{out} dB(A) | V [m³/h] | dP [Pa] |
|---------|-------|----------|------|--------------------------------------|--------------------------------------|---------------------------------------|----------|---------|
| 1 | 3 000 | 1.57 | 2.1 | 80.2 | 88.2 | 93.6 | 7 147 | 0 |
| 2 | 3 000 | 2.34 | 3.1 | 77.2 | 85.2 | 90.7 | 5 642 | 882 |
| 3 | 3 000 | 2.50 | 3.4 | 76.4 | 84.4 | 90.4 | 4 514 | 1 316 |
| 4 | 3 000 | 2.04 | 2.7 | 79.6 | 87.6 | 92.0 | 2 257 | 1 644 |
| 5 | 3 000 | 0.94 | 0.0 | 80.4 | 88.4 | 93.6 | 0 | 1 744 |
| 6 | 2 400 | 0.51 | 1.1 | 75.1 | 83.1 | 87.8 | 5 718 | 0 |
| 7 | 2 400 | 1.28 | 1.7 | 71.5 | 79.5 | 84.6 | 4 514 | 565 |
| 8 | 2 400 | 1.37 | 1.8 | 70.3 | 78.3 | 83.9 | 3 611 | 842 |
| 9 | 2 400 | 1.11 | 1.5 | 74.3 | 82.3 | 85.5 | 1 806 | 1 052 |
| 10 | 2 400 | 0.51 | 0.7 | 75.0 | 83.0 | 87.2 | 0 | 1 117 |
| 11 | 1 750 | 0.32 | 0.4 | 69.5 | 77.5 | 81.5 | 4 169 | 0 |
| 12 | 1 750 | 0.48 | 0.6 | 65.4 | 73.4 | 78.0 | 3 291 | 300 |
| 13 | 1 750 | 0.51 | 0.7 | 63.8 | 71.8 | 76.9 | 2 633 | 447 |
| 14 | 1 750 | 0.42 | 0.6 | 68.6 | 76.6 | 78.4 | 1 317 | 559 |
| 15 | 1 750 | 0.19 | 0.3 | 69.1 | 77.1 | 80.2 | 0 | 593 |

EPC = f(V)



η_{st} = f(V)



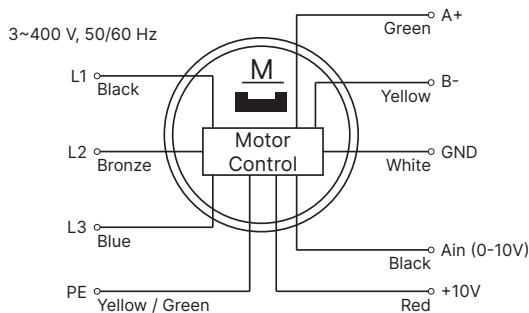
Compliance with Standards

| | |
|------------------------------------|-----------------------------------------------------------------------------------------------|
| ISO 5801:2017 | „Fans – Performance testing using standardized airways” |
| Commission Regulation(EU) 327/2011 | Requirements for fans driven by motors with an electric input power between 125 W and 500 kW. |

Information according to (EU) 327/2011 (ERP 2018)

| | | |
|----|----------------------------------------|------------|
| 1 | Overall efficiency η _{es} | 69.9% |
| 2 | Measurement category | A |
| 3 | Efficiency Category | Static |
| 4 | Efficiency grade N: Actual / Req. 2015 | 72.2% |
| 5 | Variable speed drive | Yes |
| 9 | Power consumption P _{ed} | 2.50 kW |
| | Air flow q _v | 4 513 m³/h |
| 10 | Pressure increase p _{fs} | 1 316.0 |
| | Speed (rpm) n | 3 000 |
| 11 | Specific ratio | 1.01 |

Connection of power and control cables



| Wire Harness | Terminal Number / Color | Description |
|--------------|-------------------------|----------------------------------------|
| Power Supply | L1 Black | Supplying voltage 3*400 V AC, 50 Hz |
| | L2 Brown | |
| | L3 Blue | |
| | PE Yellow / Green | Protective Earth Connection |
| Control | A Green | RS485 - A; MODBUS RTU |
| | B Yellow | RS485 - B; MODBUS RTU |
| | 10 V Red | Output 10V DC |
| | Ain Black | Analog Input; 0-10 V DC, R ≥ 1 kΩ |
| | Gnd White | I/O ground |