

HFW-L/EW

**Cased axial fans
with EC motors**



VARIABLE SPEED DRIVE
VSD: Variable Speed Drive.
. VSD1/B
. VSD3/B
Supplied with fan

CONTROL
Supplied as an optional accessory

SUPPLY
VSD1/B:
220-240 V 50/60 Hz
VSD3/B:
380-415 V 50/60 Hz

Cased axial fans with pad mounted motors and mounting arms designed to reduce noise and vibration. Complete with aerodynamically designed impellers and EC motors.

Fan:

- Airflow direction from motor to impeller
- Cast aluminium impellers
- Sheet steel casing with double flange and cable gland
- Steel Galvanised case
- Electronic variable speed drive (VSD), is supplied with fan (three phase or single-phase)

- By default, the electronic variable speed drive (VSD) is delivered programmed to run at a constant speed
- Fan working temperature: -25 °C +50°C.
- VSD working temperature: -25 °C +50 °C.

Finish:

- Hot-galvanised

Available on request:

- Airflow direction from impeller to motor
- PL version impellers - made from glass fibre reinforced polyamide
- 100% reversible impellers
- High-efficiency, IE4-compliant E.C. motors fitted with electronic variable speed drive (VSD), which can be adjusted through an external 0-10 V control signal. IP65 Protection
- The external signal can be supplied through a manual or automatic control with 0-10 V output.
- Electronic variable speed drives (VSD) are available with single-phase 220-240V 50/60Hz input (VSD1/B type) or three-phase 380-415V 50/60Hz (VSD3/B type). Standard IP20 protection, IP66 protection available on order

Order Code

HFW-L/EW — 56 — 4 — 1 — B — T — D

Galvanised cased axial fan with high efficiency motors

Impeller diameter in cm

Maximum speed:
4=1410 rpm
6=960 rpm

Motor power (hp)

Industrial Brushless E.C. Motors

M: Equipped with a VSD1/B, electronic variable speed drive, three-phase supply 220-240 V 50/60 Hz.

T: Equipped with a VSD3/B, electronic variable speed drive, three-phase supply 380-415 V 50/60 Hz.

D: Standard version, VSD is supplied, programmed to run at a constant speed

P: VSD supplied programmed to control pressure and Si-Prešion pressure transmitter

K: VSD supplied programmed and integrated into a BOXPRES KIT/B to control pressure.

Technical Characteristics

| Model | Speed min/max (r/min) | Single-phase VSD 230 V 50/60 Hz | | Three-phase VSD 400 V 50/60 Hz | | Maximum electrical power (W) | Maximum Airflow min/max (m³/h) | Sound pressure level min/max dB(A) | Approx. Weight (Kg) |
|--------------------|-----------------------|---------------------------------|-------------|--------------------------------|-------------|------------------------------|--------------------------------|------------------------------------|---------------------|
| | | Maximum input current (A) | Model VSD | Maximum input current (A) | Model VSD | | | | |
| HFW-L/EW-56-4-1 | 300 / 1410 | 7.94 | VSD1/B-0.75 | 1.87 | VSD3/B-0.75 | 905 | 2395 / 11250 | 39 / 73 | 28.0 |
| HFW-L/EW-56-4-1.5 | 300 / 1410 | 11.25 | VSD1/B-0.75 | 2.65 | VSD3/B-1.5 | 1295 | 2895 / 13600 | 40 / 74 | 32.0 |
| HFW-L/EW-56-4-2 | 300 / 1410 | 15.89 | VSD1/B-1.5 | 3.74 | VSD3/B-1.5 | 1825 | 3200 / 15050 | 41 / 75 | 30.0 |
| HFW-L/EW-56-6-0.75 | 300 / 900 | 5.64 | VSD1/B-0.75 | 1.32 | VSD3/B-0.75 | 635 | 3385 / 10150 | 38 / 62 | 23.0 |
| HFW-L/EW-63-4-1 | 300 / 1410 | 7.94 | VSD1/B-0.75 | 1.87 | VSD3/B-0.75 | 905 | 3235 / 15200 | 39 / 73 | 29.0 |
| HFW-L/EW-63-4-1.5 | 300 / 1410 | 11.25 | VSD1/B-0.75 | 2.65 | VSD3/B-1.5 | 1295 | 3785 / 17800 | 40 / 74 | 32.0 |
| HFW-L/EW-63-4-2 | 300 / 1410 | 15.89 | VSD1/B-1.5 | 3.74 | VSD3/B-1.5 | 1825 | 4105 / 19300 | 41 / 75 | 35.0 |
| HFW-L/EW-63-6-0.75 | 300 / 900 | 5.64 | VSD1/B-0.75 | 1.32 | VSD3/B-0.75 | 635 | 4535 / 13600 | 41 / 65 | 29.0 |
| HFW-L/EW-63-6-1 | 300 / 900 | 8.32 | VSD1/B-1.5 | 1.96 | VSD3/B-1.5 | 955 | 5300 / 15900 | 42 / 66 | 35.0 |
| HFW-L/EW-71-4-1.5 | 300 / 1410 | 11.25 | VSD1/B-0.75 | 2.65 | VSD3/B-1.5 | 1295 | 4150 / 19500 | 44 / 78 | 35.0 |
| HFW-L/EW-71-4-2 | 300 / 1410 | 15.89 | VSD1/B-1.5 | 3.74 | VSD3/B-1.5 | 1825 | 4445 / 20900 | 45 / 79 | 38.0 |
| HFW-L/EW-71-6-0.75 | 300 / 900 | 5.64 | VSD1/B-0.75 | 1.32 | VSD3/B-0.75 | 635 | 5365 / 16100 | 43 / 67 | 31.0 |
| HFW-L/EW-71-6-1 | 300 / 900 | 8.32 | VSD1/B-1.5 | 1.96 | VSD3/B-1.5 | 955 | 5765 / 17300 | 44 / 68 | 38.0 |
| HFW-L/EW-71-6-1.5 | 300 / 900 | 11.51 | VSD1/B-1.5 | 2.71 | VSD3/B-1.5 | 1325 | 6650 / 19950 | 45 / 69 | 40.0 |

HFW-L/EW

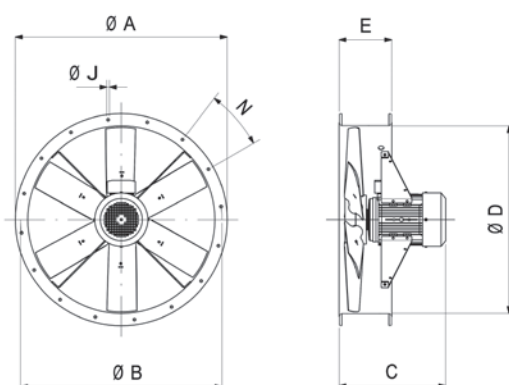
Acoustic Features

The specified values are determined according to free field measurements of pressure and sound levels in dB(A) at an equivalent distance of twice the fan's external diameter plus the impeller's diameter, with a minimum of 1.5 m.

Sound power Lw(A) spectrum in dB(A) via frequency band in Hz. Maximum speed

| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|--------------------|----|-----|-----|-----|------|------|------|------|--------------------|----|-----|-----|-----|------|------|------|------|
| HFW-L/EW-56-4-1 | 48 | 68 | 76 | 81 | 83 | 80 | 73 | 62 | HFW-L/EW-63-6-0.75 | 42 | 60 | 68 | 73 | 75 | 72 | 65 | 56 |
| HFW-L/EW-56-4-1.5 | 49 | 69 | 77 | 82 | 84 | 81 | 74 | 63 | HFW-L/EW-63-6-1 | 43 | 62 | 70 | 75 | 77 | 74 | 67 | 57 |
| HFW-L/EW-56-4-2 | 50 | 70 | 78 | 83 | 85 | 82 | 75 | 64 | HFW-L/EW-71-4-1.5 | 54 | 74 | 82 | 87 | 89 | 86 | 79 | 69 |
| HFW-L/EW-56-6-0.75 | 37 | 57 | 65 | 70 | 72 | 69 | 62 | 51 | HFW-L/EW-71-4-2 | 53 | 73 | 81 | 86 | 88 | 85 | 78 | 70 |
| HFW-L/EW-63-4-1 | 50 | 70 | 78 | 83 | 85 | 82 | 75 | 64 | HFW-L/EW-71-6-0.75 | 44 | 63 | 72 | 74 | 76 | 73 | 66 | 55 |
| HFW-L/EW-63-4-1.5 | 48 | 68 | 76 | 81 | 83 | 80 | 73 | 65 | HFW-L/EW-71-6-1 | 45 | 65 | 73 | 75 | 77 | 74 | 67 | 56 |
| HFW-L/EW-63-4-2 | 52 | 68 | 76 | 81 | 83 | 80 | 73 | 66 | HFW-L/EW-71-6-1.5 | 46 | 66 | 71 | 76 | 78 | 75 | 68 | 57 |

Dimensions in mm



| Model | ØA | ØB | C | ØD | E | ØJ | N |
|--------------------|-----|-----|-----|-----|-----|----|-----------|
| HFW-L/EW-56-4-1 | 665 | 620 | 330 | 560 | 225 | 12 | 12x30° |
| HFW-L/EW-56-4-1.5 | 665 | 620 | 380 | 560 | 225 | 12 | 12x30° |
| HFW-L/EW-56-4-2 | 665 | 620 | 380 | 560 | 225 | 12 | 12x30° |
| HFW-L/EW-56-6-0.75 | 665 | 620 | 330 | 560 | 225 | 12 | 12x30° |
| HFW-L/EW-63-4-1 | 735 | 690 | 379 | 640 | 225 | 12 | 12x30° |
| HFW-L/EW-63-4-1.5 | 735 | 690 | 429 | 640 | 225 | 12 | 12x30° |
| HFW-L/EW-63-4-2 | 735 | 690 | 429 | 640 | 225 | 12 | 12x30° |
| HFW-L/EW-63-6-0.75 | 735 | 690 | 379 | 640 | 225 | 12 | 12x30° |
| HFW-L/EW-63-6-1 | 735 | 690 | 429 | 640 | 225 | 12 | 12x30° |
| HFW-L/EW-71-4-1.5 | 815 | 770 | 389 | 710 | 225 | 12 | 16x22°30' |
| HFW-L/EW-71-4-2 | 815 | 770 | 389 | 710 | 225 | 12 | 16x22°30' |
| HFW-L/EW-71-6-0.75 | 815 | 770 | 339 | 710 | 225 | 12 | 16x22°30' |
| HFW-L/EW-71-6-1 | 815 | 770 | 389 | 710 | 225 | 12 | 16x22°30' |
| HFW-L/EW-71-6-1.5 | 815 | 770 | 389 | 710 | 225 | 12 | 16x22°30' |

Accessories

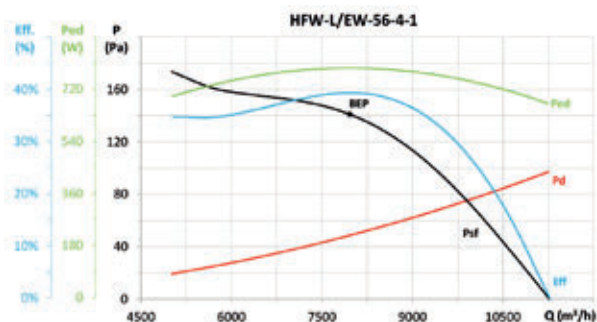
See accessories section.



HFW-L/EW

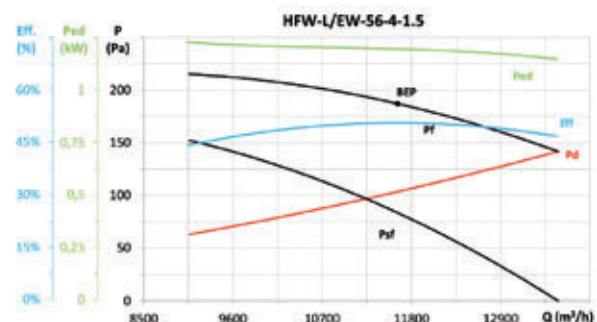


ErP. Characteristic Curves and ErP Data



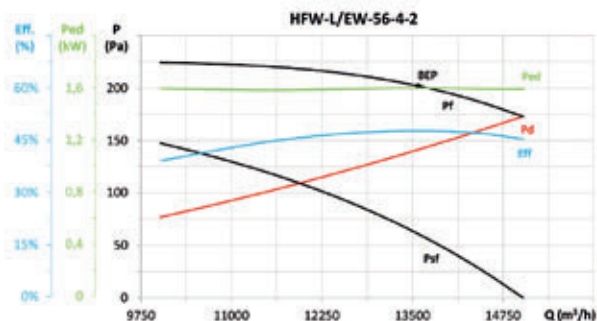
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| A | S | 1,00 | 1,09 | 43,0% | 50,0 | 0,793 | 7959 | 141 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



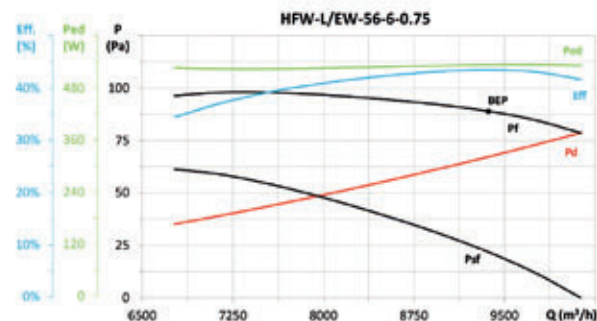
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| B | T | 1,01 | 1,08 | 54,7% | 60,5 | 1,195 | 11629 | 187 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



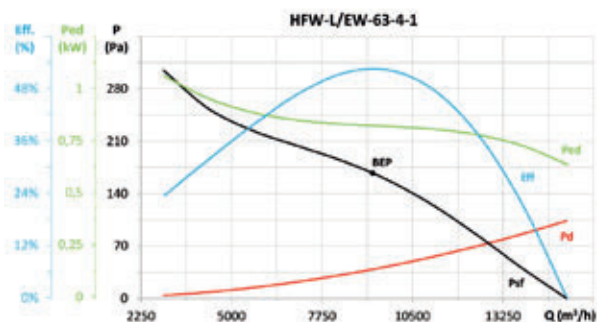
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| B | T | 1,00 | 1,07 | 53,0% | 58,1 | 1,545 | 13581 | 202 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



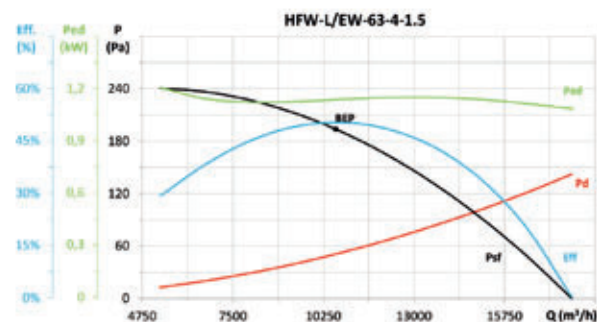
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| B | T | 1,00 | 1,11 | 49,9% | 58,1 | 0,514 | 9368 | 89 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



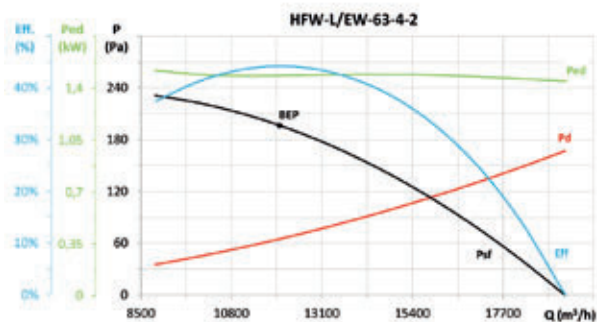
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,09 | 57,4% | 64,3 | 0,822 | 9291 | 167 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



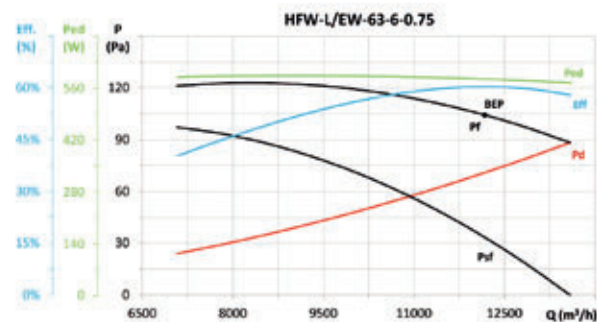
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,08 | 54,5% | 60,5 | 1,136 | 10625 | 194 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,08 | 47,5% | 52,8 | 1,485 | 12026 | 196 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



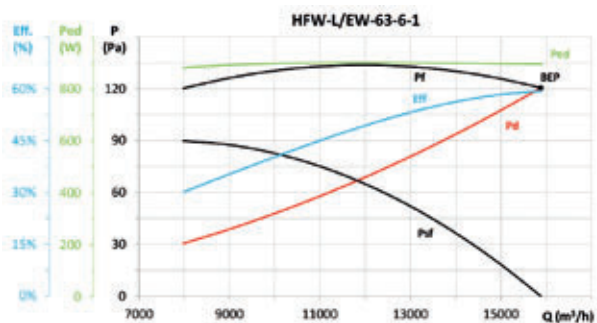
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| B | T | 1,00 | 1,11 | 69,2% | 77,1 | 0,563 | 12174 | 104 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc

HFW-L/EW

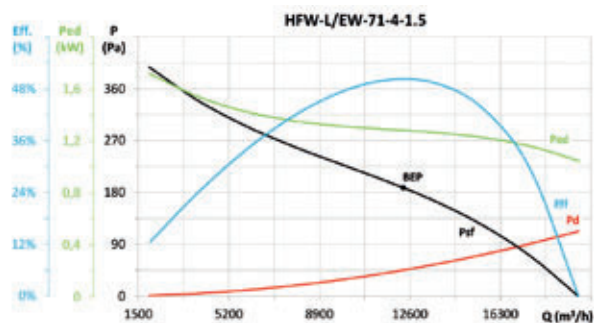


ErP. Characteristic Curves and ErP Data



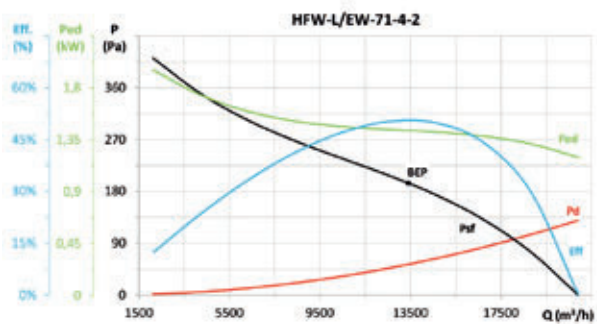
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| B | T | 1,00 | 1,09 | 66,6% | 73,4 | 0,871 | 15880 | 121 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



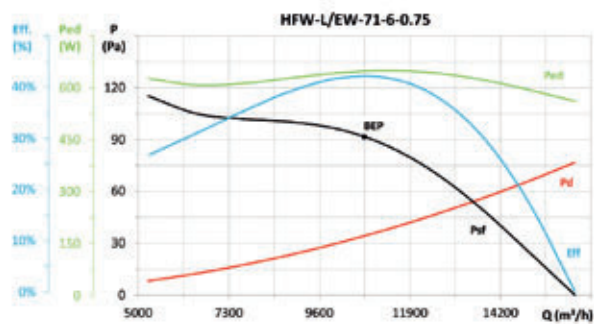
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,08 | 54,3% | 59,9 | 1,282 | 12330 | 188 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



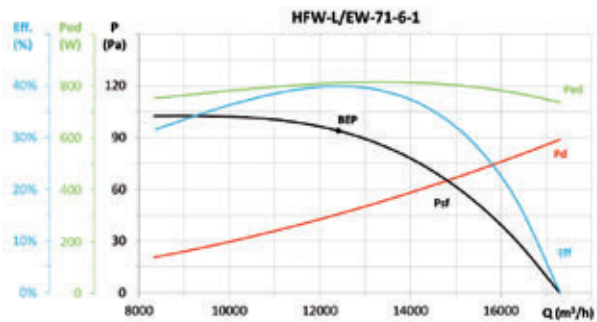
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,08 | 54,4% | 59,8 | 1,432 | 13405 | 195 | 1410 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



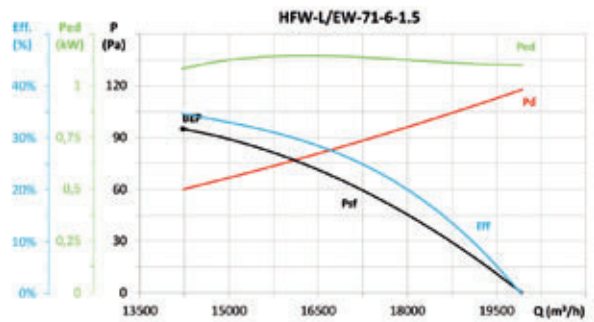
| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,10 | 48,2% | 55,8 | 0,625 | 10743 | 92 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,10 | 44,9% | 51,9 | 0,789 | 12404 | 94 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc



| MC | EC | SR | Cc | η_e (%)* | N | [kW] | [m³/h] | [Pa] | [rpm] | VSD |
|----|----|------|------|---------------|------|-------|--------|------|-------|----------|
| C | S | 1,00 | 1,09 | 38,5% | 44,7 | 1,059 | 14226 | 95 | 900 | INCLUDED |

* η_e (%) = Eff. (%) x Cc