## HQ EC 500



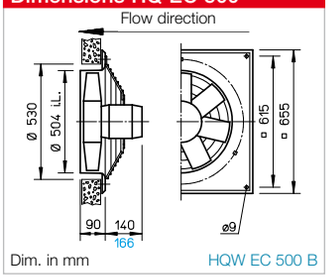

## HW EC 500




## HRF EC 500

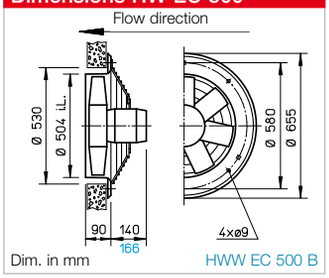



## Dimensions HQ EC 500



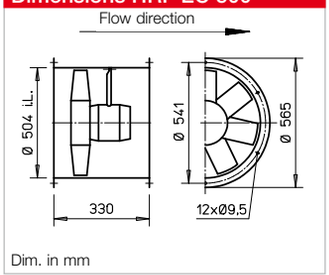

Dim. in mm HQW EC 500 B

## Dimensions HW EC 500




Dim. in mm HWW EC 500 B

## Dimensions HRF EC 500




Dim. in mm

### Description for all types

**Casing**
Made of galvanised steel sheet, types HQ and HW have additional two layer lacquer coating in papyrus white.

**Impeller**
High performance characteristics with profiled blades made of plastic, aerodynamically optimised for application, dynamically balanced.

**Drive**
Energy-efficient, speed-controllable EC external rotor motor with IP54 protection. Maintenance-free and ball bearing mounted.

**Motor protection**
Integrated electronic temperature monitoring system for EC motor and electronics.

**Electrical connection**
Standard terminal box (protection category IP54). Mounted to external cable for HQ and HW types (version “A”) or on back of motor (version “B”). Mounted on outside of duct for HRF types.

**Protection grille**
Made of powder-coated steel for HQ and HW in accordance with DIN EN ISO 13857.

**Power control**
All types are continuously controllable via internal (delivery) or external speed potentiometer. Control is also possible via three level switch or continuously variable via universal control system or electronic differential pressure/temperature controller. See type table.
Performance levels are shown on the performance curve as examples.

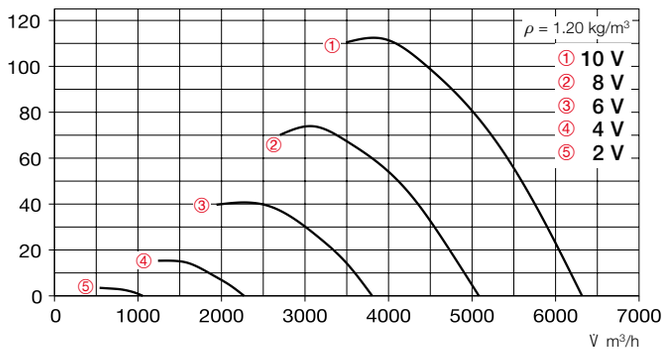
**Installation**
Installation possible in any position.

**Noise levels**
The total level and range for the sound power level and sound pressure level at 4 m free field conditions are specified above the performance diagram for the average operating point on the inlet/outlet side. The total sound pressure level at 4 m (free field conditions) is also specified in the type table, as well as the table below the performance diagram for various voltages. See page 14 f for noise emissions and room acoustics.

| Speed | Flow rate-free-blowing | Power consump. | Current consum. | Sound pressure | Wiring diagram | Max. air flow temperature | Wgt net | Design type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | **HQ EC** incl. protection grille | Ref. no. | **HW EC** incl. protection grille | Ref. no. | **HRF EC** | Ref. no. |
| min $^{-1}$ | V̇ m³/h | kW | A | dB(A) at 4m | No. | +°C | ca. kg | | | | | | |
| **Alternating current, 1~, 230 Volt, 50/60 Hz, EC motor, protection category IP54** | | | | | | | | | | | | | |
| 1090 | 6320 | 0.29 | 1.30 | 54 | 1047 | 40 | 15.7 | **HQW EC 500 A** | 04934 | **HWW EC 500 A** | 04935 | **HRFW EC 500 A** | 04936 |
| 1450 | 8300 | 0.67 | 3.00 | 62 | 1201 | 40 | 17.7 | **HQW EC 500 B** | 04937 | **HWW EC 500 B** | 04938 | **HRFW EC 500 B** | 04939 |

## Performance curves HQ EC / HW EC / HRF EC 500 A

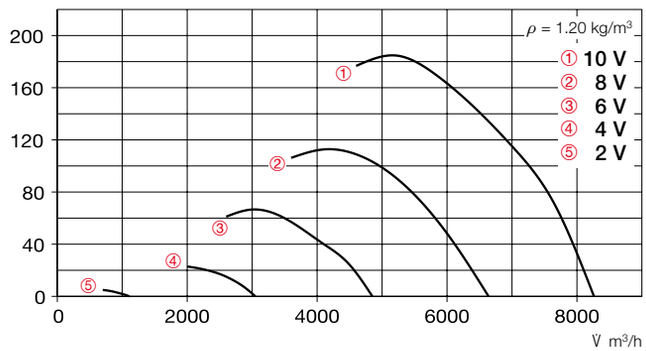
| Frequency | | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---|---|---|---|---|---|---|---|---|---|---|
| $L_{WA}$ | Air noise | dB(A) | 74 | 54 | 67 | 68 | 69 | 67 | 62 | 55 |
| $L_{PA,\ 4m}$ | Air noise | dB(A) | 54 | 34 | 47 | 48 | 49 | 47 | 42 | 35 |




| Voltage V | n min⁻¹ | Free-blow. A m³/h | $P_{el}$ W | $I_{Motor}$ A | $L_{PA,\ 4m}$ |
|---|---|---|---|---|---|
| 10 | 1090 | 6320 | 290 | 1.3 | 54 |
| 8 | 880 | 5080 | 150 | 0.68 | 50 |
| 6 | 665 | 3800 | 70 | 0.34 | 44 |
| 4 | 400 | 2270 | 25 | 0.20 | 33 |

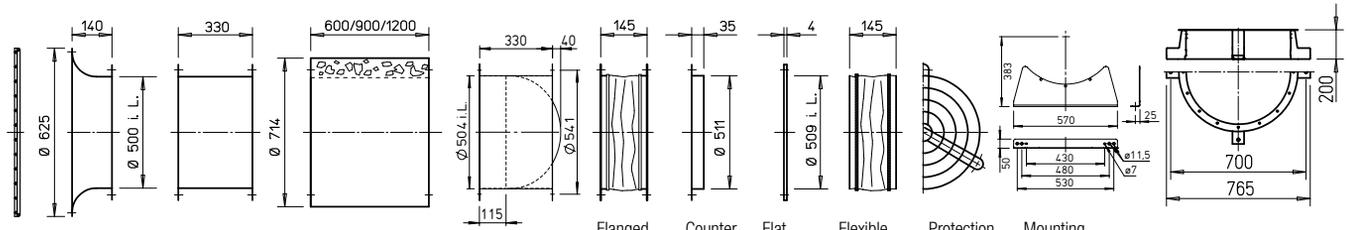
## Performance curves HQ EC / HW EC / HRF EC 500 B

| Frequency | | Hz | Tot. | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|---|---|---|---|---|---|---|---|---|---|---|
| $L_{WA}$ | Air noise | dB(A) | 82 | 56 | 72 | 76 | 77 | 75 | 72 | 63 |
| $L_{PA,\ 4m}$ | Air noise | dB(A) | 62 | 36 | 52 | 56 | 57 | 55 | 52 | 43 |




| Voltage V | n min⁻¹ | Free-blow. A m³/h | $P_{el}$ W | $I_{Motor}$ A | $L_{PA,\ 4m}$ |
|---|---|---|---|---|---|
| 10 | 1450 | 8300 | 670 | 3.00 | 62 |
| 8 | 1160 | 6640 | 350 | 1.70 | 57 |
| 6 | 860 | 4850 | 160 | 0.75 | 51 |
| 4 | 540 | 3050 | 55 | 0.34 | 41 |

## Accessories for HRF EC 500 Description see page 278 ff.




Intake nozzle with prot. grille **ASD-SGD 500** No. 01420

Extension duct **VR 500** No. 01408

Duct silencer- **RSD 500/..**

Duct shutter, automatic **RVS 500** [a] No. 02598

Flanged flexible connector **STS 500** No. 01225

Counter flange **FR 500** No. 01208

Flat flange **FF 500** No. 04947

Flexible connecting sleeve **FM 500** No. 01678

Protection grille duct side **SG 500** No. 01241

Mounting brackets **MK 500** (1 Set = 2 pcs) No. 00674

Mounting ring for vertical attachment **MRV 500** No. 01740

[a] Shutter, motorised see Accessories product pages.

| References | Page |
|---|---|
| Techn. description | 190 |
| Selection table | 191 |
| Planning information | 14 ff. |

**Special design**
Different voltage, air flow direction, higher air flow temperature, acid protection upon request.

The technical information on p.19 ff. must be observed.

| Other accessories | Page |
|---|---|
| Filters and silencers | 483 ff. |
| Shutters and ventilation grilles | 563 ff. |
| Universal control system, electronic controller, Speed potentiometer | 615 ff. |
| Five-step speed switch | 610 |

| Universal control system | | Speed potentiometer flush-mounted | | Speed potentiometer surface-mounted | | Three level speed switch flush-mounted | | Three level speed switch surface-mounted | | Electronic pressure difference controller/ actuator | | Electronic temperature controller/actuator | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | Ref. no. | **Type** | Ref. no. | **Type** | Ref. no. | **Type** | Ref. no. | **Type** | Ref. no. | **Type** | Ref. no. | **Type** | Ref. no. |
| **EUR EC**[1] | 01347 | **PU 10**[1] | 01734 | **PA 10**[1] | 01735 | **SU-3 10**[1] | 04266 | **SA-3 10**[1] | 04267 | **EDR**[1] | 01437 | **ETR**[1] | 01438 |
| **EUR EC**[1] | 01347 | **PU 10**[1] | 01734 | **PA 10**[1] | 01735 | **SU-3 10**[1] | 04266 | **SA-3 10**[1] | 04267 | **EDR**[1] | 01437 | **ETR**[1] | 01438 |

[1] Multiple EC fans can normally be connected, see Accessories.