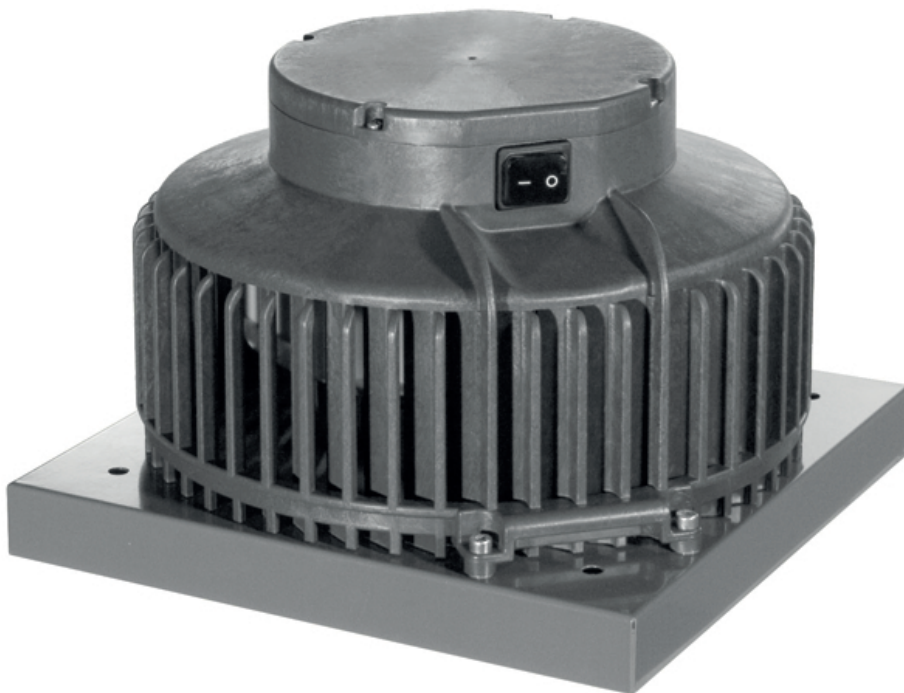


- Roof fans EC motor
- Horizontal discharge
- Motor in air stream



## Roof Unit type ARU-S EC

Roof unit with EC motor

### Application

- These fans are designed for direct or ducted ventilation in residential, commercial and industrial buildings

### Composition

- The plastic (ASA) RAL 7012 housing, with security switch, is made like a bird and finger guard
- Frame made of galvanized sheet steel powder coated with threaded pins for connection of flanges
- Turbine with backward curved blades, procured from plastic and outbalanced G6.3 according to DIN ISO 1940
- The EC motor has an integrated motor protection and is speed controllable
- Turnover:
  - Constant speed regulation (0-10V steering) for models ARU-S EC
  - Constant pressure regulation for models ARU-S EC-**CP**
- Voltage: 230Vac 1ph
- Isolation class F
- Protection classes :
  - IP54 for the engine (exception ARU-S 250 EC(CP) 20)
  - IPX4 for the whole fan
- Connection box:
  - IP44 for ARU-S 190 EC(-CP) 20 and ARU-S 220 EC(-CP) 20
  - IP54 for ARU-S 250 EC(-CP) 21
- Integrated safety switch

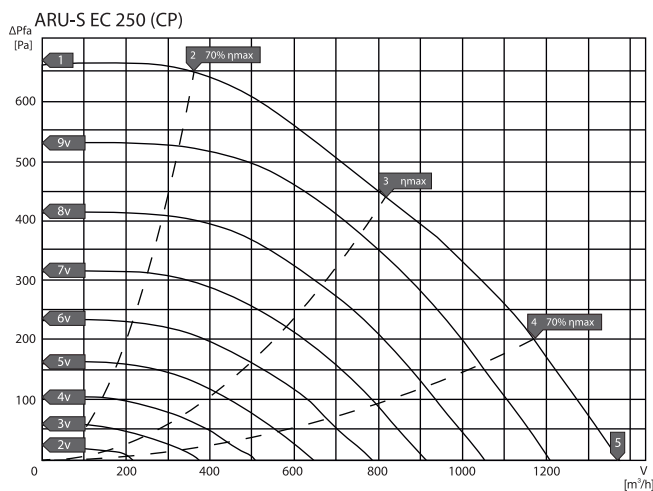
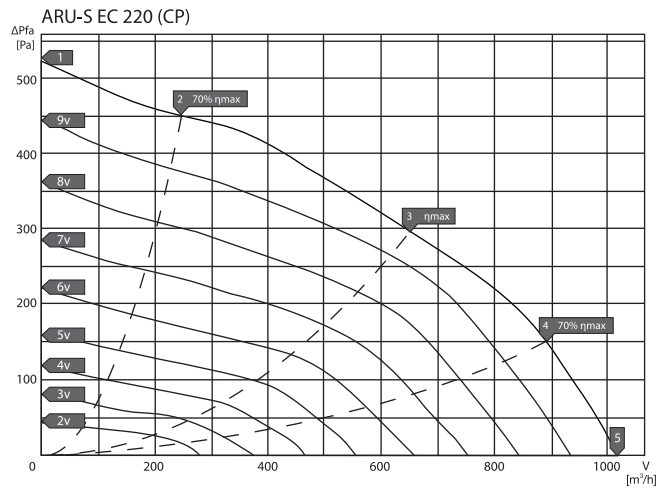
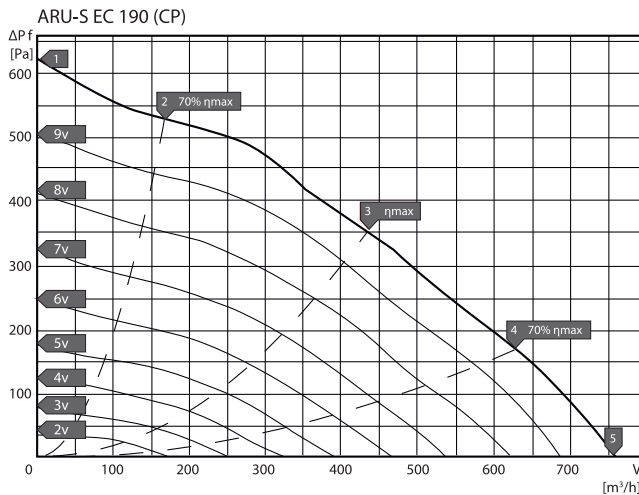
### Ancillaries

- Acoustic roof socket, type **RAC-I**
- Roof socket, type **RC-I**
- Adaptorplate, type **RAP**
- Backdraught shutter, type **RAS**
- Flexible connector, type **RFC**
- Matching flange, type **RIF**
- Speed controller, type **ESCP010** (not for ARU-S EC CP)
- 3-speed operation switch, type **MSS-D** (not for ARU-S EC CP)

Air performance data

|                      | Q [m³/h] |        |        |        |        |        |        |        |
|----------------------|----------|--------|--------|--------|--------|--------|--------|--------|
|                      | 50 Pa    | 100 Pa | 150 Pa | 200 Pa | 250 Pa | 300 Pa | 400 Pa | 500 Pa |
| ARU-S EC(-CP) 190 30 | 750      | 725    | 690    | 650    | 600    | 550    | 460    | 350    |
| ARU-S EC(-CP) 220 30 | 860      | 820    | 775    | 725    | 660    | 550    | 375    | -      |
| ARU-S EC(-CP) 250 21 | 1340     | 1270   | 1200   | 1140   | 1050   | 940    | 700    | 500    |

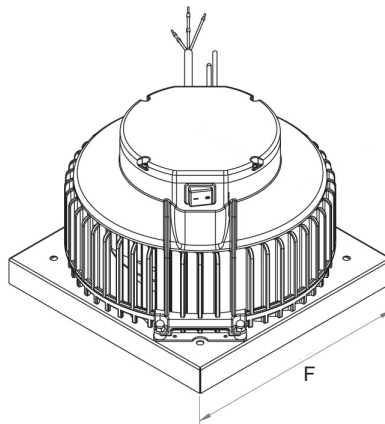
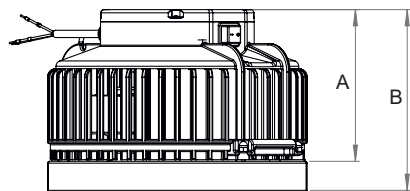
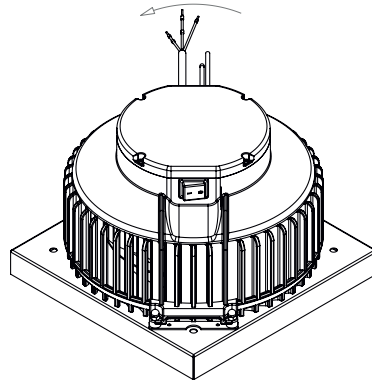
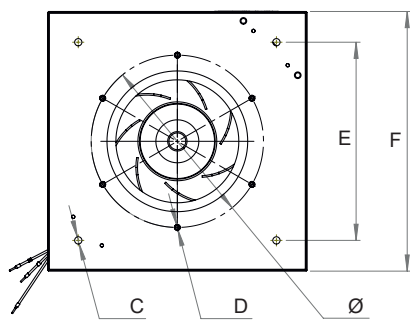
## Selection curves



Technical data

|                      | U [V]   | P [W] | I [A] | SC <sub>p</sub> ** | η <sub>t</sub> [%] | T <sub>m</sub> [°C] | T <sub>u</sub> [°C] | T <sub>o</sub> [°C] | n [rpm] | Lwa [dB(A)] |       |       |
|----------------------|---------|-------|-------|--------------------|--------------------|---------------------|---------------------|---------------------|---------|-------------|-------|-------|
|                      |         |       |       |                    |                    |                     |                     |                     |         | Lwa 5       | Lwa 6 | Lwa 2 |
| ARU-S EC(-CP) 190 30 | 1 x 230 | 121   | 1     | ESCP010            | 42.5               | 50                  | 50                  | -30                 | 3980    | 80          | 85    | -     |
| ARU-S EC(-CP) 220 30 | 1 x 230 | 119   | 1.03  | ESCP010            | 38.9               | 60                  | 60                  | -30                 | 2910    | 75          | 80    | -     |
| ARU-S EC(-CP) 250 21 | 1 x 230 | 172   | 1.4   | ESCP010            | 45.7               | 60                  | 60                  | -30                 | 2780    | 86          | 79    | -     |

- SC<sub>p</sub> = Potentiometer 0-10V
  - \*\* Potentiometer only applicable to models without constant pressure control
- η<sub>t</sub> = Maximum total efficiency
- T<sub>m</sub> = Maximum air temperature
- T<sub>u</sub> = Maximum ambient temperature
- T<sub>o</sub> = Minimum operating temperature
- Lwa 2 = Casing sound power level
- Lwa 5 = Sound power level @inlet
- Lwa 6 = Sound power level @outlet
- The sound power levels are measured according to DIN 45635 part 2 & 38



|                   | Dimensions |        |        |              |        |        |        |      |
|-------------------|------------|--------|--------|--------------|--------|--------|--------|------|
|                   | A [mm]     | B [mm] | C [mm] | D [mm]       | E [mm] | F [mm] | Ø [mm] | [kg] |
| ARU-S EC(-CP) 190 | 188        | 223    | 4 x Ø9 | (6x) M6 x 15 | 245    | 321    | 213    | 5.1  |
| ARU-S EC(-CP) 220 | 188        | 223    | 4 x Ø9 | (6x) M6 x 15 | 245    | 321    | 213    | 5.6  |
| ARU-S EC(-CP) 250 | 188        | 242    | 4 x Ø9 | (6x) M6 x 15 | 245    | 321    | 213    | 6.8  |