

AWC Series Wall Type Axial Fans



Fan:

- Motor-rotor air flow direction.
- PL version rotors in fibreglass-reinforced polyamide-6 and AL version rotors in cast aluminium.
- Sheet metal support ring.

Motor:

- IE3 efficiency motors for powers equal to or greater than 0.75kW except single-phase, 2-speed and 8-pole.
- Class F motors with ball bearings. IP55 protection, except single-phase models from size 45 to size 56. IP54 protection, 1 or 2 speeds, depending on model.
- Single-phase 230V-50Hz and three-phase 230/400V-50Hz (up to 4kW) and 400/690V-50Hz (powers greater than 4kW).
- Operating temperature: -25°C +50°C.

Finish:

- Anticorrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

On request:

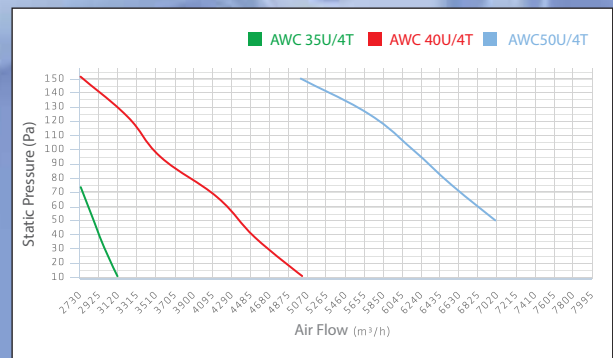
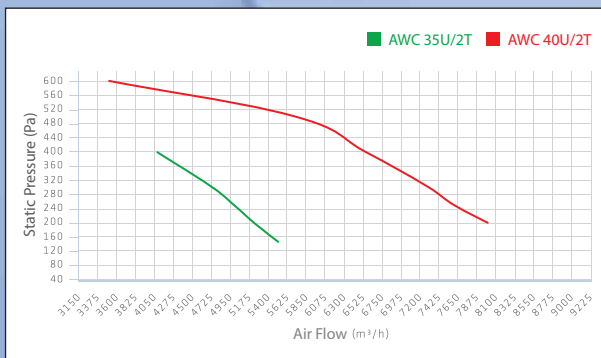
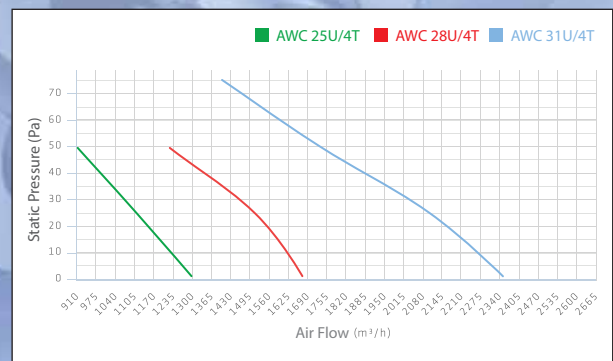
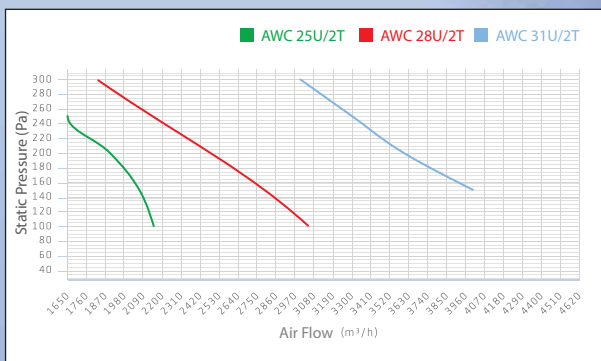
- Motor-rotor air flow direction.
- Rotors 100% reversible.
- Special windings for different voltages.

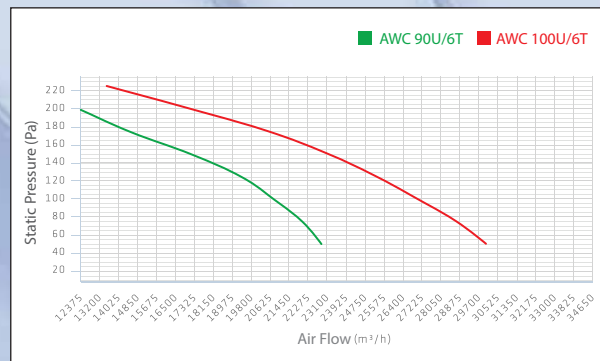
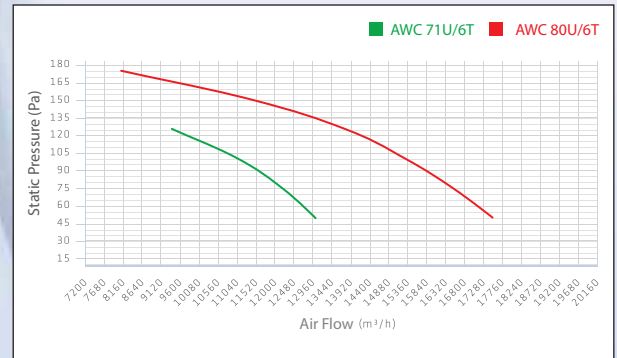
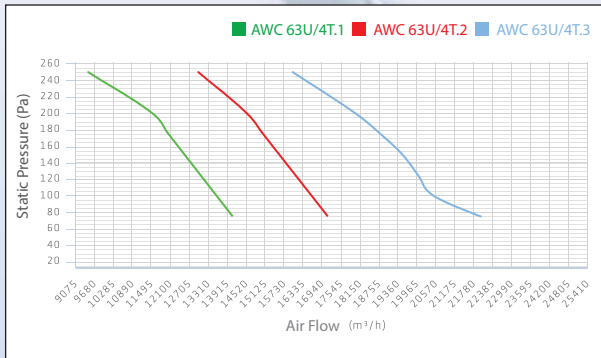
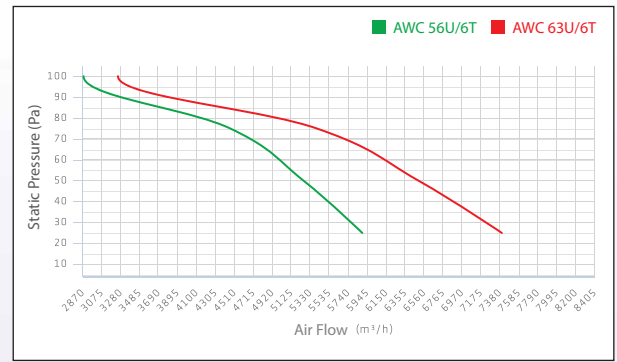
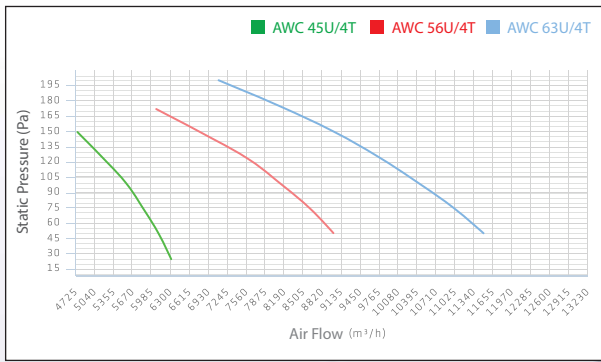
TECHNICAL SPECIFICATIONS

| MODEL | MAX.AIR FLOW(m ³ /h) | Watt | SOUND (dBA) | AMPER | RPM (dk) |
|----------|---------------------------------|------|-------------|-------|----------|
| 25U/4.T | 1300 | 0,18 | 68 | | 1450 |
| 28U/4.T | 1650 | 0,18 | 70 | | 1450 |
| 31U/4.T | 2350 | 0,18 | 71 | | 1450 |
| 35U/4.T | 3100 | 0,18 | 72 | | 1450 |
| 40U/4.T | 5000 | 0,25 | 76 | | 1450 |
| 45U/4.T | 5800 | 0,37 | 78 | | 1450 |
| 50U/4.T | 7000 | 0,55 | 79 | | 1450 |
| 56U/4.T | 9000 | 0,55 | 80 | | 1450 |
| 63U/4.T | 11500 | 0,75 | 81 | | 1450 |
| 63U/4.T1 | 14000 | 1,50 | 85 | | 1450 |
| 63U/4.T2 | 17000 | 2,20 | 88 | | 1450 |
| 63U/4.T3 | 22000 | 3,00 | 92 | | 1450 |
| 25U/2T | 2150 | 0,25 | 81 | | 2950 |
| 28U/2T | 3000 | 0,37 | 83 | | 2950 |
| 31U/2T | 4000 | 0,55 | 85 | | 2950 |
| 35U/2T | 5500 | 1,10 | 89 | | 2950 |
| 40U/2T | 8000 | 1,50 | 92 | | 2950 |
| 56U/6T | 5800 | 0,18 | 72 | | 1000 |
| 63U/6T | 7400 | 0,25 | 73 | | 1000 |
| 71U/6T | 13000 | 0,75 | 80 | | 1000 |
| 80U/6T | 17500 | 1,10 | 82 | | 1000 |
| 90U/6T | 23000 | 1,50 | 83 | | 1000 |
| 100U/6T | 30000 | 2.20 | 85 | | 1000 |

AIR FLOW PERFORMANCE DATA

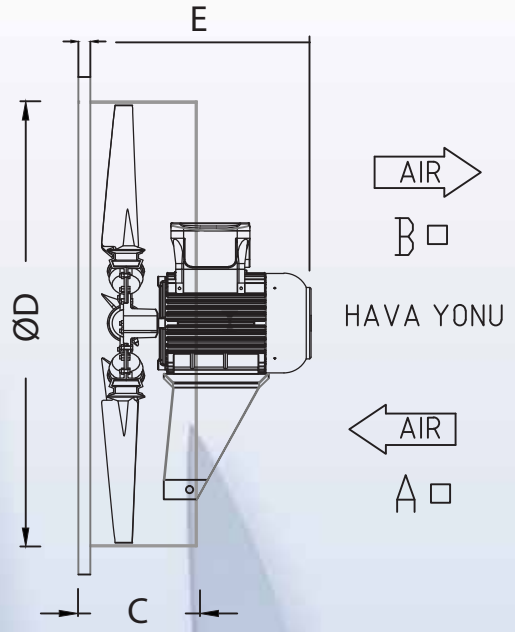
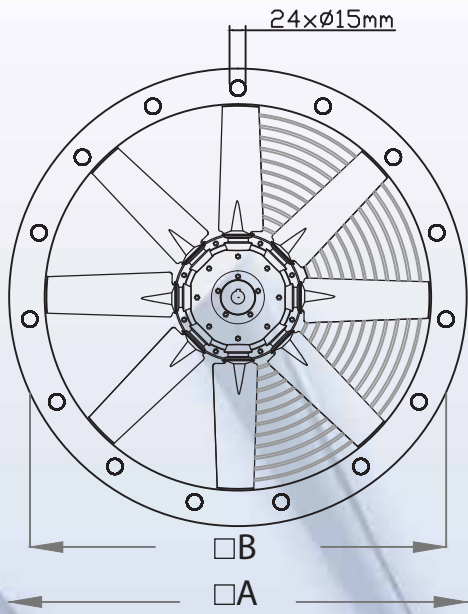
| MODEL | AIR FLOW DATA / PA / (m ³ /h) | | | | | | | | | |
|----------|--|------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 25 | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 250 |
| 25U/4.T | 1300 | 1050 | 780 | - | - | - | - | - | - | - |
| 28U/4.T | 1650 | 1500 | 1230 | - | - | - | - | - | - | - |
| 31U/4.T | 2350 | 2100 | 1730 | 1400 | - | - | - | - | - | - |
| 35U/4.T | 3100 | 2700 | 2350 | 2000 | - | - | - | - | - | - |
| 40U/4.T | 5000 | 4500 | 4100 | 3500 | 3150 | 2650 | - | - | - | - |
| 45U/4.T | - | 5800 | 5350 | 5000 | 4650 | 4100 | 3350 | - | - | - |
| 50U/4.T | - | - | 7000 | 6550 | 6150 | 5700 | 5000 | - | - | - |
| 56U/4.T | - | - | 9000 | 8600 | 8100 | 7550 | 6800 | 6000 | - | - |
| 63U/4.T | - | - | 11500 | 11000 | 10400 | 9750 | 9000 | 8100 | 7100 | - |
| 63U/4.T1 | - | - | - | 14000 | 13500 | 13000 | 12500 | 12000 | 11500 | 9500 |
| 63U/4.T2 | - | - | - | 17000 | 16500 | 16000 | 15500 | 15000 | 14500 | 13000 |
| 63U/4.T3 | - | - | - | 22000 | 20500 | 20000 | 19500 | 18800 | 18000 | 16000 |
| 2950 d/d | 100 | 150 | 200 | 250 | 300 | 400 | 500 | 600 | | |
| 25U/2T | 2150 | 2000 | 1700 | 1270 | - | - | - | - | - | - |
| 28U/2T | 3000 | 2820 | 2500 | 2250 | 1780 | - | - | - | - | - |
| 31U/2T | - | 4000 | 3600 | 3300 | 3000 | - | - | - | - | - |
| 35U/2T | - | 5500 | 5235 | 5000 | 4750 | 4100 | - | - | - | - |
| 40U/2T | - | - | 8000 | 7600 | 7300 | 6550 | 5710 | 3510 | | |
| 1000 d/d | 0 | 25 | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 225 |
| 56U/6T | - | 5800 | 5000 | 4000 | 2000 | - | - | - | - | - |
| 63U/6T | - | 7400 | 6500 | 5400 | 3250 | - | - | - | - | - |
| 71U/6T | - | - | 13000 | 12150 | 11000 | 9300 | - | - | - | - |
| 80U/6T | - | - | 17500 | 16500 | 15300 | 13800 | 11450 | 8100 | - | - |
| 90U/6T | - | - | 23000 | 22000 | 20500 | 18800 | 16200 | 13000 | 10350 | - |
| 100U/6T | - | - | 30000 | 28700 | 27000 | 25200 | 23100 | 20500 | 17100 | 13500 |



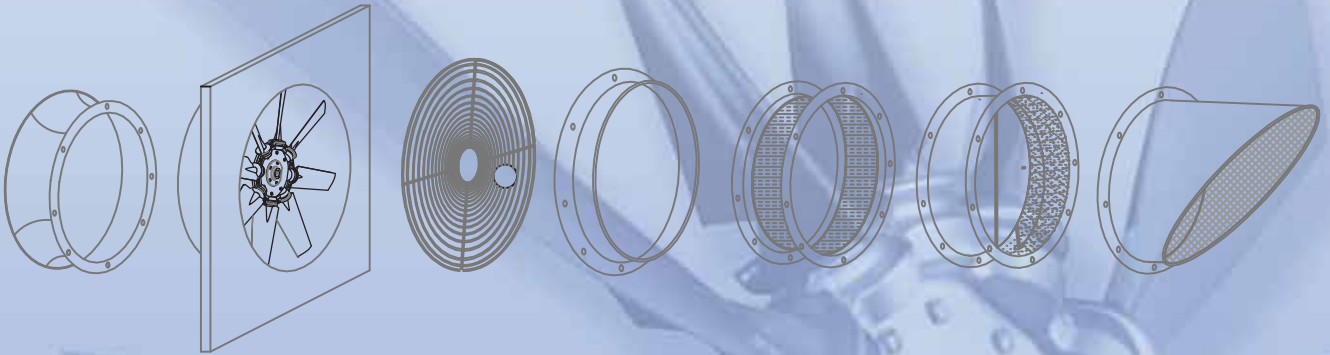


DIMENSIONS

| MODEL | DIMENSIONS / mm | | | | | |
|----------|-----------------|------|------|--------|-----|-----|
| | ØD | □A | □B | ØF AQD | E | C |
| 25U2/4/6 | 250 | 430 | 370 | 330 | 250 | 160 |
| 28U2/4/6 | 280 | 430 | 370 | 360 | 250 | 160 |
| 31U2/4/6 | 315 | 565 | 505 | 395 | 330 | 200 |
| 35U2/4/6 | 355 | 565 | 505 | 435 | 330 | 200 |
| 40U2/4/6 | 400 | 720 | 620 | 480 | 360 | 200 |
| 45U2/4/6 | 450 | 720 | 620 | 530 | 360 | 200 |
| 50U2/4/6 | 500 | 720 | 620 | 590 | 360 | 200 |
| 56U2/4/6 | 560 | 920 | 840 | 650 | 400 | 200 |
| 63U2/4/6 | 630 | 920 | 840 | 720 | 400 | 200 |
| 71U4/6 | 710 | 920 | 840 | 800 | 450 | 200 |
| 80U4/6 | 800 | 1170 | 1070 | 905 | 450 | 200 |
| 90U4/6 | 900 | 1170 | 1070 | 1110 | 500 | 200 |
| 100U4/6 | 1000 | 1400 | 1400 | 1200 | 500 | 250 |



ACCESSORY CONNECTION DIAGRAM



Description

For the purpose of estimating costs, the steps on the following pages may be bypassed. Allow 5N of thrust per 100m² of car park floor area to approximate the number of fans required.

Estimating fan quantities

The following steps are sufficient to create an initial impulse ventilation system design. A Computational Fluid Dynamics (CFD) analysis is often required to prove and further refine the design. Fans may need to be re-orientated, or in some cases, added or removed. An impulse ventilation system can be tailored to suit virtually any car park. Before considering fan locations, the system layout will need to be identified. Refer to the previous section for information relating to system layouts and their suitability for particular car parks.

Step 1 - Assessing Car Park Geometry

First identify the supply and exhaust points in the car park. A system that complements the natural air path and is able to circulate or move air effectively within the car park should be chosen. Certain layout features may assist the effectiveness of a particular layout as shown below:

(a) 'Natural air path'



Figure 6(a). Preferred natural air path

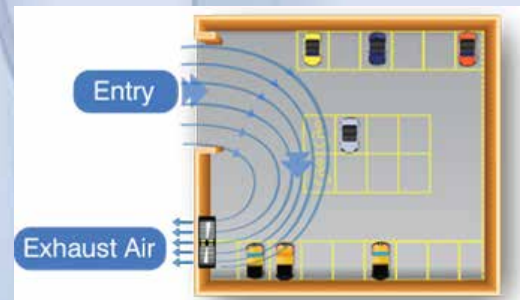


Figure 6(b). Natural air path to be avoided

- For 'Linear Flow Systems', supply and exhaust points should be spaced across the length of a car park.
- 'Circular Mixing Systems' are more tolerant of closely placed supply and exhaust points, but it is advisable to have a good amount of separation.
- Supply air points should include access ramps to outside.
- The impulse ventilation system layout should complement the natural air path from supply to exhaust points.

(b) Ceiling features

To make the system more effective, position JetVent Fans in-line with supporting ceiling beams as illustrated in Figure 7(a). If this is not possible, the system becomes less effective and more fans may be needed.

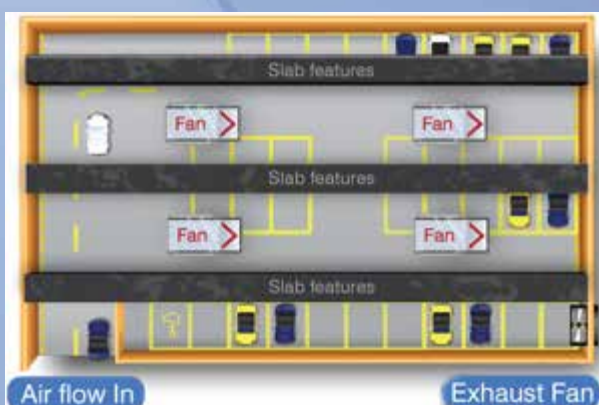


Figure 7(a). Fan's air movement parallel to beams is most effective



Figure 7(b). Fan's air movement perpendicular to beams is less effective