



POLAR Cat (G)

Air coolers – commercial line

General information & application

Fincoil POLAR Cat air coolers are efficient and reliable unit air coolers suitable for cold and freezing rooms in commercial refrigeration. Units are also suitable for cooling engine and monitoring rooms.

Refrigerants all H(C)FC, brine (G) , CO₂

Capacities (SC2) 1.1 up to 41.4 kW

Standard features

- Finned coil
 - Copper tubing \varnothing 12.7 mm
 - Aluminium fins
 - Fin spacing 4 or 7 mm
 - Tube pitch 35 x 30.31 mm staggered
- Casing material is polyester coated hot dip galvanized steel, colour white NCS 1002-4.
- Hinged, double insulated drip tray.
- 1 to 3 Draw-through fans in 4 fan sizes (254, 350, 450 & 500 mm) and different fan speed options to obtain capacity and sound pressure level alternatives. Fan motors are suitable for 400/50/3 or 230/50/1 power supply. Fan size 254 is with single phase shaded-pole motor. Other fan sizes have single- or 3-phase motors (\varnothing 500: 3-phase only). Fan units are with D/Y-connection functioning 2-speed motors. Fan speed of 3-phase fans can be regulated by changing the voltage. Three-phase motors have internal bimetallic thermal contacts wired to junction boxes. Single-phase motors have automatic built-in thermo contacts. Minimum operating temperature for 3-phase motors is -50°C , for single-phase fans -25°C . Protection class IP54 (fan \varnothing 254 mm IP44).
- Refrigerant connections on the right, seen from the coil side.



POLAR Cat

- Water drain connection fits both R1" threaded connection and DN32 connection.
- Design pressure 26 barg. Each heat exchanger is leak tested with dry air. Design pressure for brine coolers is 6 barg
- A manual including installation and service instructions is shipped with each unit.

Options

- Electric defrost in coil and drip tray (SS)
- Low-capacity electric defrost (SS0)
- Fan ring heater (SP)
- Wall mounting brackets (SK)
- Airsock flange (Ft)
Check external fan pressure!
- Epoxy coated aluminium fins (Ep)
Fin spacing 4 mm only
- Stainless steel casing

Performance data

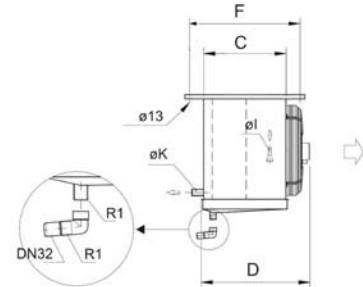
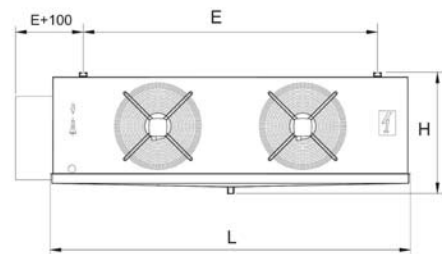
| coil size | ø fan mm | fan no. | fin spacing 4 mm | | | | | fin spacing 7 mm | | | | | Lpa** | |
|-----------|----------|---------|------------------|----------------------------|----------|----------------------------|------------------------|------------------|----------------------------|----------|----------------------------|----------------|----------------|----|
| | | | 1400 rpm | | 1150 rpm | | surface m ² | 1400 rpm | | 1150 rpm | | rpm 1400 dB(A) | rpm 1150 dB(A) | |
| | | | cap. kW* | air flow m ³ /s | cap. kW* | air flow m ³ /s | | cap. kW* | air flow m ³ /s | cap. kW* | air flow m ³ /s | | | |
| 101 | 254 | 1 | 1.41 | 0.20 | - | - | 6.4 | 1.08 | 0.21 | - | - | 3.9 | 53 | - |
| 102 | 254 | 2 | 2.83 | 0.39 | - | - | 13 | 2.14 | 0.41 | - | - | 7.8 | 56 | - |
| 103 | 350 | 1 | 3.70 | 0.73 | - | - | 11 | 2.55 | 0.75 | - | - | 6.6 | 58 | - |
| 104 | 254 | 3 | 4.24 | 0.59 | - | - | 19 | 3.31 | 0.62 | - | - | 12 | 57 | - |
| 105 | 350 | 1 | 5.09 | 0.62 | - | - | 22 | 3.99 | 0.66 | - | - | 13 | 58 | - |
| 106 | 350 | 2 | 6.60 | 1.36 | - | - | 18 | 4.63 | 1.42 | - | - | 11 | 61 | - |
| 107 | 350 | 2 | 9.90 | 1.24 | - | - | 43 | 7.79 | 1.32 | - | - | 26 | 61 | - |
| 108 | 450 | 1 | 9.68 | 1.28 | 8.46 | 1.05 | 39 | 7.39 | 1.33 | 6.53 | 1.12 | 24 | 65 | 60 |
| 109 | 450 | 1 | 12.0 | 1.44 | 10.5 | 1.24 | 60 | 8.91 | 1.47 | 8.04 | 1.28 | 37 | 65 | 60 |
| 110 | 350 | 3 | 13.6 | 1.74 | - | - | 58 | 10.5 | 1.86 | - | - | 35 | 63 | - |
| 111 | 450 | 2 | 19.4 | 2.56 | 17.0 | 2.11 | 77 | 15.1 | 2.67 | 13.2 | 2.24 | 47 | 68 | 63 |
| 112 | 450 | 2 | 24.3 | 2.88 | 21.3 | 2.48 | 121 | 16.3 | 2.92 | 16.3 | 2.55 | 73 | 68 | 63 |
| 113 | 450 | 3 | 29.8 | 3.84 | 25.9 | 3.16 | 116 | 22.2 | 4.00 | 19.8 | 3.36 | 71 | 70 | 65 |
| 114 | 500 | 2 | 28.1 | 3.05 | 22.5 | 2.34 | 129 | 22.8 | 3.23 | 19.0 | 2.53 | 78 | 71 | 66 |
| 115 | 500 | 2 | 31.4 | 3.38 | 25.9 | 2.65 | 161 | 25.9 | 3.55 | 21.9 | 2.83 | 98 | 71 | 66 |
| 116 | 500 | 3 | 41.4 | 4.57 | 34.0 | 3.51 | 193 | 34.4 | 4.84 | 28.6 | 3.80 | 117 | 72 | 67 |

Dimensions

| coil size | dimensions (mm) | | | | | | | refr. conn. (mm) | | | net weight (kg) | |
|-----------|-----------------|-----|-----|-----|------|-----|----|------------------|---------|------|-----------------|--|
| | | | | | | | | liquid | suction | int. | fin spacing | |
| | L | H | D | C | E | F | I | K | I | 4 | 7 | |
| 101 | 730 | 400 | 335 | 270 | 426 | 370 | 12 | 12 | 2 | 15 | 14 | |
| 102 | 1130 | 400 | 335 | 270 | 826 | 370 | 12 | 22 | 4 | 28 | 25 | |
| 103 | 930 | 550 | 490 | 360 | 626 | 510 | 12 | 22 | 4 | 30 | 28 | |
| 104 | 1530 | 400 | 335 | 270 | 1226 | 370 | 12 | 28 | 6 | 40 | 35 | |
| 105 | 930 | 550 | 490 | 360 | 626 | 510 | 12 | 28 | 7 | 35 | 30 | |
| 106 | 1330 | 550 | 490 | 360 | 1026 | 510 | 12 | 28 | 5 | 60 | 55 | |
| 107 | 1530 | 550 | 490 | 360 | 1226 | 510 | 16 | 35 | 12 | 65 | 60 | |
| 108 | 1190 | 670 | 600 | 440 | 826 | 590 | 16 | 35 | 11 | 65 | 55 | |
| 109 | 1390 | 810 | 600 | 440 | 1026 | 590 | 16 | 42 | 17 | 85 | 75 | |
| 110 | 1930 | 550 | 600 | 440 | 1626 | 590 | 16 | 42 | 16 | 90 | 85 | |
| 111 | 1990 | 670 | 600 | 440 | 1626 | 590 | 16 | 54 | 20 | 120 | 105 | |
| 112 | 2390 | 810 | 600 | 440 | 2026 | 590 | 16 | 54 | 31 | 170 | 150 | |
| 113 | 2790 | 670 | 600 | 440 | 2426 | 590 | 16 | 54 | 29 | 180 | 160 | |
| 114 | 2000 | 810 | 660 | 500 | 1626 | 675 | 16 | 54 | 36 | 170 | 150 | |
| 115 | 2400 | 810 | 660 | 500 | 2026 | 675 | 22 | 63 | 44 | 195 | 170 | |
| 116 | 2800 | 810 | 660 | 500 | 2426 | 675 | 22 | 76.1 | 52 | 230 | 195 | |

* Eurovent SC2

** Sound pressure level Lpa is given in a room with absorption area of 100 m² (Sabine), observation point at a distance of 5 m and 45° horizontally below the centre of the fans.

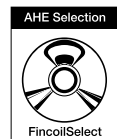


PC(G)E-112-7-2-450-1400-400/50/3-11b (14R1)-Options

| | |
|---|--|
| — | G: Tube connection size |
| — | G: Tube connection (DN=flange, R=outer thread) |
| — | G: No. of circuits |
| — | Marking of circuits |
| — | Power supply (400/50/3 or 230/50/1) |
| — | Fan speed (rpm) |
| — | Fan diameter (254, 350, 450 or 500 mm) |
| — | No. of fans |
| — | Fin spacing |
| — | Coil size |
| — | Special model |
| — | Liquid circulated execution |
| — | Polar Cat commercial air cooler |

Benefits

- Heavy duty materials, resulting in a long operational product life.
- Reliable performance, Eurovent certified.
- Energy efficient. Low total cost of ownership.
- Advanced product selection software available.
- One full year product guarantee.



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Alfa Laval reserves the right to change specification without prior notification.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

