

Air Cooled Chillers

Series CA 0621 – CA 1921



▣ [English](#)

With a cooling capacity from 70 to 238 kW, the CA Series chillers provide low temperature water independent from any ambient condition. This range has been specifically designed for application in all the sectors of the plastics industry, with maximum flexibility and energy efficient functioning.



Customers. The core of our innovation

▶ Performance and efficiency

guaranteed by all features

- > Designed to operate in stringent conditions, with **ambient air temperatures from -20°C up to +46°C** (according to the different versions available)
- > Green refrigerant **R407C**, in line with Piovan's respect towards environmental concerns
- > **Scroll compressors**, significantly reducing energy consumption and noise levels
- > **Stainless steel brazed-plate** evaporator for a highly efficient heat exchange
- > **Internal water circulation pump** for optimal flow (optional)
- > **Internal galvanized and insulated tank** for temperature stability and energy saving



Insulated stainless steel brazed-plate evaporator



Internal tank with relief valve and make-up valve.
Internal pump. Stand-by pump ready

- > Various **safety devices** protect the unit and guarantee optimal functioning (high and low pressure switches, high and low pressure gauges, metal filters on condensers, flow switch)
- > Reliable and sophisticated **microprocessor control**; it displays key water temperature visualisation and alarms in a simple format.

- > Ideal for both **internal and external installations** without necessity of any protection
- > Simplified on-site positioning with facilitated and quick start-up operations

Complete protection from atmospheric agents and reduced noise level. Double door for maximum insulation of the electric cabinet.



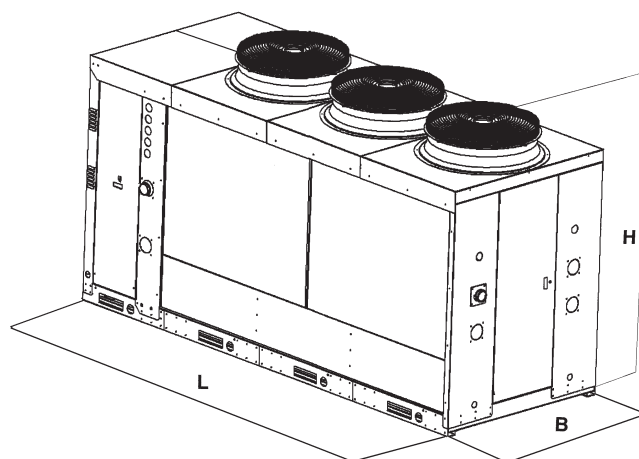
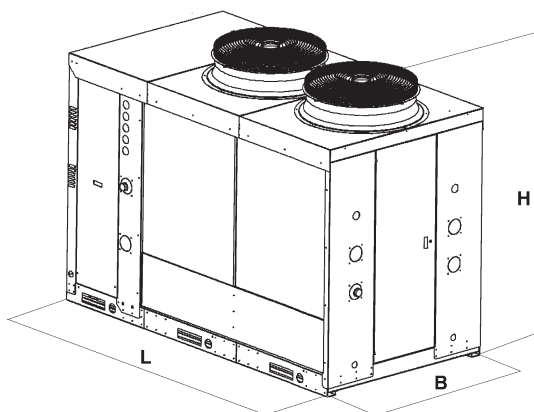
▶ Options for greater flexibility



High-efficiency axial fans

- > Version for operating at ambient temperature down to -20°C (variable speed fans with inverter, remote control, electric cabinet heater, heater on the evaporator and forced operation of the pump, for anti-freeze protection).
- > Centrifugal condenser fans to permit air ducting for heat recovery during winter
- > Stainless steel version for water pump and tank

Technical data



| | | CA0621MT | CA0621HT | CA0721MT | CA0721HT | CA0821MT | CA0821HT | CA0921MT | CA0921HT |
|---|-----------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Cooling capacity T evap 20-15°C - T amb 25°C | kcal | 60,200 | 65,360 | 68,800 | 73,100 | 78,260 | 80,840 | 91,160 | 97,180 |
| | kW | 70 | 76 | 80 | 85 | 91 | 94 | 106 | 113 |
| Absorbed power 15°C - 25°C | kW | 16.2 | 15.8 | 18.3 | 17.7 | 21.8 | 19.5 | 25.4 | 23.0 |
| EER* 15°C -25°C | | 4.32 | 4.81 | 4.37 | 4.80 | 4.17 | 4.82 | 4.17 | 4.91 |
| Water Pump - Medium pressure | mc/h | 0/28 | 0/28 | 0/28 | 0/28 | 0/28 | 0/28 | 0/28 | 0/28 |
| | bar kW | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 3.90/2.80 4.0 |
| Water Pump - High pressure | mc/h | 0/36 | 0/36 | 0/36 | 0/36 | 0/36 | 0/36 | 0/36 | 0/36 |
| | bar kW | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 5.80/4.50 7.5 |
| Fans | No | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Water connections (gruvlock) | in/out | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" |
| Weight | kg | 960 | 1.080 | 980 | 1130 | 1190 | 1230 | 1190 | 1230 |
| Dimensions (mm) | L | 1850 | 2850 | 1850 | 2850 | 2850 | 2850 | 2850 | 2850 |
| | B | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| | H | 2230 | 2230 | 2230 | 2230 | 2230 | 2230 | 2230 | 2230 |
| | L1 | 640 | 640 | 640 | 640 | 640 | 640 | 640 | 640 |
| | L2 | 265 | 265 | 265 | 265 | 265 | 265 | 265 | 265 |
| | H1 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 |
| | H2 | 765 | 765 | 765 | 765 | 765 | 765 | 765 | 765 |

| | | CA1131MT | CA1131HT | CA1431MT | CA1431HT | CA1921MT | CA1921HT |
|---|-----------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Cooling capacity T evap 20-15°C - T amb 25°C | kcal | 112,660 | 120,400 | 135,880 | 146,200 | 191,780 | 204,680 |
| | kW | 131 | 140 | 158 | 170 | 223 | 238 |
| Absorbed power 15°C - 25°C | kW | 31.2 | 29.25 | 36.6 | 34.5 | 49.1 | 45.6 |
| EER* 15°C -25°C | | 4.20 | 4.80 | 4.32 | 4.93 | 4.54 | 5.22 |
| Water Pump - Low pressure | mc/h | | | 0/36 | 0/36 | 24/66 | 24/66 |
| | bar kW | | | 3.15/1.90 3.0 | 3.15/1.90 3.0 | 3.25/2.25 5.5 | 3.25/2.25 5.5 |
| Water Pump - Medium pressure | mc/h | 0/28 | 0/28 | 0/33 | 0/36 | 24/72 | 24/72 |
| | bar kW | 3.90/2.80 4.0 | 3.90/2.80 4.0 | 4.85/3.75 5.5 | 5.80/4.50 7.5 | 3.80/2.70 7.5 | 3.80/2.70 7.5 |
| Water Pump - High pressure | mc/h | 0/36 | 0/36 | 12/36 | 12/36 | 24/72 | 24/72 |
| | bar kW | 5.80/4.50 7.5 | 5.80/4.50 7.5 | 7.30/5.50 11.0 | 7.30/5.50 11.0 | 5.45/3.70 11.0 | 5.45/3.70 11.0 |
| Fans | No | 2 | 3 | 2 | 3 | 3 | 4 |
| Water connections (gruvlock) | in/out | 2" 1/2 | 2" 1/2 | 2" 1/2 | 2" 1/2 | 3" | 3" |
| Weight | kg | 1370 | 1440 | 1400 | 1540 | 1650 | 1800 |
| Dimensions (mm) | L | 2850 | 3850 | 2850 | 3850 | 3850 | 4850 |
| | B | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| | H | 2230 | 2230 | 2230 | 2230 | 2230 | 2230 |
| | L1 | 640 | 640 | 640 | 640 | 640 | 640 |
| | L2 | 265 | 265 | 265 | 265 | 265 | 265 |
| | H1 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 |
| | H2 | 765 | 765 | 765 | 765 | 765 | 765 |

Data are referred to the following conditions: R407C gas, 400/3/50Hz power supply, installed at sea level and working in proper conditions according to Piován instruction manual.
EER includes compressors & fans.