

AN Air-cooled water chillers, heat pumps and condensing units With axial fans and capacities from 5.7 to 70 kW



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



R407C

• STANDARD VERSION

• VERSION EQUIPPED WITH WATER PUMP AND STORAGE TANK

Features

- Available in 12 different sizes
- Cooling only, heat pump and air cooled condensing versions
- 2 versions are available:
AN: Standard version
AN A: Version equipped with water pump, expansion vessel, mechanical water filter, storage tank
- All versions, except the motocondensing one,

can be requested to operate at low temperature to produce water cooled from 4 °C down to -6 °C. **This request must be specified when the order is placed.**

- High efficiency scroll compressors with low power consumption
- Antifreeze electric heater for the storage tank. Standard on AN 2507 A - 3007 A
- Water side differential pressure switch stan-

dard on all models

- Electronic control card with compressor starting delay and defrosting cycle control
- High efficiency heat exchangers
- Axial flow fan units for extremely quiet operation
- Metallic protective cabinet with rustproof polyester paint

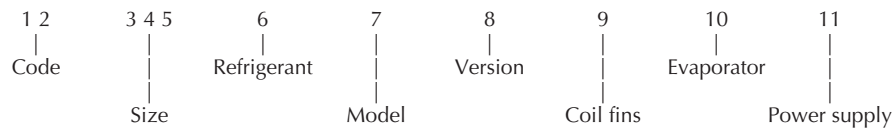
Accessories

- **BDX:** Condensate drip tray for outdoor unit
- **DCPX:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 19 °C down to -10 °C.
- **DRE:** Electronic peak current reducer. **It must be factory-mounted.**
- **GP:** Safety grille: protects external coils from accidental impact.
- **KR:** Antifreeze electric heater for plate exchanger. **It must be factory-mounted.**
- **PR3:** Simplified remote control panel. All main functions of the unit, alarms included, are possible. It can be used with a shielded cable at a distance of 30 m.
- **PRD:** 'Intelligent' remote control panel with the same functions as the on-board panel. It can be used with a shielded cable at a distance of 150 m.
- **RA:** Antifreeze electric heater for the storage tank. **It must be factory-mounted.**
- **SDP:** Electronic card for using PR1 accessory up to a distance of 150 m.
- **VT:** Anti-vibration mounts.

Selection

By combining the various options, each model can be configured exactly to match even the most specific system requirements.

Configuration rules:



Code:

AN

Size:

020, 025, 030, 041, 050, 080, 090, 101, 151, 200, 250, 300

Refrigerant:

7 - R407C

Model:

- ° - Cooling only
- H - Heat pump

Version:

- ° - Standard
- A - With pump and storage tank

Coil fins:

- ° - Aluminium
- R - Copper
- S - Tinned copper
- V - Painted / copper aluminium version

Evaporator:

- ° - Standard
- C - Without evaporator

Power supply:

- M - 1~ 230V 50Hz
- 3 - 3~ 230V 50Hz
- ° - 3N~ 400V 50Hz

Warning:

- standard options are shown by symbol °;
- heat pump version and the motocondensing version (field 7: option H; field 10: option C) are not available;
- Single-phase power supply (field 11: option M) is possible for 020 - 025 - 030 size only.

Commercial code example: **AN1017HAR**

This is a new AN unit, size 101, charged with R407C, equipped with heat pump, storage tank and water pump, copper condensing coil, evaporator, suitable for compressor with 3N~ 400V 50Hz motor.

Note that as each option is precisely identified, it is not necessary to specify standard options (shown with °) in the commercial code.

| Compatibility of accessories | | | | | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| All versions | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1017 | 1517 | 2007 | 2507 | 3007 |
| DCPX | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| DCPX 10 | | | | | | | | ✓ | ✓ | ✓ | | |
| DCPX 11 | | | | | | | | | | | ✓ | ✓ |
| DCPX 39* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| DCPX 40* | | | | | | | | ✓ | ✓ | ✓ | | |
| DCPX 41* | | | | | | | | | | | ✓ | ✓ |
| DRE 5 | | | | | ✓ | ✓ | ✓ | | | | | |
| DRE 10 | | | | | | | | ✓ | | | | |
| DRE 15 | | | | | | | | | ✓ | ✓ | | |
| DRE 25 | | | | | | | | | | | ✓ | |
| DRE 30 | | | | | | | | | | | | ✓ |
| GP 3 | | | | | | | | | | | ✓ | ✓ |
| GP 4* | | | | | | | | | | | ✓ | ✓ |
| Standard versions | | | | | | | | | | | | |
| BDX 5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| KR 2 | ✓ | ✓ | | | | | | | | | | |
| KR 3 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| KR 5 | | | | | | | | | | | ✓ | ✓ |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| VT 8 | | | | | | | | ✓ | ✓ | ✓ | | |
| VT 12 | | | | | | | | | | | ✓ | ✓ |
| A versions | | | | | | | | | | | | |
| BDX 5 | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| BDX 6 | | | | | ✓ | ✓ | ✓ | | | | | |
| KR 3 | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| VT 8 | | | | ✓ | ✓ | ✓ | ✓ | | | | | |
| VT 9 | | | | | | | | ✓ | ✓ | ✓ | | |
| VT 13 | | | | | | | | | | | ✓ | ✓ |
| C versions | | | | | | | | | | | | |
| VT 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| VT 8 | | | | | | | | ✓ | ✓ | ✓ | | |
| VT 12 | | | | | | | | | | | ✓ | ✓ |

* = Only for heat pump versions.

Technical data

| Mod. AN | Version | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 |
|-----------------------------------|----------|------------|------------|------------|----------------------|-------------|-------------|
| Cooling capacity (kW) | All | 5.7 | 6.6 | 8.2 | 10.4 | 13.7 | 18.2 |
| Total input power (kW) | Standard | 2.30 | 2.65 | 3.25 | 3.59 | 4.60 | 6.10 |
| | A | 2.46 | 2.82 | 3.43 | 3.86 | 4.88 | 6.4 |
| Total input current (A) 230V/400V | Standard | 11.3 / 4.0 | 12.6 / 4.8 | 15.8 / 5.8 | (17.5 / 14.4 / 6.2)* | 20.5 / 12.5 | 27.4 / 12.5 |
| | A | 12.1 / 5.4 | 13.3 / 6.2 | 16.7 / 7.5 | (19.8 / 17.1 / 8.9)* | 21.6 / 11.1 | 28.5 / 13.6 |
| Water flow rate (l/h) | All | 980 | 1140 | 1410 | 1790 | 2360 | 3130 |
| Pressure drop (kPa) | Standard | 4.3 | 4.4 | 28.0 | 27.0 | 37.1 | 28.9 |
| Effective pressure (kPa) | A | 71 | 67 | 67 | 61 | 62 | 57 |
| Heating capacity (kW) | H - HA | 7.4 | 8.5 | 9.7 | 11.8 | 15.2 | 19.2 |
| | H | 2.78 | 3.24 | 3.72 | 4.33 | 5.35 | 6.8 |
| Total input power (kW) | HA | 2.94 | 3.4 | 3.9 | 4.6 | 5.6 | 7.1 |
| | H | 13.5 / 4.9 | 15.1 / 5.5 | 17.6 / 6.5 | (20.3 / 18.3 / 7.3)* | 22 / 11.1 | 28.6 / 14.4 |
| Total input current (A) 230V/400V | HA | 14.3 / 6.1 | 15.3 / 6.6 | 18.5 / 8.2 | (22.3 / 20.3 / 9.3)* | 23.2 / 12.4 | 29.7 / 15.5 |
| | H - HA | 1270 | 1460 | 1670 | 2030 | 2610 | 3300 |
| Water flow rate (l/h) | H - HA | 5 | 7 | 38 | 30 | 39 | 26 |
| Pressure drop (kPa) | H | 31 | 35 | 37 | 35 | 40 | 39 |
| ♪ Sound pressure - dB (A) | All | 2500 | 3300 | 3450 | 5300 | 7000 | 6700 |
| Total air flow rate (m³/h) | Standard | 1" | 1" | 1" | 1" | 1" | 1" |
| | A | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 |
| Water connections (Ø female) | All | 0.6 | 0.75 | 0.85 | 0.85 | 1.03 | 1.41 |
| Evaporator water contents (dm³) | A | 3 | 3 | 3 | 3 | 3 | 3 |
| Pump speed (n.) | A | 2 | 2 | 2 | 5 | 5 | 5 |
| Expansion tank capacity (l) | A | 25 | 25 | 35 | 35 | 75 | 75 |
| Storage tank capacity (l) | A | | | | | | |

* = AN 0417: 1~ 230V 50Hz / 3~ 230V 50Hz / 3N~ 400V 50Hz

| Mod. AN | Version | 0907 | 1017 | 1517 | 2007 | 2507 | 3007 | |
|---------------------------------|----------|----------|-------|-------|---------------|----------------|----------------|---------------|
| Cooling capacity (kW) | All | 21.1 | 27.4 | 35 | 42 / 40** | 57 / 54** | 70 / 66.5** | |
| Total input power (kW) | Standard | 7.0 | 9.2 | 12.25 | 14 / 13.9** | 19.2 / 19.4** | 23.3 / 23.4** | |
| | A | 7.3 | 9.8 | 12.9 | 14.7 / 14.6** | 19.95 / 20.1** | 24.05 / 24.2** | |
| Total input current (A) | 230V | Standard | 22 | 33 | 38 | 45.5 / 45.5** | 60 / 61.6** | 72.4 / 74** |
| | | A | 23.5 | 36.3 | 40 | 45.8 / 48** | 59.1 / 65.1** | 71.5 / 77.5** |
| | 400V | Standard | 13 | 19 | 23 | 27.7 / 27.7** | 37 / 38.5** | 44.1 / 45.7** |
| | | A | 14.5 | 21 | 25 | 29.2 / 29.1** | 38.9 / 40.4** | 46 / 47.6** |
| Water flow rate (l/h) | All | 3630 | 4710 | 6020 | 7220 / 6880** | 9800 / 9290** | 12040/11440** | |
| Pressure drop (kPa) | Standard | 30.6 | 26.3 | 29.0 | 36 / 32.5** | 30 / 27** | 35 / 41** | |
| Effective pressure (kPa) | A | 50 | 69 | 68 | 70 | 139 / 143** | 128 / 133** | |
| Heating capacity (kW) | H - HA | 22.7 | 29.5 | 35 | 45 | 61 | 75 | |
| | H | 8.4 | 10.3 | 12 | 16.4 | 22.3 | 26.8 | |
| Total input power (kW) | HA | 8.7 | 10.9 | 12.7 | 17.1 | 23.1 | 27.5 | |
| | H | 23.5 | 36 | 42 | 51.7 | 64.4 | 77.6 | |
| Total input current (A) | 230V | HA | 25 | 39.3 | 45 | 54.2 | 67.9 | 81.1 |
| | | H | 14.5 | 21 | 24 | 31.2 | 43.2 | 50.8 |
| | 400V | HA | 16 | 23 | 26 | 32.7 | 45.1 | 52.7 |
| | | H | 3900 | 5070 | 6020 | 7740 | 10490 | 12900 |
| Water flow rate (l/h) | H - HA | 36 | 24 | 28 | 45 | 32 | 37 | |
| Pressure drop (kPa) | H | 39 | 46 | 48 | 47 | 44 | 45 | |
| ♪ Sound pressure - dB (A) | All | 6450 | 13450 | 12400 | 12000 | 21000 | 21000 | |
| Total air flow rate (m³/h) | Standard | 1" | 1" | 1" | 1" | 2"1/2 | 2"1/2 | |
| | A | 1"1/4 | *** | *** | *** | 2"1/2 | 2"1/2 | |
| Water connections (Ø female) | All | 1.78 | 2.44 | 3.1 | 3.1 | 5.52 | 6.48 | |
| Evaporator water contents (dm³) | A | 3 | 1 | 1 | 1 | 1 | 1 | |
| Pump speed (n.) | A | 5 | 8 | 8 | 8 | 24 | 24 | |
| Expansion tank capacity (l) | A | 75 | 145 | 145 | 145 | 500 | 500 | |
| Storage tank capacity (l) | A | | | | | | | |

Power supply: for 0207 - 0257 - 0307: 1~ 230V 50 Hz; 3N~ 400V 50 Hz.

for 0417: 1~ 230V 50 Hz; 3~ 230V 50 Hz; 3N~ 400V 50 Hz.

for 0507 - 0807 - 0907 - 1017 - 1517 - 2007 - 2507 - 3007: 3~ 230V 50 Hz; 3N~ 400V 50 Hz.

Performance values refer to the following conditions:

♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2.

In accordance with ISO 3744 regulations

■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C;
- Δt = 5 °C.

■ Heating:

- water outlet temperature 50 °C;
- ambient air temperature 7 °C D.B., 6 °C W.B.;
- Δt = 5 °C.

** = Only for heat pump versions.

***= 1"1/2 inlet; 1"1/4 outlet

Technical data

| Mod. AN (condensing unit) | | 0207 C | 0257 C | 0307 C | 0417 C | 0507 C | 0807 C | 0907 C | 1017 C | 1517 C | 2007 C | 2507 C | 3007 C |
|---------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cooling capacity | kW | 6.3 | 7.5 | 9.2 | 11.7 | 15.5 | 20 | 23 | 29 | 37 | 45 | 60 | 73.5 |
| Total input power | kW | 2.35 | 2.7 | 3.3 | 3.8 | 4.7 | 6.15 | 6.9 | 9.2 | 10.8 | 13.9 | 18.65 | 22.8 |
| Total input current | A (230V) | 11 | 12.3 | 15.7 | 11.7 | 16 | 21.2 | 22.6 | 31.3 | 41.3 | 44.1 | 58.5 | 71.5 |
| | A (400V) | 4.6 | 5.3 | 6.3 | 7.1 | 9.8 | 12.8 | 13.6 | 18 | 25 | 27 | 36 | 43.6 |
| ♪ Sound pressure | dB (A) | 31 | 35 | 37 | 35 | 40 | 39 | 39 | 46 | 48 | 47 | 44 | 45 |
| Total air flow rate | m³/h | 2500 | 3300 | 3450 | 5300 | 7000 | 6700 | 6450 | 13450 | 13450 | 12000 | 21000 | 21000 |

Power supply: for 0207 - 0257 - 0307: 1~ 230V 50 Hz; 3N~ 400V 50 Hz.

for 0417: 1~ 230V 50 Hz; 3~ 230V 50 Hz; 3N~ 400V 50 Hz.

for 0507 - 0807 - 0907 - 1017 - 1517 - 2007 - 2507 - 3007: 3~ 230V 50 Hz; 3N~ 400V 50 Hz.

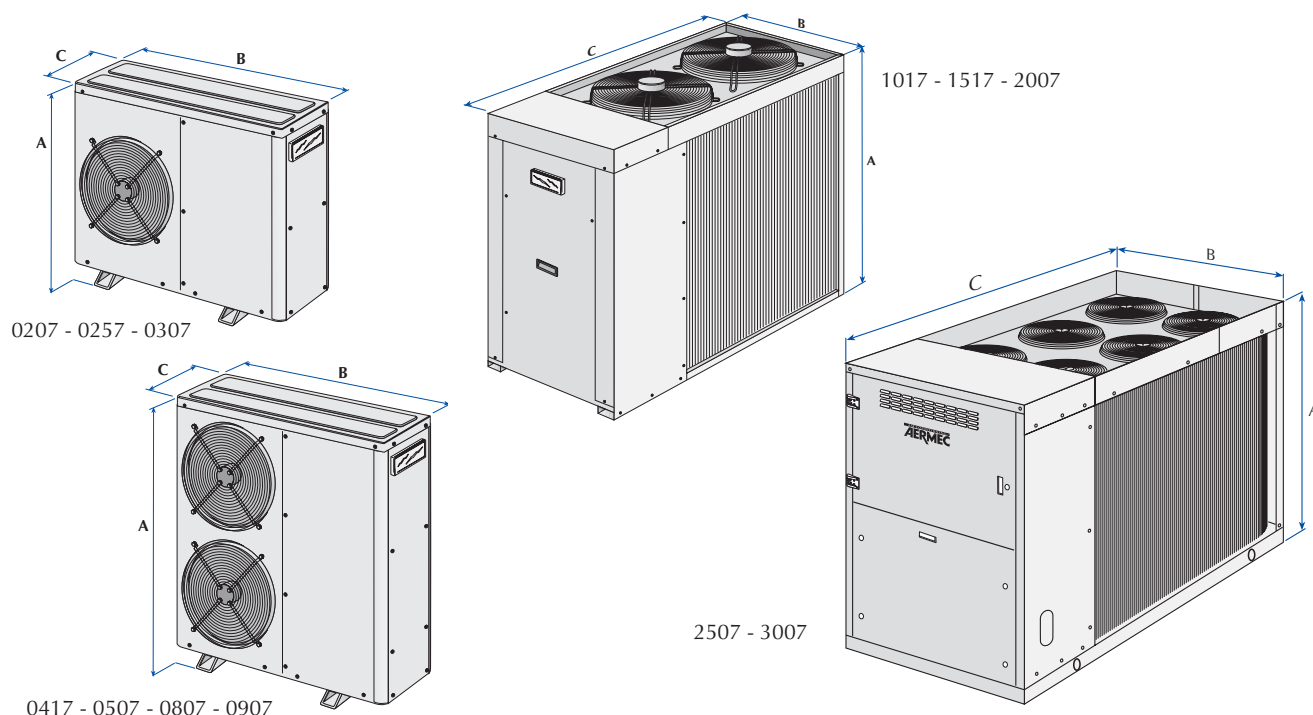
Performance values refer to the following conditions:

- ♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2.

■ Cooling:

- evaporation temperature 5 °C;
- ambient temperature 35 °C.

Dimensions (mm)



| AN Standard (Std) - C | | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1017 | 1517 | 2007 | 2507 | 3007 |
|-----------------------|-------|------|------|------|------|------|------|---------------|------|------|------|---------------|---------------|
| Height | A | 850 | 850 | 1000 | 1250 | 1250 | 1250 | 1250 1550* | 1345 | 1345 | 1345 | 1606 | 1606 |
| Width | B | 900 | 900 | 900 | 1120 | 1120 | 1120 | 1120 | 750 | 750 | 750 | 1100 | 1100 |
| Depth | C | 352 | 352 | 352 | 435 | 435 | 435 | 435 | 1750 | 1750 | 1750 | 2450 2950* | 2450 2950* |
| Weight (kg) | AN | 74 | 77 | 81 | 113 | 123 | 131 | 168 | 280 | 293 | 350 | 650 | 695 |
| | AN H | 78 | 81 | 85 | 119 | 129 | 137 | 195 | 295 | 328 | 385 | 745 | 760 |
| | AN C | 70 | 71 | 76 | 107 | 116 | 122 | 157 | 266 | 276 | 333 | 623 | 663 |
| AN A | | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1017 | 1517 | 2007 | 2507 | 3007 |
| Height | A | 864 | 864 | 1014 | 1250 | 1280 | 1280 | 1280 1580* | 1345 | 1345 | 1345 | 1606 | 1606 |
| Width | B | 1120 | 1120 | 1120 | 1120 | 1167 | 1167 | 1167 | 750 | 750 | 750 | 1100 | 1100 |
| Depth | C | 435 | 435 | 435 | 435 | 555 | 555 | 555 | 1750 | 1750 | 1750 | 2450 2950* | 2450 2950* |
| Weight** (kg) | AN A | 109 | 113 | 120 | 139 | 183 | 189 | 226 | 342 | 370 | 427 | 780 | 825 |
| | AN HA | 113 | 117 | 125 | 145 | 189 | 195 | 253 | 360 | 410 | 460 | 875 | 890 |

* = Heat pump version.

** = AN A - HA: net weight.

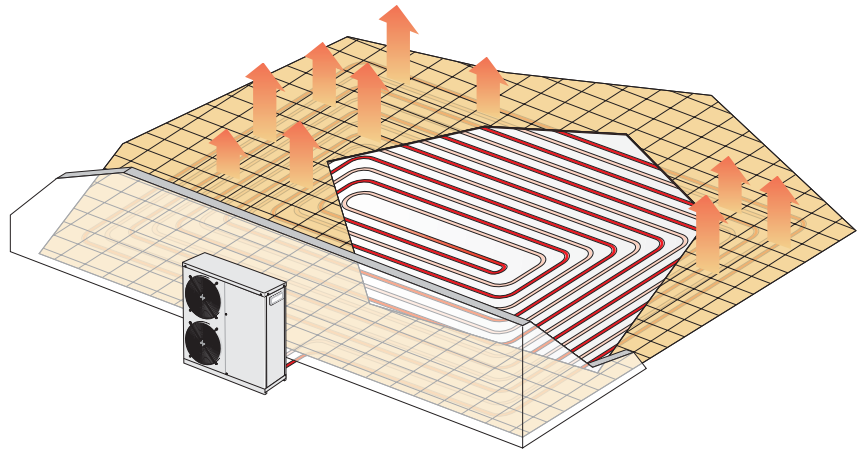
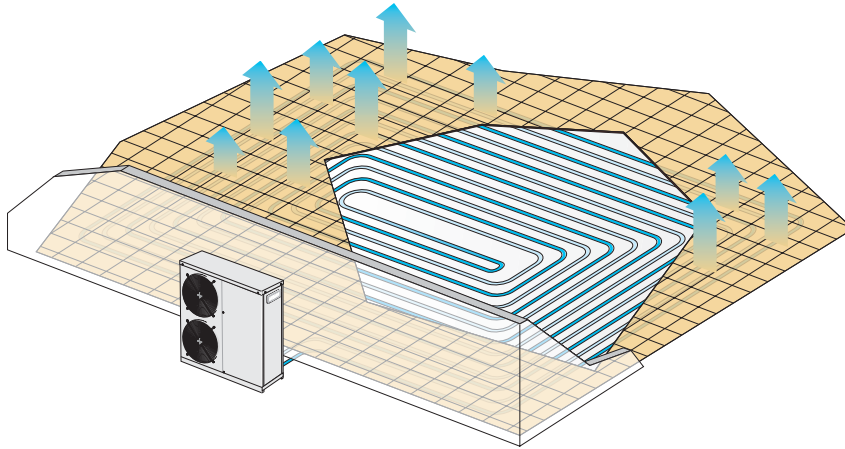
HE

Air cooled heat pump chillers for under floor systems application.
Cooling capacity 6,7 to 47,5 kW

R407C



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



- **LIVING WATER TEMPERATURE UP TO 20 °C**
- **FUNCTIONING WITH AMBIENT TEMPERATURE DOWN TO -15 °C IN HEATING AND TO 46 °C IN COOLING**
- **COMPLETE WITH PUMP AND STAINLESS STEEL STORAGE TANK**
- **AVAILABLE IN SINGLE OR DOUBLE HYDRAULIC RING**

Characteristics

- Available in 10 different sizes
- Heat pump models with high-efficiency special compressor and functioning with ambient temperature down to -15 °C
- Two versions are available:
 - HE U: Version with single ring equipped with circulation pump, expansion tank, mechanical water filter, stainless steel storage tank
 - HE B: Double ring version (with circuit breaker version) fitted with primary circulation pump, expansion tank, mechanical water filter, stainless steel storage tank; in this case the user circuit (radiating panel) must have a dedicated pump (not supplied)
- Scroll compressor
- Differential pressure switch or flow switch, standard
- Electronic control card and with start timing and management of defrost cycles
- High efficiency heat exchangers
- Axial flow fans for quiet operation
- Metallic protective cabinet with rustproofing polyester paint
- Electrical power supply single phase to 14 kW in cooling and 10.6 kW in heating

Note: using the HE unit for under floor cooling we suggest to provide an air dehumidification system (dehumidifier, split system, ...)

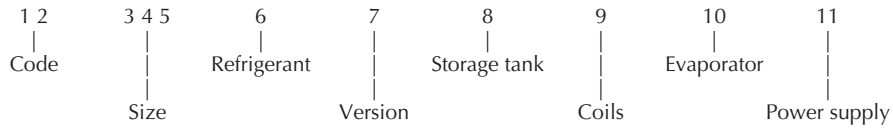
Accessories

- **BDX:** Condensate drip tray for outdoor unit.
- **DCPX:** Low temperature device for operation of outdoor units at ambient temperatures less than 19 °C down to -10 °C.
- **DRE:** Electronic starting current reduction device. Can only be applied in the factory.
- **KR:** Electric antifreeze heater for plate-type heat exchangers. Can only be applied in the factory.
- **PR3:** Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 30 m.
- **PRD1:** Smart remote panel. Repeats at a distance the functions of the panel on the machine. Can be made remote with shielded cable up to 150 m.
- **RA:** Antifreeze electric heater for the accumulation tank. Can only be applied in the factory.
- **SDP:** Card for making the PR1 accessory remote up to 150 m.
- **VT:** anti-vibration mounting.

Choice of Unit

By suitably combining the numerous options available, it is possible to configure each model in such a way as to meet the most particular of system requirements.

Sheet configurer:



Initials:

HE

Size:

020, 025, 030, 040, 050, 080, 090, 100, 150, 200

Refrigerant :

° - R407C

Version:

° - Standard

H - Heat pump

Storage tank:

U - Single ring with accumulation and pump

B - Double ring with accumulation and primary pump

Batteries:

° - aluminium

R - copper

S - tinned copper

V - made of aluminium with epoxy paint

Evaporator:

° - Standard

Power supply:

° - 3~ 400V 50Hz (All the models except 020 cooling only)

M - 1~ 230V 50Hz

Caution:

– the standard options are shown by the symbol °;

– the three phase power supply (field 11: option°) it is not available for the model 020 cooling only.

– the single phase power supply (field 11: option M) is only available for sizes 020 - 025 - 030 - 040 - 050 cooling only, and for sizes 020 H - 025 H - 030 H - 040 H, for the heat pumps.

Example of the commercial code: **HE100HUR**

This is an HE unit, with size 100 with R407C refrigerant gas, heat pump type single ring with storage tank and pump, with condensing coils made of copper, with evaporator and with electrical panel for compressors with motors 3~ 400V 50Hz.

As you might have noted, as every operation is represented unequivocally by all the others, it is not necessary to indicate the standard options (represented by °) inside the commercial code,.

Technical data cooling only

| Mod. HE | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|----------------------------------|---------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Cooling capacity | kW | 6.7 | 8.4 | 10.1 | 11.9 | 14.5 | 18.0 | 23.8 | 27.2 | 35.8 | 47.5 |
| Total input power | kW | 2.2 | 2.5 | 3.0 | 3.5 | 4.2 | 5.1 | 6.7 | 8.0 | 10.5 | 13.7 |
| Total input current 230V-1 | A | 11.1 | 11.8 | 15.2 | 17.6 | 21.8 | --- | --- | --- | --- | --- |
| Total input current 400V-3 | A | --- | 5.6 | 8.0 | 8.9 | 10.7 | 12.6 | 15.4 | 16.7 | 21.8 | 27.0 |
| E.E.R. | W/W | 3.05 | 3.36 | 3.37 | 3.40 | 3.45 | 3.53 | 3.55 | 3.40 | 3.41 | 3.47 |
| Water flow rate | l/h | 1150 | 1440 | 1740 | 2050 | 2490 | 3100 | 1090 | 4680 | 6160 | 8170 |
| Static pressure available kPa | 60 | 57 | 54 | 56 | 50 | 58 | 57 | 54 | 58 | 52 | --- |
| Starting current 230V-1 | A | 50 | 63 | 80 | 104 | 118 | --- | --- | --- | --- | --- |
| Starting current 400V-3 | A | --- | 34 | 44 | 50 | 54 | 70 | 105 | 102 | 135 | 141 |
| Sound pressure | db(A) | 36 | 36 | 33 | 33 | 37 | 37 | 36 | 44 | 45 | 46 |
| Plumbing connections IN | Gas | 1" | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 1"1/2 |
| Plumbing connections OUT | Gas | 1" | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Water flow rate to the condenser | m3/h | 3300 | 3450 | 5300 | 5300 | 6500 | 6700 | 6450 | 13450 | 12400 | 12000 |
| Accumulation tank capacity | l | 25 | 35 | 35 | 35 | 35 | 75 | 75 | 145 | 145 | 145 |

The performance refers to the following conditions:

- ♪ Sound pressure in free field conditions at a distance of 10 mt.s a directional factor of 2.
In accordance with ISO 3744 regulations

The electrical data and the heads refer to models with a single ring

COOLING:

- Water inlet temperature 23°C
- Water outlet temperature 18°C
- outside air temp. 35 °C
- $\Delta t = 5$ °C.

Heat pump technical data

| Mod. HE | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|----------------------------------|---------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Cooling capacity | kW | 6.9 | 8.6 | 9.7 | 12.0 | 14.1 | 17.0 | 20.1 | 25.5 | 37.0 | 44.2 |
| Total input power | kW | 2.3 | 2.9 | 3.0 | 3.7 | 4.2 | 5.2 | 6.2 | 8.3 | 11.2 | 13.6 |
| Total input current 230V-1 | A | 11.7 | 14.4 | 16.0 | 20.6 | --- | --- | --- | --- | --- | --- |
| Total input current 400V-3 | A | 5.5 | 6.2 | 8.1 | 9.4 | 10.4 | 11.8 | 13.6 | 17.9 | 22.2 | 26.3 |
| E.E.R. | W/W | 3.00 | 2.97 | 3.23 | 3.24 | 3.36 | 3.27 | 3.24 | 3.07 | 3.30 | 3.25 |
| Water flow rate | l/h | 1190 | 1480 | 1670 | 2060 | 2430 | 2920 | 3460 | 4390 | 6360 | 7600 |
| Static pressure available | kPa | 59 | 56 | 56 | 56 | 51 | 68 | 73 | 57 | 56 | 56 |
| Heating capacity | kW | 6.3 | 7.8 | 8.5 | 10.6 | 12.1 | 15.0 | 17.6 | 22.4 | 31.6 | 38.7 |
| Total input power | kW | 1.8 | 2.2 | 2.4 | 3.0 | 3.3 | 4.5 | 5.0 | 6.8 | 9.3 | 11.3 |
| Total input current 230V-1 | A | 9.3 | 11.7 | 13.0 | 17.0 | --- | --- | --- | --- | --- | --- |
| Total input current 400V-3 | A | 4.7 | 5.3 | 7.4 | 8.3 | 9.3 | 11.0 | 11.9 | 16.4 | 19.9 | 23.3 |
| C.O.P. | W/W | 3.50 | 3.55 | 3.54 | 3.53 | 3.67 | 3.33 | 3.52 | 3.29 | 3.40 | 3.42 |
| Water flow rate | l/h | 1080 | 1340 | 1460 | 1820 | 2080 | 2580 | 3030 | 3850 | 5440 | 6660 |
| Starting current 230V-1 | A | 60 | 76 | 78 | 101 | --- | --- | --- | --- | --- | --- |
| Starting current 400V-3 | A | 28 | 34 | 42 | 50 | 57 | 68 | 78 | 103 | 132 | 173 |
| Sound pressure | db(A) | 36 | 36 | 33 | 33 | 37 | 37 | 36 | 44 | 45 | 46 |
| Plumbing connections IN | Gas | 1" | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 1"1/2 |
| Plumbing connections OUT | Gas | 1" | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Water flow rate to the condenser | m3/h | 3300 | 3450 | 5300 | 5300 | 6500 | 6700 | 6450 | 13450 | 12400 | 12000 |
| Accumulation tank capacity | l | 25 | 35 | 35 | 35 | 35 | 75 | 75 | 145 | 145 | 145 |

The performance refers to the following conditions:

- ♪ Sound pressure in free field conditions at a distance of 10 mt.s a directional factor of 2.
In accordance with ISO 3744 regulations

The electrical data and the heads refer to models with a single ring

Cooling:

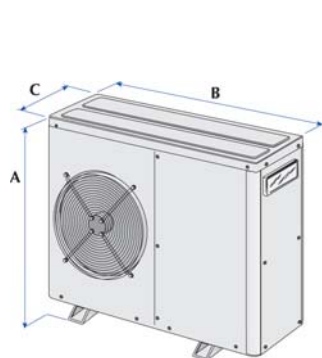
- Water inlet temperature 23°C
- Water outlet temperature 18°C
- outside air temp. 35 °C
- $\Delta t = 5$ °C.

Heating:

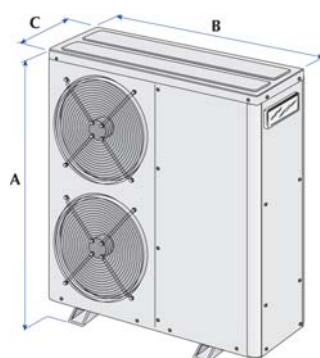
- Water inlet temperature 30°C
- Water outlet temperature 35°C
- outside air temp 7 °C b.s., 6 °C b.u.;
- $\Delta t = 5$ °C.C.

| All the versions | Accessories available | | | | | | | | | |
|------------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
| DCPX 39 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| DCPX 40 | | | | | | | | ✓ | ✓ | ✓ |
| DRE 5 | | | | | ✓ | ✓ | | ✓ | | |
| DRE 10 | | | | | | | | | ✓ | |
| DRE 15 | | | | | | | | | | ✓ |
| BDX 5 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| BDX 6 | | | | | | ✓ | ✓ | | | |
| KR 3 | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | ✓ | | | | | | | |
| VT 8 | | | | ✓ | ✓ | ✓ | ✓ | | | |
| VT 9 | | | | | | | | ✓ | ✓ | ✓ |

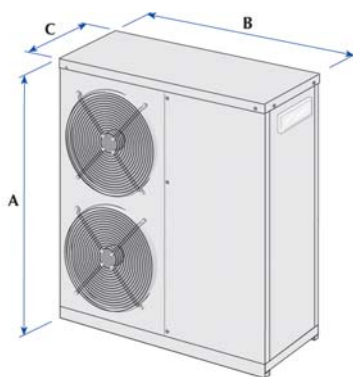
Dimensions (mm)



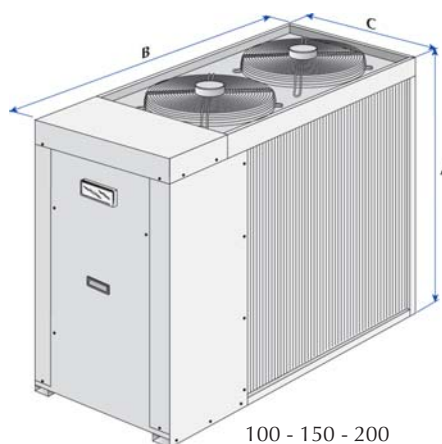
020 - 025



030 - 040 - 050



080 - 090



100 - 150 - 200

| | HE | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|---------------------|----|------|------|------|------|------|------|------|------|------|------|
| Height | A | 864 | 1014 | 1250 | 1250 | 1250 | 1280 | 1280 | 1345 | 1345 | 1345 |
| Width | B | 1120 | 1120 | 1120 | 1120 | 1120 | 1167 | 1167 | 1750 | 1750 | 1750 |
| Depth | C | 435 | 435 | 435 | 435 | 435 | 555 | 555 | 750 | 750 | 750 |
| Weight | kg | 108 | 113 | 135 | 139 | 152 | 186 | 196 | 355 | 377 | 427 |
| Weight (versions H) | kg | 112 | 117 | 141 | 146 | 158 | 192 | 223 | 373 | 417 | 460 |

ANZ

Air-cooled heat pumps units
With axial fans and capacities from 6.2 to 41.6 kW



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.

R407C



- **PURPOSE DESIGNED HEAT PUMP**
- **HIGH EFFICIENCY COMPRESSOR**
- **HEATING MODE OPERATION WITH EXTERNAL TEMPERATURE DOWN TO -15°C**
- **VERSION AVAILABLE: WITH BUFFER TANK, PUMP AND INTEGRATED ELECTRIC HEATER**

Features

- Available in 10 different sizes
- Heat pump versions
- 4 versions are available:
 - ANZ: Standard version
 - ANZ A: Version equipped with water pump, expansion vessel, mechanical water filter, storage tank
 - ANZ K: Version equipped with water pump, expansion vessel, mechanical water filter, storage tank with electric heater and basic control
 - ANZ J: Version equipped with water pump, expansion vessel, mechanical water filter, storage tank with electric heater and advanced control
- High efficiency scroll compressors with low power consumption
- Differential pressure switch or fluxostat, standard supplied
- Evaporator electric heating element
- Electronic control card with compressor starting delay and defrosting cycle control
- High efficiency heat exchangers
- Axial flow fan units for extremely quiet operation
- Metallic protective cabinet with rustproof polyester paint

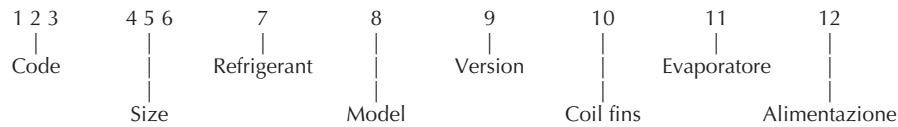
Accessories

- **BDX:** Condensate drip tray for outdoor unit.
- **DCPX:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 19°C down to -10°C .
- **DRE:** Electronic peak current reducer. **It must be factory-mounted.**
- **PR3:** Simplified remote control panel. All main functions of the unit, alarms included, are possible. It can be used with a shielded cable at a distance of 30 m.
- **PRD:** 'Intelligent' remote control panel with the same functions as the on-board panel. It can be used with a shielded cable at a distance of 150 m.
- **RA:** Antifreeze electric heater for the storage tank. **It must be factory-mounted.**
- **SDP:** Electronic card for using PR1 accessory up to a distance of 150 m.
- **VT:** Anti-vibration mounts.

Selection

By combining the various options, each model can be configured exactly to match even the most specific system requirements.

Configuration rules:



Code:

ANZ

Size:

020, 025, 030, 041, 050, 080, 090, 100, 150, 200

Refrigerant:

7 - R407C

Model:

H - Heat pump

Version:

- ° - Standard
- A - With pump and storage tank
- K - With pump and storage tank + with electric heater and basic control
- J - With pump and storage tank + with electric heater and advanced control

Coil fins:

- ° - Aluminium
- R - Copper
- S - Tinned copper
- V - Painted / copper aluminium version

Evaporator:

- ° - Standard

Power supply:

- ° - 3N~ 400V 50Hz
- M - 1~ 230V 50Hz

Warning:

- standard options are shown by symbol °;
- Single-phase power supply (field 12: option M) is possible for 020 - 025 - 030 - 041 size only.

Commercial code example: ANZ1007HAR

This is a new ANZ unit, size 100, charged with R407C, equipped with heat pump, storage tank and water pump, copper condensing coil, evaporator, suitable for compressor with 3~ 400V 50Hz motor.

Note that as each option is precisely identified, it is not necessary to specify standard options (shown with °) in the commercial code.

| Compatibility of accessories | | | | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|
| All versions | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1007 | 1507 | 2007 |
| DCPX 39 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| DCPX 40 | | | | | | | | ✓ | ✓ | ✓ |
| DRE 5 | | | | | ✓ | ✓ | ✓ | | | |
| DRE 10 | | | | | | | | ✓ | | |
| DRE 15 | | | | | | | | | ✓ | ✓ |
| Standard version | | | | | | | | | | |
| BDX 5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| VT 8 | | | | | | | | ✓ | ✓ | ✓ |
| A standard | | | | | | | | | | |
| BDX 5 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| BDX 6 | | | | | ✓ | ✓ | ✓ | | | |
| BDX 7 (only for K and J versions) | | | | | ✓ | ✓ | ✓ | | | |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RA (only for A versions) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| VT 8 | | | | ✓ | ✓ | ✓ | ✓ | | | |
| VT 9 | | | | | | | | ✓ | ✓ | ✓ |

Technical data

| Mod. ANZ | Version | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1007 | 1507 | 2007 |
|---|-----------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Cooling capacity (kW) | All | 6,2 | 6,7 | 8,7 | 10,6 | 14,3 | 16,5 | 20,9 | 29,4 | 34,3 | 41,6 |
| Total input power (kW) | Standard | 2,5 | 2,6 | 3,3 | 3,6 | 4,6 | 5,3 | 6,8 | 9,4 | 11,6 | 13,9 |
| | A | 2,6 | 2,7 | 3,5 | 3,8 | 4,9 | 5,6 | 7,1 | 10,0 | 12,2 | 14,6 |
| Total input current (A) 230V ^(*) | Standard | 13,1 | 12,4 | 17,5 | 17,2 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| | A | 13,9 | 12,9 | 18,4 | 19,3 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Total input current (A) 400V | Standard | 4,3 | 4,8 | 5,9 | 5,9 | 9,1 | 10,2 | 13,6 | 19,4 | 21,3 | 27,4 |
| | A | 5,6 | 6,1 | 7,6 | 8,3 | 10,4 | 11,3 | 15,1 | 21,1 | 23,3 | 28,8 |
| Water flow rate (l/h) | All | 1070 | 1150 | 1500 | 1820 | 2460 | 2840 | 3590 | 5060 | 5900 | 7160 |
| Pressure drop (kPa) | Standard | 5,0 | 4,5 | 31,5 | 28 | 40 | 24 | 30 | 30 | 28 | 35 |
| Effective pressure (kPa) | A | 70 | 66 | 66 | 60 | 61 | 58 | 50 | 68 | 68 | 69 |
| Heating capacity (kW) | All | 8,1 | 8,5 | 10,3 | 12,1 | 16,1 | 17,3 | 22,6 | 33,8 | 38,0 | 47,3 |
| Total input power (kW) | Standard | 2,4 | 2,5 | 3,1 | 3,6 | 4,6 | 4,9 | 6,8 | 9,3 | 11,0 | 13,8 |
| | A | 2,6 | 2,7 | 3,3 | 3,8 | 4,9 | 5,2 | 7,1 | 9,9 | 11,7 | 14,5 |
| Total input current (A) 230V ^(*) | Standard | 12,5 | 11,7 | 15,8 | 16,4 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| | A | 13,3 | 12,2 | 16,7 | 18,5 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Total input current (A) 400V | Standard | 4,4 | 4,5 | 5,6 | 5,7 | 9,3 | 10,2 | 13,5 | 18,4 | 20,3 | 27,1 |
| | A | 5,7 | 5,8 | 7,3 | 8,1 | 10,6 | 11,3 | 15,0 | 20,1 | 22,3 | 28,5 |
| Water flow rate (l/h) | All | 1390 | 1460 | 1770 | 2080 | 2770 | 2980 | 3890 | 5810 | 6540 | 8140 |
| Pressure drop (kPa) | Standard | 6 | 7 | 43 | 31,5 | 44 | 21 | 36 | 31 | 47 | 50 |
| Electric heater (kW) | AK | 4 | 4 | 5 | 5 | 6 | 8 | 10 | 13 | 18 | 20 |
| Electric heater (kW) | AJ | 4 | 4 | 5 | 5 | 6 | 8 | 10 | 13 | 18 | 20 |
| ♪ Sound pressure - db(A) | All | 30 | 37 | 37 | 33,5 | 38 | 38 | 36,5 | 44,5 | 45,5 | 46,5 |
| Total air flow rate (m ³ /h) | All | 2500 | 3300 | 3450 | 5300 | 7000 | 6700 | 6450 | 13450 | 12400 | 12000 |
| | Std (IN) | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| | Std (OUT) | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| | A (IN) | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/2 | 1"1/2 | 1"1/2 |
| | A (OUT) | 1" | 1" | 1" | 1" | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Pump speed (n°) | A | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 |
| Expansion tank capacity (l) | A | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 8 | 8 | 8 |
| Storage tank capacity (l) | A | 25 | 25 | 35 | 35 | 75 | 75 | 75 | 145 | 145 | 145 |

(*) = Si ricorda che per i modelli da 050 a 200 (con e senza accumulatore), non è disponibile l'alimentazione 1~230 50 Hz.

Si ricorda che l'alimentazione 3~230 50 Hz non è disponibile per nessun modello.

Performance values refer to the following conditions:

♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2
In accordance with ISO 3744 regulations

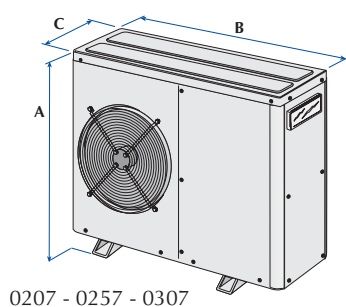
■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C;
- Δt = 5 °C.

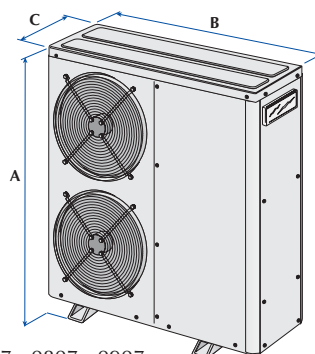
■ Heating:

- water outlet temperature 45 °C;
- ambient air temperature 7 °C B.S., 6 °C B.U.;
- Δt = 5 °C.

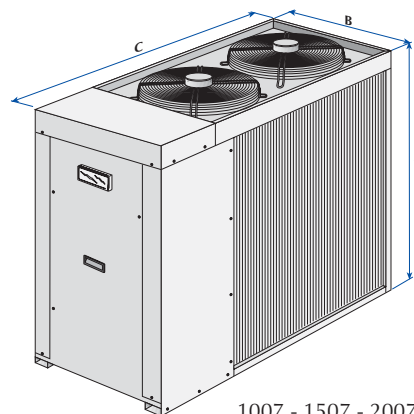
Dimensions (mm)



0207 - 0257 - 0307



0417 - 0507 - 0807 - 0907



1007 - 1507 - 2007

| ANZ Standard (Std) | | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1007 | 1507 | 2007 |
|---------------------------|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Height | A | 850 | 850 | 1000 | 1250 | 1250 | 1250 | 1580 | 1345 | 1345 | 1345 |
| Width | B | 900 | 900 | 900 | 1120 | 1120 | 1120 | 1167 | 750 | 750 | 750 |
| Depth | C | 352 | 352 | 352 | 435 | 435 | 435 | 555 | 1750 | 1750 | 1750 |
| Weight | kg | 78 | 81 | 85 | 128 | 129 | 137 | 252 | 314 | 353 | 394 |

| ANZ A | | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1007 | 1507 | 2007 |
|--------------|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Height | A | 864 | 864 | 1014 | 1250 | 1280 | 1280 | 1580 | 1345 | 1345 | 1345 |
| Width | B | 1120 | 1120 | 1120 | 1120 | 1167 | 1167 | 1167 | 750 | 750 | 750 |
| Depth | C | 435 | 435 | 435 | 435 | 555 | 555 | 555 | 1750 | 1750 | 1750 |
| Weight | kg | 113 | 117 | 125 | 154 | 189 | 195 | 277 | 376 | 430 | 469 |

| ANZ K - J | | 0207 | 0257 | 0307 | 0417 | 0507 | 0807 | 0907 | 1007 | 1507 | 2007 |
|------------------|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Height | A | 864 | 864 | 1014 | 1250 | 1280 | 1280 | 1580 | 1345 | 1345 | 1345 |
| Width | B | 1120 | 1120 | 1120 | 1120 | 1277 | 1277 | 1277 | 750 | 750 | 750 |
| Depth | C | 435 | 435 | 435 | 435 | 555 | 555 | 555 | 1750 | 1750 | 1750 |
| Weight | kg | 113 | 117 | 125 | 154 | 194 | 200 | 282 | 378 | 432 | 471 |

CR Water chillers and heat pumps air cooled With radial fans and capacities from 5.7 to 38 kW

R407C



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



• STANDARD VERSION • VERSION EQUIPPED WITH WATER PUMP

• VERSION EQUIPPED WITH WATER PUMP AND STORAGE TANK

Features

- Available in 10 different sizes
- Cooling only and heat pump (H) versions
- All versions are supplied for use with R407C
- 3 versions are available:
 - CR: standard version
 - CR P: version equipped with water pump
 - CR A: version equipped with water pump, expansion vessel, mechanical water filter, storage tank
- The cooling-only versions can be requested for silenced operation with a reduction in the fan speed. This request must be specified when the order is placed
- All versions, except the motocondensing one, can be requested to operate at low temperature to produce water cooled from 4 °C down to -6 °C. This request must be specified when the order is placed
- All the versions can be ordered with an uprated fan assembly that enables higher useful heads to be reached at the nominal flow rate. This request must be specified when the order is placed. Please refer to the technical manuals for technical data
- Compressor disconnect switch and main power switch with door lock handle standard equipment on all models
- Horizontal (standard) or vertical air discharge (this request must be specified when the order is placed)
- Quiet operation
- Scroll compressor
- Electric heater for the compressor carter
- Supplied water filter, already mounted on CR A - P
- Differential pressure switch on all models except for CR 020, 025, 030, 040 A - P where a flow switch is installed
- Variable speed radial fans
- Electronic control and management card with start-up timer and defrost cycle optimization function
- Plate type exchangers
- Metallic protective cabinet with rustproof polyester paint

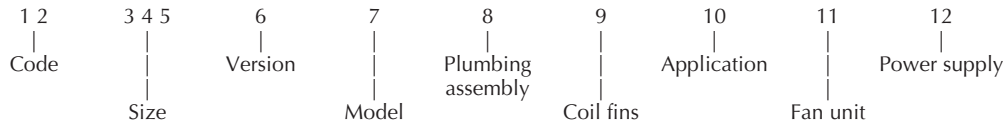
Accessories

- **DR:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 20 °C down to - 10 °C. **For the combination with the FRC flange, please refer to the technical manual of the unit.**
- **DRE:** Peak current reducer. **It must be factory-mounted.**
- **FRC:** Flange made of galvanized and painted sheet steel for connection to air intake and delivery ducts.
- **GPCR:** Safety grille: protects external coils from accidental impact.
- **KR:** Antifreeze electric heater for plate exchanger. **It must be factory-mounted.**
- **PR3:** Simplified remote control panel. All main functions of the unit, alarms included, are possible. It can be used with a shielded cable at a distance of 30 m.
- **PRD:** 'Intelligent' remote control panel with the same functions as the on-board panel. It can be used with a shielded cable at a distance of 150 m.
- **RA:** Antifreeze electric heater for the storage tank. **It must be factory-mounted.**
- **SDP:** Electronic card for using PR1 accessory up to a distance of 150 m.
- **VT:** Anti-vibration mounts.

Selection

By combining the various options, each model can be configured exactly to match even the most specific system requirements.

Configuration rules:



Code:

CR

Size:

020, 025, 030, 040, 050, 080, 090, 100, 150, 200

Version:

- ° - Standard
- L - Silenced

Model:

- ° - Cooling only
- H - Heat pump

Plumbing assembly:

- ° - Standard
- P - With pump
- A - With pump and storage tank

Coil fins:

- ° - Aluminium
- R - Copper
- S - Tinned copper
- N - Painted copper / aluminium version

Application:

- ° - Standard
- Y - Low temperature with water produced down to -6 °C

Fan unit:

- ° - Front supply
- V - Vertical supply

Power supply:

- ° - 3N~ 400V 50Hz
- 3 - 3~ 230V 50Hz
- M - 3~ 230V 50Hz

Warning:

- standard options are shown by symbol °;
- heat pump version and the silenced version (field 6: option L; field 7: option H);
- Single-phase power supply (field 12: option M) is possible for 020 - 025 - 030 - 040 size only.

Commercial code example: **CR100°HA°°°3**

This is a new CR unit, size 100, charged with R407C, equipped with heat pump, storage tank and water pump, suitable for compressor with 3~ 230V 50Hz motor.

| All versions | Compatibility of accessories | | | | | | | | | |
|---------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
| DR 22 | ✓ | ✓ | | | | | | | | |
| DR 32 | | | ✓ | ✓ | | | | | | |
| DR 52 | | | | | ✓ | | | | | |
| DR 77 | | | | | | ✓ | ✓ | | | |
| DR 102 | | | | | | | | ✓ | | |
| DR 152 | | | | | | | | | ✓ | ✓ |
| DRE 5 | | | | | ✓ | ✓ | ✓ | | | |
| DRE 10 | | | | | | | | ✓ | | |
| DRE 15 | | | | | | | | | ✓ | ✓ |
| FRC 1 | ✓* | ✓* | ✓ | ✓ | | | | | | |
| FRC 2 | | | | | ✓ | | | | | |
| FRC 3 | | | | | | ✓ | ✓ | | | |
| FRC 4 | | | | | | | | ✓ | | |
| FRC 5 | | | | | | | | | ✓ | ✓ |
| GPCR 1 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| GPCR 2 | | | | | ✓ | | | | | |
| GPCR 3 | | | | | | ✓ | ✓ | | | |
| GPCR 4 | | | | | | | | ✓ | | |
| GPCR 5 | | | | | | | | | ✓ | ✓ |
| KR 2 | ✓ | ✓ | | | | | | | | |
| KR 3 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PR3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PRD | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SDP | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Standard - L - P versions | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
| VT 7 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| VT 8 | | | | | ✓ | ✓ | | | | |
| VT 9 | | | | | | | ✓ | ✓ | ✓ | ✓ |
| A versions | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
| RA | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 7 | ✓ | ✓ | | | | | | | | |
| VT 8 | | | ✓ | ✓ | | | | | | |
| VT 9 | | | | | ✓ | ✓ | ✓ | | | |
| VT 15 | | | | | | | | ✓ | ✓ | ✓ |

* = Only for CR A versions.

Technical data

| Mod. CR | | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|---------------------------|----------|----------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| Cooling capacity | kW | All | 5.7 | 6.7 | 8.0 | 10.0 | 12.1 | 16.3 | 18.0 | 25.0 | 33.3 | 38.0 |
| Total input power | kW | Standard | 2.6 | 3.06 | 3.44 | 4.68 | 5.16 | 7.25 | 7.75 | 11.25 | 13.55 | 16.75 |
| | | A - P | 2.85 | 3.31 | 3.69 | 4.93 | 5.49 | 7.58 | 8.08 | 12.25 | 14.55 | 17.88 |
| Total input current (A) | 3N~ 400V | Standard | 4.7 | 5.7 | 6.3 | 8.5 | 9.7 | 13.6 | 14.7 | 20.9 | 23.9 | 30.2 |
| | | A - P | 5.8 | 6.8 | 7.4 | 9.6 | 11.4 | 15.2 | 16.3 | 23.0 | 25.9 | 32.6 |
| | 1~ 230V | Standard | 12.7 | 15.0 | 16.8 | 24.1 | - | - | - | - | - | - |
| | | A - P | 13.8 | 16.1 | 17.9 | 25.2 | - | - | - | - | - | - |
| | 3~ 230V | Standard | - | - | - | 16.5 | 19.0 | 27.7 | 30.2 | 42.8 | 49.5 | 61.8 |
| | | A - P | - | - | - | 17.59 | 20.7 | 29.3 | 31.8 | 46.4 | 53.0 | 66.0 |
| Water flow rate | l/h | All | 980 | 1150 | 1380 | 1720 | 2080 | 2800 | 3100 | 4300 | 5730 | 6540 |
| Pressure drop | kPa | Standard | 4.3 | 4.5 | 26.8 | 24.9 | 28.8 | 23.1 | 22.3 | 21.9 | 26.3 | 29.5 |
| Useful head on water side | kPa | A - P | 70 | 68 | 68 | 62 | 72 | 67 | 64 | 79 | 74 | 83 |
| ♪ Sound pressure | dB (A) | All | 38 | 39 | 40 | 43 | 42 | 46 | 45.5 | 47 | 46 | 46.5 |
| Nominal motor power | n. x kW | All | 1x0.55 | 1x0.55 | 1x0.55 | 1x0.75 | 1x1.1 | 1x1.5 | 1x1.5 | 2x1.1 | 2x1.5 | 2x1.5 |
| Nominal air flow rate | m³/h | All | 2400 | 2500 | 3050 | 3500 | 4400 | 7700 | 7100 | 10300 | 12600 | 15200 |
| Maximum static pressure | Pa | All | 160 | 120 | 100 | 113 | 135 | 115 | 124 | 155 | 95 | 80 |

| Mod. CR H | | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|---------------------------|----------|----------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| Cooling capacity | kW | All | 5.7 | 6.7 | 8.0 | 10.0 | 12.1 | 16.3 | 18.0 | 25.0 | 33.3 | 38.0 |
| Total input power | kW | Standard | 2.6 | 3.05 | 3.45 | 4.7 | 5.15 | 7.25 | 7.75 | 11.25 | 13.55 | 16.75 |
| | | A - P | 2.85 | 3.3 | 3.7 | 4.95 | 5.48 | 7.58 | 8.08 | 12.25 | 14.55 | 17.9 |
| Total input current (A) | 3N~ 400V | Standard | 4.7 | 5.7 | 6.3 | 8.5 | 9.7 | 13.6 | 14.7 | 20.9 | 23.9 | 30.2 |
| | | A - P | 5.8 | 6.8 | 7.4 | 9.6 | 11.4 | 15.2 | 16.3 | 23.0 | 25.9 | 32.6 |
| | 1~ 230V | Standard | 12.7 | 15.0 | 16.8 | 24.1 | - | - | - | - | - | - |
| | | A - P | 13.8 | 16.1 | 17.9 | 25.2 | - | - | - | - | - | - |
| | 3~ 230V | Standard | - | - | - | 16.5 | 19.0 | 27.7 | 30.2 | 42.8 | 49.5 | 61.8 |
| | | A - P | - | - | - | 17.59 | 20.7 | 29.3 | 31.8 | 46.4 | 53.0 | 66.0 |
| Water flow rate | l/h | All | 980 | 1150 | 1380 | 1720 | 2080 | 2800 | 3100 | 4300 | 5730 | 6540 |
| Pressure drop | kPa | Standard | 4.3 | 4.5 | 26.8 | 24.9 | 28.8 | 23.1 | 22.3 | 21.9 | 26.3 | 29.5 |
| Useful head on water side | kPa | A - P | 70 | 68 | 68 | 62 | 72 | 67 | 64 | 79 | 74 | 83 |
| Heating capacity | kW | All | 6.1 | 7.2 | 8.5 | 10.6 | 12.5 | 17.0 | 19.2 | 26.3 | 35.0 | 39.5 |
| Total input power | kW | Standard | 2.99 | 3.53 | 3.97 | 5.27 | 5.69 | 8.23 | 8.57 | 12.78 | 15.4 | 18.75 |
| | | A - P | 3.24 | 3.78 | 4.22 | 5.52 | 6.02 | 8.56 | 8.9 | 13.78 | 16.4 | 19.88 |
| Total input current (A) | 3N~ 400V | Standard | 5.3 | 6.3 | 7.0 | 9.2 | 10.4 | 15.0 | 15.7 | 22.9 | 26.3 | 32.8 |
| | | A - P | 6.4 | 7.4 | 8.1 | 10.3 | 12.0 | 16.7 | 17.3 | 24.9 | 28.3 | 35.3 |
| | 1~ 230V | Standard | 14.7 | 17.4 | 19.6 | 27.0 | - | - | - | - | - | - |
| | | A - P | 15.8 | 18.5 | 20.7 | 28.1 | - | - | - | - | - | - |
| | 3~ 230V | Standard | - | - | - | 17.6 | 19.9 | 28.9 | 30.2 | 44.0 | 51.0 | 63.3 |
| | | A - P | - | - | - | 18.72 | 21.6 | 30.5 | 31.9 | 47.6 | 54.5 | 67.5 |
| Water flow rate | l/h | All | 1050 | 1240 | 1460 | 1820 | 2150 | 2920 | 3300 | 4520 | 6020 | 6790 |
| Pressure drop | kPa | Standard | 4.9 | 5.2 | 30.0 | 27.9 | 30.8 | 25.2 | 25.3 | 24.2 | 29.0 | 31.8 |
| ♪ Sound pressure | dB (A) | All | 38 | 39 | 40 | 43 | 42 | 46 | 45.5 | 47 | 46 | 46.5 |
| Nominal motor power | n. x kW | All | 1x0.55 | 1x0.55 | 1x0.55 | 1x0.75 | 1x1.1 | 1x1.5 | 1x1.5 | 2x1.1 | 2x1.5 | 2x1.5 |
| Nominal air flow rate | m³/h | All | 2400 | 2500 | 3050 | 3500 | 4400 | 7700 | 7100 | 10300 | 12600 | 15200 |
| Maximum static pressure | Pa | All | 160 | 120 | 100 | 113 | 135 | 115 | 124 | 155 | 95 | 80 |

| Mod. CR L | | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|---------------------------|----------|----------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| Cooling capacity | kW | All | 5.4 | 6.4 | 7.5 | 9.4 | 11.5 | 15.3 | 17.0 | 23.6 | 31.5 | 35.7 |
| Total input power | kW | Standard | 2.8 | 3.3 | 3.71 | 4.98 | 5.53 | 7.75 | 8.24 | 12.0 | 14.55 | 17.85 |
| | | A - P | 3.05 | 3.55 | 3.96 | 5.23 | 5.86 | 8.08 | 8.57 | 13.0 | 15.55 | 18.98 |
| Total input current (A) | 3N~ 400V | Standard | 5.0 | 6.0 | 6.6 | 8.9 | 10.1 | 14.3 | 15.3 | 22.0 | 25.2 | 31.8 |
| | | A - P | 6.1 | 7.1 | 7.7 | 10.0 | 11.8 | 16.0 | 17.0 | 24.0 | 27.3 | 34.2 |
| | 1~ 230V | Standard | 13.5 | 16.0 | 18.0 | 25.4 | - | - | - | - | - | - |
| | | A - P | 14.6 | 17.1 | 19.1 | 26.5 | - | - | - | - | - | - |
| | 3~ 230V | Standard | - | - | - | 17.4 | 19.5 | 28.2 | 30.3 | 43.3 | 50.3 | 62.7 |
| | | A - P | - | - | - | 18.48 | 21.2 | 29.8 | 32.0 | 46.9 | 53.9 | 66.9 |
| Water flow rate | l/h | All | 930 | 1100 | 1290 | 1620 | 1980 | 2630 | 2920 | 4060 | 5420 | 6140 |
| Pressure drop | kPa | Standard | 3.9 | 4.1 | 23.4 | 22.1 | 26.1 | 20.4 | 19.8 | 19.5 | 23.5 | 26.0 |
| Useful head on water side | kPa | A - P | 71 | 69 | 69 | 64 | 75 | 71 | 69 | 85 | 80 | 90 |
| ♪ Sound pressure | dB (A) | All | 33 | 34 | 35 | 38 | 37 | 41 | 40.5 | 42 | 41 | 41.5 |
| Nominal motor power | n. x kW | All | 1x0.55 | 1x0.55 | 1x0.55 | 1x0.75 | 1x1.1 | 1x1.5 | 1x1.5 | 2x1.1 | 2x1.5 | 2x1.5 |
| Nominal air flow rate | m³/h | All | 1920 | 2000 | 2440 | 2800 | 3520 | 6160 | 5680 | 8240 | 10080 | 12160 |
| Maximum static pressure | Pa | All | 117 | 105 | 65 | 115 | 70 | 90 | 90 | 75 | 62 | 70 |

Technical data

| Mod. CR - CR H - CR L | | Version | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|---------------------------|------------------|----------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Evaporator water contents | dm ³ | All | 0.6 | 0.6 | 0.85 | 0.85 | 1.03 | 1.41 | 1.78 | 2.44 | 3.1 | 3.1 |
| Carter electric heater | W | All | 40 | 40 | 40 | 35/70 | 35/70 | 70 | 70/75 | 44/75 | 44/75 | 75 |
| Pump speed | n. | A - P | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 |
| Storage tank capacity | l | A | 26 | 26 | 35 | 35 | 75 | 75 | 75 | 150 | 150 | 150 |
| Expansion tank capacity | l | A | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 8 | 8 | 8 |
| Water connections | Ø ⁽¹⁾ | Standard | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" | 1" |
| | Ø ⁽²⁾ | A - P | 1" | 1" | 1" | 1" | 1" 1/4 | 1" 1/4 | 1" 1/4 | 1" 1/4 | 1" 1/4 | 1" 1/4 |
| Peak current (A) | 3N~ 400V | All | 34.6 | 42.6 | 48.6 | 52.9 | 70.2 | 106.4 | 104.4 | 137.9 | 144.7 | 185.0 |
| | 1~ 230V | All | 66.2 | 81.2 | 105.2 | 120.3 | - | - | - | - | - | - |
| | 3~ 230V | All | - | - | - | 102.2 | 145.4 | 186.7 | 181.7 | 223.6 | 226.8 | 287.4 |
| Max. current (A) | 3N~ 400V | Standard | 6.15 | 7.12 | 7.94 | 9.4 | 12.5 | 17.0 | 18.3 | 25.5 | 32.6 | 36.8 |
| | | A - P | 7.25 | 8.22 | 9.04 | 10.5 | 14.45 | 18.95 | 20.25 | 27.56 | 34.66 | 39.23 |
| | 1~ 230V | Standard | 17.33 | 19.79 | 22.6 | 27.9 | - | - | - | - | - | - |
| | | A - P | 18.43 | 20.89 | 23.7 | 29.0 | - | - | - | - | - | - |
| | 3~ 230V | Standard | - | - | - | 16.3 | 21.7 | 29.5 | 31.6 | 43.4 | 56.1 | 64.1 |
| | | A - P | - | - | - | 17.4 | 23.7 | 31.5 | 33.6 | 47.0 | 59.7 | 68.3 |

Power supply: for 020 - 025 - 030: 1~ 230V 50 Hz; 3N~ 400V 50 Hz.
for 040: 1~ 230V 50 Hz; 3~ 230V 50 Hz; 3N~ 400V 50 Hz.
for 050 - 080 - 090 - 100 - 150 - 200: 3~ 230V 50 Hz; 3N~ 400V 50 Hz.

Performance values refer to the following conditions:

- ♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2.
- In accordance with ISO 3744 regulations

■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C;
- Δt = 5 °C.

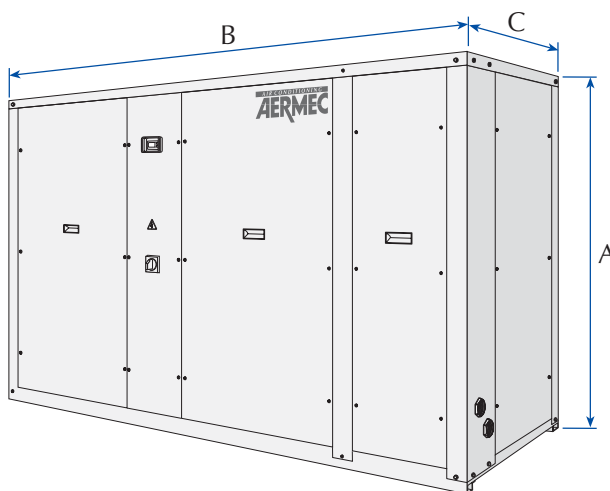
■ Heating:

- water outlet temperature 50 °C;
- ambient air temperature 7 °C D.B., 6 °C W.B.;
- Δt = 5 °C.

⁽¹⁾ = male connection.

⁽²⁾ = female connection.

Dimensions (mm)



| Mod. CR Standard - P | | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
|----------------------|-------|------|------|------|------|------|------|------|------|------|------|
| Height | A | 755 | 755 | 1010 | 1010 | 1010 | 1200 | 1200 | 1350 | 1500 | 1500 |
| | A* | 1068 | 1068 | 1085 | 1085 | 1085 | 1260 | 1260 | 1420 | 1650 | 1650 |
| Width | B | 950 | 950 | 950 | 950 | 1300 | 1500 | 1500 | 1750 | 2000 | 2000 |
| Depth | C | 600 | 600 | 600 | 600 | 600 | 700 | 700 | 800 | 850 | 850 |
| | CR | 115 | 115 | 150 | 160 | 198 | 255 | 285 | 351 | 445 | 485 |
| Weight (kg) | CR P | 125 | 125 | 160 | 170 | 208 | 265 | 295 | 361 | 455 | 495 |
| | CR H | 136 | 137 | 177 | 188 | 229 | 287 | 313 | 393 | 490 | 523 |
| | CR HP | 149 | 151 | 191 | 201 | 244 | 302 | 328 | 409 | 506 | 543 |
| | | | | | | | | | | | |
| Mod. CR A | | 020 | 025 | 030 | 040 | 050 | 080 | 090 | 100 | 150 | 200 |
| Height | A | 1010 | 1010 | 1010 | 1010 | 1010 | 1200 | 1200 | 1350 | 1500 | 1500 |
| | A* | 1068 | 1068 | 1085 | 1085 | 1085 | 1260 | 1260 | 1420 | 1650 | 1650 |
| Width | B | 950 | 950 | 1300 | 1300 | 1750 | 1950 | 1950 | 2150 | 2400 | 2400 |
| Depth | C | 600 | 600 | 600 | 600 | 600 | 700 | 700 | 800 | 850 | 850 |
| | CR A | 145 | 150 | 185 | 200 | 263 | 300 | 335 | 401 | 495 | 535 |
| Weight (kg) | CR HA | 170 | 175 | 225 | 240 | 290 | 350 | 385 | 460 | 555 | 595 |

* = with vertical air supply.

R407C



Features

- Available in 5 sizes
- All versions are supplied for use with R407C
- Metallic protective cabinet with rustproof polyester paint
- Scroll compressor with protective sound insulating cover
- Quiet operation
- Variable speed radial fans
- Main power switch with door lock handle supplied as standard
- Compressor thermal-magnetic circuit breaker supplied as standard
- Remote control panel
- High and low pressure switches

Accessories

- **DR:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 20 °C down to - 10 °C. Not compatible with flange FRC.
- **FRC:** Flange made of galvanized and painted sheet steel for connection to air intake and delivery ducts.

| Mod. CU | Compatibility of accessories | | | | |
|---------|------------------------------|-----|-----|------|------|
| | 317 | 517 | 767 | 1017 | 1517 |
| DR 32 | ✓ | | | | |
| DR 52 | | ✓ | | | |
| DR 77 | | | ✓ | | |
| DR 102 | | | | ✓ | |
| DR 152 | | | | | ✓ |
| FRC 31 | ✓ | | | | |
| FRC 51 | | ✓ | | | |
| FRC 76 | | | ✓ | | |
| FRC 101 | | | | ✓ | |
| FRC 151 | | | | | ✓ |

Technical data

| Mod. CU | | 317 | 517 | 767 | 1017 | 1517 |
|-----------------------------------|--------------------------------|----------|---------|---------|---------|---------|
| Cooling capacity | kW | 9.7 | 14.8 | 21.5 | 30.5 | 41 |
| Total input power | kW | 3.75 | 5.5 | 8.55 | 11 | 14.9 |
| Total input current | A (230 V) | 14.4 | 22.3 | 27.7 | 36.7 | 46.9 |
| | A (400 V) | 7 | 10.9 | 16 | 21.2 | 27.1 |
| E.E.R. | W/W | 2.59 | 2.69 | 2.51 | 2.77 | 2.75 |
| Fans | n. | 2 | 2 | 2 | 2 | 2 |
| Motor power | n. x kW | 1 x 0.75 | 1 x 1.1 | 1 x 1.5 | 2 x 1.1 | 2 x 1.5 |
| Nominal air flow rate | m ³ /h | 3500 | 6000 | 8600 | 12000 | 16000 |
| Fan speed (nominal) | rpm | 930 | 880 | 740 | 625 | 590 |
| Maximum available static pressure | Pa | 108 | 108 | 108 | 88.3 | 117.7 |
| ♪ Sound power | dB (A) | 73.5 | 75.5 | 78 | 78.5 | 79 |
| Coil | Surface area (m ²) | 0.385 | 0.578 | 0.875 | 1.125 | 1.312 |
| | n. rows | 3 | 3 | 3 | 3 | 3 |
| Refrigerant charge | kg | 2.18 | 2.29 | 4.99 | 6.13 | 7.78 |
| Cooling connections | Ø (Gas) | 5/8" | 5/8" | 1 1/4" | 1 1/4" | 1 1/2" |
| | Ø (Liquid) | 3/8" | 1/2" | 1/2" | 5/8" | 5/8" |
| Peak current | A (230 V) | 97 | 140 | 171 | 221 | 245 |
| | A (400 V) | 48 | 68 | 101 | 136 | 141 |

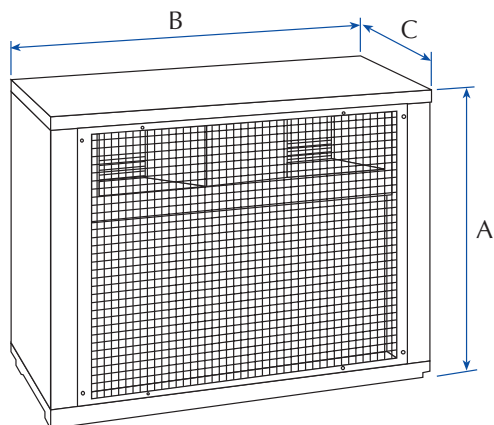
Power supply = 3~ 230V 50Hz; 3N~ 400V 50Hz.

Performance values refer to the following conditions:

■ Cooling:

- evaporation temperature 5 °C;
- ambient temperature 35 °C.

Dimensions (mm)



| Mod. CU | | 317 | 517 | 767 | 1017 | 1517 |
|---------|----|-----|------|------|------|------|
| Height | A | 975 | 975 | 1200 | 1310 | 1310 |
| Width | B | 950 | 1300 | 1500 | 1750 | 2000 |
| Depth | C | 600 | 600 | 700 | 850 | 850 |
| Weight | kg | 145 | 191 | 291 | 387 | 447 |

NRA Air-cooled water chillers, heat pumps and condensing units With axial fans and capacities from 48 to 82 kW

R407C



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



• STANDARD VERSION

• VERSION EQUIPPED WITH WATER PUMP AND STORAGE TANK

Features

- Available in 4 different sizes
- Cooling only, heat pump and air cooled condensing versions
- All versions are supplied for use with R407C
- Version equipped with partial or total heat recovery is available
- 3 versions available:
 - Standard with water filter and flow switch
 - With low head pumping unit, 500 litre storage tank with 300 W antifreeze heater, water filter, flow switch and expansion tank
 - With high head pumping unit, 500 litre storage tank with 300W antifreeze heater, water filter, flow switch and expansion tank
- All versions except the motocondensing one can be ordered for low temperature operation for production of chilled water from 4 °C down to -6 °C. This option must be specified at the time of ordering
- High efficiency scroll compressors with low power consumption
- Modular microprocessor control system
- Functional parameters can be displayed in any of four languages
- Simplified remote control panel. All main functions of the unit, alarms included, are possible
- High efficiency plate type heat exchangers
- Evaporator electric heating element
- Electric heater for the compressor carter
- High pressure transducer (NRA H only)
- Low pressure transducer (NRA H only)
- Axial flow fan units for extremely quiet operation
- Compact size
- Metallic protective cabinet with rustproof polyester paint

Accessories

- **AER485:** RS-485 interface for supervision systems with MODBUS protocol.
- **DCPX:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 19 °C down to - 10 °C.
- **DRE:** Electronic peak current reducer. **It must be factory-mounted.**
- **GP:** Safety grille: protects external coils from accidental impact.
- **PGS:** Daily/weekly programmer with facility to program two daily on/off cycles and set different parameters for each day of the week.
- **RIF:** Current rephaser. Parallel connection with the motor makes the reduction of input current possible. **This can only be installed when the machine is being made and must therefore be specified when the order is placed.**
- **ROMEO: (Remote Overwatching Modem Enabling Operation)** is a device that enables a remote control of a chiller from an ordinary WAP mobile phone. Furthermore it allows to send alarm or pre-alarm SMS messages up to 3 GSM mobile phones which may not be equipped with WAP. **This device includes AER485 accessory.**
- **TP 1:** Low pressure transducer: to provide working pressure readout on the microprocessor card display (one required for each circuit).
- **TP 2:** High pressure transducer: to provide working pressure readout on the microprocessor card display (one required for each circuit).
- **VT:** Anti-vibration mounts: set of four mounts for installation in locations on the underneath of the baseplate.

| Mod. | Compatibility of accessories | | | | | | | | | | | |
|---------|------------------------------|--------|--------|--------|----------|----------|----------|----------|--------|--------|--------|--------|
| | 275 L | 300 L | 325 L | 350 L | 275 A/LC | 300 A/LC | 325 A/LC | 350 A/LC | 275 HL | 300 HL | 325 HL | 350 HL |
| AER485 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DCPX 14 | | | | | | | | | ✓ | ✓ (x2) | ✓ (x2) | ✓ (x2) |
| DCPX 16 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ (x2) | | | | |
| DRE 275 | ✓ | | | | ✓ | | | | ✓ | | | |
| DRE 300 | | ✓ | | | | ✓ | | | | ✓ | | |
| DRE 325 | | | ✓ | ✓ | | | ✓ | ✓ | | | ✓ | ✓ |
| GP 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| GP 4 | | | | | | | | ✓* | ✓ | ✓ | ✓ | ✓ |
| PGS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RIF | 62 | 62 | 62 | 82 | 62 | 62 | 62 | 82 | 62 | 62 | 62 | 82 |
| ROMEO | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TP 1 | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | | | | |
| TP 2 | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | ✓ (x2) | | | | |
| VT 12 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| VT 13** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

* = GP 3 for NRA 350 LC and GP 4 for NRA 350 A

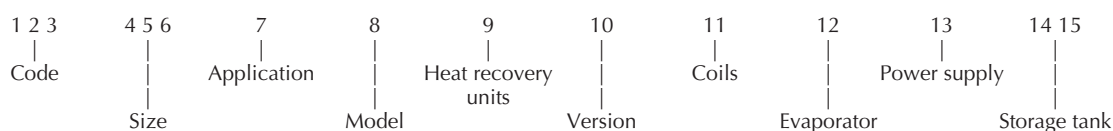
** = To be used in place of the accessory VT 12 on versions with accumulators.

N.B. = between brackets, the quantity necessary.

Selection

By combining the various options, each model can be configured exactly to match even the most specific system requirements.

Configuration rules:



Code:

NRA

Size:

275, 300, 325, 350

Application:

- ° - Standard with produced water above +4 °C
- Y - Low temperature with produced water down to -6 °C

Model:

- ° - Cooling only
- H - Heat pump

Heat recovery units:

- ° - Without heat recovery units
- D - With desuperheaters
- T - With total recovery units

Version:

- L - Silenced
- A - Silenced high temperature

Coils:

- ° - Aluminium
- R - Copper
- S - Tinned copper
- V - Painted copper / aluminium version

Evaporator:

- ° - To PED standards
- C - Without evaporator

Power supply:

- ° - 3N~ 400V 50Hz with thermal-magnetic cut-outs
- 4 - 3~ 230V 50Hz with thermal-magnetic cut-outs
- 9 - 3~ 500V 50Hz with thermal-magnetic cut-outs

Storage tank:

- 00 - without accumulator
- 01 - low head storage tank and single pump
- 02 - low head storage tank and standby pump
- 03 - high head storage tank and single pump
- 04 - high head storage tank and standby pump
- 05 - storage tank with holes for supplementary heater, low head and single pump
- 06 - storage tank with holes for supplementary heater, low head and standby pump
- 07 - storage tank with holes for supplementary heater, high head and single pump
- 08 - storage tank with holes for supplementary heater, high head and standby pump

Warning:

- standard options are shown by symbol °;
- for cooling only versions, it is possible only the combination between options Y and A (please, contact the Headquarter for particular needs);
- Following options are not available for heat pump version: Y, T, A and C.

Commercial code example: **NRA300LRG402**

This code identifies an NRA unit, size 300, with copper condensing coils, with electrical panel for compressors with 3~ 230V 50Hz motors and low head storage tank and standby pump.

Note that as each option is precisely identified, it is not necessary to specify standard options (shown with °) in the commercial code.

Technical data

| Mod. NRA | Vers. | 275 | 300 | 325 | 350 |
|---|------------|-----------|-----------|-----------|-----------|
| Cooling capacity (kW) | L | 48 | 57 | 65 | 74 |
| | A | 53 | 62 | 71 | 82 |
| Total input power (kW) | L | 20.5 | 24 | 27 | 31 |
| | A | 18 | 21 | 24 | 27.5 |
| Water flow rate (l/h) | L | 8260 | 9800 | 11180 | 12730 |
| | A | 9120 | 10660 | 12380 | 14100 |
| Pressure drops (kPa) | L | 33.0 | 30.0 | 29.8 | 40.8 |
| | A | 40.0 | 35.5 | 36.5 | 50.0 |
| Working current (A) | L | 40.0 | 46.0 | 50.0 | 57.5 |
| | A | 36.2 | 41.6 | 45.4 | 54.0 |
| Total air flow rate (m ³ /h) | L | 14000 | 21000 | 21000 | 20300 |
| | A | 13720 | 20450 | 20450 | 27300 |
| ♪ Sound pressure dB (A) | L - A | 44 | 44 | 45 | 45 |
| Compressors / circuits (n.) | All | 2 / 2 | 2 / 2 | 2 / 2 | 2 / 2 |
| Partialisation steps (n.) | All | 2 | 2 | 2 | 2 |
| Fans (n.) | L | 4 | 6 | 6 | 6 |
| | A | 4 | 6 | 6 | 8 |
| Max. current (A) | L - A | 65 | 68 | 71 | 77 |
| Peak current (A) | L - A | 155 | 161 | 166 | 209 |
| Carter electric heater (W) | L - A | 2 x 75 | 2 x 75 | 2 x 75 | 2 x 75 |
| Water connections (Ø) | L - A | 2" 1/2 | 2" 1/2 | 2" 1/2 | 2" 1/2 |
| Storage tank capacity (l) | L - A | 500 | 500 | 500 | 500 |
| Effective pressure (kPa) | gr1* L / A | 140 / 122 | 135 / 126 | 126 / 113 | 148 / 130 |
| | gr2* L / A | 182 / 172 | 176 / 162 | 171 / 161 | 157 / 145 |

* = gr1 (Low head pumping unit); gr2 (High head pumping unit)

| Mod. NRA HL | | 275 | 300 | 325 | 350 |
|--------------------------|-------------------|--------|--------|--------|--------|
| Cooling capacity | kW | 51 | 59 | 67 | 76 |
| Total input power | kW | 19.5 | 21.5 | 25 | 28.5 |
| Water flow rate | l/h | 8770 | 10150 | 11520 | 13070 |
| Pressure drops | kPa | 27.0 | 39.0 | 35.0 | 42.0 |
| Working current | A | 39 | 41.7 | 48.5 | 55.7 |
| Heating capacity | kW | 58 | 68 | 78 | 88 |
| Total input power | kW | 22 | 25.5 | 28.5 | 32.5 |
| Water flow rate | l/h | 9980 | 11700 | 13420 | 15140 |
| Pressure drops | kPa | 31.0 | 42.0 | 38.0 | 48.0 |
| Working current | A | 42.5 | 48.8 | 53.5 | 60.8 |
| Total air flow rate | m ³ /h | 21000 | 28000 | 28000 | 28000 |
| ♪ Sound pressure | dB (A) | 44 | 44 | 45 | 45 |
| Compressors / circuits | n. | 2 / 2 | 2 / 2 | 2 / 2 | 2 / 2 |
| Partialisation steps | n. | 2 | 2 | 2 | 2 |
| Fans | n. | 6 | 8 | 8 | 8 |
| Max. current | A | 65 | 68 | 71 | 77 |
| Peak current | A | 155 | 161 | 166 | 209 |
| Carter electric heater | W | 2 x 75 | 2 x 75 | 2 x 75 | 2 x 75 |
| Water connections | Ø | 2" 1/2 | 2" 1/2 | 2" 1/2 | 2" 1/2 |
| Storage tank capacity | l | 500 | 500 | 500 | 500 |
| Effective pressure (kPa) | gr1* | 134 | 131 | 122 | 105 |
| | gr2* | 176 | 172 | 168 | 155 |

* = gr1 (Low head pumping unit); gr2 (High head pumping unit)

| Mod. NRA LC | | 275 | 300 | 325 | 350 |
|------------------------|-------------------|--------|--------|--------|--------|
| Cooling capacity | kW | 56 | 66 | 75 | 88 |
| Total input power | kW | 18.8 | 22 | 24.9 | 29 |
| Working current | A | 39 | 42.75 | 46.5 | 55.5 |
| Total air flow rate | m ³ /h | 13720 | 20450 | 20450 | 27300 |
| ♪ Sound pressure | dB (A) | 44 | 44 | 45 | 45 |
| Compressors / circuits | n. | 2 / 2 | 2 / 2 | 2 / 2 | 2 / 2 |
| Fans | n. | 4 | 6 | 6 | 8 |
| Max. current | A | 65 | 68 | 71 | 77 |
| Peak current | A | 155 | 161 | 166 | 209 |
| Carter electric heater | W | 2 x 75 | 2 x 75 | 2 x 75 | 2 x 75 |

Performance values refer to the following conditions:

♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2.

In accordance with ISO 3744 regulations

- Power supply: 3N~ 400V 50Hz

■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C; Δt = 5 °C.

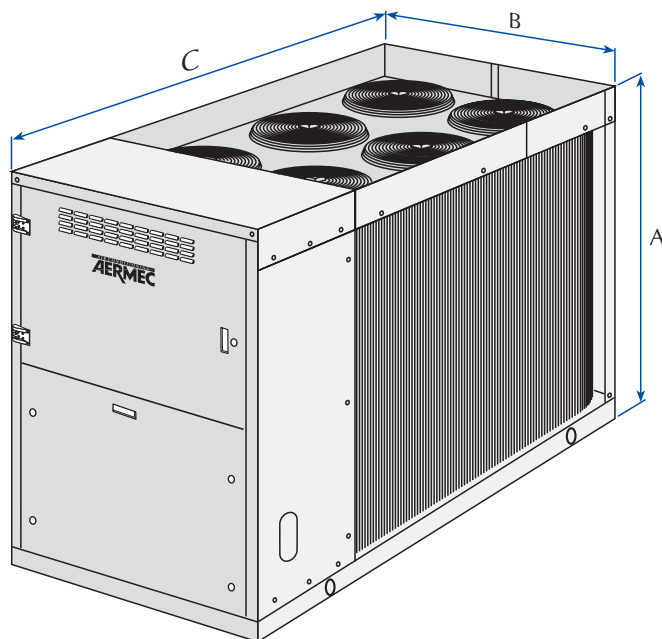
■ Heating:

- water outlet temperature 50 °C;
- ambient air temperature 7 °C D.B. 6 °C W.B.; Δt = 5 °C.

■ Cooling (NRA LC):

- evaporation temperature 5 °C;
- ambient air temperature 35 °C.

Dimensions (mm)



| Mod. NRA | | 275 | 300 | 325 | 350 |
|-------------|------------|------|------|------|------|
| Height | A | 1606 | 1606 | 1606 | 1606 |
| Width | B | 1100 | 1100 | 1100 | 1100 |
| Depth (C) | NRA L - LC | 2450 | 2450 | 2450 | 2450 |
| | NRA A | 2450 | 2450 | 2450 | 2950 |
| | NRA HL | 2950 | 2950 | 2950 | 2950 |
| Weight (kg) | NRA L | 625 | 655 | 670 | 750 |
| | NRA A | 660 | 690 | 705 | 790 |
| | NRA HL | 725 | 750 | 770 | 860 |

| Additional weights (kg) | | 275 | 300 | 325 | 350 |
|--------------------------|--|-----|-----|-----|-----|
| For 01-05 versions* add: | | 130 | 130 | 130 | 130 |
| For 02-06 versions* add: | | 145 | 145 | 145 | 145 |
| For 03-07 versions* add: | | 135 | 135 | 135 | 135 |
| For 04-08 versions* add: | | 150 | 150 | 150 | 150 |

* = fields 14 and 15 of the Configuration Rules

Note: the weights given for the versions with accumulator refer to the weight with empty storage tank.