Company Profile
## Who we are

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## What we do

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## How we do it

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**FOUR PRODUCTION SECTORS FOR INNOVATIVE SOLUTIONS**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Cooling</td>
<td>Precision air conditioners designed for data centers, telephone exchanges, shelters.</td>
</tr>
<tr>
<td>Chillers</td>
<td>Liquid chillers for food, textile, pharmaceutical and electronic big industries.</td>
</tr>
<tr>
<td>Heat pumps &amp; Multifunction</td>
<td>Multifunction liquid chillers and heat pumps suitable for installation in supermarkets and business centers, banks, public offices, airports, hospitals.</td>
</tr>
<tr>
<td>Artificial Intelligence</td>
<td>Advanced software tools for units selection, energy efficiency calculation, networking and remote monitoring.</td>
</tr>
</tbody>
</table>

Since 1963, RC Group supplies reliable and innovative solutions and it is today considered the market leading company in precision air conditioning and refrigeration with high-tech content.
4th July 1963 - RC Condizionatori was established with the mission of providing innovative and high quality air conditioning systems.

1963 - The first air conditioner installed in a major Italian bank. One of the first air conditioners for computer room made in Italy.

1963 - First to introduce energy-saving free-cooling systems, the S.C.R. System on MRE/A chiller.

1980: First HVAC company using CAD design suites

1983: Birth of RC World, RC Group selection software, one of the first electronic catalogue of the HVAC sector.

1990: RC Group takes over Simair (Florence) to develop the TLC market and AMP (Rome) to extend its own range to chillers as well.

13th October 1991: First in Europe to obtain the ISO9000 quality certification.

2003: The first SILVER BULLET unit pioneering magnetic levitation compressors technology.

2005: RC Group patented IDEA®, dynamic control system of defrosting cycles, able to identify the actual ice presence on the air/gas heat exchanger in order to start the defrosting cycle only when it is necessary.

2006: RC joins De’Longhi Professional Group, focused on industrial products.

2010: Birth of Spectrum, On-line WEB application able to predict the Energy performance of the units (chillers and heat pumps) and to conduct a comprehensive energy analysis.

2010, 2012, 2013, 2014: Gold Customer Award as Danfoss Turbocor OEMs


2012: Delclima is listed on the Milano stock exchange since 2nd of January. De’Longhi Trust is the majority share-holder of Delclima.

2012: Birth of UNICO TURBO FL FREE. Free-cooling liquid chiller equipped with centrifugal compressors with magnetic levitation bearings.

2014: Birth of UNICO TURBO FLG FREE. Free-cooling liquid chiller equipped with centrifugal compressors with magnetic levitation bearings charged with HFO1234ze refrigerant.

2015: RC Group acquires 8 group’s subsidiaries.

2015: Birth of X TYPE, unique precision air conditioner with innovative X coils.

2015: Birth of SIVIS, the innovative indirect adiabatic cooling system.

2015: RC Group launches on the market GO GREEN innovative solutions:

“Secure, sustainable, and competitive energy for Europe”. This is the claim of the European Commission for energy efficiency.

The Energy Efficiency Directive sets rules and obligations to help the EU reach its 2020 and 2030 energy efficiency target:
- 20% energy savings target by 2020;
- 30% energy savings target by 2030.

This is a big goal not only for the European community but also for the entire planet.

OUR MISSION
RC Group is focused on this important target with the GoGreen Innovative Solution project. Go Green is not a simple commercial logo but our Mission oriented to efficient energy use and applying innovative technologies. Whatever the air conditioning application, from the hospital to a industrial field or from mall to IT Cooling for data center, energy and solutions must be used to best, developing sustainable and environmentally friendly technologies; all in four words:
INNOVATIVE SOLUTIONS
RC Group offers innovative solutions that meet with accurate precision the Customer needs proposing:

- Efficient solutions;
- Critical contexts products;
- Instruments to speed-up the process for the realization of its projects.

The commercial and service widespread coverage is made up of a number of agencies and service centers in Italy as well as many product distribution and service companies in the rest of the World, in order to be always in the middle of the action. Wherever you are, RC Group is always by your side.

QUALITY & ENVIRONMENT
The assurance of the quality of all products from RC Group factory is determined by:

- Severe laboratory tests.
- Accurate running tests.

- All design, production and test procedures are in accordance with ISO 9001:2008 norms.

In the respect of the environmental protection, RC Group:

- Is certified in accordance with ISO 14001:2004 norms.
- Is searching innovative solutions for energy saving and environmental respect with its GO GREEN INNOVATIVE SOLUTIONS.

SATISFACTION
RC Group main aim is the full Customer satisfaction, achieved through:

- Products quality;
- Technological innovation;
- Environmental respect;
- Energy efficiency.

This strategy gives big satisfaction results to the end users, buyers and RC Group.

TECHNOLOGICAL EVOLUTION
RC Group technology is based on over fifty years of activity in the air conditioning for:

- Data center;
- Metrology labs;
- Telecommunication;
- Comfort;
- Industrial processes.

The company designs and produces through sophisticated computerized systems:

- 3D CAD;
- Thermodynamic simulator;
- Acoustic simulator;
- Products selection software;
- Energy analysis software.

RC GROUP LOGO EVOLUTION

SINCE 1963... ...TODAY
ISO 9001:2008 CERTIFICATION
For production plants of Valle Salimbene (PV) and Zeccone (PV) – Italy
RC GROUP S.p.A. has been the first European company in HVAC field to get the ISO 9001 certification in 1991: all the processes are certified to assure products and services in compliance with the corporate policy.

For the production plant of Foshan, Guangzhou – People’s Republic of China
The headquarters RC GROUP S.p.A. in the Republic of China has achieved ISO 9001 and GB/T 19001 certification in 2009, for the assembly and sale of Precision Air Conditioners. Its organisation is certified according to UNI EN ISO 14001:2004.

ISO 14001:2004 CERTIFICATION
For production plants of Valle Salimbene (PV) and Zeccone (PV) – Italy

P.E.D. CERTIFICATION
For production plants of Valle Salimbene (PV) and Zeccone (PV) – Italy
RC GROUP S.p.A. products meet the requirements of module H category II and III of the European directive 97 / 23CE and subsequent modifications for pressure equipment.

EUROVENT CERTIFICATION
For production plants of Valle Salimbene (PV) and Zeccone (PV) – Italy
RC GROUP S.p.A. participated in the EUROVENT certification program for LCP and HP (Liquid Chilling Packages and Heat Pumps).

CE MARKING
For production plants of Valle Salimbene (PV) and Zeccone (PV) – Italy

TR CERTIFICATION - DECLARATION OF CONFORMITY EAC (RUSSIAN FEDERATION, BELARUS, KAZAKHSTAN)
For RC Group products
RC GROUP S.p.A. products has obtained the TR Certification and the Declaration of conformity EAC. They attest the product conformity to the products safety standards of the Eurasian Custom Union: Russian Federation, Belarus and Kazakhstan.

Eurovent is an international organization of manufacturers that works to improve the standards of products for air-conditioning and refrigeration systems throughout the European market. The members of this organization voluntarily submit their products to a network of independent laboratories approved for testing and evaluation in accordance with European and international standards. The participation in this certification program ensure that the specifications of the products presented by RCGroup in its commercial and technical literature are clear and transparent.

Check ongoing validity of certification on web site: www.eurovent-certification.com
**PRODUCTION PLANTS**

**RC1**
Valle Salimbene - Italy
- Chillers & heat pumps 36500m²
- Headquarter, R&D, production plant

**RC2**
Valle Salimbene - Italy
- Large capacity chillers & heat pumps 2300m²
- Production

**RC3**
Zeccone - Italy
- Precision and telecommunication air conditioners 7500m²
- Production

**RC4**
Valle Salimbene - Italy
- Spare parts warehouse 1000m²
- Top quality spare parts.

**LAB1**
Valle Salimbene - Italy
- Lab for chillers and heat pumps test up to 1600kW
- UNI 14511
- ISO 9614-2

**LAB2**
Valle Salimbene - Italy
- Enthalpy room for precision and telecommunication air conditioners
- EUROVENT 6/6,
- ANSI-ASHRAE 2016

**SUBSIDIARIES**

- **RC Group France SaS**
  - Croissy Beaubourg
- **Aircotech SA**
  - Belgium
  - Temtat
- **RC Group Luxembourg SaS**
  - Strassen
- **RC Group UK LTD**
  - Watford Herts
- **RC Group SpA Deutschland**
  - Neuss
- **RC Milano Rappresentanze SRL**
  - Pero - Milano
- **RC Beijing LTD**
  - Beijing
- **RC Asia Pacific LTD**
  - Kowloon Bay Hong Kong

- **Foshan RC Air Cond LTD**
  - Foshan - China

**RC5**

- Precision and telecommunication air conditioners for Far East market
- 3000m²
- Production plant and sales & marketing department

**PRODUCTION PLANTS IN ITALY**
- 3

**SPARE PARTS WAREHOUSE**
- 1

**LABORATORIES**
- 2

**SUBSIDIARIES**
- 8

**AGENTS**
- 26

**DISTRIBUTORS**
- 45

**AUTHORIZED SERVICE CENTER**
- 53

**EMPLOYEES**
- 275

**M2 OF PRODUCTION AREA**
- 50300m²

**COMPLETE RANGE OF PRODUCTS FROM 4 TO 1840kw**

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C_PRF • RCGROUP SpA
RC Group adopts LEAN MANUFACTURING principles for its production plants of Zeccone and Valle Salimbene as important guidelines to CONTINUOUS IMPROVEMENT in all areas.

PRODUCT STANDARDS:
- STANDARD WORK. Processes and deadlines defined for each operation and standardization of the product families.
- LEAN DESIGN. Planning based on machine production.
- GROUP TECHNOLOGY. Common software & hardware platforms for several production lines.

PRODUCTION STANDARDS:
- PRODUCTION LAYOUT. Production processes design.
- 5S. Better organization and cleanliness of the work place.
- LIVE FEEDBACK. Live measurement, showing the efficiency of the productive processes.
- SHORT LEAD TIME. Reduction of the average crossing time with a productive layout that simplifies and minimizes the machines handling. Attention in not to have machine stopped, but machine waiting to be processed.
- KPI. Creation of reports that summarise the key values in order to measure and compare the productive processes efficiency to continuously evaluate and better develop the CONTINUOUS IMPROVEMENT.

The application of these instruments allowed the increasing quality of our services to the customer, furnishing products without defects, shorter delivery time and a high general quality of the production.

RC GROUP SpA • C_PRF

RC1

VALLE SALIMBENE PRODUCTION PLANT (RC1)
KEYWORD: FLEXIBILITY
- 4 production lines divided in three sectors:
  - assembly (A);
  - welding (W);
  - electric connection (E).

Testing and shipping area at the end of the production lines. Separate area for plumbing.

RC3

ZECCONE PRODUCTION PLANT (RC3)
KEYWORD: LEAN
3 production lines:
- yellow: small size machines;
- orange: medium size machines;
- green: big size machines.

three sectors for each line:
- assembly (A);
- welding (W);
- electrical connection (E).

Testing and shipping area at the end of the production lines. Separate area for plumbing.

RC Group obtains 40% reduction of average crossing time

RC2

VALLE SALIMBENE PRODUCTION PLANT (RC2)
KEYWORD: CUSTOMIZATION
Independent working islands, each one including:
- assembly (A);
- welding (W);
- electrical connection (E).

Testing and shipping area at the end of the production lines. Separate area for plumbing.

RC GROUP SpA • C_PRF
## AIR CONDITIONERS FOR DATA CENTER FOR PERIMETER INSTALLATION

### NEXT EVO
- **NEXT EVO INV**
  - R410A - DX
  - R410A - DW
- **NEXT EVO CW**
  - S
  - K
- **NEXT EVO CW PLUS**
  - S
  - K
- **NEXT EVO DL**
  - CW
  - R410A - DX
  - R410A - INV
- **NEXT EVO MTR**
  - R410A - DX
  - R410A - DW

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEXT EVO INV</td>
<td>70</td>
</tr>
<tr>
<td>NEXT EVO CW</td>
<td>15</td>
</tr>
<tr>
<td>NEXT EVO CW PLUS</td>
<td>125</td>
</tr>
<tr>
<td>NEXT EVO DL</td>
<td>11</td>
</tr>
<tr>
<td>NEXT EVO MTR</td>
<td>14</td>
</tr>
</tbody>
</table>

### AIR CONDITIONERS FOR DATA CENTER FOR IN ROW, IN RACK INSTALLATION

### COOLSIDE EVO
- **in row/in rack versions**
  - Air conditioning system for high density rack and blade servers.
  - R410A - DX

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOLSIDE EVO</td>
<td>4</td>
</tr>
</tbody>
</table>

### COOLROW
- **in row version**
  - Air conditioners for high density rack and blade servers.
  - DX Inv

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOLROW</td>
<td>14</td>
</tr>
</tbody>
</table>
**IT Cooling - Products overview**

**AIR CONDITIONERS FOR DATA CENTER FOR PERIMETER INSTALLATION**

**NEW!**

- **FREECOOLING**
- **INVERTER**

**ENERGY SPLIT**

1. **MINIPAC**
   - Horizontal air delivery
   - Package air conditioners with free-cooling system.
2. **ENERTEL**
   - Horizontal air delivery
   - Under/Over/Displacement versions
3. **MARK**
   - Horizontal air delivery
   - Package air conditioners with free-cooling system for outdoor or indoor installation.

**INDIRECT ADIABATIC COOLING SYSTEM**

**NEW!**

**DATA CENTER**

**SIVIS**

- 2 stages indirect adiabatic cooling system
- **pPUE 1.025**
- **20 YEARS WARRANTY**

- **pPUE 1.07**

**AIR CONDITIONERS FOR TELECOMMUNICATION**

**ENERGY SPLIT**

- **Horizontal air delivery**
- Split system air conditioners with free-cooling system.

**MINIPAC**

- **Horizontal air delivery**
- Package air conditioners with free-cooling system for outdoor installation.

**ENERTEL**

- **Horizontal air delivery**
- Package air conditioners with free-cooling system for indoor installation.

**MARK**

- **Horizontal air delivery**
- Package air conditioners with free-cooling system for outdoor or indoor installation.

**SIVIS**

- **pPUE 1.025**
- **20 YEARS WARRANTY**

**ENERGY SPLIT**

- **R407C**
- **R410A**

**MINIPAC**

- **R407C**

**ENERTEL**

- **R407C**

**ENERTEL DL**

- **R134a**

**MARK**

- **R410A**

**DL** - displacement air delivery.
### AIR COOLED LIQUID CHILLERS

<table>
<thead>
<tr>
<th></th>
<th>SMART 2</th>
<th>SMART PF</th>
<th>UNICO - UNICO PF</th>
<th>PYXIS U</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R410A</td>
<td>R410A</td>
<td>R410A</td>
<td>R410A</td>
</tr>
<tr>
<td>0 50 100</td>
<td>5 20 40</td>
<td>12 37</td>
<td>20 260</td>
<td>0 44</td>
</tr>
<tr>
<td>150 200</td>
<td>150 200</td>
<td>260</td>
<td>284</td>
<td>250 kW</td>
</tr>
<tr>
<td>250 kW</td>
<td>250 kW</td>
<td>250 kW</td>
<td>250 kW</td>
<td></td>
</tr>
</tbody>
</table>

**SMART 2**
- Air cooled liquid chillers equipped with scroll compressor and axial fans.

**SMART PF**
- Air cooled liquid chillers equipped with scroll compressor and plug fan.

**UNICO - UNICO PF**
- Air cooled liquid chillers equipped with scroll compressors and axial fans or plug fans.

**PYXIS U**
- Air cooled liquid chillers equipped with scroll compressors, axial fans and microchannel condensing coils.

**PYXIS - PYXIS HE**
- Air cooled liquid chillers equipped with scroll compressors, axial fans and microchannel condensing coils.

**UNICO TURBO FL - FLG**
- Air cooled liquid chillers in A-class energy efficiency equipped with oil-free centrifugal compressors with magnetic levitation bearings, flooded evaporator and microchannel condensing coils.

**NEBIS HE FL**
- Air cooled liquid chillers equipped with two on/off screw compressors, axial fans, flooded evaporator and microchannel condensing coils.

**NEBIS INV HE FL**
- Air cooled liquid chillers equipped with inverter + on/off screw compressors, axial fans, flooded evaporator and microchannel condensing coils.

- **PF** - equipped with plug fans, for indoor installation;

- **HE** - high energy efficiency, A energy efficiency class according to EUROVENT;
- **FL** - equipped with flooded shell and tube evaporator;
- **INV** - equipped with screw inverter compressor;
- **TURBO** - equipped with centrifugal compressors with magnetic levitation bearings;
- **G** - HFO1234ze refrigerant charge.

---

**SMART**
- R410A

**SMART PF**
- R410A

**UNICO**
- R410A

**UNICO PF**
- R410A

**PYXIS U**
- R410A

**PYXIS - PYXIS HE**
- R410A

**UNICO TURBO FL - FLG**
- R134a

**NEBIS HE FL**
- R134a

**NEBIS INV HE FL**
- R134a

**GLIDER EVO**
- R134a

**GLIDER EVO CLA**
- R134a

**UNICO TURBO FL**
- R134a

**UNICO TURBO FLG**
- HFO

**UNICO TURBO HE**
- R134a
### Air Cooled Liquid Chillers with Free-Cooling System

**MAXIMO - MAXIMO PF**  
Air cooled liquid chillers with free-cooling system equipped with scroll compressors and axial fans or plug fans.

<table>
<thead>
<tr>
<th>Model</th>
<th>Compressor Type</th>
<th>Power Levels (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMO</td>
<td>R410A</td>
<td>0, 100, 200, 300</td>
</tr>
<tr>
<td>MAXIMO PF</td>
<td>R410A</td>
<td>0, 250, 500, 750, 1000, 1250, 1500</td>
</tr>
</tbody>
</table>

**EAGLE FREE**  
Air cooled liquid chillers with free-cooling system equipped with scroll compressors and axial fans.

<table>
<thead>
<tr>
<th>Model</th>
<th>Compressor Type</th>
<th>Power Levels (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAGLE FREE</td>
<td>R410A</td>
<td>0, 100, 200, 300</td>
</tr>
</tbody>
</table>

**UNICO TURBO FL FREE**  
Air cooled liquid chillers in A-class energy efficiency with free-cooling system equipped with oil-free centrifugal compressors with magnetic levitation bearings, flooded evaporator and microchannel condensing coils.

<table>
<thead>
<tr>
<th>Model</th>
<th>Compressor Type</th>
<th>Power Levels (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNICO TURBO FL FREE</td>
<td>HFO</td>
<td>0, 250, 500, 750, 1000, 1250, 1500</td>
</tr>
</tbody>
</table>

**GLIDER EVO FREE**  
Air cooled liquid chillers with free-cooling system equipped with screw compressors and axial fans.

<table>
<thead>
<tr>
<th>Model</th>
<th>Compressor Type</th>
<th>Power Levels (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLIDER EVO FREE</td>
<td>R134a</td>
<td>0, 250, 500, 750, 1000, 1250, 1500</td>
</tr>
</tbody>
</table>

---

PF - equipped with plug fans, for indoor installation;  
M - mechanical cooling;  
FC - Free-Cooling

---

PF - equipped with plug fans, for indoor installation;  
FL - equipped with flooded shell and tube evaporator;  
CLA - A-class energy efficiency;  
TURBO - equipped with centrifugal compressors with magnetic levitation bearings;  
HFO1234ze refrigerant charge.
Chillers - Products overview

WATER COOLED LIQUID CHILLERS

NEMO
Water cooled liquid chillers equipped with scroll compressor.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>kW</th>
<th>kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEMO</td>
<td>R410A</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>NEMO A</td>
<td>R410A</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

A - moteo evaporating unit, to be matched with remote condenser;

MANTA EVO
Water cooled liquid chillers equipped with scroll compressors.

FRIGO SCREW K
Water cooled liquid chillers equipped with a single screw compressor.

FRIGO SCREW
Water cooled liquid chillers with A-class energy efficiency equipped with screw compressors.

FRIGO TURBO K
Water cooled liquid chillers equipped with oil-free centrifugal compressor with magnetic levitation bearings and plate type heat exchanger.

FRIGO TURBO FL
Water cooled liquid chillers equipped with A-class energy efficiency equipped with oil-free centrifugal compressors with magnetic levitation bearings and flooded evaporator.

FRIGO TURBO FLG
Water cooled liquid chillers equipped with A-class energy efficiency equipped with oil-free centrifugal compressors with magnetic levitation bearings and flooded evaporator.

<table>
<thead>
<tr>
<th></th>
<th>kW</th>
<th>kW</th>
<th>kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANTA EVO</td>
<td>R410A</td>
<td>21</td>
<td>464</td>
</tr>
<tr>
<td>MANTA EVO A</td>
<td>R410A</td>
<td>19</td>
<td>416</td>
</tr>
<tr>
<td>FRIGO SCREW K</td>
<td>R134a</td>
<td>186</td>
<td>656</td>
</tr>
<tr>
<td>FRIGO SCREW CLA</td>
<td>R134a</td>
<td>407</td>
<td></td>
</tr>
<tr>
<td>FRIGO SCREW CLA PLUS</td>
<td>R134a</td>
<td>626</td>
<td>1180</td>
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<tr>
<td>FRIGO SCREW HR</td>
<td>R134a</td>
<td>333</td>
<td></td>
</tr>
<tr>
<td>FRIGO TURBO FL</td>
<td>R134a</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>FRIGO TURBO FLG</td>
<td>HFO</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>FRIGO TURBO HE</td>
<td>R134a</td>
<td>520</td>
<td></td>
</tr>
<tr>
<td>FRIGO TURBO K</td>
<td>R134a</td>
<td>270</td>
<td></td>
</tr>
</tbody>
</table>

FL - equipped with flooded shell and tube evaporator;
TURBO - equipped with centrifugal compressors with magnetic levitation bearings;
G - HFO1234ze refrigerant charge; CC - Cooling Capacity; HC - Heating Capacity.

A - moteo evaporating unit, to be matched with remote condenser;
K - compact version;
CLA - A class energy efficiency; CLA PLUS - exceeding A class energy efficiency;
HR - Heat Recovery version;
Heat Pumps & Multifunction - Products overview

SMART 2 HP
Air cooled heat pump liquid chillers equipped with scroll compressor and axial fans.

REVERSO - REVERSO PF
Air cooled heat pump liquid chillers equipped with scroll compressors and axial fans or plug fans.

PYXIS HP U
Air cooled heat pump liquid chillers equipped with scroll compressors and axial fans.

ORION
Air cooled heat pump liquid chillers equipped with scroll compressors and axial fans.

SMART 2 HP  R410A  CC  HC
<table>
<thead>
<tr>
<th>kW</th>
<th>CC</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

SMART HP PF  R410A  CC  HC
<table>
<thead>
<tr>
<th>kW</th>
<th>CC</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
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REVERSO  R410A  CC  HC
<table>
<thead>
<tr>
<th>kW</th>
<th>CC</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>23</td>
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<td>261</td>
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REVERSO PF  R410A  CC  HC
<table>
<thead>
<tr>
<th>kW</th>
<th>CC</th>
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<tbody>
<tr>
<td>19</td>
<td>24</td>
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PYXIS HP U  R410A  CC  HC
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<tbody>
<tr>
<td>43</td>
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ORION  R407C  CC  HC
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<tr>
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ORION LN  R407C  CC  HC
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<thead>
<tr>
<th>kW</th>
<th>CC</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>202</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PF - equipped with plug fans, for indoor installation; LN - low noise version;

CC - Cooling Capacity; HC - Heating Capacity.

Air cooled heat pump liquid chillers equipped with scroll compressors and axial fans.

Air cooled heat pump liquid chillers equipped with screw compressors and axial fans.

CC - Cooling Capacity; HC - Heating Capacity.
# Heat Pumps & Multifunction - Products overview

## WATER COOLED HEAT PUMP LIQUID CHILLERS

### NEMO HP
Water cooled heat pump liquid chillers equipped with scroll compressor and plate type heat exchangers.

<table>
<thead>
<tr>
<th>NEMO HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R410A</td>
</tr>
<tr>
<td>CC</td>
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<tr>
<td>HC</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>40 kW</td>
</tr>
</tbody>
</table>

### NEMO A HP
Water cooled heat pump liquid chillers equipped with scroll compressor and plate type heat exchangers.

<table>
<thead>
<tr>
<th>NEMO A HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R410A</td>
</tr>
<tr>
<td>CC</td>
</tr>
<tr>
<td>HC</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>40 kW</td>
</tr>
</tbody>
</table>

A - motoevaporating unit, to be matched with remote condenser;  
CC - Cooling Capacity;  
HC - Heating Capacity.

### MANTA EVO HP
Water cooled heat pump liquid chillers equipped with scroll compressors and plate type heat exchangers.

### HYDRA
Water cooled heat pump liquid chillers equipped with scroll compressors and plate type heat exchangers.

### FRIGO SCREW WP
Water cooled heat pump liquid chillers equipped with scroll compressors and plate type heat exchangers.

<table>
<thead>
<tr>
<th>HYDRA HH</th>
</tr>
</thead>
<tbody>
<tr>
<td>R410A</td>
</tr>
<tr>
<td>CC</td>
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<tr>
<td>HC</td>
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<tr>
<td>27</td>
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<tr>
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<tr>
<td>297</td>
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<tr>
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<tr>
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<table>
<thead>
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<td>1000</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>HYDRA B</th>
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<tbody>
<tr>
<td>R410A</td>
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<tr>
<td>650</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>MANTA EVO HP</th>
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<tbody>
<tr>
<td>R410A</td>
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<tr>
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</table>

<table>
<thead>
<tr>
<th>MANTA EVO A HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R410A</td>
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<tr>
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</tr>
<tr>
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</table>

<table>
<thead>
<tr>
<th>MANTA EVO WP</th>
</tr>
</thead>
<tbody>
<tr>
<td>R410A</td>
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<td>650</td>
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<tr>
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</tr>
<tr>
<td>5000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>FRIGO SCREW WP</th>
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</thead>
<tbody>
<tr>
<td>R134a</td>
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<td>393</td>
</tr>
<tr>
<td>774</td>
</tr>
<tr>
<td>1511</td>
</tr>
<tr>
<td>1978</td>
</tr>
</tbody>
</table>

HH - heating only version;  
WP - inversion on hydraulic circuit;  
B - geothermal version;  
HP - inversion on refrigerant circuit;  
CC - Cooling Capacity;  
HC - Heating Capacity.
### Heat Pumps & Multifunction - Products overview

**MULTIFUNCTION CHILLERS**

<table>
<thead>
<tr>
<th></th>
<th>MULTIPLO PF</th>
<th>MULTIPLO SCREW</th>
<th>TRILOGY</th>
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<tbody>
<tr>
<td><strong>Type</strong></td>
<td>R410A</td>
<td>R134a</td>
<td>R410A</td>
</tr>
<tr>
<td><strong>PF</strong></td>
<td>12,1 ÷ 307,0 kW</td>
<td>12,1 ÷ 155,0 kW</td>
<td>12,1 ÷ 307,0 kW</td>
</tr>
<tr>
<td><strong>CC</strong></td>
<td>8,3 ÷ 172,0 kW</td>
<td>8,8 ÷ 89,0 kW</td>
<td>8,3 ÷ 172,0 kW</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>0 100 200 300 1000 1250 kW</td>
<td>0 100 200 300 1000 1250 kW</td>
<td>0 100 200 300 1000 1250 kW</td>
</tr>
</tbody>
</table>

**PF** - equipped with plug fans, for indoor installation;
**CC** - Cooling Capacity;
**HC** - Heating Capacity.

---

### REMOTE CONDENSER AND HEAT EXCHANGERS TO BE MATCHED WITH RC GROUP MACHINES

**DRY COOLER**

- **Power**: 8,3 ÷ 172,0 kW
- **Type**: Air cooled multifunction chillers equipped with axial fans.

**DRY COOLER PF**

- **Power**: 8,8 ÷ 89,0 kW
- **Type**: Air cooled multifunction chillers equipped with plug fans.

**TEAM MATE**

- **Power**: 12,1 ÷ 307,0 kW
- **Type**: Remote air/gas heat exchanger equipped with axial fan.

**TEAM MATE PF**

- **Power**: 12,1 ÷ 155,0 kW
- **Type**: Remote air/gas heat exchanger equipped with plug fan.

---

**RCGROUP SpA** • **C_PRF**
Artificial Intelligence - Products overview

RC WORLD

On-line WEB application for the calculation of the performance of the range of RC Group products to all the permissible operating conditions.

On-line WEB application able to predict the Energy performance of the units (chillers and heat pumps) and to conduct a comprehensive energy analysis.

RC SPECTRUM

On-line WEB application able to predict the Energy performance of the units (chillers and heat pumps) and to conduct a comprehensive energy analysis.

Master Plant SEQuencer offers some useful tools for the management of several units installed in parallel on a hydronic network: liquid chillers, heat pumps, multifunction units and dry coolers.

The software is free, it is easy to use and is available for download at www.rcgroup.it To download you need to register.

The installation is guided and requires an activation code that is provided by the RC GROUP commercial department.

RC WORLD offers:
- Multiple selection and calculation:
- Comparison between multiple machines of the same or different series;
- Calculation of the sound spectrum of the machine;
- Dimensional drawings of the machines;
- Description of the components of the machine and the options selected;
- Check for incompatibility of the selected accessories;
- Data sheet of the product and accessories with output in PDF format;
- Database updated thanks to the on-line application;
- Export file to be used for calculating the energy performance in SPECTRUM.
- Calculation of energy efficiency of the unit at partial loads (ESEER) achievable by connection to the energy performance estimation software SPECTRUM via Web Service.

The software is free, it is easy to use and is available at www.rcspectrum.it To use the software you need to register.

Once the selection and calculation performance of the desired machine in RC WORLD, you export a file to be used for the calculation in SPECTRUM.

SPECTRUM offers:
- Energy performance of whatever unit in a specific operating condition ("ONE SHOT" mode):
  - Gross and net EER for chillers;
  - TER calculation for chillers with heat recovery;
  - Gross and net COP for heat pumps, with estimation of defrost for air-to-water units.
- Evaluation of standard indexes:
  - ESEER: European seasonal Energy efficiency ratio (in cooling mode).
- Energy analysis (one year-based estimation):
  - Single machine;
  - Multiple configuration of a single model, with parallel or sequential mode of insertion;
  - Comparison of different models on the same plant;
  - Complex layout, with machines of different models and size, with sequencing rules in accordance to Master Plant SEQuencer functions.

The features of Master Plant SEQuencer add value to the installed units, to the plant and to the building.

Master Plant SEQuencer offers:
- Energy savings maximization;
- Noise reduction;
- Optimum efficiency of the units;
- Plant monitoring and management in synergy with RC CLOUD PLATFORM.

Master Plant SEQuencer can be applied to:
- 2-pipe, 4-pipe plants;
- In parallel installed units;
- Up to 5 liquid chillers, even different in type and size, as liquid chillers; heat pumps and multifunction units;
- Chillers supplied by other manufacturers, different from RC Group;
- Pumps with fixed speed, variable speed and the RC Group WPC system.
- Dry coolers.

The device is designed to work in standalone mode or in combination with a BMS supervisor.
Artificial Intelligence - Products overview

**COOLNET**

Intelligent NET for IT Cooling that maximizes the energy saving in LOAD SHARING.

COOLNET is a software that applies to chilled water air conditioners X TYPE, NEXT EVO CW and COOLROW CW microprocessor control system. It optimizes the LOAD SHARING working mode and maximizes the energy savings.

- Manages up to 15 units in LAN, to optimize the temperature statistics. More than 15 units can be managed in groups.
- Minimizes power consumption, controlling uniformly units within the cooling zone.
- Increases energy saving of the units by a factor up to 40% when compared with BAC standard solution.
- Avoids the heating/cooling fighting. The units work together to efficiently satisfy thermal load.
- Optimizes the answer to unbalanced load through a smart self-adaptive LOAD SHARING.
- The master unit, through the application of heuristic algorithm, elaborates the average return temperature of all of the linked units and defines a Cooling Zone. It then processes the common load signal that modulates the fan speed of all the units within the operating band.
- Answers to the main needs of the XXI century Data Center:
  - Lower energy consumption. Savings on bills.
  - Management of unbalanced load.
  - Flexibility. Adaptability to the IT equipment evolution.
  - Ease of use. Simple parameters to be set, just turn on Cool Net function.
- Don't require any additional electronic equipment, compared with standard unit.

**RC CLOUD PLATFORM**

RC CLOUD PLATFORM is an ecosystem of web services for remote monitoring and management of air conditioning plants; designed for mobile usage on tablets and smartphones, it is accessible from pc also.

The user, accessing the platform from rccloudplatform.rcgroup.it site, RC group site, or iOS and Android apps, is allowed to directly work on the field through the designed interface.

Each RC Cloud Box can manage up to 400 Modbus registers and up to 31 serially connected RC Group units: Air conditioners; Liquid chillers; Heat pumps and multifunction units.

The modular structure of RC CLOUD PLATFORM offers:
- Real time plant's check and units remote control (start/stop, set point modification, alarms reset);
- Customizable visualization and analysis (historical) of each unit data;
- Charts creation and export;
- Data monitoring on maps;
- SMS, Mail, Speech Synthesis, FAX and APP (iOS e Android) notifications;
- Integration of different devices in the system (WPC, Energy Performance, …)

RC CLOUD PLATFORM can receive plant information and directly operate on main operative parameters by connection with Master Plant SEQuencer, RC Group sequencer for liquid chillers, heat pumps and multifunction unit.

**WPC**

Inverter pumps and controls for chillers and heat pumps

WPC system by RC Group allows to obtain the maximum energy savings possible maintaining a high comfort level. WPC controls the water flow of a plant to the lowest possible value, so as to always ensure only the amount necessary to meet the load and to ensure the proper operation of the unit.

WPC is a completely autonomous system:
- Available for Chillers and Heat Pumps;
- Profitable for IT Cooling and Comfort plants;
- For units from 50 kW up to 800 kW;
- Maximum 2 chillers connected;
- Optimal for units with multi-scroll on/off compressor;
- Optimal for units with proportional capacity control screw compressor;
- The best solution for units with inverter driven compressors.

For plants greater than 800 kW or more than 2 chillers, it is for use with SEQUENCER or a BMS.

WPC offers the following possibilities:
- Proper operating conditions;
- Energy saving;
- High comfort level;
- Economic advantage;
- Respect for the environment.
Technical data and dimensions are not binding. RC GROUP S.p.A. reserves the right for changes and / or modifications without notice.