



In commercial buildings, hospitals, factories, governmental institutions, sports stadiums, schools and so on, Carrier's 30HXY/30HXC provides satisfactory air-conditioning, and with the premium quality, pioneering environmental concept, highly efficient operation and the perfect after-sale services, it has become one of the most popular series in Carrier air-conditioner family.



Shanghai Qizhong Forest Sports City Tennis Center



Changchun Longjiaju Airport



Beijing Wanda Plaza



Shanghai Long-distance Passenger Transportation Center



Shenzhen Metro



Guangdong Olympic Stadium



Beijing CBD International Building



Shenzhen Wal-Mart Asia Center



National Olympic Sports Center Athletes Mansion

**Physical data**

| 30HXC                        |    | 30HXY<br>100A                                      | 130A | 140A | 155A | 190A | 230A | 260A | 285A | 310A | 345A | 375A |
|------------------------------|----|--|------|------|------|------|------|------|------|------|------|------|
| Net nominal cooling capacity | kW | 335  | 449  | 509  | 541  | 651  | 812  | 897  | 985  | 1106 | 1204 | 1300 |
| Compressors                  |    | Semi-hermetic, twin-screw POWER <sup>3</sup>       |      |      |      |      |      |      |      |      |      |      |
| Evaporator                   |    | Shell and tube with internally finned copper tubes |      |      |      |      |      |      |      |      |      |      |
| Entering water temperature   | °C | 12   |      |      |      |      |      |      |      |      |      |      |
| Leaving water temperature    | °C | 7  |      |      |      |      |      |      |      |      |      |      |
| Condenser                    |    | Shell and tube with internally finned copper tubes |      |      |      |      |      |      |      |      |      |      |
| Entering water temperature   | °C | 30   |      |      |      |      |      |      |      |      |      |      |
| Leaving water temperature    | °C | 35   |      |      |      |      |      |      |      |      |      |      |
| Refrigerant charge           |    | HFC-134a   |      |      |      |      |      |      |      |      |      |      |
| Dimensions                   |    |  |      |      |      |      |      |      |      |      |      |      |
| Length                       | mm | 2794   | 3278 | 3278 | 3278 | 3278 | 3912 | 3912 | 3912 | 4521 | 4521 | 4521 |
| Width                        | mm | 950  | 980  | 980  | 980  | 980  | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 |
| High                         | mm | 1930   | 1816 | 1816 | 1816 | 1941 | 2060 | 2060 | 2060 | 2112 | 2112 | 2112 |
| Net weight                   | kg | 1950   | 2474 | 2537 | 2547 | 2983 | 4242 | 4296 | 4416 | 5014 | 5090 | 5258 |

**Electrical data**

| 30HXC                |         | 30HXY<br>100A | 130A | 140A | 155A | 190A | 230A | 260A | 285A | 310A | 345A | 375A |
|----------------------|---------|---------------|------|------|------|------|------|------|------|------|------|------|
| Power circuit        |         |               |      |      |      |      |      |      |      |      |      |      |
| Nominal power supply | V-ph-Hz | 400-3-50      |      |      |      |      |      |      |      |      |      |      |
| Voltage range        | V       | 360-440       |      |      |      |      |      |      |      |      |      |      |
| Nominal power input* | kW      | 69            | 90   | 102  | 112  | 130  | 164  | 192  | 196  | 221  | 251  | 263  |

- \* Standard Eurovent conditions: Evaporator entering/leaving water temperature 12°C and 7°C. Condenser entering/leaving water temperature 30°C/35°C. Fouling factor=0.000044 m<sup>2</sup> K/W
- \* Effective power input = power input of the compressors + the control circuit + the power input of the pump to overcome the evaporator pressure drop.
- \* Net cooling capacity = gross cooling capacity minus the water pump heat against the internal evaporator pressure drop.
- \* Short steel pipes factory-supplied, to be installed on site for evaporator and condenser water connections.



Create a comfortable and beautiful world with you.....

As the world leader in heating, ventilation, air conditioning and refrigeration for more than 100 years, Carrier's commitment to continually improving the quality of comfort we provide to our customers has changed the way we live, work, play and breathe.

At the same time, we shoulder more responsibilities——

Carrier Corporation identified six specific areas of concentration that directly impact how we, as a world manufacturer, balance our customers' needs for comfort with the environment's needs for responsible consumption. Each area is described below.

At Carrier Corporation, we believe that, for generations to come, success will be measured not only by the quality of our products and systems, but also by how we have improved the quality of life.

|                    |                    |                                   |
|--------------------|--------------------|-----------------------------------|
| Refrigerant        | Product Efficiency | Product Size / Material Reduction |
| Indoor Air Quality | Sound              | Air Distribution                  |



**30HXY/30HXC**  
Semi-closed Water-cooled Screw Chiller



www.carrier.com.cn



# 30HXY/30HXC

## Semi-closed Water-cooled Screw Chiller

High Efficiency/Standard Type  
Cooling capacity: 335-1300kW



Fully adopting the environmentally friendly refrigerant – HFC134-a, 30HXC Screw Chiller has been through the test for years in the market and become a mature product, environmentally friendly, energy saving, convenient and quiet, with wide range of applications, which won the high praise of customers and represents the world-leading level of the modern water-cooled screw chiller.

30HXC High Efficiency Water-cooled Screw Chiller further improves the heat transfer and optimizes the system based on the standard unit, to realize higher full load/part load efficiency. It is highly efficient, energy saving, reliable in operation and convenient for maintenance, and it considers both the full load and the part load, in particular, the outstanding comprehensive part load performance, to provide the more economic unit for users.



### Stable and Highly Efficient

- **High precision manufacture process**

Adopting the high accuracy male/female rotor, with the accuracy of micrometer level, stable operation and low vibration, to ensure the high efficiency and reliable operation.



- **06N compressor**

The new generation Carrier 06N screw compressor is a semi-closed screw compressor specially designed for HFC-134a, manufactured with exquisite and advanced techniques. The unique plunger energy adjustment and the oil pump lubrication system can reduce the energy consumption and generate the stable and reliable operation.



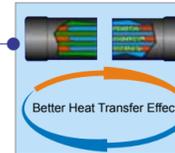
- **Carrier Patent – Electronic Expansion Valve**

The Carrier patented Level 1500 high precision electronic expansion valve combines the rough and fine adjustment to eliminate the heat power delay of the heat expansion valve. It can choke flow and reduce pressure, adjust the flow and control the liquid level, to make prompt and accurate control of the evaporating temperature and effectively improve the operating efficiency of the low load condition



- **Highly Efficient Flooded Evaporator**

The heat transfer copper tube can be fully immersed in the refrigerating liquid to achieve the better transfer effect, make the tube side cleaning simple, and the use more reliable and the maintenance more convenient.



- **TURBO-B Carrier Patented Super High Efficiency Heat Transfer Tube**

The super high efficiency evaporating tube is designed with the special heat transfer surface based on the leading technology of Carrier aiming at different heat transfer mechanism and the fluid medium, to optimize the transfer efficiency, reduce the loss of flow pressure along the process and decrease the energy consumption.



### New Environmental Friendly Refrigerant

- **The environmentally friendly refrigerant HFC-134a brings no damage to the ozone sphere**

The dissipation of the ozone sphere can cause skin cancer, cataract and other diseases, reduce the agricultural output, damage the ocean ecosystem and reduce the fishery output. HFC-134a is recognized as the best environmental-friendly refrigerant, widely used in the world, with the increasingly wider applications and rise in performance-price ratio.

- **Professional design dedicated for HFC-134a**

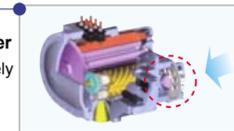
The chiller is specially designed for HFC-134a, perfectly integrating the environmental considerations and high efficiency. It is a trustworthy product with mature techniques.

### Quiet Operation from 3-stage Silencing

- **Stage 1**

- **Specially designed built-in compressor silencer**

To reasonably guide the exhaust flow and effectively reduce the noises produced from pulsation of high pressure exhaust air flow.



- **Stage 2**

- **New external silencer of compressor**

The silencer on each compressor exhaust line can transform large portion of sound energy into heat energy with the advance sound absorption material, to significantly reduce the noise of the chiller.



- **Stage 3**

- **Tailored chiller silencing cabinet**

The 2nd generation silencing cabinet features the pretty appearance, flexible and compact structure and better silencing effect.



### Convenient Installation and Operation

- **Compact body to enter the standard door easily**

It can easily pass the standard door, convenient for the on-site installation. All the chillers are less than 1050mm wide.



- **Simply connect the water and power line to complete the installation**

The installation is very convenient, as the refrigerant has been filled before ex-factory, the installation at the site is just to connect it to the water line and the power line.  
Electrical connection: 380V – 3ph – 50Hz  
Water connection: connected to the refrigerated and cooled water lines  
The new clip water chamber for connecting with the tube simplifies the installation procedures and improves the reliability.



- **Visualized interface**

Pro-Dialog plus computer control system and the visualized interface show you the operation procedure at a glance.

