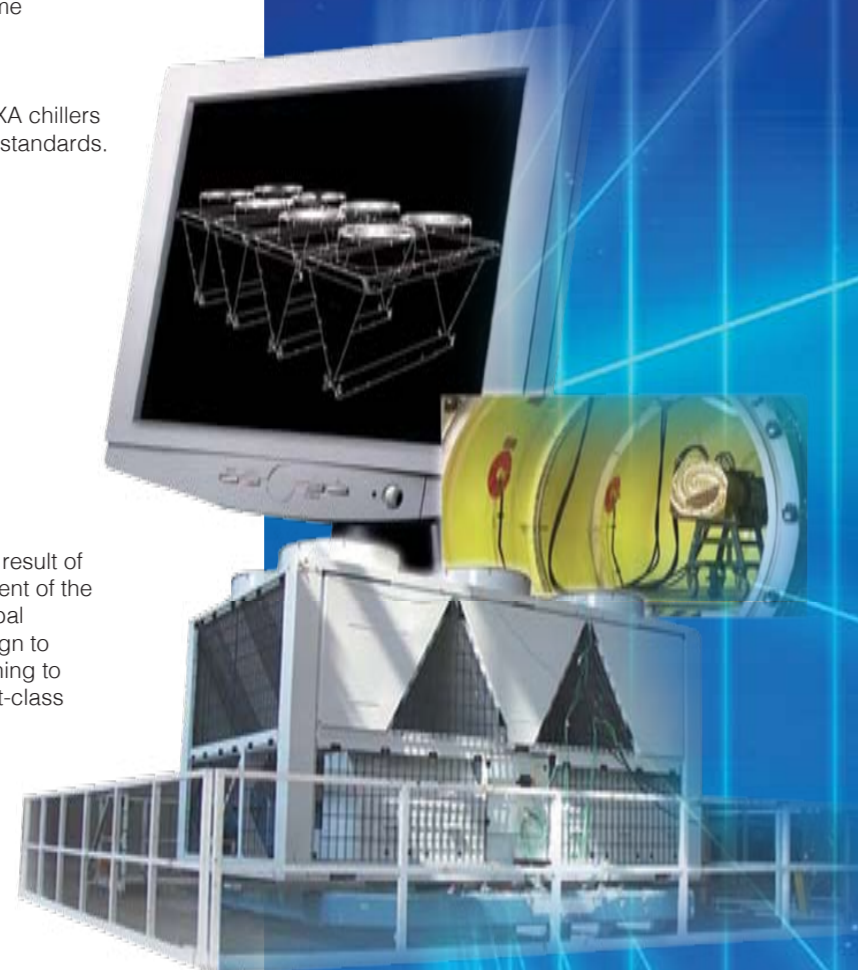


Strict Test to Ensure Reliable Quality

Integrating global technology resources, Carrier developed 30XA after several years' efforts. Large research investments and the strict requirements on product quality ensure the high reliability of the product.

- Every component of the system has passed the test in the special laboratories.
- Tens of prototype have been tested under extreme conditions in the world (wind-proof, corrosion resistance and extreme temperature)
- A transport simulation test has been made to 30XA chillers on the vibration platform of the military industrial standards.



The reliable quality of 30XA chillers is not only the result of Carrier's professional R&D, but also the achievement of the product quality control in compliance with the global standard production flow. No matter from the design to transportation, or from installation and commissioning to daily operation, 30XA chillers demonstrate the first-class performance.



Physical data

30XA		252	302	352	402	452	502	602	702	752
Nominal cooling capacity*	kW	260	283	303	384	439	493	597	655	697
Standard low-noise unit		264	289	314	389	447	503	613	673	717
High efficiency/temperature unit (option)	kW									
Operating weight**										
Standard low-noise unit	kg	3551	3597	3632	4454	4524	4992	5868	6022	6304
Copper/aluminium coil (option 254)	kg	3871	3903	4427	4865	4931	5499	6474	6641	7402
Refrigerant		R134A								
Circuit A	kg	36	37	37	53	54	63	62	62	70
Circuit B	kg	38	38	39	37	39	39	62	66	62
Circuit A copper/aluminium coil (option 254)	kg	60	55	70	85	85	102	102	102	110
Circuit B copper/aluminium coil (option 254)	kg	64	56	56	56	56	56	88	105	88
Compressors		06T semi-hermetic screw compressors, 50 r/s								
Circuit A		1	1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1	1
Minimum capacity	%	15	14	15	11	11	10	14	15	11
Control		PRO-DIALOG, electronic expansion valve (EXV)								
Condensers		Aluminium micro-channel heat exchanger								
Fans		FLYING BIRD IV								
Quantity										
Standard unit		6	6	6	8	8	9	11	12	12
Copper/aluminium coil (option 254))		6	6	7	8	8	9	11	12	13
Evaporator		Flooded multi-pipe type								
Water content	l	58	61	61	66	70	77	79	94	98
Maximum operating pressure	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000
Water connections		Victaulic								
Diameter	in	5	5	5	5	5	5	5	6	6
Outside diameter	mm	141,3	141,3	141,3	141,3	141,3	141,3	141,3	168,3	168,3

30XA		852	902	1002	1202	1352	1502	
Nominal cooling capacity*	kW	804	854	956	1156	1314	1427	
Standard low-noise unit		828	884	989	1191	1368	1474	
High efficiency/temperature unit (option)	kW							
Operating weight**								
Standard low-noise unit	kg	7137	7419	8022	10282	10996	12155	
Copper/aluminium coil (option 254)	kg	7842	8590	8836	11294	12018	13365	
Refrigerant		R134A						
Circuit A	kg	77	70	77	70	70	77	
Circuit B	kg	66	75	84	62	63	84	
Circuit C	kg	-	-	-	84	80	84	
Circuit A copper/aluminium coil (option 254)	kg	120	110	130	112	110	130	
Circuit B copper/aluminium coil (option 254)	kg	98	110	125	96	105	125	
Circuit C copper/aluminium coil (option 254)	kg	-	-	-	120	120	120	
Compressors		06T semi-hermetic screw compressors, 50 r/s						
Circuit A		1	1	1	1	1	1	
Circuit B		1	1	1	1	1	1	
Circuit C		-	-	-	1	1	1	
Minimum capacity	%	12	15	15	7	9	10	
Control		PRO-DIALOG, electronic expansion valve (EXV)						
Condensers		Aluminium micro-channel heat exchanger						
Fans		FLYING BIRD IV						
Quantity								
Standard unit		14	14	16	20	20	24	
Copper/aluminium coil (option 254)		14	15	16	20	20	24	
Evaporator		Flooded multi-pipe type						
Water content	l	119	130	140	182	224	240	
Maximum operating pressure	kPa	1000	1000	1000	1000	1000	1000	
Water connections		Victaulic						
Diameter, inlet/outlet	in	6	6	8	6	6/8	6/8	
Outside diameter, inlet/outlet	mm	168,3	168,3	219,1	168,3	168,3/219,1	168,3/219,1	

* Nominal conditions: evaporator entering/leaving water temperature = 12°C/7°C. Outdoor air temperature = 35°C
Evaporator fouling factor = 0.000018 m² K/W
** Weights are guidelines only.

Note: The 30XA 1502 units are delivered in 2 modules for field assembly.



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.



Thunderbolt, the Efficiency Pioneer

AQUAFORCE™

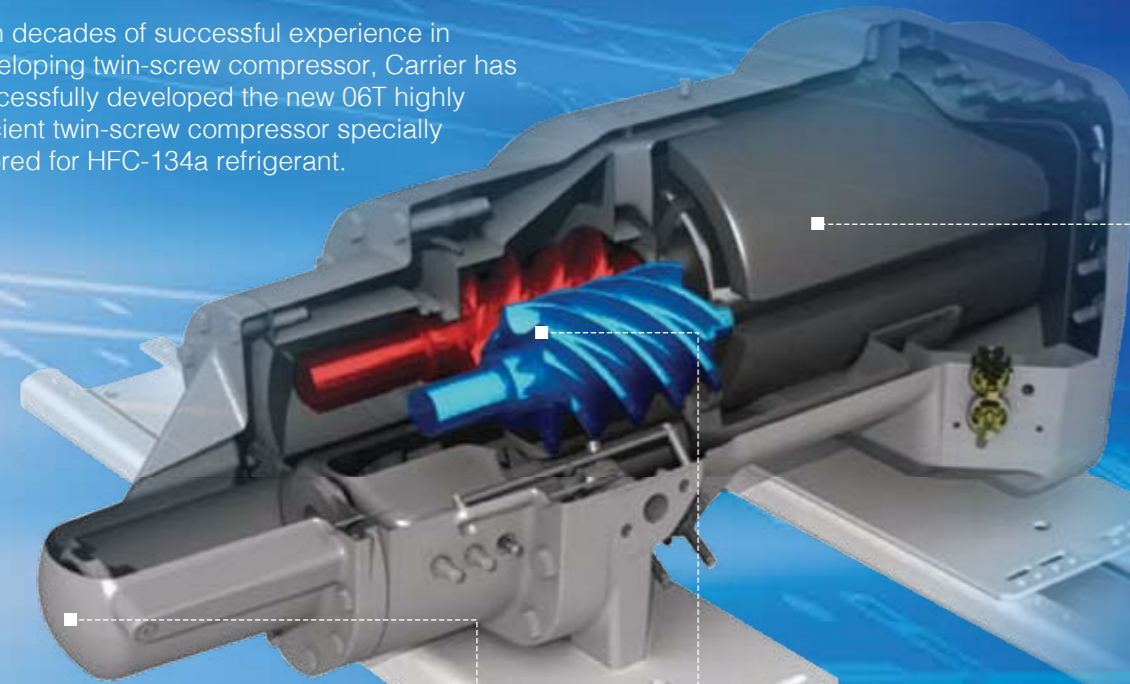
30XA
Air Cooled Screw Chiller

COP reaches 3.2 reflecting the optimum efficiency performance

Carrier has successfully developed 30XA Air-cooled Screw Liquid Chiller leading the industry, with the full load refrigeration efficiency of 3.2 and the premium part load efficiency, by utilizing the innovative conception. The excellent refrigeration performance makes 30XA reach the new height of air-cooled products---Grade 2 energy efficiency.

Highly efficient twin-screw compressor

With decades of successful experience in developing twin-screw compressor, Carrier has successfully developed the new 06T highly efficient twin-screw compressor specially tailored for HFC-134a refrigerant.



Successive stepless unloading of slide valve

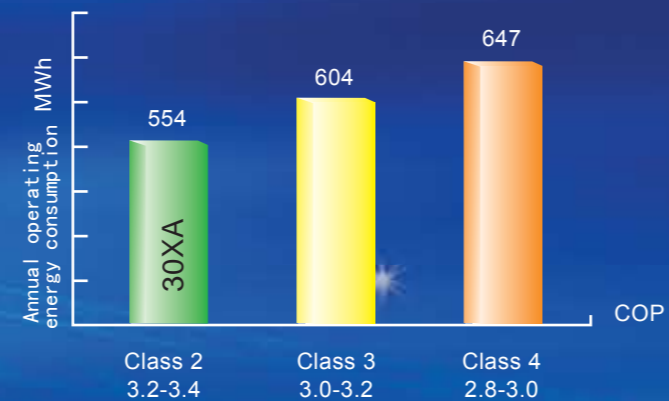


Highly efficient motor



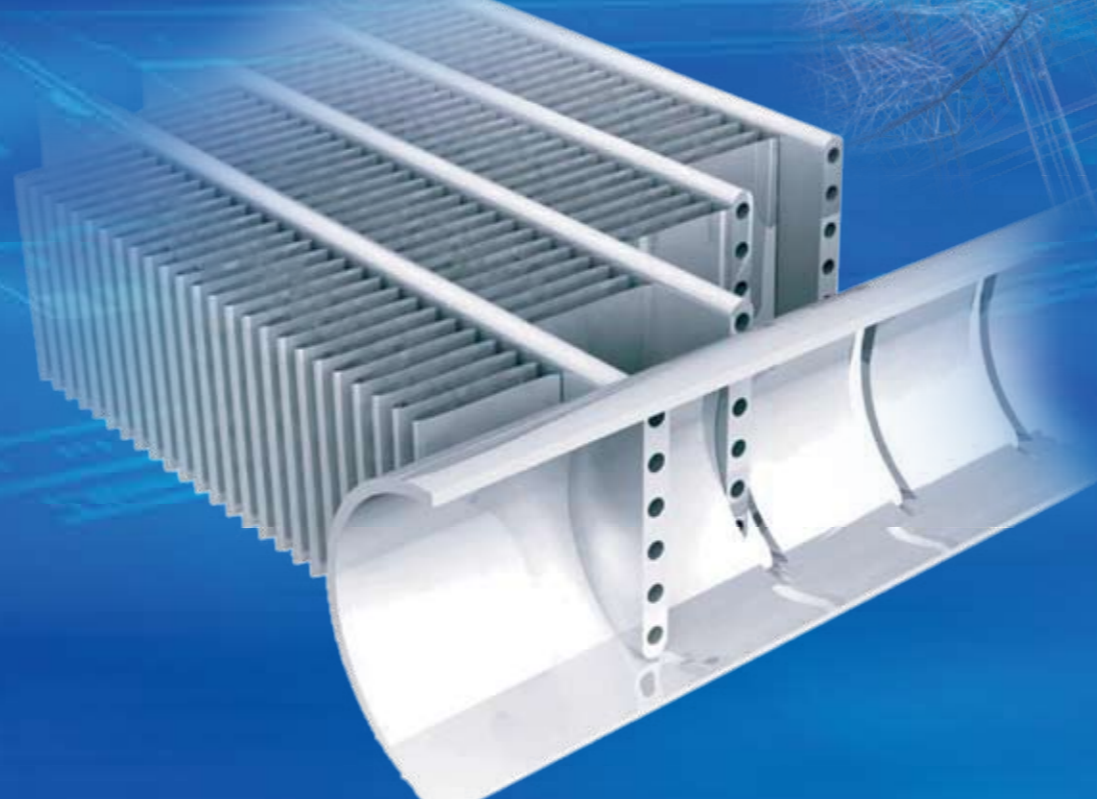
Patented overall dimension design of screw rotor, with the processing precision reaching micron, and correct engagement.

Take an office building for example, the total cooling load is 1700 kW. When using two 30XA852 chillers, the 8% of energy can be saved, if compared with the product with Class 3 energy efficiency, and with those of Class 4, the energy saving can reach 14%.



MCHX condenser(optional)

Carrier applies the micro-channel heat transfer technique used in aviation and automobile to the central air-conditioner successfully for the first time. The heat transfer efficiency is improved by 10% and the air resistance is reduced by 50%, compared with conventional copper-aluminum fin coil. The full-load cooling efficiency of the chiller shall rise by 2% and the energy saving effect is much better.



Comprehensive improvement of silencing performance

Minimum noise is only 61 dB (A)*

* Measured value of 1000kW chiller

Optimized design brings new standard of silencing

The 4th generation "Flying Bird" low noise axial fan, low noise double screw compressor and vibration reduction installation, optimized fin coil, silencing box of compressor and low speed fan options, advanced design concept and successful application of new technique makes 30XA become one of the quietest products. At the distance of 10m, the chiller with cold quantity of 1000kW is only 61dB(A). What is most commendable is that 30XA realizes the perfect combination of excellent silencing performance and splendid cooling performance.



Easy Installation and Convenient Operation

Human-friendly design saves the installation and repair time



The compressor is erected on the slide track to facilitate on-site maintenance and repair, to save the maintenance time after stopping the equipment and provide more human-friendly services.

Microcomputer control to simplify the operation



Pro-Dialog Plus microcomputer control system specially designed for the air-cooled liquid chiller perfectly features the easy and convenient operation and the advanced ad complicated control concept for the central air-conditioner. The system monitors all operating parameters and safety device in real time, precisely manage the compressor, electronic expansion valve, fan and pump (built-in hydraulic module for option), to make the chiller operate with the optimum energy efficiency.

Integrated design simplifies the operation



The integrated design built-in hydraulic module (optional) includes the pump, filter, expansion water tank, flow switch, flow control valve and other necessary hydraulic components, which has been tested prior to ex-factory. It can be put into operation after the water pipes and the power supply are connected after it is delivered to the site so that the installation time and cost of the users can be greatly reduced.