

**AIR-COOLED SCREW CHILLERS** 

## **Smart Chiller Solutions.**

Made in India, for a Sustainable India.

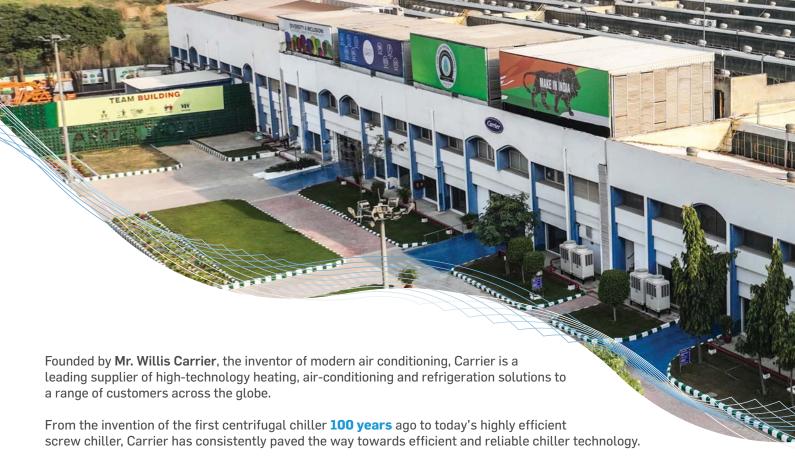




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Providing smart and sustainable solutions with Made in India chillers, Carrier's comprehensive range of offerings is suitable for varied customer applications.

#### MANUFACTURED AT GURGAON FACILITY







Our factory certifications provide the assurance of top-notch quality and reliability, which makes Carrier one of the most sought-after companies in the industry.







#### **FACTORY MILESTONES**



Manufactured and shipped our **1000**<sup>th</sup> chiller from Carrier India's Manufacturing Facility in July 2020.



Accredited with IGBC\* Platinum Certification

\*Indian Green Building Council



#### CARRIER ESG GOALS

Our 2030 ESG goals are our commitment to the things that matter, and we are continuously challenging ourselves to think bigger and be better.



Reduce our customers' carbon footprint by more than 1 gigaton



Achieve carbon-neutral operations







Minimise energy, water and landfill wastage



Establish a responsible supply chain program

#### CARRIER EXPERT CENTRE (CEC) GURGAON





#### **GURGAON R&D CENTRE**

Carrier was built on a legacy of innovation, beginning with our founders. We are innovators at heart, and inventors by heritage. From the start, we've pioneered new technologies and enabled the creation of entirely new industries that have changed the world. Today, building on our history of firsts, we're boldly advancing the industries we created to make a difference in people's lives. Backed by a state-of-the-art R&D centre in Gurgaon, our pursuit for excellence revolves around developing products & solutions for all customer verticals.



The facility also houses NABL-certified laboratories, capable of testing Water Cooled Chillers up to 500TR, with VRF systems and DX 1:1 units.

#### UNIQUE DESIGN FOR SAFETY AND RELIABILITY



Flammable-Gas Detectors for Enhanced Safety



Automatic Exhaust Control System



Testing of Horizontal & Top Discharge Units



Class-1 Fire Resistant PUF Panels



#### AIR-COOLED SCREW CHILLERS





30KA - AC Screw Chiller Cooling capacity: 340~1484 kW

AquaForce® 30KA air-cooled screw chiller is designed from the ground up to meet the efficiency demands of today and the future by providing premium air-cooled chiller packages for contractors, consulting engineers and building owners.



AquaForce® 30KAV air-cooled VFD screw chiller with Greenspeed® Intelligence is the premium solution for infrastructure applications where installers, consultants and building owners require superior reliability and optimal performances, especially at part loads.









Flying Bird condenser fans



ASME Stamped HX\*



Anti-corrosion\* Coatings



IP54 (Electric Panel)\* Safety

#### **TESTING CAPABILITIES**

Our focus is to develop next-generation products using the latest technologies and aim to deliver better products that meet the high energy-efficiency standards. With our AHRI-certified performance test lab at Shanghai, we endeavour to provide complete customer satisfaction through remote witness testing in the digital post-pandemic world.



Test Chamber



Control Panel



**Power Station** 



Testing Chiller





#### WATER-COOLED SCREW CHILLERS





30XW - WC Screw Chiller Cooling capacity: 250~1487 kW

AquaForce® 30XW water-cooled screw chiller is built for superior reliability & flexibility of operation. Available in 2 efficiency classes, the 30XW is designed to deliver robust performance with low maintenance costs.







**30XWV - WC Screw Chiller with VFD** Cooling capacity: 566~1611 kW

AquaForce® 30XWV water-cooled VFD screw chiller with Greenspeed® Intelligence is designed to meet current and future requirements of energy efficiency, versatility and compactness, while delivering on Carrier's commitment towards environmental leadership.



Marine Water Box\*



ASME Stamped HX\*



High pressure water box\*



High Efficiency Tubes\*



#### **TESTING CAPABILITIES**

Our continuous efforts to enhance engineering capabilities is of prime focus when it comes to introducing new, high-technology Carrier products in our Gurgaon factory. We endeavour to meet our customers' expectations with our state-of-the-art performance test lab in Gurgaon suited to meet global standards.







In-house water-cooled chiller performance test capability up to 500 TR capacity







#### CARRIER SMARTVU™ CONTROL SYSTEM

SmartVu<sup>™</sup> is an integrated, dynamic and intelligent touch-screen system for enhanced equipment and system management. It is equipped with several features designed to deliver productivity, connectivity and efficiency.



**FEATURES** 



Intuitive touch-screen interface



Smart data collection for optimised chiller system



Customisable menu for different users



DCT for simplified service operations



Time scheduling for reduced energy bills



Night mode for silent operation

#### INTELLIGENT REMOTE MANAGEMENT



Supports CCN, BACnet IP, Modbus TCP/IP and Modbus RTU protocols



Intelligent protocol module Wi-Fi



Carrier Smart Service based on Big Data Processing

#### SERVICE CAPABILITIES

Get world-class HVAC service and support whenever you need it.

With Carrier, you can count on our expertise and superior service offerings to help you get the most from your HVAC system from start-up to the entire lifecycle.





#### TECHNICAL SPECIFICATIONS - 30KA

Model	30KA	0351A	0451A	0501A	0550A	0651A	0700A	0750A	0800A	0900A	1000A	1050A	1100A	1250A	1350A	1500A
Nominal cooling	kW	340	442	487	554	617	661	715	767	882	981	1067	1120	1216	1382	1484
capacity*	TR	97	126	139	158	175	188	203	218	251	279	303	318	346	393	422
Compressor			Semi-Hermetic Screw Compressor													
Minimum capacity	%	30%	30%	30%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Refrigerant			R134a													
Control			Carrier® SmartVu™ Intelligent Control System													
Condenser			Cu/Al Heat Exchanger													
Fans			VIth Generation Flying Bird Axial Fan													
Evaporator			Flooded Multi-Pipe													
Water connection								Vict	aulic							
Electrical data																
Nominal power supply	V-Ph-Hz							400V-3	Ph-50Hz							
Start-up method								Star-Del	ta Starte	r						
Dimensions & Weight																
Unit length	mm	3668	3668	3668	4801	4751	6126	6298	6298	7410	8410	8410	8410	9509	10584	10584
Unit width	mm				ı	ı		22	53	ı	I					
Unit height	mm							23	79							
Shipping weight	kg	3268	3784	3794	4696	4907	5388	5731	5828	6473	7088	7627	7991	8121	9345	9912
Operating weight	kg	3112	3668	3678	4595	4808	5224	5561	5658	6298	6927	7466	7830	7925	9117	9718

<sup>\*</sup>Nominal Conditions:

Evaporator Entering / Leaving Water Temperature = 54°F / 44°F, Outdoor Air Temperature = 95°F Evaporator Fouling Factor = 0.0001 (hr-sqft-°F)/BTU

#### TECHNICAL SPECIFICATIONS - 30KAV

Model	30KAV	0550A	0660A	0700A	A0080	0900A	1000A	1100A						
Nominal cooling	kW	546	665	713	798	888	986	1068						
capacity*	TR	155	189	203	227	252	280	304						
Compressor		VFD Semi-hermetic screw compressor												
Minimum capacity	%	10%	10%	10%	10%	10%	10%	10%						
Refrigerant		R134a												
Control			Carrier® SmartVu™ Intelligent Control System											
Condenser		Cu/Al Heat Exchanger												
Fans		VIth Generation Flying Bird Axial Fan												
Evaporator		Flooded Multi-Pipe												
Water connection				Vi	ictaulic									
Electrical data														
Nominal power supply	V-Ph-Hz			400V	-3Ph-50Hz									
Start-up method				VFI	D starter									
Dimensions & Weight														
Unit length	mm	5399	6475	6475	7555	7555	8635	8635						
Unit width	mm		1	1	2253	1								
Unit height	mm				2379									
Shipping weight	kg	5368	5825	5981	6800	7284	7624	7812						
Operating weight	kg	5235	5626	5796	6620	7104	7428	7627						

#### \*Nominal Conditions:

Evaporator Entering / Leaving Water Temperature = 54°F / 44°F, Outdoor Air Temperature = 95°F Evaporator Fouling Factor = 0.0001 (hr-sqft-°F)/BTU

#### TECHNICAL SPECIFICATIONS - 30XW

Model	30XW	0262	0312	0352	0452P	0552P	0652P	0702P	0903	0912P	1052	1152P	1261P	1401P	1501	1501P
Nominal cooling	kW	249	304	367	448	571	676	736	858	897	1074	1144	1246	1408	1497	1487
capacity*	TR	71	86	104	128	162	192	209	244	255	305	325	354	400	426	423
Compressor							Semi-Hei	metic Sc	rew Co	mpresso	r					
Minimum capacity	%	15%	% 15% 15% 15% 15% 15% 15% 8% 8% 20% 20%										20%	20%		
Refrigerant			R134a													
Controller			Carrier® SmartVu™ Intelligent Control System													
Heat Exchangers			Flooded Multi-Pipe													
Electrical data																
Nominal power supply	V-Ph-Hz							400-3	3-50							
Start-up method								Star-Delta	a Starte	r						
Dimensions & Weight																
Unit length	mm	2742	2742	2742	2763	3055	3080	3286	3080	3142	4029	4694	4515	4515	4488	4515
Unit width	mm	960	960	960	970	1008	1135	1135	1135	1070	1050	1070	1541	1541	1526	1541
Unit height	mm	1568	1568	1568	1696	1743	1950	1949	1900	2062	1845	1998	2614	2614	2563	2614
Shipping weight	kg	2298	2359	2394	2966	3312	4188	4331	3977	4493	5529	6749	8479	8530	8086	8608
Operating weight	kg	2002	2063	2098	2600	3025	3979	4155	3923	4299	5259	6684	8230	8280	7781	8355

#### \*Nominal Conditions:

Evaporator Entering / Leaving Water Temperature =  $54^{\circ}F$  /  $44^{\circ}F$ , Condenser Entering / Leaving Water Temperature =  $85^{\circ}F$  /  $94.3^{\circ}F$  Evaporator Fouling Factor = 0.0001 (hr-sqft- $^{\circ}F$ )/BTU; Condenser Fouling Factor = 0.00025 (hr-sqft- $^{\circ}F$ )/BTU

#### TECHNICAL SPECIFICATIONS - 30XW-V

Model	30XW-V	160	180	195	200	235	308	328	368	358	378	408	428	458	
Nominal cooling	kW	566	640	714	823	904	1074	1146	1232	1252	1336	1435	1495	1611	
capacity*	TR	161	182	203	234	257	305	326	350	356	380	408	425	458	
Compressor			Inverter-Driven Semi-Hermetic Twin-Screw Compressor												
Minimum capacity	%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Refrigerant			R134a												
Controller			Carrier® SmartVu™ Intelligent Control System												
Heat Exchangers			Flooded Multi-Pipe												
Electrical data															
Nominal power supply	V-Ph-Hz						400-3	3-50							
Start-up method							VFD St	arter							
Dimensions & Weight															
Unit length	mm	3056	3056	3301	3288	3288	4166	4107	4166	4124	4515	4515	4515	4515	
Unit width	mm	1137	1137	1223	1215	1215	1396	1526	1405	1541	1541	1541	1541	1541	
Unit height	mm	1743	1743	1949	1949	1949	2321	2563	2403	2614	2614	2614	2614	2614	
Shipping weight	kg	3348	3371	4368	4386	4392	6578	8033	6782	8270	8640	8751	8751	8847	
Operating weight	kg	3061	3084	4192	4210	4216	6384	7769	6606	8083	8469	8628	8628	8724	

#### \*Nominal Conditions:



# Is your HVAC system's routine technical inspection due?

Book your appointment now at

### 1800 3000 3545 1800 1021 421

Or to know more, please connect with us at: expertsupportindia@carrier.com

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