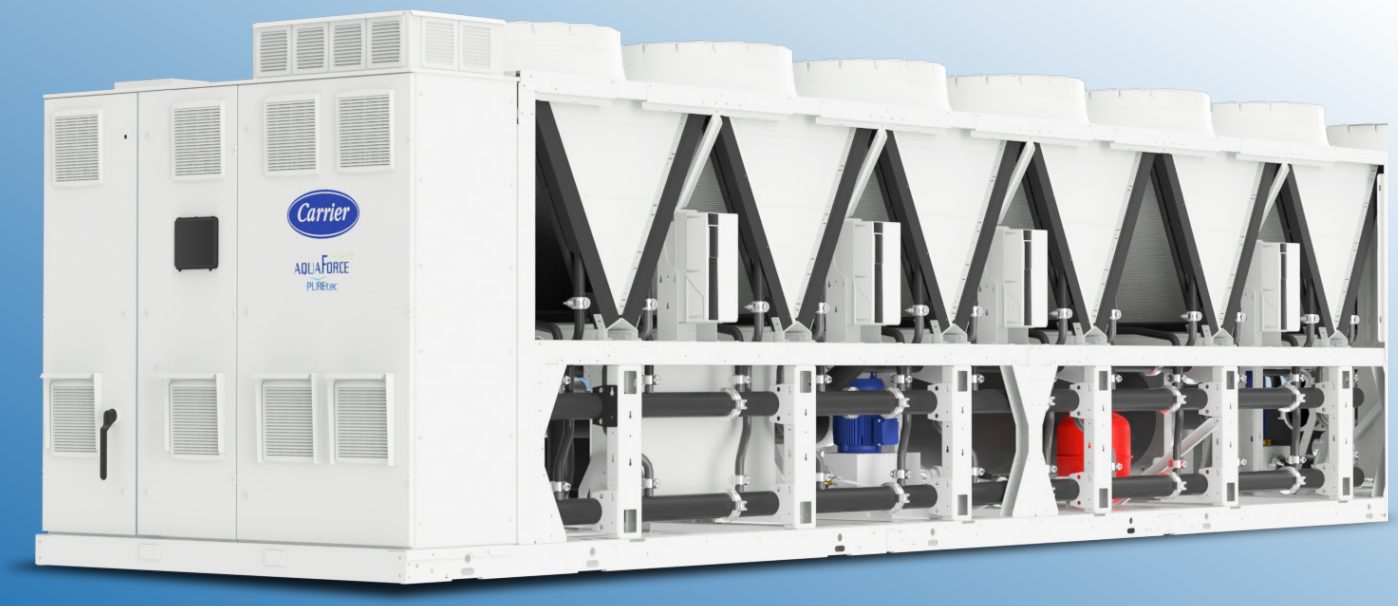
Efficient & High- Performing Chiller Designed for **DATA CENTERS**

AQUAFORCE® 30XF AIR-COOLED VARIABLE-SPEED SCREW CHILLER



About Carrier

A COMPANY COMMITTED TO ENGINEERING INNOVATIVE HVAC EXPERTISE

Carrier is one of the global provider of healthy, safe, sustainable and intelligent building and cold chain solutions. We develop innovative products and services with the aim of positively impacting people and industries.

As innovators at heart and inventors by heritage, our drive for innovation continues today with a renewed focus on creating sustainable, efficient and high-performance solutions is likely to meet the needs of our clientele.

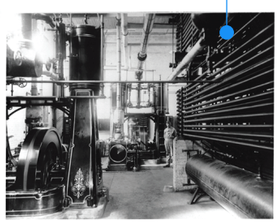
At Carrier, we see possibilities in everything, creating solutions that matter for people and our planet.

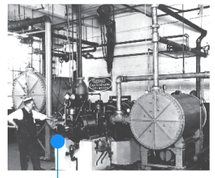
CARRIER'S HERITAGE:
THE INVENTION THAT CHANGED THE WORLD

On July 17, 1902, Willis Carrier designed the first modern air-conditioning system to solve a problem at the Sackett & Wilhelms printing plant in Brooklyn, New York City. With this, he launched an industry that would fundamentally improve the way we live, work and play.

1902

Willis Carrier designed the first modern air conditioning system.





1913

Willis Carrier developed the Carrier Air Humidifier.

1922

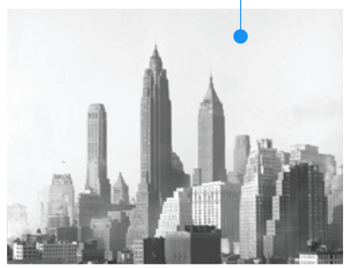
Willis Carrier unveiled his single-most influential innovation, the centrifugal refrigeration machine (also known as chiller).

1926

Carrier introduced the first home air conditioner.

1946

San Antonio, Texas, touts the world's first air-conditioned city bus.



1949

Carrier announced that the four biggest and most modern post-war skyscrapers in New York city would be air-conditioned from top to bottom by Carrier's Conduit Weather Master

1977

The University of Riyadh received two centrifugal chillers – marking the start of the largest comfort cooling installation in

1993

Carrier was instrumental in launching the U.S. Green Building Council® and was the first company in the world to join the

USGBC MEMBER

1993

Carrier Transicold, our land transportation solution, introduced the R134a refrigerant, coinciding with the production of the 100,000th container unit.

2008

Beijing National Stadium used Carrier air handling units.

2011

Carrier introduced Infinity®, an air source heat pump with the greatest heating efficiency.

2020

TIME named Carrier's OptiClean™ air scrubber a Best Invention of 2020.

120 YEARS
STILL CHANGING THE WORLD

2022

The world celebrates the 120th anniversary of modern air conditioning – an invention that fundamentally improved the way we live,

THE CARRIER COMMITMENT

TO COMPLETE DATA CENTER OPTIMIZATION

The presence of data centers are now more important and strategic than ever before, but they also face greater scrutiny regarding their availability, flexibility and efficiency. As your data centers evolve to meet the needs of today, they deserve a cooling solution — and a trusted partner — that can evolve with it.

At Carrier, we deliver innovative solutions that meet your requirements, equipping you to confidently meet data center challenges. Our reliable range of HVAC systems efficiently cool operations, while reducing your energy consumption and carbon footprint. Our management systems integrate building and IT infrastructure for greater visibility and optimization, while our service and support help you enjoy a peace of mind by enabling continuous operations.

All this to ensure you have the confidence to operate with optimized performance at every turn of the data center lifecycle — and at Carrier, it's delivered by design.

AQUAFORCE® 30XF AIR-COOLED CHILLER

THE EFFICIENT DATA CENTER PARTNER

A premium cooling solution ideal for data center operations, the Carrier 30XF Air-Cooled Chiller is designed with an optimized combination of best-in-class technologies.

AHRI CERTIFIED www.ahridirectory.org | greenspeed AQUAFORCE™

Reduced Energy Consumption

Exceptional performance of COP and IPLV at part load operations for lowered energy consumption.

Service Continuity and Redundancy

Equipped with an ultra-fast capacity recovery option for 100% recovery as low as 120 seconds in case of power outages, therefore improving uptime.

Built-In Solution

Easier transportation and installation facilitated with inbuilt active harmonic filters and hydraulic kit with no requirement of external installation components.

Improved Unit Performance

Permanent magnet motor on the compressor increases electrical performance at full-load and part-load operations. This results in improved overall efficiency during mechanical operations with no slip or rotor loss.

Advanced, Intelligent Energy Monitoring

Integrated with user-friendly SmartVU™ intelligent control to display real-time service parameters. Offers an innovative energy monitoring system with current data on electrical energy consumption, cooling capacity and both instantaneous and average values of machine's energy efficiency. To maximize energy savings, it can also be remotely monitored with Carrier experts to carry out a diagnosis and optimize electricity consumption.

Low Noise Levels

Significantly reduced compressor and fan noise owing to new-generation Carrier 06Z variable-speed twin-screw compressor with integrated resonance attenuator and newly designed low-noise fans. An optional acoustic cover can be fitted for the screw compressor to further reduce noise levels.

Free Cooling

100% Hydronic free-cooling harnesses the natural temperature difference with the external environment to cool indoor spaces without refrigeration, delivering up to 50% energy savings and significantly reducing operational costs while ensuring optimal performance.

Low-GWP Refrigerants

Available with ultra low GWP refrigerant of R1234ze(E), Low GWP refrigerant R513A & R134a.

MODEL DESCRIPTION (R134a & R513A)

30XF A 1152 PT015

Option codes	Description
012	High-Static Fan (120Pa)
012B	High-Speed Fan (60Hz)
015	Low Noise (Sheet Metal Enclosure)
015S	Super Low Noise
263	E-Coating
842	ASME Heat Exchanger
020A	IP54 Control Box
148B	J-Bus Gateway
148C	BACnet Gateway
148D	Lon Gateway
156	Energy Management Module
158A	7” Touch Screen
275	Remote Controller
282	EMC Classification C2
295	Ultra Fast Capacity Recovery
301	Lead/Lag Control
329D	Compressor with Induction Motor
041A	Water Exchanger Frost Protection
041B	Evaporator and Hydronic Kit (Anti-freeze Protection)
081AT	ATS (Automatic Transfer Switch)
093A	Compressor Discharge Valves
104	1.6Mpa Evaporator
107	Reversed Evaporator Connection
281	Evaporator with Aluminum Jacket
299	38mm Evaporator Insulation
305A	Spring Damping
309D	Isolate Valve for Safety Valve (Dual Safety Valve)
312A	Australian Compliance
314	Flange Connection
324A	AHF THiD 5% (Unit Mount)
901	Water-Side Plate with Aluminum Spray Coating

- 1152 – Unit cooling capacity code
- A – R134a Refrigerant
  C – R513A Refrigerant
- 30XF – Variable frequency screw air-cooling unit

OPERATING RANGE (R134a & R513A)

Evaporator water temperature	°C	Minimum	Maximum
Water entering temperature at start-up		-	45*
Water entering temperature during operation		6.8	30
Water leaving temperature during operation		3.3	20

Note: If the leaving water temperature is below 4°C, a glycol/water solution or the frost protection option must be used.

Condenser air temperature	Minimum	Maximum
Storage	-20	68
Operation	-20	50**

Note: If the air temperature is below 0°C, a glycol/water solution or the frost protection option must be used.

*Based on the installation type and the air temperature | **Part load, based on the water temperature

MODEL DESCRIPTION (R1234ze(E))

30XF Z 2100 PT015

Option codes	Description
012B	High speed fan at 1140rpm
15	Low noise (sheet metal enclosure)
015LS	Super low noise
020A	Ip54 control box protect box
023A	Improves aesthetics and piping protection against impacts
041A	Evaporator frost protection
041B	Evaporator & hydraulic module frost protection
85A	Chiller connect to 2 seprated power supplied (Control , Main Pumps & Heaters connect to external UPS 400V)
85B	Chiller connect to 2 separated power supplied (Control connect to 230V UPS only)
92	Service valve set
116V	Hp vfd single pump hydraulic module
149B	Modbus over IP and rs485
149	Bacnet over IP
152P	Remote pump control
156+	Energy management module plus
194	Dual relief valves on 3-way valve
200	Australian regulation
232	Capacity booster
256	Insulation of the evap. in/out ref.lines
263	Super enviro-shield anti-corrosion protection (e-coat)
263AC	E-coat on free cooling coils
266	Welded evaporator connection kit
295+	Ultra fast capacity recovery
305A	Total hydraulic intergrated free-cooling
305C	Total hydraulic free-cooling – glycol free
329	Compressor with permanent magnet
331	Plastic tarp
338	Hydraulic free-cooling removal
340A	Ats(automatic transfer switch)
346A	Configurable active harmonic filter 150a
346B	Configurable active harmonic filter 300a
346C	Configurable active harmonic filter 450a
70D	Main disconnect switch with shortcircuit protection
282	Emc class. c2. as per en 61800-3
284	230v electrical plug
294	Energy metering
335	400-3-60 power supply
337	Surge arrester

30XF — Variable frequency screw air-cooling unit

Z — Z- R1234ze(E)

2100 — Unit cooling capacity code

OPERATING RANGE (R1234ze(E))

Unit operating range

Water Heat Exchanger		Minimum	Maximum
Water inlet temperature at start-up	°C	-	45(1)
Water inlet temperature during operation	°C	6.8	36
Water outlet temperature during operation	°C	3,3(2)	26
Water inlet- outlet temperature difference during operation at full load	°C	3	15

Air Heat Exchanger		Minimum	Maximum
Ambient air temperature during storage	°C	-20	68
Ambient air temperature during operation	°C	-20(3)	55

Note:

The use of brine or antifreeze protection option is required if pure water is to be used and to be cooled below 4°C.

If the air temperature is to fall below 0°C, a glycol/water solution or the freeze protection option must be used.

(1) Operating at partial load
(2) According to the type of installation and air temperature.
(3) Options 41A/41B mandatory for start-ups below -5°C.

DESIGNED TO MEET DATA CENTER REQUIREMENTS

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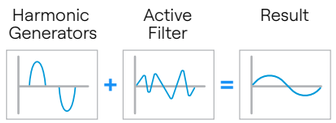
Automatic Transfer Switch

Ultra Fast Capacity Recovery



Active Harmonic Filter

Brand-New 06Z Compressor

Variable Speed Fan

Design of Wind Side Micro Channel Heat Exchanger

Variable Frequency Starting

Modular Design

Free Cooling

Extensive Low-Noise Options

Carrier SmartVU™ Control System

Low-GWP Refrigerants

Automatic Transfer Switch

- Advanced and intelligent power-switching device guided by a dedicated control logic
- Ensures a continuous supply of electricity from one of two power sources to a connected load circuit

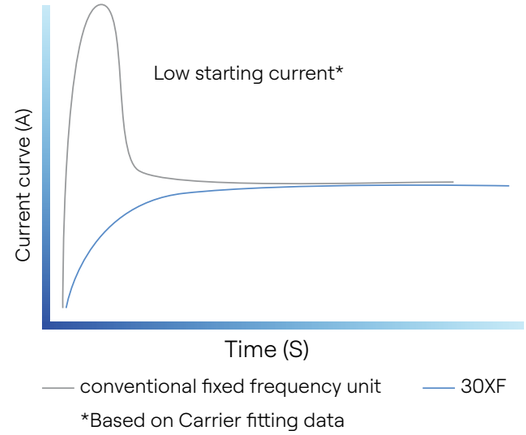
Active Harmonic Filter

- Can be selected to eliminate harmonics at the source, with less than 5% of Total Harmonic Distortion
- The option maintains a low and safe level of harmonics to ensure reliability
- No energy is lost in the distribution system with higher power optimization in data centers
- This unit-mounted option helps in maintaining a clean electrical environment

Variable Speed Fan

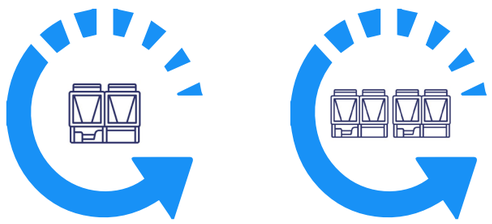
- Significantly increases air volume and lowers fan noise
- Impeller design incorporates composite materials and integral casting mold
- Shield reduces leakage and turbulence between impeller and air outlet
- Efficient variable speed fan motor with 80% motor efficiency

Variable Frequency Starting



Using a frequency converter to achieve soft start of the compressor, the low starting current avoids impact of excessive starting current on the power grid caused by conventional

Ultra Fast Capacity Recovery

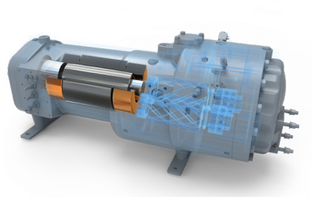


Single Circuit Chiller:
60 seconds at 100% Load*

Dual Circuit & Duplex Chiller:
120 seconds at 100% Load*

- Delay in chiller restart and capacity regain following power outage may increase water temperature and potentially affect the desired operation; an additional water volume system or loop is deployed to overcome the issue
- This feature ensures an immediate restart of chiller operations after power restoration with 100% capacity recovery in less than 3 minutes

Brand-New 06Z Compressor

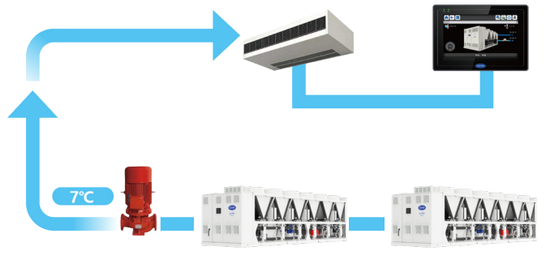


- Newly optimized tooth number pairing ratio with precise meshing for lower compressor vibration and lower unit leakage rate as compared to previous generation of compressors
- Compressor adopts a slide valve-free design to achieve full frequency conversion adjustment, effectively reducing mechanical losses with a larger adjustment range and precise control
- Internal pressure ratio control valve achieves precise adjustment; by opening and closing internal solenoid valve according to diverse pressure loads and ratios, it adapts to varied working conditions and significantly improves unit performance under partial loads
- Variable speed compressor had a wide operating range with a single unit operating load as low as

Design of Wind Side Micro Channel Heat Exchanger

- Refrigerant uses micro channel heat exchanger technology on wind side to lower refrigerant filling and protect the environment
- Sturdy and reliable standard nano level TCP coating on the fins' surface enables to improve their anti-corrosion performance while maintaining heat transfer performance without being affected; higher anti-corrosion E-coating can also be opted to achieve better anti-corrosion results
- V-shape coil design which is conducive to uniform distribution of wind field, ensuring exceptional unit performance

Modular Design



Modules can be connected in series to avoid operational interference and achieve stable control of water temperature. This ensures more stable operations of the unit.

*Please refer to your local sales representative for more information.

Free Cooling

- 100% Hydronic free-cooling harnesses the natural temperature difference with the external environment to cool indoor spaces without refrigeration, delivering up to 50% energy savings and significantly reducing operational costs while ensuring optimal performance

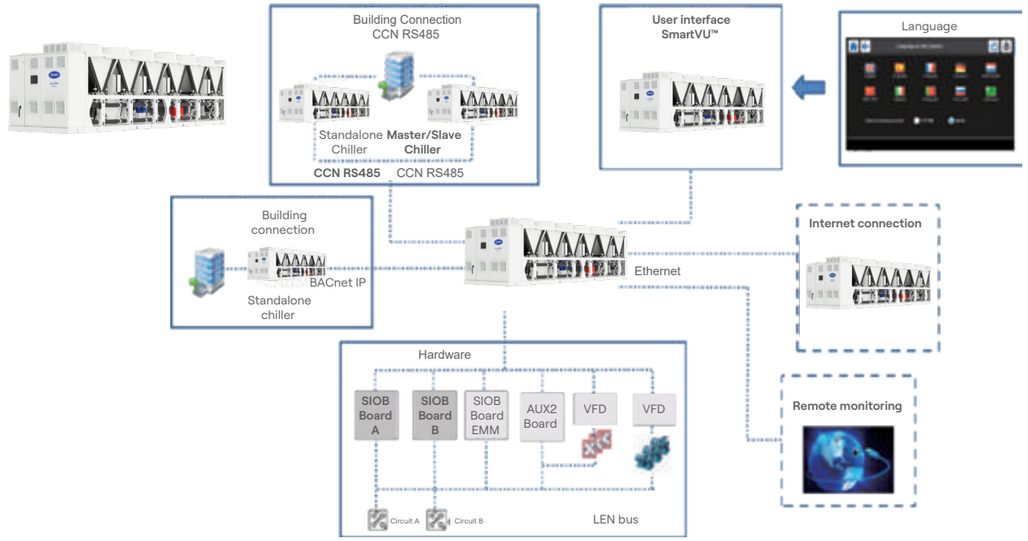
Extensive Low-Noise Options

- Varied noise reduction options can be customized as per requirements
- Ultra-low noise option is based on, where compressor suction pipe is packed with sound-absorption materials and equipped with a low-noise fan to further lower the machine's overall noise
- Spring damping balances the weight unit combined with compressor vibration dampers to form dual vibration reduction which efficiently alleviates noise transmission caused by unit vibration across the building structure
- Hardware soundproof cover can further isolate the noise of components such as exhaust pipes and compressors

CARRIER SmartVu™ CONTROL SYSTEM

An integrated, dynamic and intelligent touch-screen system, enjoy enhanced equipment and system management with the intelligent Carrier SmartVu™. It is equipped with a host of advanced features that ensure productivity, connectivity and efficiency.

SmartVu™ also comes with intelligent protocol module Wi-Fi that supports CCN, BACnet IP, Modbus TCP/IP and Modbus RTU protocols, leveraging the Carrier Smart Service based on Big Data Processing.



Features

- Intuitive Touch Screen Interface
- PID to Indicate All Parameter Data for Chiller
- Email Alerts
- Image Tile Menu Layout
- DCT for Simplified Service Operations
- Time Scheduling for Reduced Energy Bills
- Direct Access to Service Documents

MAINTENANCE YOU CAN COUNT ON

Maximize performance, protect your investments and maintain your HVAC budget with the customizable BluEdge service platform. Carrier helps you create a plan that ensures your equipment's peak performance and longevity.

First Year Service Contract
When you purchase certain qualifying equipment, you'll benefit from our complimentary BluEdge First Year Service Contract. Includes operating inspections by factory-certified Carrier technicians provided during the standard equipment warranty period. You'll also receive high priority for non-scheduled service events.

Customers with IoT-enabled equipment will receive digital support that includes advance notifications, remote diagnostics and enhanced field service support.

Bluedge Services

24/7 Emergency Support & Prioritization
Stay ahead of failures and reduce operating costs, available 24/7. Service agreement customers receive priority for service calls.

IAQ Offerings
Continuously monitor various air quality parameters and conditions for changes so adjustments can be made to get indoor air quality to healthy levels.

Digital offerings
Connect your equipment to Carrier's cloud-based IoT platform, securely sharing real-time data to visualize, analyze and optimize machine health and life cycle outcomes.

Annual Preventive Maintenance
Our technicians perform thorough maintenance in machine shutdown mode that ensures longevity and higher reliability when placed back into service. Cooling and heating start-up services ensure optimal seasonal performance.

Operating Inspections
Carrier thoroughly inspects and adjusts your equipment

Preventive Maintenance
Receive more frequent preventive maintenance outside
of the standard preventive maintenance schedules based on individual equipment requirements and needs.

Predictive Maintenance
Advanced diagnostic service options expose hidden problems before they become emergency issues and schedule repairs at times most convenient for you.

Unscheduled Repairs, Parts & Labor
Repair or replacement of moving parts and maintainable

Carrier-certified technicians understand the intricacies of your business and the daily demands on the equipment in your facility.

How we ensure the highest-quality customer service:

- Factory-trained and certified technicians
- Carrier factory-authorized parts
- Comprehensive HVAC equipment expertise across all brands
- Focus on safety and efficiency
- Standard procedures
- Customer-focused service team
- First year service contract with qualifying equipment

WE SERVICE ALL EQUIPMENT BRANDS

We have extensive experience servicing all major heating, ventilation and cooling
manufacturers' equipment, as well as excellent technical understanding of HVAC

- Air- and Water-Cooled Chillers
- Packaged Unitary Equipment
- Air Handling Units
- Cooling Towers
- Building Controls
- Heat Exchangers
- Boilers
- Split Systems
- Pumps

CARRIER COMMERCIAL SERVICE SOLUTIONS

HEALTHY BUILDINGS
Suite of advanced solutions to help deliver healthier, safer, more efficient and productive indoor air quality regardless of your building type/indoor environment.

DIGITAL OFFERINGS
Advanced analytics and actionable insights to deliver key outcomes. Connected chillers receive 24/7 support from the BluEdge Command Center with real-time monitoring by top-tier engineers.

CARRIER RENTAL SYSTEMS
Specialized cooling, heating, dehumidification and power generation rental equipment for temporary solutions and long-term projects.

CARRIER I-VU® BUILDING AUTOMATION
Building automation and control products help optimize
the use of HVAC systems to deliver healthier, more

CARRIER 30XF TECHNICAL SPECIFICATIONS (R134a & R513A)

Model		Unit	0501		0651		0751		0851		1002	
			R134a	R513A	R134a	R513A	R134a	R513A	R134a	R513A	R134a	R513A
Nominal cooling capacity	IDC 1 condition	kW	738.3	737.8	928.7	928.3	1,129	1,128	1,275	1,275	1,497	1,496
Compressor power	IDC 1 condition	kW	172.2	178.8	213.7	222	254.1	263.8	291.4	302.5	349.8	363.3
Total power	IDC 1 condition	kW	184	190.6	228	236.6	271.5	281.2	311.6	322.7	372.8	386.3
Cooling capacity	IDC 2 condition	kW	587.1	546.6	739.9	689.1	876.3	814.9	1,024	952.9	1,174	1,092
Compressor power	IDC 2 condition	kW	169.8	162	204.6	198	233.1	222	274	259	335.4	318
Total power	IDC 2 condition	kW	181.6	174	219.2	212	250.5	239	294.2	280	358.4	341
Minimum capacity		%	25%		30%		25%		25%		10%	
Refrigerant(s)			R134a/R513A									
Circuit A		kg	85		95		130		145		85	
Circuit B		kg	-		-		-		-		85	
Circuit C		kg	-		-		-		-		-	
Circuit D		kg	-		-		-		-		-	
Compressor			Variable Speed Semi-Hermetic Screw Compressor									
Circuit A			1		1		1		1		1	
Circuit B			-		-		-		-		1	
Circuit C			-		-		-		-		-	
Circuit D			-		-		-		-		-	
Control			Carrier SmartVU™ System									
Condenser			Micro Channel									
Fans			VI generation FlyingBird axial fan									
Quantity			8		10		12		14		16	
Total airflow	IDC1 condition	L/s	40,084		50,105		60,127		70,148		80,169	
Fan speed	IDC1 condition	RPM	950									
Total airflow	IDC2 condition	L/s	40,084		50,105		60,127		70,148		80,169	
Fan speed	IDC2 condition	RPM	950									
Evaporator			Flooded Heat Exchanger									
Water content		L	84		101		101		127		146	
Nominal flow rate	IDC1 condition	L/s	18		22		27		31		35	
Nominal pressure drop	IDC1 condition	kPa	8		11		19		24		43	
Flow rate	IDC2 condition	L/s	14		18		21		25		28	
Pressure drop	IDC2 condition	kPa	5.50		7.35		11.9		15.8		27.6	
Connection			Victaulic									
Nominal Diameter		DN	150		150		150		150		150	
Electrical data												
Power supply			400V-3Ph-50Hz									
Control power supply			24V via Internal Transformer									
Start-up method			VFD Start									
Fan and control power		kW	11.8		14.6		17.4		20.2		23.0	
Maximum unit current draw	Circuit A+B	A	314		388		453		518		625	
Maximum unit current draw	Circuit C+D	A	-		-		-		-		-	
Maximum start-up current	Circuit A+B	A	314		388		453		518		625	
Maximum start-up current	Circuit C+D	A	-		-		-		-		-	
Max operation power	Circuit A+B	kW	202		250		292		334		402	
Max operation power	Circuit C+D	kW	-		-		-		-		-	
Unit dimensions (L x W x H)		mm	6,982 x 2,253 x 2,297		6,982 x 2,253 x 2,297		8,176 x 2,253 x 2,297		9,370 x 2,253 x 2,297		10,519 x 2,253 x 2,297	
Shipping weight		kg	5,096		5,751		6,376		6,774		8,683	
Operating weight (Standard)		kg	4,935		5,600		6,255		6,610		8,475	

Notes:
1. IDC1 Condition: entering/leaving water temperature = 30/20°C, outdoor air temperature = 35°C, fouling factor = 0.018m2K/kW
2. IDC2 Condition: entering/leaving water temperature = 30/20°C, outdoor air temperature = 45°C, fouling factor = 0.018m2K/kW
3. Allowable voltage fluctuations ±10%
4. Models A and B are shipped independently for Models 1300 to 1700
5. Both R134a and R513A refrigerants are AHRI-certified

Model		Unit	1152		1300		1400		1500		1600		1700	
			R134a	R513A	R134a	R513A	R134a	R513A	R134a	R513A	R134a	R513A	R134a	R513A
Nominal cooling capacity	IDC 1 condition	kW	1,731	1,730	1,834	1,833	2,021	2,020	2,223	2,223	2,384	2,384	2,519	2,519
Compressor power	IDC 1 condition	kW	396.2	411.8	422.6	438.9	462.4	480.1	503.4	522.8	542.1	563.6	579.5	601.6
Total power	IDC 1 condition	kW	422.3	437.6	451.2	467.5	493.8	511.5	537.6	557	579.1	600.6	619.3	641.4
Cooling capacity	IDC 2 condition	kW	1,318	1,226	1,451	1,351	1,597	1,486	1,744	1,622	1,882	1,750	2,028	1,887
Compressor power	IDC 2 condition	kW	362.5	347.4	399.6	383.7	434.1	414.4	469.1	445.4	501.5	475	546.4	516.4
Total power	IDC 2 condition	kW	388.3	373.2	428.2	412.3	465.5	445.8	503.3	479.6	538.5	512	586.2	556.2
Minimum capacity		%	15%		15%		15%		15%		15%		15%	
Refrigerant(s)			R134a/R513A											
Circuit A		kg	120		95		95		135		135		145	
Circuit B		kg	70		-		-		-		-		-	
Circuit C		kg	-		95		135		135		145		145	
Circuit D		kg	-		-		-		-		-		-	
Compressor			Variable Speed Semi-Hermetic Screw Compressor											
Circuit A			1		1		1		1		1		1	
Circuit B			1		-		-		-		-		-	
Circuit C			-		1		1		1		1		1	
Circuit D			-		-		-		-		-		-	
Control			Carrier SmartVU™ System											
Condenser			Micro Channel											
Fans			VI generation FlyingBird axial fan											
Quantity			18		20		22		24		26		28	
Total airflow	IDC1 condition	L/s	90,190		100,211		110,232		120,253		130,274		140,295	
Fan speed	IDC1 condition	RPM	950											
Total airflow	IDC2 condition	L/s	90,190		100,211		110,232		120,253		130,274		140,295	
Fan speed	IDC2 condition	RPM	950											
Evaporator			Flooded Heat Exchanger											
Water content		L	174		202		202		202		228		254	
Nominal flow rate	IDC1 condition	L/s	43		44		49		53		57		61	
Nominal pressure drop	IDC1 condition	kPa	14		25		29		35		40		43	
Flow rate	IDC2 condition	L/s	32		35		38		42		45		49	
Pressure drop	IDC2 condition	kPa	8.18		17.9		21.2		24.8		27.9		31.0	
Connection														
Nominal Diameter		DN	150		150		150		200		200		200	
Electrical data														
Power supply			400V-3Ph-50Hz											
Control power supply			24V via Internal Transformer											
Start-up method			VFD Start											
Fan and control power		kW	25.8		28.6		31.4		34.2		37.0		39.8	
Maximum unit current draw	Circuit A+B	A	688		388		388		453		453		518	
Maximum unit current draw	Circuit C+D	A	-		388		453		453		518		518	
Maximum start-up current	Circuit A+B	A	688		388		388		453		453		518	
Maximum start-up current	Circuit C+D	A	-		388		453		453		518		518	
Max operation power	Circuit A+B	kW	443		250		250		292		292		334	
Max operation power	Circuit C+D	kW	-		250		292		292		334		334	
Unit dimensions (L x W x H)		mm	11,713 x 2,253 x 2,297		14,202 x 2,253 x 2,297		15,396 x 2,253 x 2,297		16,590 x 2,253 x 2,297		17,784 x 2,253 x 2,297		18,978 x 2,253 x 2,297	
Shipping weight		kg	9,648		11,659		12,288		12,913		13,330		13,728	
Operating weight (Standard)		kg	9,410		11,357		12,016		12,671		13,045		13,400	

Notes:
1. IDC1 Condition: entering/leaving water temperature = 30/20°C, outdoor air temperature = 35°C, fouling factor = 0.018m2K/kW
2. IDC2 Condition: entering/leaving water temperature = 30/20°C, outdoor air temperature = 45°C, fouling factor = 0.018m2K/kW
3. Allowable voltage fluctuations ±10%
4. Models A and B are shipped independently for Models 1300 to 1700
5. Both R134a and R513A refrigerants are AHRI-certified

CARRIER 30XF TECHNICAL SPECIFICATIONS (R1234ze(E))

Model		30XFZ with PT338 without free cooling	0550	0600	0750	0900	1000	1100
Nominal cooling capacity	IDC1 condition	kW	550	615	809	950	1,066	1118
Compressor power			120	130	176	209	241	240
Total power			133	143	195	230	265	268
Cooling capacity	IDC2 condition		507	568	711	835	948	1033
Compressor power			146	154	196	229	267	294
Total power			160	172	214	250	292	322
Minimum capacity		%	20%	18%	24%	20%	18%	10%
Refrigerant(s)			R1234ze (E)					
Module A		kg	82	85	124	126	128	80
Module B			-	-	-	-	-	82
Compressor			Variable speed semi-hermetic screw compressor					
Module A			1	1	1	1	1	1
Module B			-	-	-	-	-	1
Control			Carrier SmartVu 7 inch Touch screen					
Condenser			Microchannel					
Fans			VI generation FlyingBird axial fan					
Quantity			8	10	10	12	14	16
Total air flow	IDC1 condition	m3/h	143500	165869	183069	217133	252528	290997
Total air flow	IDC2 condition		147666	185555	183626	220588	257620	295116
Fan speed	Max	rpm	950					
Evaporator			Flooded heat exchanger					
Water content		l	141	154	206	206	206	314
Nominal flow rate	IDC1 condition	l/s	13	15	19	23	26	27
Nominal pressure drop		kPa	40	48	38	49	59	25
Flow rate	IDC2 condition	l/s	12	14	17	20	23	25
Pressure drop		kPa	35	43	31	40	49	21
Connection			Victaulic					
Nominal Diameter		DN	125	125	150	150	150	150
Electrical data								
Power supply			400V-3Ph-50Hz					
Control power supply			24V via internal transformer					
Start-up method			VFD start					
Fan and control power IDC1		kW	13	13	18	21	24	28
Fan and control power IDC2			14	18	18	21	25	28
Maximum unit current	Module A+B	A	274	310	355	421	482	537
Maximum start-up current			274	310	355	421	482	537
Max operation power		kW	177	200	229	271	311	346
Unit length (Operating)		mm	5591	6785	6785	7979	9173	11003
Unit width			2258					
Unit height			2325					
Shipping weight		kg	4262	4548	5591	5881	6207	8288
Operating weight (Standard)			4403	4702	5797	6087	6413	8602

Notes:
1.IDC1 Condition: entering/leaving water temperature=30/20℃, outdoor air temperature = 35℃, fouling factor = 0.018m2K/kW
2.IDC2 Condition: entering/leaving water temperature=30/20℃, outdoor air temperature = 45℃, fouling factor = 0.018m2K/kW
3. Allowable voltage fluctuations ±10%
4. All 30XFZ with R1234ze(E) refrigerant is AHRI-certified

Model		30XFZ with PT338 without free cooling	1250	1400	1500	1700	1800*	1900	2000	2100
Nominal cooling capacity	IDC1 condition	kW	1250	1427	1525	1777	1877	1978	2076	2174
Compressor power			261	312	335	403	421	439	463	487
Total power			288	343	366	440	461	482	509	537
Cooling capacity	IDC2 condition		1155	1216	1276	1430	1555	1679	1787	1904
Compressor power			311	329	337	385	417	450	489	520
Total power			346	361	372	420	456	492	534	569
Minimum capacity		%	9%	11%	10%	11%	11%	10%	9%	9%
Refrigerant(s)			R1234ze (E)							
Module A		kg	83	126	126	126	128	128	128	130
Module B			85	82	85	130	130	132	134	134
Compressor			Variable speed semi-hermetic screw compressor							
Module A			1	1	1	1	1	1	1	1
Module B			1	1	1	1	1	1	1	1
Control			Carrier SmartVu 7 inch Touch screen							
Condenser			Microchannel							
Fans			VI generation FlyingBird axial fan							
Quantity			20	18	20	20	22	24	26	28
Total air flow	IDC1 condition	m3/h	337329	325669	347549	363891	401341	438222	471655	509043
Total air flow	IDC2 condition		370897	331443	369349	367233	404204	441169	478235	515294
Fan speed	Max	rpm	950							
Evaporator			Flooded heat exchanger							
Water content		l	356	412	433	506	526	549	549	562
Nominal flow rate	IDC1 condition	l/s	30	34	37	43	45	48	50	52
Nominal pressure drop		kPa	30	26	29	32	35	39	42	46
Flow rate	IDC2 condition	l/s	28	29	31	34	37	40	43	46
Pressure drop		kPa	26	19	21	22	25	29	32	36
Connection			Victaulic							
Nominal Diameter		DN	150	150	150	150/200	150/200	150	150	150
Electrical data										
Power supply			400V-3Ph-50Hz							
Control power supply			24V via internal transformer							
Start-up method			VFD start							
Fan and control power IDC1		kW	27	31	31	36	40	44	46	49
Fan and control power IDC2			35	32	35	35	39	42	46	49
Maximum unit current	Module A+B	A	607	629	677	748	795	842	893	945
Maximum start-up current			607	629	677	748	795	842	893	945
Max operation power		kW	391	405	436	482	512	542	575	609
Unit length (Operating)		mm	13393	12199	13393	13143	14335	15529	16723	17919
Unit width			2258							
Unit height			2325							
Shipping weight		kg	8949	9712	10059	11077	11427	11751	12075	12447
Operating weight (Standard)			9305	10124	10492	11583	11953	12300	12624	13009

Notes:
1.IDC1 Condition: entering/leaving water temperature=30/20℃, outdoor air temperature = 35℃, fouling factor = 0.018m2K/kW
2.IDC2 Condition: entering/leaving water temperature=30/20℃, outdoor air temperature = 45℃, fouling factor = 0.018m2K/kW
3. Allowable voltage fluctuations ±10%
4. All 30XFZ with R1234ze(E) refrigerant is AHRI-certified

*Also available from Carrier's manufacturing facility in India.

NOTES

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