



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

**APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0817

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Carrier Corporation

Manufacturer's Technical Representative: Anthony Molavi

Mailing Address: 9701 Old Statesville Road, Raleigh, NC 28269

Telephone: (704) 921-3976 Email: Anthony.Molavi@Carrier.com

Product Information

Product Name: AquaSnap Air-Cooled Chiller

Product Model Number(s): 09RC_020 to 09RC_230, 38RC_025 to 38RC_150, 30RC_010 to 30RC_0252

Product Category: Chillers

Product Sub-Category: Chillers - Air Cooled

General Description: 09RC Remote Condensing Unit, 38RC Condensing Unit, 30RC Air-Cooled Chiller

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Katie Braman

Mailing Address: 36 SW Wall St, Bend, OR 97702

Telephone: (541) 241-2310 Email: katie@go-pre.com

Title: Principal & Program Manager





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

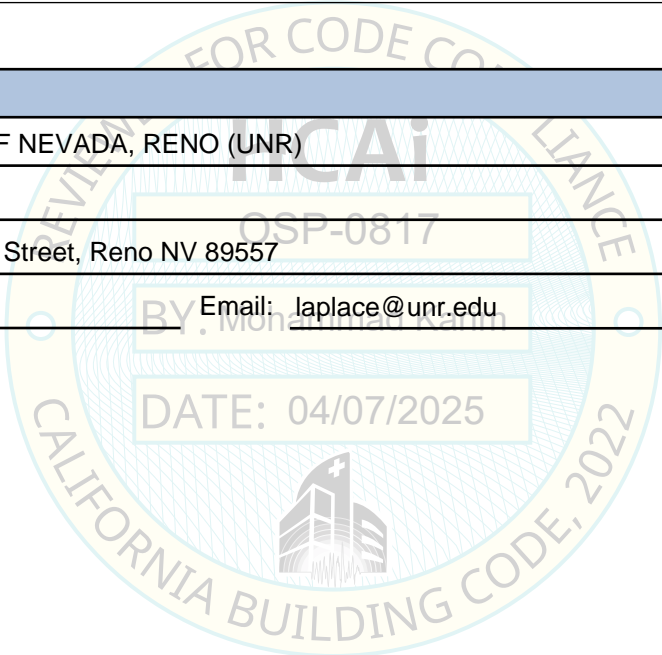
Company Name: PRE COMPLIANCE
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 36 SW Wall Street, Bend, OR 97702
Telephone: (415) 635-8461 Email: Andy@go-pre.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: UNIVERSITY OF NEVADA, RENO (UNR)
Contact Person: Patrick Laplace
Mailing Address: 1664 N. Virginia Street, Reno NV 89557
Telephone: (775) 784-6937 Email: laplace@unr.edu





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OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 0.83 at z/h=0, 1.33 at z/h=1

SDS (Design spectral response acceleration at short period, g) = 1.85

a_p (Amplification factor) = 1.0

R_p (Response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

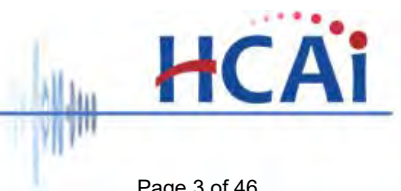
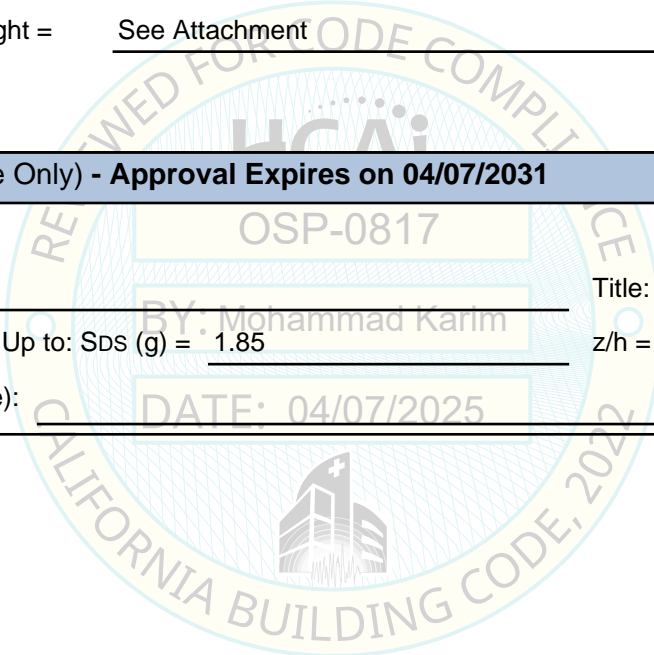
HCAI Approval (For Office Use Only) - Approval Expires on 04/07/2031

Date: 4/7/2025

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.85 z/h = 1

Condition of Approval (if applicable): DATE: 04/07/2025





Pre No. CC231342-01-R2

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

CBC 2022

TABLE 1

Mounting Configuration: Base Mounted - Rigid

Construction Summary

Carbon Steel

Options Summary

09RC AquaSnap 20-230 tons, 38RC AquaSnap 25-150 tons, 30RC AquaSnap 10-250 tons

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Nominal Tonnage	UUT
		D	W	H			
09RC AquaSnap® Remote Condensing Unit 20 to 230 Tons	09RCS_020	89	47	89	860	20 tons	Extrap.
	09RCS_030	89	47	89	1,020	30 tons	Extrap.
	09RCS_035	89	98	89	1,322	35 tons	Extrap.
	09RCM_050	89	98	89	1,594	50 tons	Extrap.
	09RCM_060	89	98	89	1,812	60 tons	Extrap.
	09RC_080	105	88	99	2,592	80 tons	Extrap.
	09RC_095	152	88	99	3,417	95 tons	Extrap.
	09RC_115	152	88	99	3,566	110 tons	Extrap.
	09RC_130	199	88	99	4,437	130 tons	Extrap.
	09RC_145	199	88	99	4,596	145 tons	Extrap.
	09RC_160	247	88	99	5,500	160 tons	Extrap.
	09RC_170	247	88	99	5,634	170 tons	Extrap.
	09RC_185	294	88	99	6,453	185 tons	Extrap.
	09RC_200	294	88	99	6,587	200 tons	Extrap.
09RC_230	294	88	99	7,654	230 tons	Extrap.	
38RC AquaSnap® Condensing Unit 25 to 150 Tons	38RCS(D)025	89	47	67	1,413	25 tons	Extrap.
	38RCS(D)027	89	47	80	1,645	27 tons	Extrap.
	38RCS(D)030	89	47	80	1,651	30 tons	Extrap.
	38RCS(D)040	89	98	80	2,835	40 tons	Extrap.
	38RCS(D)050	89	98	80	2,863	50 tons	Extrap.
	38RCD060	89	98	80	2,978	60 tons	Extrap.
	38RC070	105	88	99	4,284	70 tons	Extrap.
	38RC080	153	88	99	5,751	80 tons	Extrap.
	38RC090	153	88	99	5,821	90 tons	Extrap.
	38RC100	153	88	99	5,970	100 tons	Extrap.
	38RC110	199	88	99	7,811	110 tons	Extrap.
	38RC130	199	88	99	7,954	130 tons	Extrap.
	38RC150	199	88	99	7,980	150 tons	Extrap.

Notes: 09RC chillers are depopulated versions of the 30RC units (minus compressor and evaporator). 38RC chillers are depopulated versions of the 30RC units (minus the evaporator).

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 1 Mounting Configuration: Base Mounted - Rigid

Construction Summary

Carbon Steel

Options Summary

09RC AquaSnap 20-230 tons, 38RC AquaSnap 25-150 tons, 30RC AquaSnap 10-250 tons

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Nominal Tonnage	UUT
		D	W	H			
30RC AquaSnap® Air-Cooled Chillers 10 to 250 Tons	30RCA010561-1---0	67	46	66	1,015	10 tons	1,4
	30RC_015	67	46	66	1,366	15 tons	Interp.
	30RC_020	67	46	66	1,702	20 tons	Interp.
	30RC_025	89	46	66	1,860	25 tons	Interp.
	30RC_030	89	46	78	1,892	30 tons	Interp.
	30RC_035	89	46	78	3,141	35 tons	Interp.
	30RC_040	89	96	66	3,167	40 tons	Interp.
	30RC_045	89	96	66	3,283	45 tons	Interp.
	30RC_050	89	96	78	3,304	50 tons	Interp.
	30RC_055	89	96	78	3,409	55 tons	Interp.
	30RC_060	89	96	78	3,512	60 tons	Interp.
	30RC_065	108	90	99	4,784	65 tons	Interp.
	30RCA0676S6FFJ755	108	90	99	4,784	65 tons	2,5
	30RC_070	108	90	99	4,997	70 tons	Interp.
	30RC_072	108	90	99	4,997	70 tons	Interp.
	30RC_080C	108	90	99	5,997	80 tons	Interp.
	30RC_080	153	90	99	6,151	80 tons	Interp.
	30RC_082	105	90	99	5,211	80 tons	Interp.
	30RC_090	153	90	99	6,156	90 tons	Interp.
	30RC_092C	105	90	99	4,336	90 tons	Interp.
	30RC_092	152	90	99	6,151	90 tons	Interp.
	30RC_100	153	90	99	6,156	100 tons	Interp.
	30RC_102C	105	90	99	4,439	100 tons	Interp.
	30RC_102	152	90	99	6,156	100 tons	Interp.
	30RC_110	153	90	99	6,715	110 tons	Interp.
30RC_112	152	90	99	6,715	110 tons	Interp.	
30RC_120C	153	90	99	5,799	120 tons	Interp.	
30RC_120	199	90	99	7,557	120 tons	Interp.	
30RC_122C	152	90	99	5,799	120 tons	Interp.	
30RC_122	199	90	99	7,557	120 tons	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

CBC 2022

TABLE 1

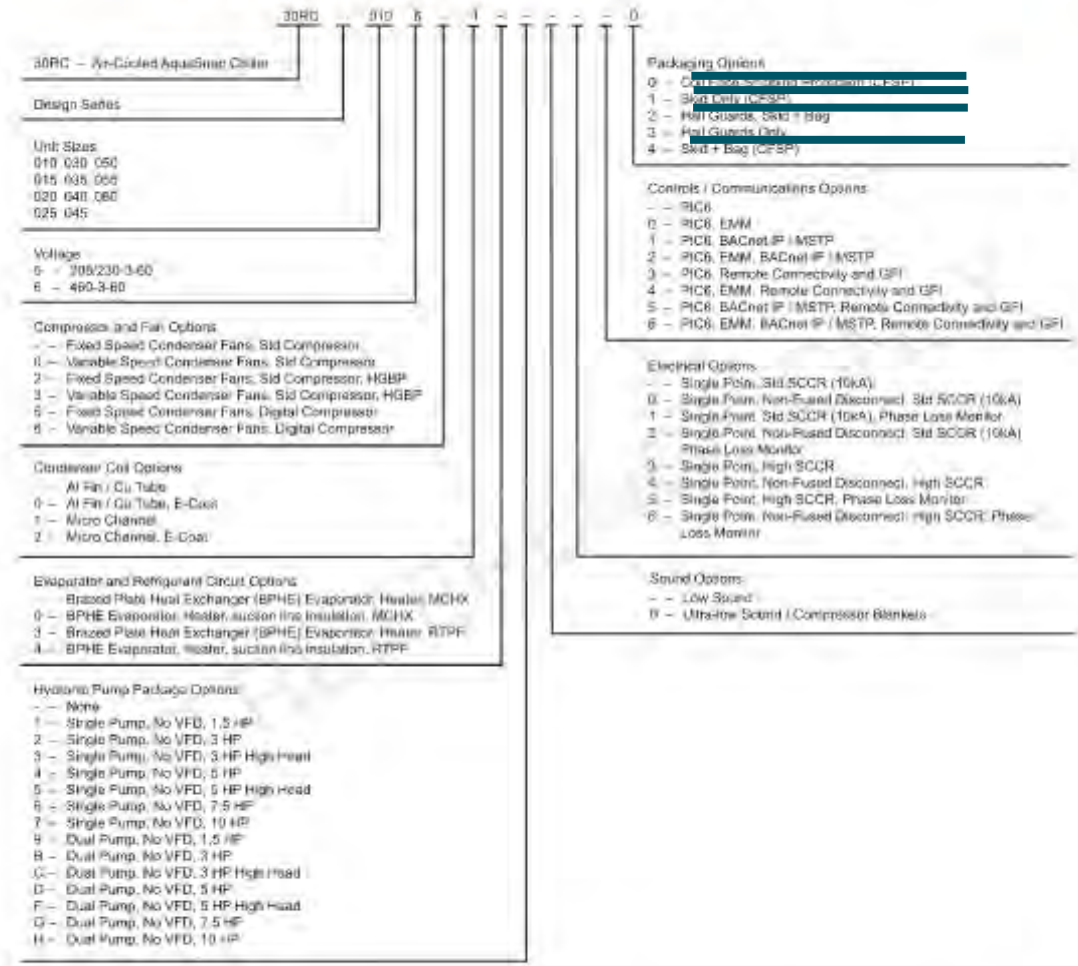
Mounting Configuration: Base Mounted - Rigid

30RC 10 - 60 Nominal Tons

Model number nomenclature



AQUASNAP® CHILLER MODEL NUMBER DESIGNATION, 30RC010-060



LEGEND
EMM – Energy Management Module
GFI – Ground Fault Interrupting
MCHX – Microchannel Heat Exchanger
SCCR – Short Circuit Current Rating
VFD – Variable Frequency Drive

Quality Assurance
(ISO 9001), 2015-certified processes



Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 1

Mounting Configuration: Base Mounted - Rigid

30RC 60 - 250 Nominal Tons

Model number nomenclature



Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Example:	3	0	R	C	-	1	1	0	6	S	-	1	-	-	-	-	K

Model
 30RC — Air-Cooled AquaSnap® Chiller

— Design Series

Nominal Capacity

R-410A Units	R-32 Units
080 090 120	087 082 122 162 232
070 100 130	072 102 132 172 242
060 110 140	062 112 152 202

Voltage Options

- 1 — 575-3-50
- 2 — 380-3-50
- 3 — 208/230-3-40
- 5 — 480-3-40

Tier

- S — Standard
- C — Certified

Compressor Fan and Bypass Options

- Fixed Speed Condenser Fans
- 0 — Variable Speed Condenser Fans
- 2 — Fixed Speed Condenser Fans, HGBP with BPHE Evap
- 3 — Variable Speed Condenser Fans, HGBP with BPHE Evap
- 6 — Fixed Speed Condenser Fans, HGBP with DX Evap
- 8 — Variable Speed Condenser Fans, HGBP with DX Evap
- H — Variable Speed Condenser Fans, Low LWT Fluid, MCHX Coils

Condenser Coil Options

- Aluminum Fin / Copper Tube
- 0 — Aluminum Fin / Copper Tube, E-Coat
- 1 — Microchannel
- 2 — Microchannel, E-coat
- 3 — Aluminum Fin / Copper Tube, Chicago Relief Valve
- 4 — Aluminum Fin / Copper Tube, E-coat, Chicago Relief Valve
- 5 — Microchannel, Chicago Relief Valve
- 6 — Microchannel, E-coat, Chicago Relief Valve
- 7 — Aluminum Fin/Copper Tube, Desuperheater
- 8 — Aluminum Fin/Copper Tube, E-Coat, Desuperheater
- 9 — Microchannel, Desuperheater
- B — Microchannel, E-coat, Desuperheater
- C — Aluminum Fin/Copper Tube, Chicago Relief Valve, Desuperheater
- D — Aluminum Fin/Copper Tube, E-Coat, Chicago Relief Valve, Desuperheater
- E — Microchannel, Chicago Relief Valve, Desuperheater
- G — Microchannel, E-Coat, Chicago Relief Valve, Desuperheater

Evaporator and Refrigerant Circuit Options

- BPHE Evaporator, No Heater
- 0 — BPHE Evaporator, No Heater, Suction Line Insulation
- 1 — BPHE Evaporator, No Heater, Suction Service Valve
- 2 — BPHE Evaporator, No Heater, Suction Line Insulation, Suction Service Valve
- 3 — BPHE Evaporator, Heater
- 4 — BPHE Evaporator, Heater, Suction Line Insulation
- 5 — BPHE Evaporator, Heater, Suction Service Valve
- 6 — BPHE Evaporator, Heater, Suction Line Insulation, Suction Service Valve
- 8 — DX Evaporator, No Heater
- 9 — DX Evaporator, No Heater, Suction Line Insulation
- B — DX Evaporator, No Heater, Suction Service Valve
- C — DX Evaporator, No Heater, Suction Line Insulation, Suction Service Valve
- D — DX Evaporator, Heater
- F — DX Evaporator, Heater, Suction Line Insulation
- G — DX Evaporator, Heater, Suction Service Valve
- H — DX Evaporator, Heater, Suction Line Insulation, Suction Service Valve

Security/Low Sound Options

- K — CFSP
- 0 — CFSP, Low Sound
- 2 — CFSP, Coil Trim Panels
- 3 — CFSP, Low Sound, Coil Trim Panels
- 5 — CFSP, Coil Trim Panels, Security Grilles
- 6 — CFSP, Low Sound, Coil Trim Panels, Security Grilles
- 8 — Coil Trim Panels, Security Grilles, Full Guard (End)
- 9 — Low Sound, Coil Trim Panels, Security Grilles, Half Guard (End)
- C — Full Half Guard
- D — Low Sound, Full Half Guard
- G — Coil Trim Panels, Skid + Bag
- H — Low Sound, Coil Trim Panels, Skid + Bag

Controls/Communication Options

- PIC6, Remote Connectivity (RC), BACnet IP
- 0 — PIC6, RC, EMM, BACnet IP
- 1 — PIC6, RC, EMM, GFI, BACnet IP
- 2 — PIC6, RC, GFI, BACnet IP
- 3 — PIC6, RC, BACnet IP, LEI Lowworks Transition (TL)
- 4 — PIC6, RC, EMM, BACnet IP, LEI Lowworks TL
- 5 — PIC6, RC, EMM, GFI, BACnet IP, LEI Lowworks TL
- 6 — PIC6, RC, GFI, BACnet IP, LEI Lowworks TL

Electrical Options

- Single Point, Std SCCR
- 0 — Single Point, Non-Fused Disconnect (NFD), Std SCCR
- 1 — Dual Point, Std SCCR
- 2 — Dual Point, Non-Fused Disconnect, Std SCCR
- 4 — Single Point, Non-Fused Disconnect, High SCCR
- 6 — Dual Point, Non-Fused Disconnect, High SCCR
- 7 — Single Point, Std SCCR, 7" Display
- 8 — Single Point, NFD, Std SCCR, 7" Display
- 9 — Dual Point, Std SCCR, 7" Display
- B — Dual Point, NFD, Std SCCR, 7" Display
- D — Single Point, NFD, High SCCR, 7" Display
- G — Dual Point, NFD, High SCCR, 7" Display

Hydraulic Pump Package Options

BPHE Evaporator

- None
- 0 — Single Pump, 0 hp
- 1 — Single Pump, 7.5 hp
- 2 — Single Pump, 10 hp
- 3 — Single Pump, 15 hp
- 4 — Single Pump, 20 hp
- 5 — Dual Pump, 5 hp
- 6 — Dual Pump, 7.5 hp
- 7 — Dual Pump, 10 hp
- 8 — Dual Pump, 15 hp
- 9 — Dual Pump, 20 hp
- B — Dual VFD Pump, 5 hp
- C — Dual VFD Pump, 7.5 hp
- D — Dual VFD Pump, 10 hp
- F — Dual VFD Pump, 15 hp
- G — Dual VFD Pump, 20 hp

DX Evaporator

- J — None
- K — Single Pump, 5 hp
- L — Single Pump, 7.5 hp
- M — Single Pump, 10 hp
- N — Single Pump, 15 hp
- P — Single Pump, 20 hp
- Q — Dual Pump, 5 hp
- R — Dual Pump, 7.5 hp
- S — Dual Pump, 10 hp
- T — Dual Pump, 15 hp
- V — Dual VFD Pump, 5 hp
- W — Dual VFD Pump, 7.5 hp
- X — Dual VFD Pump, 10 hp
- Y — Dual VFD Pump, 15 hp

NOTE: When an Engineering to Order (ETO) unit is specified, digits 12 through 17 will vary to match the item ordered and will not follow the standard nomenclature above.

LEGEND

- BPHE — Brazed Plate Heat Exchanger
- CFSP — Coil Face Shipping Protection
- DX — Direct Expansion
- EMM — Energy Management Module
- GFI — Ground Fault Interrupter
- LEI — Local Equipment Interface
- LWT — Leaving-Water Temperature
- MCHX — Microchannel Heat Exchanger
- RTPF — Round Tube, Plate Fin
- SCCR — Short-Circuit Current Rating
- VFD — Variable Frequency Drive

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

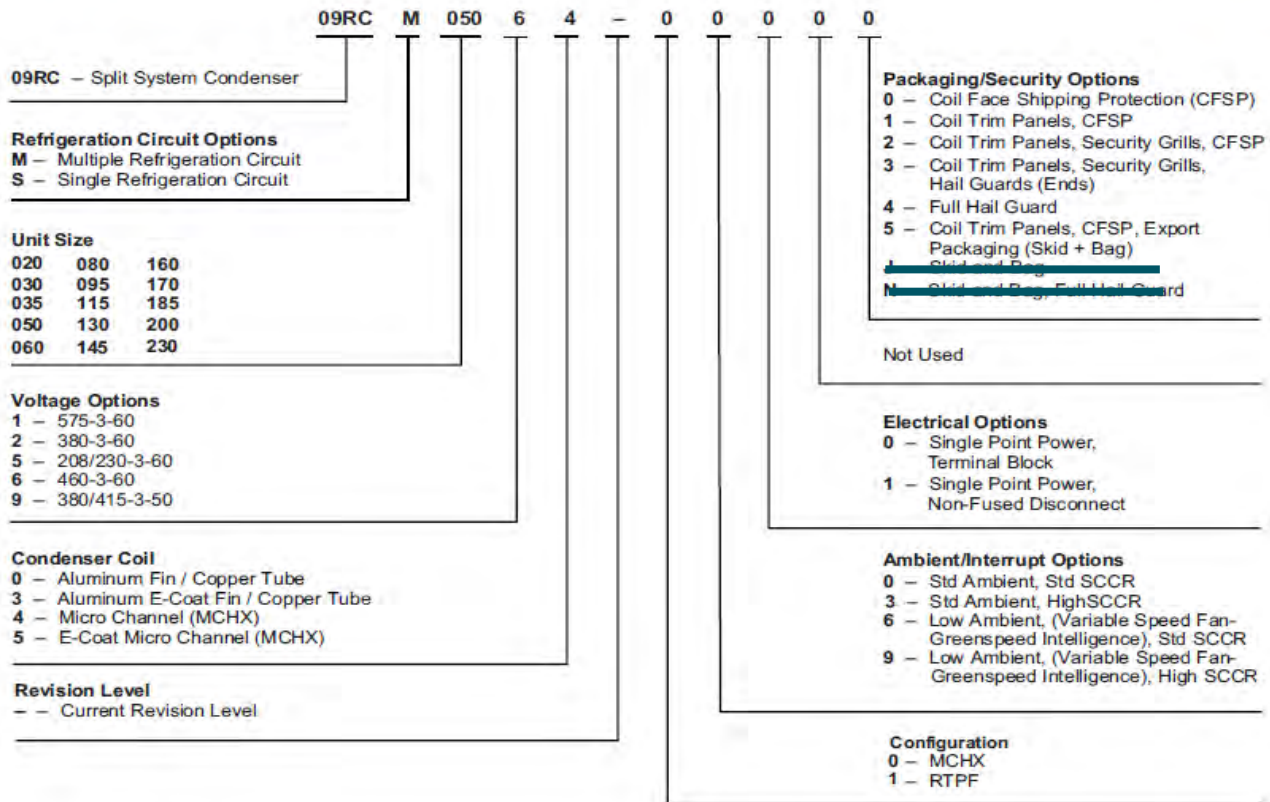
CBC 2022

TABLE 1

Mounting Configuration: Base Mounted - Rigid

09RC AquaSnap® Remote Condensing Unit 20 - 230 Tons

Model number nomenclature



LEGEND
MCHX — Microchannel Heat Exchanger
RTPF — Round Tube Plate Fin

Quality Assurance

ISO 9001: 2015-certified processes

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

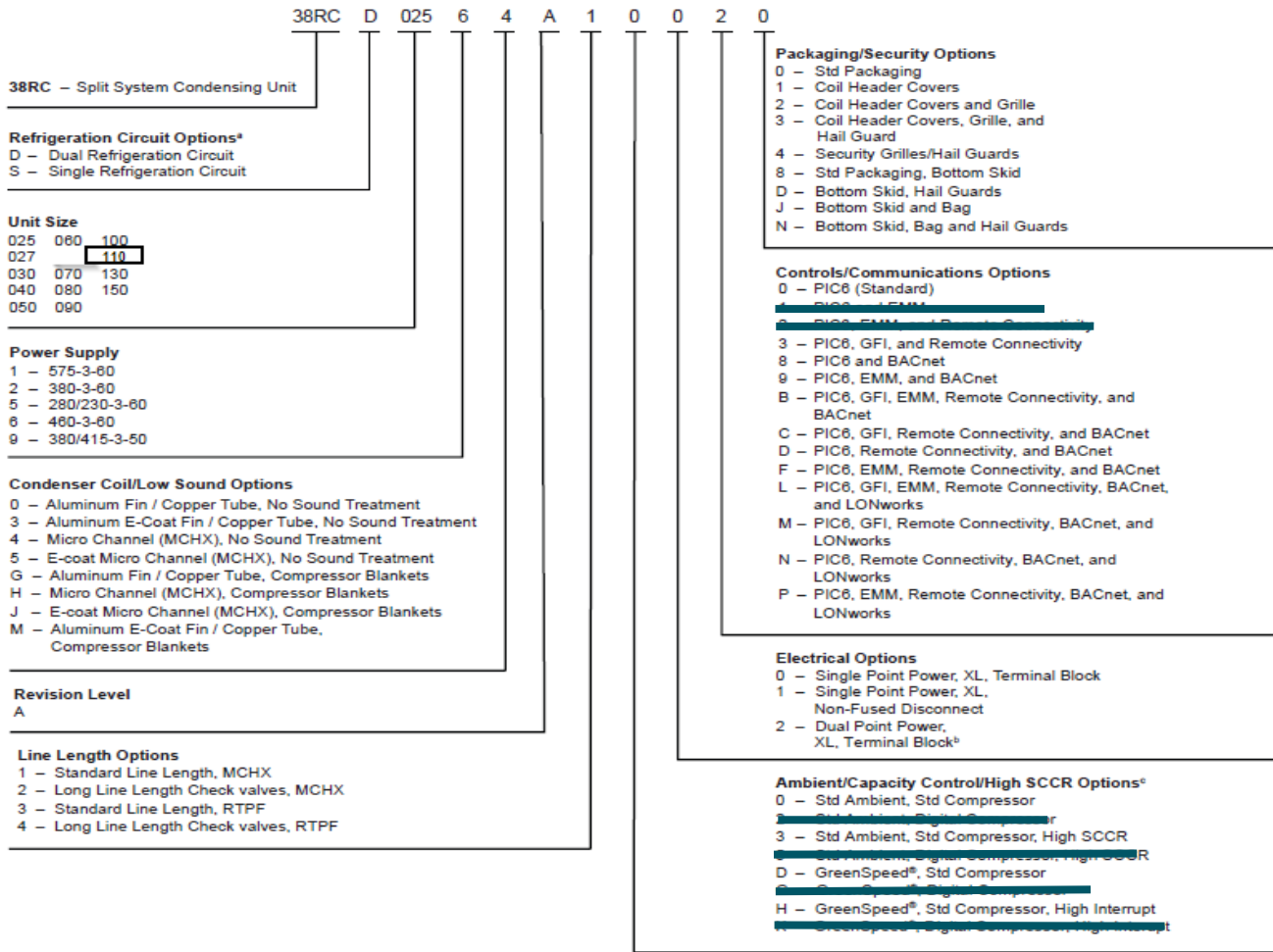
Building Codes

CBC 2022

TABLE 1

Mounting Configuration: Base Mounted - Rigid

38RC AquaSnap® Condensing Unit 25 - 150 Tons



Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 2

Compressors

Component (Manufacturer)	Model	Description	Weight lbs.	Notes	UUT
Compressors-Scroll Hermetic (Copeland)	GC30JL110	4.25 tons, 575V	76.6	Carbon Steel Housing	Extrap.
	GC30JK120	4.25 tons, 460V	76.6		Extrap.
	GC30JC111	4.25 tons, 380V	76.6		Extrap.
	GC30JN113	4.25 tons, 200-230V	76.6		1
	GC30NL110	6 tons, 575V	88.9		Interp.
	GC30NK120	6 tons, 460V	88.9		Interp.
	GC30NC111	6 tons, 380V	88.9		Interp.
	GC30NN113	6 tons, 200-230V	88.9		Interp.
	GC30NL130	6.3 tons, 575V	90.2		Interp.
	GC30JK133	6.3 tons, 460V	90.2		Interp.
	GC30NC131	6.3 tons, 380V	90.2		Interp.
	GC30NV132	6.3 tons, 200-230V	90.2		1
Compressors-Scroll Hermetic (Danfoss)	GC02PL001	15 tons, 575V	158	Carbon Steel Housing	Extrap.
	GC02PT003	15 tons, 460V	158		Extrap.
	GC02PT001	15 tons, 380V	158		Extrap.
	GC02PN001	15 tons, 200 / 230V	158		Extrap.
	GC02XL001	17 tons, 575V	158		Extrap.
	GC02PT004	17 tons, 460V	158		2
	GC02PT002	17 tons, 380V	158		Interp.
	GC02PN002	17 tons, 200 / 230V	158		Interp.
	GC02XL001	20 tons, 575V	251		Interp.
	GC02XT003	20 tons, 460V	251		Interp.
	GC02XT001	20 tons, 380V	251		Interp.
	GC02XN001	20 tons, 200 / 230V	251		Interp.
	GC02XL002	20 tons, 575V	247		Interp.
	GC02XT004	20 tons, 460V	247		Interp.
GC02XT002	20 tons, 380V	247	Interp.		
GC02XN002	20 tons, 200 / 230V	247	Interp.		

Notes: CBC 2022 §1705A.14.3.1 exception No. 5 can be applied for compressors. Per the code, "Exempt subcomponents shall be permitted to be substituted without testing, provided that the substituted subcomponent relative to the certified subcomponent had: 1. Similar configuration with equivalent function. 2. Supports and attachments of similar configuration with equivalent strength and stiffness. 3. Same attachment location. 4. Changes in dimensions, center of gravity and mass, of not more than 10 percent of the certified subcomponent and still meets Exceptions 5, 6, or 7. 5. Manufacturing process with ISO 9001 certification.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes
CBC 2022

TABLE 2 Compressors

Component (Manufacturer)	Model	Description	Weight lbs.	Notes	UUT
Compressors-Scroll Hermetic (Danfoss)	GC02YL001	25 tons, 575V	258	Carbon Steel Housing	Interp.
	GC02YT003	25 tons, 460V	258		Interp.
	GC02YT001	25 tons, 380V	258		Interp.
	GC02YN001	25 tons, 200 / 230V	258		Interp.
	GC02YL001	25 Tons, 575V	254		Interp.
	GC02YT004	25 tons, 460V	254		Interp.
	GC02YT002	25 tons, 380V	254		Interp.
	GC02YN002	25 tons, 200 / 230V	254		Interp.
	GC02ZL002	40 tons, 575V	388		Interp.
	GC02ZT004	40 tons, 460V	388		Interp.
	GC02ZT002	40 tons, 380V	388		Interp.
	GC02ZN002	40 tons, 200 / 230V	388		Interp.
	GC02ZL004	44 tons, 575V	388		Interp.
	GC02ZT008	44 tons, 460V	388		3
	GC02ZT006	44 tons, 380V	388		Extrap.
GC02ZN004	44 tons, 200 / 230V	388	Extrap.		
Compressors-Scroll Hermetic Digital (Emerson-Copeland)	GC30NL130	6 Tons, 575V, digital	90.2		Interp.
	GC30JK133	6 Tons, 460V, digital	90.2		4
	GC30NC131	6 Tons, 380V, digital	90.2		Interp.
	GC30NV132	6 Tons, 200/230V, digital	90.2		Interp.
	GC30UL130	9.17 Tons, 575V, digital	107.6		Interp.
	GC30UK133	9.17 Tons, 460V, digital	107.6		Interp.
	GC30UC131	9.17 Tons, 380V, digital	107.6		Interp.
	GC30UV132	9.17 Tons, 200/230V, digital	107.6		Interp.
	GC30VL109	10.75 Tons, 575V, digital	107.6		Interp.
	GC30VK109	10.75 Tons, 460V, digital	107.6		Interp.
GC30VC104	10.75 Tons, 380V, digital	107.6		Interp.	
GC30VV103	10.75 Tons, 200/230V, digital	107.6		Interp.	

Notes: CBC 2022 §1705A.14.3.1 exception No. 5 can be applied for compressors. Per the code, "Exempt subcomponents shall be permitted to be substituted without testing, provided that the substituted subcomponent relative to the certified subcomponent had: 1. Similar configuration with equivalent function. 2. Supports and attachments of similar configuration with equivalent strength and stiffness. 3. Same attachment location. 4. Changes in dimensions, center of gravity and mass, of not more than 10 percent of the certified subcomponent and still meets Exceptions 5, 6, or 7. 5. Manufacturing process with ISO 9001 certification.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes
CBC 2022

TABLE 3 Condenser Coils

Component (Manufacturer)	Model	Description	Weight (lbs.)	UUT
Condenser Coil - Microchannel (Mahle, Danfoss, Sanhua) ¹	38AP404986	57" x 48", 107 tubes out, 28 tubes back, Aluminum Tubing, Aluminum Fins and Headers	75	1
	38AP400948	79" x 48", 107 tubes out, 28 tubes back, Aluminum Tubing, Aluminum Fins and Headers	80	Interp.
	38AP400946	79" x 60", 119 tubes out, 50 tubes back, Aluminum Tubing, Aluminum Fins and Headers	85	Interp.
	38AP400943	79" x 48", 107 tubes out, 28 tubes back, Aluminum Tubing, Aluminum Fins and Headers	80	Interp.
	38AP400947	79" x 60", 119 tubes out, 50 tubes back, Aluminum Tubing, Aluminum Fins and Headers	85	Interp.
	2002632704	82.34 x 52.1, 116 tubes out, 28 tubes back, Aluminum Tubing, Aluminum Fins and Headers	90	2
	2002632749	82.34 x 52.1, 116 tubes out, 28 tubes back, Aluminum Tubing, Aluminum Fins and Headers. E-Coat	90	Interp.
Condenser Coil - Round Tube Plate Fin (Carrier)	38AP405217	55.09 x 48.09, 12CKT, 3 Rows, Copper Tubing and Headers, Aluminum Fins	100	Extrap.
	38AP404057	55.09 x 48.09, 12CKT, 3 Rows, Copper Tubing and Headers, Aluminum Fins	140	Extrap.
	38AP402023	55.09 x 48.09, 12CKT, 3 Rows, Copper Tubing and Headers, Aluminum Fins	140	Extrap.

Notes: ¹Model number represent Carrier internal part number. Each unit was tested with coils from Mahle, Danfoss, and Sanhua.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes
CBC 2022

TABLE 3 Condenser Coils

Component (Manufacturer)	Model	Description	Weight (lbs.)	UUT
Condenser Coil - Round Tube Plate Fin (Carrier)	38AP406025	55.09 x 48.09,12CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	140	Extrap.
	38AP403697	77.09 x 60,15CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	175	Extrap.
	38AP403916	77.09 x 60,15CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	175	Extrap.
	38AP403694	77.09 x 60,15CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	175	Extrap.
	2003667558	82.5" x 52",9 CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	250	3
	2003667559	82.5" x 52",9 CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	250	Interp.
	2003667560	82.5" x 52",9 CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	250	3
	2003667561	82.5" x 52",9 CKT,3 Rows,Copper Tubing and Headers, Aluminum Fins	250	Interp.

Notes: ¹Model number represent Carrier internal part number. Each unit was tested with coils from Mahle, Danfoss, and Sanhua.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

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TABLE 5 Fan VFDs

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Fan VFDs (Danfoss)	HK30WA462	380, 460 V, Steel, Al, PC/ABS cover	9.9	7	2
	HK30WA467	575 V, Steel, Al, PC/ABS cover	14.5	5	Interp.
	HK30WA395	208-230 V, Steel, Al, PC/ABS cover	17.4	7	Interp.
	HK30WA463	380, 460 V, Steel, Al, PC/ABS cover	17.4	11	Interp.
	HR46JZ014	380, 460 V, Steel, Al, PC/ABS cover	17.4	15	Interp.
	HK30WA396	208-230 V, Steel, Al, PC/ABS cover	20.9	11	Interp.
	HR46JZ017	380, 460 V, Steel, Al, PC/ABS cover	20.9	18	Interp.
	HR46JZ019	380, 460 V, Steel, Al, PC/ABS cover	20.9	22	Interp.
	HK30WA469	380, 460 V, Steel, Al, PC/ABS cover	25.3	11	Interp.
	HR46JZ015	575 V, Steel, Al, PC/ABS cover	26.5	15	Interp.
	HR46ZP001	208-230 V, Steel, Al, PC/ABS cover	31	3	1
	HR46ZP002	380, 460 V, Steel, Al, PC/ABS cover	31	3	Interp.
	HR46ZP007	208-230 V, Steel, Al, PC/ABS cover	31	3.7	Interp.
	HR46ZP003	575 V, Steel, Al, PC/ABS cover	31	4	Interp.
	HR46ZP008	380-460 V, Steel, Al, PC/ABS cover	31	4	Interp.
	HR46ZR003	575 V, Steel, Al, PC/ABS cover	31	7.5	Interp.
	HR46ZR001	380-460 V, Steel, Al, PC/ABS cover	31	7.5	Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

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TABLE 5 **Fan VFDs**

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Fan VFDs (Danfoss)	HR46ZQ002	575 V, Steel, Al, PC/ABS cover	31	5.5	Interp.
	HR46ZQ001	208-230 V, Steel, Al, PC/ABS cover	51	7.5	Interp.
	HR46ZS005	380 V, Steel, Al, PC/ABS cover	51	11	Interp.
	HR46ZS001	208-230 V, Steel, Al, PC/ABS cover	51	11	Interp.
	HR46JZ013	208-230 V, Steel, Al, PC/ABS cover	54	15	Interp.
	HR46JZ016	208-230 V, Steel, Al, PC/ABS cover	54	18	Interp.
	HR46JZ018	575 V, Steel, Al, PC/ABS cover	54	18	Interp.
	HR46JZ020	575 V, Steel, Al, PC/ABS cover	54	22	Interp.
	HR46JZ021	380, 460 V, Steel, Al, PC/ABS cover	54	30	3
	HR46JZ022	575 V, Steel, Al, PC/ABS cover	54	30	Interp.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 6 Cooler

Component (Manufacturer)	Model	Description	Weight lbs.	Notes	UUT
Cooler - Brazed Plate Heat Exchanger (Alfa Laval)	LL01LV010	0.085 cubic feet, Stainless Steel	42.1		1
	LL01LV015	0.109 cubic feet, Stainless Steel	51.4		Interp.
	LL01LV020	0.152 cubic feet, Stainless Steel	68.4		Interp.
	LL01LV025	0.186 cubic feet, Stainless Steel	82.4		Interp.
	LL01LV030	0.214 cubic feet, Stainless Steel	93.2		Interp.
	LL01LV035	0.314 cubic feet, Stainless Steel	140.2		Interp.
	LL01LV040	0.381 cubic feet, Stainless Steel	159.7		Interp.
	LL01LV045	0.432 cubic feet, Stainless Steel	174.2		Interp.
	LL01LV050	0.466 cubic feet, Stainless Steel	184		Interp.
	LL01LV055	0.5 cubic feet, Stainless Steel	193.7		Interp.
	LL01LV059	0.517 cubic feet, Stainless Steel	198.5		Interp.
	LL01LV060	0.526 cubic feet, Stainless Steel	134.3		Interp.
	LL01LV070	0.611 cubic feet, Stainless Steel	153.6		Interp.
	LL01LV080	0.713 cubic feet, Stainless Steel	176.2		Interp.
	LL01LV100	0.87 cubic feet, Stainless Steel	110		Interp.
	LL01LV110	1.147 cubic feet, Stainless Steel	137.7		Interp.
	LL01LV130	1.305 cubic feet, Stainless Steel	153.5		Interp.
	LL01LV150	1.503 cubic feet, Stainless Steel	173.2		Interp.
	LL01LV180	1.661 cubic feet, Stainless Steel	189		Interp.
	LL01LV200	2.254 cubic feet, Stainless Steel	248.3		Interp.
LL01LV230	2.492 cubic feet, Stainless Steel	272		3	
Desuperheater Brazed Plate Heat Exchanger (Alfa Laval)	LL01LB029	0.06 cubic feet, Stainless Steel	49.9		2
	LL01LB028	0.13 cubic feet, Stainless Steel	68.3		Interp.
	LL01LB025	0.22 cubic feet, Stainless Steel	92.8		Interp.
	LL01LB027	0.30 cubic feet, Stainless Steel	117.6		3
Cooler - Shell and Tube (Carrier)	00PSN800097401A	30.6 gal, Copper Tubes and Carbon Steel Shell	856		2

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP506327	208/230, 460V, Carbon Steel	165	1.5	1
	38AP506301	380V, Carbon Steel	165	1.5	Interp.
	38AP506302	575V, Carbon Steel	165	1.5	Interp.
	38AP502549	208/230, 460V, Carbon Steel	165	1.5	Interp.
	38AP502553	380V, Carbon Steel	165	1.5	Interp.
	38AP502554	575V, Carbon Steel	165	1.5	Interp.
	38AP506303	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP506304	380V, Carbon Steel	211	3	Interp.
	38AP506305	575V, Carbon Steel	211	3	Interp.
	38AP506306	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP506307	380V, Carbon Steel	211	3	Interp.
	38AP506308	575V, Carbon Steel	211	3	Interp.
	38AP506309	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP506310	380V, Carbon Steel	211	3	Interp.
	38AP506311	575V, Carbon Steel	211	3	Interp.
	38AP502555	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP502556	380V, Carbon Steel	211	3	Interp.
	38AP502557	575V, Carbon Steel	211	3	Interp.
	38AP502558	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP502559	380V, Carbon Steel	211	3	Interp.
	38AP502560	575V, Carbon Steel	211	3	Interp.
	38AP502561	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP502562	380V, Carbon Steel	211	3	Interp.
	38AP502563	575V, Carbon Steel	211	3	Interp.
	38AP502756	208/230, 460V, Carbon Steel	211	3	Interp.
	38AP502752	380V, Carbon Steel	211	3	Interp.
	38AP502750	575V, Carbon Steel	211	3	Interp.
	38AP503619	575V, Carbon Steel	268	3	Interp.
	38AP503620	380V, Carbon Steel	268	3	Interp.
	38AP503621	208/230V, Carbon Steel	268	3	Interp.
	38AP503646	460V, Carbon Steel	268	3	Interp.
	38AP502618	208/230, 460V, Carbon Steel	268	3	Interp.
38AP502617	380V, Carbon Steel	421	3	Interp.	
38AP502616	575V, Carbon Steel	421	3	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP503637	575V, Carbon Steel	479	3	Interp.
	38AP503638	380V, Carbon Steel	479	3	Interp.
	38AP503639	208/230V, Carbon Steel	479	3	Interp.
	38AP503651	460V, Carbon Steel	479	3	Interp.
	38AP506312	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP506313	380V, Carbon Steel	226	5	Interp.
	38AP506314	575V, Carbon Steel	226	5	Interp.
	38AP506321	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP506322	380V, Carbon Steel	226	5	Interp.
	38AP506323	575V, Carbon Steel	226	5	Interp.
	38AP506324	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP506325	380V, Carbon Steel	226	5	Interp.
	38AP506326	575V, Carbon Steel	226	5	Interp.
	38AP502564	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP502565	380V, Carbon Steel	226	5	Interp.
	38AP502566	575V, Carbon Steel	226	5	Interp.
	38AP502573	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP502574	380V, Carbon Steel	226	5	Interp.
	38AP502575	575V, Carbon Steel	226	5	Interp.
	38AP502576	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP502577	380V, Carbon Steel	226	5	Interp.
	38AP502578	575V, Carbon Steel	226	5	Interp.
	38AP502762	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP502760	380V, Carbon Steel	226	5	Interp.
	38AP502759	575V, Carbon Steel	226	5	Interp.
	38AP503301	575V, Carbon Steel	283	5	Interp.
	38AP503408	380V, Carbon Steel	283	5	Interp.
	38AP503409	208/230V, Carbon Steel	283	5	Interp.
	38AP503416	460V, Carbon Steel	283	5	Interp.
	38AP503622	575V, Carbon Steel	283	5	Interp.
	38AP503623	380V, Carbon Steel	283	5	Interp.
	38AP503624	208/230V, Carbon Steel	283	5	Interp.
38AP503647	460V, Carbon Steel	283	5	Interp.	
38AP503702	208/230, 460V, Carbon Steel	226	5	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$

$I_p = 1.5$

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP503701	380V, Carbon Steel	226	5	Interp.
	38AP503700	575V, Carbon Steel	226	5	Interp.
	38AP503712	575V, Carbon Steel	283	5	Interp.
	38AP503713	380V, Carbon Steel	283	5	Interp.
	38AP503714	208/230V, Carbon Steel	283	5	Interp.
	38AP503715	460V, Carbon Steel	283	5	Interp.
	38AP503730	208/230, 460V, Carbon Steel	226	5	Interp.
	38AP503729	380V, Carbon Steel	226	5	Interp.
	38AP503728	575V, Carbon Steel	226	5	Interp.
	38AP503740	575V, Carbon Steel	283	5	Interp.
	38AP503741	380V, Carbon Steel	283	5	Interp.
	38AP503742	208/230V, Carbon Steel	283	5	Interp.
	38AP503743	460V, Carbon Steel	283	5	Interp.
	38AP502615	208/230, 460V, Carbon Steel	451	5	Interp.
	38AP502614	380V, Carbon Steel	451	5	Interp.
	38AP502613	575V, Carbon Steel	451	5	Interp.
	38AP503438	575V, Carbon Steel	509	5	Interp.
	38AP503439	380V, Carbon Steel	509	5	Interp.
	38AP503440	208/230V, Carbon Steel	509	5	Interp.
	38AP503441	460V, Carbon Steel	509	5	Interp.
	38AP503434	575V, Carbon Steel	509	5	Interp.
	38AP503435	380V, Carbon Steel	509	5	Interp.
	38AP503436	208/230V, Carbon Steel	509	5	Interp.
	38AP503452	460V, Carbon Steel	509	5	Interp.
	38AP503442	575V, Carbon Steel	509	5	Interp.
	38AP503443	380V, Carbon Steel	509	5	Interp.
	38AP503444	208/230V, Carbon Steel	509	5	Interp.
	38AP503445	460V, Carbon Steel	509	5	Interp.
	00PSN500727004A	208-230V, Carbon Steel	307	5	Interp.
	00PSN500727004A	460V, Carbon Steel	307	5	Interp.
	00PSN500727005A	380V, Carbon Steel	307	5	Interp.
	00PSN500727006A	575V, Carbon Steel	307	5	Interp.
	00PSN500727031A	208-230V, Carbon Steel	558	5	Interp.
	00PSN500727031A	460V, Carbon Steel	558	5	Interp.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	00PSN500727032A	380V, Carbon Steel	558	5	Interp.
	00PSN500727033A	575V, Carbon Steel	558	5	Interp.
	00PSN500727100A	208-230V, Carbon Steel	620	5	Interp.
	00PSN500727101A	460V, Carbon Steel	620	5	Interp.
	00PSN500727098A	380V, Carbon Steel	620	5	Interp.
	00PSN500727099A	575V, Carbon Steel	620	5	Interp.
	00PSN500727180A	208-230V, Carbon Steel	620	5	Interp.
	00PSN500727181A	460V, Carbon Steel	620	5	Interp.
	00PSN500727178A	380V, Carbon Steel	620	5	Interp.
	00PSN500727179A	575V, Carbon Steel	620	5	Interp.
	00PSN500727188A	208-230V, Carbon Steel	620	5	Interp.
	00PSN500727189A	460V, Carbon Steel	620	5	Interp.
	00PSN500727186A	380V, Carbon Steel	620	5	Interp.
	00PSN500727187A	575V, Carbon Steel	620	5	Interp.
	38AP506315	208/230, 460V, Carbon Steel	264	7.5	Interp.
	38AP506316	380, Carbon Steel	264	7.5	Interp.
	38AP506317	575, Carbon Steel	264	7.5	Interp.
	38AP502567	208/230, 460V, Carbon Steel	264	7.5	Interp.
	38AP502568	380V, Carbon Steel	264	7.5	Interp.
	38AP502569	575V, Carbon Steel	264	7.5	Interp.
	38AP502704	380V, Carbon Steel	264	7.5	Interp.
	38AP502703	575V, Carbon Steel	264	7.5	Interp.
	38AP502706	208/230, 460V, Carbon Steel	264	7.5	Interp.
	38AP503417	575V, Carbon Steel	321	7.5	Interp.
	38AP503418	380V, Carbon Steel	321	7.5	Interp.
	38AP503419	208/230V, Carbon Steel	321	7.5	Interp.
	38AP503420	460V, Carbon Steel	321	7.5	Interp.
	38AP503613	575V, Carbon Steel	321	7.5	Interp.
	38AP503614	380V, Carbon Steel	321	7.5	Interp.
	38AP503615	208/230V, Carbon Steel	321	7.5	Interp.
	38AP503648	460V, Carbon Steel	321	7.5	Interp.
	38AP503705	208/230, 460V, Carbon Steel	264	7.5	Interp.
38AP503704	380V, Carbon Steel	264	7.5	Interp.	
38AP503703	575V, Carbon Steel	264	7.5	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP503716	575V, Carbon Steel	321	7.5	Interp.
	38AP503717	380V, Carbon Steel	321	7.5	Interp.
	38AP503718	208/230V, Carbon Steel	321	7.5	Interp.
	38AP503719	460V, Carbon Steel	321	7.5	Interp.
	38AP503733	208/230, 460V, Carbon Steel	264	7.5	Interp.
	38AP503732	380V, Carbon Steel	264	7.5	Interp.
	38AP503731	575V, Carbon Steel	264	7.5	Interp.
	38AP503744	575V, Carbon Steel	321	7.5	Interp.
	38AP503745	380V, Carbon Steel	321	7.5	Interp.
	38AP503746	208/230V, Carbon Steel	321	7.5	Interp.
	38AP503747	460V, Carbon Steel	321	7.5	Interp.
	38AP502611	208/230, 460V, Carbon Steel	527	7.5	Interp.
	38AP502610	380V, Carbon Steel	527	7.5	Interp.
	38AP502607	575V, Carbon Steel	527	7.5	Interp.
	38AP503631	575V, Carbon Steel	585	7.5	Interp.
	38AP503632	380V, Carbon Steel	585	7.5	Interp.
	38AP503633	208/230V, Carbon Steel	585	7.5	Interp.
	38AP503655	460V, Carbon Steel	585	7.5	Interp.
	38AP503470	575V, Carbon Steel	585	7.5	Interp.
	38AP503471	380V, Carbon Steel	585	7.5	Interp.
	38AP503472	208/230V, Carbon Steel	585	7.5	Interp.
	38AP503473	460V, Carbon Steel	585	7.5	Interp.
	38AP503474	575V, Carbon Steel	585	7.5	Interp.
	38AP503475	380V, Carbon Steel	585	7.5	Interp.
	38AP503476	208/230V, Carbon Steel	585	7.5	Interp.
	38AP503494	460V, Carbon Steel	585	7.5	Interp.
	38AP502621	208/230, 460V, Carbon Steel	527	7.5	Interp.
	38AP502620	380V, Carbon Steel	527	7.5	Interp.
	38AP502619	575V, Carbon Steel	527	7.5	Interp.
	38AP503640	575V, Carbon Steel	585	7.5	Interp.
	38AP503641	380V, Carbon Steel	585	7.5	Interp.
	38AP503642	208/230V, Carbon Steel	585	7.5	Interp.
	38AP503654	460V, Carbon Steel	585	7.5	Interp.
00PSN500727007A	208-230V, Carbon Steel	353	7.5	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

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TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	00PSN500727007A	460V, Carbon Steel	353	7.5	Interp.
	00PSN500727008A	380V, Carbon Steel	353	7.5	Interp.
	00PSN500727009A	575V, Carbon Steel	353	7.5	Interp.
	00PSN500727501A	208-230V, Carbon Steel	363	7.5	Interp.
	00PSN500727501A	460V, Carbon Steel	363	7.5	Interp.
	00PSN500727502A	380V, Carbon Steel	363	7.5	Interp.
	00PSN500727503A	575V, Carbon Steel	363	7.5	Interp.
	00PSN500727034A	208-230V, Carbon Steel	670	7.5	Interp.
	00PSN500727034A	460V, Carbon Steel	670	7.5	Interp.
	00PSN500727035A	380V, Carbon Steel	670	7.5	Interp.
	00PSN500727036A	575V, Carbon Steel	670	7.5	Interp.
	00PSN500727288A	208-230V, Carbon Steel	550	7.5	Interp.
	00PSN500727288A	460V, Carbon Steel	550	7.5	Interp.
	00PSN500727289A	380V, Carbon Steel	550	7.5	Interp.
	00PSN500727290A	575V, Carbon Steel	550	7.5	Interp.
	00PSN500727104A	208-230V, Carbon Steel	772	7.5	Interp.
	00PSN500727105A	460V, Carbon Steel	772	7.5	Interp.
	00PSN500727102A	380V, Carbon Steel	772	7.5	Interp.
	00PSN500727103A	575V, Carbon Steel	772	7.5	Interp.
	00PSN500727184A	208-230V, Carbon Steel	772	7.5	Interp.
	00PSN500727185A	460V, Carbon Steel	772	7.5	Interp.
	00PSN500727182A	380V, Carbon Steel	772	7.5	Interp.
	00PSN500727183A	575V, Carbon Steel	772	7.5	Interp.
	00PSN500727192A	208-230V, Carbon Steel	772	7.5	Interp.
	00PSN500727193A	460V, Carbon Steel	772	7.5	Interp.
	00PSN500727190A	380V, Carbon Steel	772	7.5	Interp.
	00PSN500727191A	575V, Carbon Steel	772	7.5	Interp.
	00PSN500727517A	208-230V, Carbon Steel	652	7.5	Interp.
	00PSN500727518A	460V, Carbon Steel	652	7.5	Interp.
	00PSN500727515A	380V, Carbon Steel	652	7.5	Interp.
	00PSN500727516A	575V, Carbon Steel	652	7.5	Interp.
	00PSN500727521A	208-230V, Carbon Steel	652	7.5	Interp.
00PSN500727522A	460V, Carbon Steel	652	7.5	Interp.	
00PSN500727519A	380V, Carbon Steel	652	7.5	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	00PSN500727520A	575V, Carbon Steel	652	7.5	Interp.
	38AP506318	208/230, 460V, Carbon Steel	288	10	Interp.
	38AP506319	380V, Carbon Steel	288	10	Interp.
	38AP506320	575V, Carbon Steel	288	10	Interp.
	38AP502570	208/230, 460V, Carbon Steel	288	10	Interp.
	38AP502571	380V, Carbon Steel	288	10	Interp.
	38AP502572	575V, Carbon Steel	288	10	Interp.
	38AP502700	208/230, 460V, Carbon Steel	288	10	Interp.
	38AP502702	380V, Carbon Steel	288	10	Interp.
	38AP502701	575V, Carbon Steel	288	10	Interp.
	38AP503421	575V, Carbon Steel	345	10	Interp.
	38AP503422	380V, Carbon Steel	345	10	Interp.
	38AP503423	208/230V, Carbon Steel	345	10	Interp.
	38AP503424	460V, Carbon Steel	345	10	Interp.
	38AP503611	575V, Carbon Steel	345	10	Interp.
	38AP503612	380V, Carbon Steel	345	10	Interp.
	38AP503610	208/230V, Carbon Steel	345	10	Interp.
	38AP503649	460V, Carbon Steel	345	10	Interp.
	38AP503708	208/230, 460V, Carbon Steel	288	10	Interp.
	38AP503707	380V, Carbon Steel	288	10	Interp.
	38AP503706	575V, Carbon Steel	288	10	Interp.
	38AP503720	575V, Carbon Steel	345	10	Interp.
	38AP503721	380V, Carbon Steel	345	10	Interp.
	38AP503722	208/230V, Carbon Steel	345	10	Interp.
	38AP503723	460V, Carbon Steel	345	10	Interp.
	38AP503736	208/230, 460V, Carbon Steel	288	10	Interp.
	38AP503735	380V, Carbon Steel	288	10	Interp.
	38AP503734	575V, Carbon Steel	288	10	Interp.
	38AP503748	575V, Carbon Steel	345	10	Interp.
	38AP503749	380V, Carbon Steel	345	10	Interp.
	38AP503750	208/230V, Carbon Steel	345	10	Interp.
	38AP503751	460V, Carbon Steel	345	10	Interp.
38AP502606	208/230, 460V, Carbon Steel	575	10	Interp.	
38AP502603	380V, Carbon Steel	575	10	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP502602	575V, Carbon Steel	575	10	Interp.
	38AP503628	575V, Carbon Steel	633	10	Interp.
	38AP503629	380V, Carbon Steel	633	10	Interp.
	38AP503630	208/230V, Carbon Steel	633	10	Interp.
	38AP503657	460V, Carbon Steel	633	10	Interp.
	38AP503495	575V, Carbon Steel	633	10	Interp.
	38AP503497	380V, Carbon Steel	633	10	Interp.
	38AP503498	208/230V, Carbon Steel	633	10	Interp.
	38AP503499	460V, Carbon Steel	633	10	Interp.
	38AP503500	575V, Carbon Steel	633	10	Interp.
	38AP503507	380V, Carbon Steel	633	10	Interp.
	38AP503508	208/230V, Carbon Steel	633	10	Interp.
	38AP503509	460V, Carbon Steel	633	10	Interp.
	38AP502624	208/230, 460V, Carbon Steel	575	10	Interp.
	38AP502623	380V, Carbon Steel	575	10	Interp.
	38AP502622	575V, Carbon Steel	575	10	Interp.
	38AP503643	575V, Carbon Steel	633	10	Interp.
	38AP503644	380V, Carbon Steel	633	10	Interp.
	38AP503645	208/230V, Carbon Steel	633	10	Interp.
	38AP503656	460V, Carbon Steel	633	10	Interp.
	00PSN500727010A	208-230V, Carbon Steel	297	10	Interp.
	00PSN500727010A	460V, Carbon Steel	297	10	Interp.
	00PSN500727011A	380V, Carbon Steel	297	10	Interp.
	00PSN500727012A	575V, Carbon Steel	297	10	Interp.
	2003681226	208-230V, Carbon Steel	381	10	Interp.
	2003681226	460V, Carbon Steel	381	10	Interp.
	2003681227	380V, Carbon Steel	381	10	Interp.
	2003681228	575V, Carbon Steel	381	10	Interp.
	00PSN500727040A	208-230V, Carbon Steel	550	10	Interp.
	00PSN500727040A	460V, Carbon Steel	550	10	Interp.
	00PSN500727041A	380V, Carbon Steel	550	10	Interp.
	00PSN500727042A	575V, Carbon Steel	550	10	Interp.
00PSN500727043A	208-230V, Carbon Steel	592	10	Interp.	
00PSN500727043A	460V, Carbon Steel	592	10	Interp.	

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$
 $I_p = 1.5$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	00PSN500727044A	380V, Carbon Steel	592	10	Interp.
	00PSN500727045A	575V, Carbon Steel	592	10	Interp.
	00PSN500727112A	208-230V, Carbon Steel	652	10	Interp.
	00PSN500727113A	460V, Carbon Steel	652	10	Interp.
	00PSN500727110A	380V, Carbon Steel	652	10	Interp.
	00PSN500727111A	575V, Carbon Steel	652	10	Interp.
	00PSN500727116A	208-230V, Carbon Steel	694	10	Interp.
	00PSN500727117A	460V, Carbon Steel	694	10	Interp.
	00PSN500727114A	380V, Carbon Steel	694	10	Interp.
	00PSN500727115A	575V, Carbon Steel	694	10	Interp.
	00PSN500727196A	208-230V, Carbon Steel	694	10	Interp.
	00PSN500727197A	460V, Carbon Steel	694	10	Interp.
	00PSN500727194A	380V, Carbon Steel	694	10	Interp.
	00PSN500727195A	575V, Carbon Steel	694	10	Interp.
	2003716052	208-230V, Carbon Steel	694	10	Interp.
	2003716053	460V, Carbon Steel	694	10	Interp.
	2003716050	380V, Carbon Steel	694	10	Interp.
	2003716051	575V, Carbon Steel	694	10	Interp.
	2003716056	208-230V, Carbon Steel	694	10	Interp.
	2003716057	460V, Carbon Steel	694	10	Interp.
	2003716054	380V, Carbon Steel	694	10	Interp.
	2003716055	575V, Carbon Steel	694	10	Interp.
	2003758168	208-230V, Carbon Steel	694	10	Interp.
	2003758169	460V, Carbon Steel	694	10	Interp.
	2003758166	380V, Carbon Steel	694	10	Interp.
	2003758167	575V, Carbon Steel	694	10	Interp.
	2003762009	208-230V, Carbon Steel	694	10	Interp.
	2003762010	460V, Carbon Steel	694	10	Interp.
	2003762007	380V, Carbon Steel	694	10	Interp.
	2003762008	575V, Carbon Steel	694	10	Interp.
	38AP502716	208/230, 460V, Carbon Steel	395	15	Interp.
	38AP502715	380V, Carbon Steel	395	15	Interp.
38AP502714	575V, Carbon Steel	395	15	Interp.	
38AP503616	575V, Carbon Steel	452	15	Interp.	

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$
 $I_p = 1.5$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	38AP503617	380V, Carbon Steel	452	15	Interp.
	38AP503618	208/230V, Carbon Steel	452	15	Interp.
	38AP503650	460V, Carbon Steel	452	15	Interp.
	38AP503711	208/230, 460V, Carbon Steel	395	15	Interp.
	38AP503710	380V, Carbon Steel	395	15	Interp.
	38AP503709	575V, Carbon Steel	395	15	Interp.
	38AP503724	575V, Carbon Steel	452	15	Interp.
	38AP503725	380V, Carbon Steel	452	15	Interp.
	38AP503726	208/230V, Carbon Steel	452	15	Interp.
	38AP503727	460V, Carbon Steel	452	15	Interp.
	38AP503739	208/230, 460V, Carbon Steel	395	15	Interp.
	38AP503738	380V, Carbon Steel	395	15	Interp.
	38AP503737	575V, Carbon Steel	395	15	Interp.
	38AP503752	575V, Carbon Steel	452	15	Interp.
	38AP503753	380V, Carbon Steel	452	15	Interp.
	38AP503754	208/230V, Carbon Steel	452	15	Interp.
	38AP503755	460V, Carbon Steel	452	15	Interp.
	38AP502605	208/230, 460V, Carbon Steel	789	15	Interp.
	38AP502601	380V, Carbon Steel	789	15	Interp.
	38AP502600	575V, Carbon Steel	789	15	Interp.
	38AP503626	575V, Carbon Steel	847	15	Interp.
	38AP503627	380V, Carbon Steel	847	15	Interp.
	38AP503625	208/230V, Carbon Steel	847	15	Interp.
	38AP503658	460V, Carbon Steel	847	15	Interp.
	38AP503510	575V, Carbon Steel	847	15	Interp.
	38AP503512	380V, Carbon Steel	847	15	Interp.
	38AP503513	208/230V, Carbon Steel	847	15	Interp.
	38AP503514	460V, Carbon Steel	847	15	Interp.
	38AP503518	575V, Carbon Steel	847	15	Interp.
	38AP503519	380V, Carbon Steel	847	15	Interp.
	38AP503520	208/230V, Carbon Steel	847	15	Interp.
	38AP503521	460V, Carbon Steel	847	15	Interp.
	00PSN500727013A	208-230V, Carbon Steel	385	15	Interp.
00PSN500727013A	460V, Carbon Steel	385	15	Interp.	

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$
 $I_p = 1.5$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	OPSN500727014A	380V, Carbon Steel	385	15	Interp.
	00PSN500727015A	575V, Carbon Steel	385	15	Interp.
	00PSN500727025A	208-230V, Carbon Steel	422	15	Interp.
	00PSN500727025A	460V, Carbon Steel	422	15	Interp.
	00PSN500727026A	380V, Carbon Steel	422	15	Interp.
	00PSN500727027A	575V, Carbon Steel	422	15	Interp.
	00PSN500727046A	208-230V, Carbon Steel	778	15	Interp.
	00PSN500727046A	460V, Carbon Steel	778	15	Interp.
	00PSN500727047A	380V, Carbon Steel	778	15	Interp.
	00PSN500727048A	575V, Carbon Steel	778	15	Interp.
	00PSN500727055A	208-230V, Carbon Steel	872	15	Interp.
	00PSN500727055A	460V, Carbon Steel	872	15	Interp.
	00PSN500727056A	380V, Carbon Steel	872	15	Interp.
	00PSN500727057A	575V, Carbon Steel	872	15	Interp.
	00PSN500727120A	208-230V, Carbon Steel	880	15	Interp.
	00PSN500727121A	460V, Carbon Steel	880	15	Interp.
	00PSN500727118A	380V, Carbon Steel	880	15	Interp.
	00PSN500727119A	575V, Carbon Steel	880	15	Interp.
	00PSN500727201A	208-230V, Carbon Steel	880	15	Interp.
	00PSN500727202A	460V, Carbon Steel	880	15	Interp.
	00PSN500727198A	380V, Carbon Steel	880	15	Interp.
	00PSN500727199A	575V, Carbon Steel	880	15	Interp.
	00PSN500727132A	208-230V, Carbon Steel	974	15	Interp.
	00PSN500727133A	460V, Carbon Steel	974	15	Interp.
	00PSN500727130A	380V, Carbon Steel	974	15	Interp.
	00PSN500727131A	575V, Carbon Steel	974	15	Interp.
	00PSN500727213A	208-230V, Carbon Steel	974	15	Interp.
	00PSN500727214A	460V, Carbon Steel	974	15	Interp.
	00PSN500727211A	380V, Carbon Steel	974	15	Interp.
	00PSN500727212A	575V, Carbon Steel	974	15	Interp.
	2003762016	208-230V, Carbon Steel	974	15	Interp.
	2003762017	460V, Carbon Steel	974	15	Interp.
2003762014	380V, Carbon Steel	974	15	Interp.	
2003762015	575V, Carbon Steel	974	15	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

CBC 2022

TABLE 7 Pumps

Component (Manufacturer)	Model	Description	Weight lbs.	Horsepower (hp)	UUT
Single/Dual Speed Pumps (Armstrong)	2003762020	208-230V, Carbon Steel	974	15	Interp.
	2003762021	460V, Carbon Steel	974	15	Interp.
	2003762018	380V, Carbon Steel	974	15	Interp.
	2003762019	575V, Carbon Steel	974	15	Interp.
	2003681230	208-230V, Carbon Steel	486	20	Interp.
	2003681230	460V, Carbon Steel	486	20	Interp.
	2003681231	380V, Carbon Steel	486	20	Interp.
	2003681232	575V, Carbon Steel	486	20	Interp.
	2003681233	208-230V, Carbon Steel	1008	20	Interp.
	2003681233	460V, Carbon Steel	1008	20	Interp.
	2003681234	380V, Carbon Steel	1008	20	Interp.
	2003681235	575V, Carbon Steel	1008	20	Interp.
	2003681876	208-230V, Carbon Steel	1110	20	Interp.
	2003681877	460V, Carbon Steel	1110	20	Interp.
	2003681874	380V, Carbon Steel	1110	20	Interp.
	2003681875	575V, Carbon Steel	1110	20	Interp.
	2003681880	208-230V, Carbon Steel	1110	20	Interp.
	2003681881	460V, Carbon Steel	1110	20	3
	2003681878	380V, Carbon Steel	1110	20	Interp.
	2003681879	575V, Carbon Steel	1110	20	Interp.
RC Centrifugal Pump (Xylem) ¹	e-90, 1.25AAB	Shaft Carbon Steel, Volute Cast Iron	66	3	4
	e-90, 2AAC	Shaft Carbon Steel, Volute Cast Iron	85	5	Interp.
	e-80,5x1.5x7C	Shaft Carbon Steel, Volute Cast Iron	260	5	Interp.
	e-82, 3x3x9.5	Shaft Carbon Steel, Volute Cast Iron	510	5	Interp.
	e-80, 2x2x7B	Shaft Carbon Steel, Volute Cast Iron	340	7.5	Interp.
	e-82, 3x3x9.5	Shaft Carbon Steel, Volute Cast Iron	554	7.5	Interp.
	e-82, 3x3x7	Shaft Carbon Steel, Volute Cast Iron	520	7.5	Interp.
	e-82, 4x4x9.5	Shaft Carbon Steel, Volute Cast Iron	680	7.5	Interp.
	e-80,3x3x9.5C	Shaft Carbon Steel, Volute Cast Iron	300	7.5	Interp.
	e-80, 5x5x11	Shaft Carbon Steel, Volute Cast Iron	470	7.5	Interp.
	e-80, 2x2x7B	Shaft Carbon Steel, Volute Cast Iron	455	10	Interp.
	e-82, 3x3x7	Shaft Carbon Steel, Volute Cast Iron	570	10	Interp.

Notes: ¹Pump model nomenclature: e-90(single), e-82 (single), and e-82 (dual), discharge diameter x suction diameter x impeller diameter in inches.

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes
CBC 2022

TABLE 8 Pump VFDs

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Pump VFD (Danfoss)	HR46TN023	575V V, Steel, Al, PC/ABS cover	31	3.0	Interp.
	HR46TN018	380V V, Steel, Al, PC/ABS cover	31	3.0	Interp.
	HR46TN013	208/230V V, Steel, Al, PC/ABS cover	31	3.0	1
	HR46TN018	460V V, Steel, Al, PC/ABS cover	31	3.0	Interp.
	HR46TN024	575V V, Steel, Al, PC/ABS cover	31	5.0	Interp.
	HR46TN019	380V V, Steel, Al, PC/ABS cover	31	5.0	Interp.
	HR46TN014	208/230V V, Steel, Al, PC/ABS cover	51	5.0	Interp.
	HR46TN019	460V V, Steel, Al, PC/ABS cover	31	5.0	Interp.
	HR46TN025	575V V, Steel, Al, PC/ABS cover	31	7.5	Interp.
	HR46TN020	380V V, Steel, Al, PC/ABS cover	31	7.5	Interp.
	HR46TN015	208/230V V, Steel, Al, PC/ABS cover	51	7.5	Interp.
	HR46TN020	460V V, Steel, Al, PC/ABS cover	31	7.5	Interp.
	HR46TN026	575V V, Steel, Al, PC/ABS cover	31	10.0	Interp.
	HR46TN021	380V V, Steel, Al, PC/ABS cover	31	10.0	Interp.
	HR46TN016	208/230V V, Steel, Al, PC/ABS cover	51	10.0	Interp.
	HR46TN021	460V V, Steel, Al, PC/ABS cover	31	10.0	Interp.
HR46TN027	575V V, Steel, Al, PC/ABS cover	51	15.0	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters
 $S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 8 Pump VFDs

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Pump VFD (Danfoss)	HR46TN022	380V V, Steel, Al, PC/ABS cover	51	15.0	Interp.
	HR46TN017	208/230V V, Steel, Al, PC/ABS cover	51	15.0	Interp.
	HR46TN022	460V V, Steel, Al, PC/ABS cover	51	15.0	Interp.
	HR46TN014	208-230 V, Carbon Steel	62	5.0	Interp.
	HR46TN019	460 V, Carbon Steel	62	5.0	Interp.
	HR46TN019	380 V, Carbon Steel	62	5.0	Interp.
	HR46TN024	575 V, Carbon Steel	62	5.0	Interp.
	HR46TN015	208-230 V, Carbon Steel	102	7.5	Interp.
	HR46TN020	460 V, Carbon Steel	62	7.5	Interp.
	HR46TN020	380 V, Carbon Steel	62	7.5	Interp.
	HR46TN025	575 V, Carbon Steel	62	7.5	Interp.
	HR46TN016	208-230 V, Carbon Steel	102	10.0	Interp.
	HR46TN021	460 V, Carbon Steel	62	10.0	Interp.
	HR46TN021	380 V, Carbon Steel	62	10.0	Interp.
	HR46TN026	575 V, Carbon Steel	62	10.0	Interp.
	HR46TN017	208-230 V, Carbon Steel	102	15.0	Interp.
	HR46TN022	460 V, Carbon Steel	102	15.0	Interp.
	HR46TN022	380 V, Carbon Steel	102	15.0	Interp.
	HR46TN027	575 V, Carbon Steel	102	15.0	Interp.
	HR46TN028	208-230 V, Carbon Steel	120	20.0	Interp.
	HR46TN029	460 V, Carbon Steel	102	20.0	3
	HR46TN029	380 V, Carbon Steel	102	20.0	Interp.
HR46TN030	575 V, Carbon Steel	102	20.0	Interp.	

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 9 Control Boxes

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Control Boxes (UTEC)	C30RC010	208-230, 460, 380, 575V, Carbon-Steel	85	10	1
	C30RC015	208-230, 460, 380, 575V, Carbon-Steel	85	15	Interp
	C30RC020	208-230, 460, 380, 575V, Carbon-Steel	85	20	Interp
	C09RCS020	208-230, 460, 380, 575V, Carbon-Steel	85	20	Interp
	C30RC025	208-230, 460, 380, 575V, Carbon-Steel	85	20	Interp
	C38RCS(D)025	208-230, 460, 380, 575V, Carbon-Steel	85	25	Interp
	C38RCS(D)027	208-230, 460, 380, 575V, Carbon-Steel	85	27	Interp
	C30RC030	208-230, 460, 380, 575V, Carbon-Steel	85	30	Interp
	C38RCS(D)030	208-230, 460, 380, 575V, Carbon-Steel	85	30	Interp
	C09RCS030	208-230, 460, 380, 575V, Carbon-Steel	85	30	Interp
	C30RC035	208-230, 460, 380, 575V, Carbon-Steel	135	35	Interp
	C09RCS035	208-230, 460, 380, 575V, Carbon-Steel	135	35	Interp
	C30RC040	208-230, 460, 380, 575V, Carbon-Steel	135	40	Interp
	C38RCS(D)040	208-230, 460, 380, 575V, Carbon-Steel	135	40	Interp
	C30RC045	208-230, 460, 380, 575V, Carbon-Steel	135	45	Interp
	C30RC050	208-230, 460, 380, 575V, Carbon-Steel	135	50	Interp
	C38RCS(D)050	208-230, 460, 380, 575V, Carbon-Steel	135	50	Interp
	C09RCM050	208-230, 460, 380, 575V, Carbon-Steel	135	50	Interp

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 1.85g$ for $z/h=0$

Building Codes

CBC 2022

TABLE 9

Control Boxes

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Control Boxes (UTEC)	C30RC055	208-230, 460, 380, 575V, Carbon-Steel	135	55	Interp
	C30RC060	208-230, 460, 380, 575V, Carbon-Steel	135	60	Interp
	C38RCD060	208-230, 460, 380, 575V, Carbon-Steel	135	50	Interp
	C09RCM060	208-230, 460, 380, 575V, Carbon-Steel	135	60	Interp
	C30RC065	208-230, 460, 380, 575 V, Carbon-Steel	720	65	Interp
	C30RC067	208-230, 460, 380, 575 V, Carbon-Steel	300	65	2
	C30RC070	208-230, 460, 380, 575 V, Carbon-Steel	720	70	Interp
	C38RC070	208-230, 460, 380, 575 V, Carbon-Steel	400	70	Interp
	C30RC072	208-230, 460, 380, 575 V, Carbon-Steel	720	70	Interp
	C30RC080 C	208-230, 460, 380, 575 V, Carbon-Steel	720	80	Interp
	C30RC080	208-230, 460, 380, 575 V, Carbon-Steel	720	80	Interp
	C38RC080	208-230, 460, 380, 575 V, Carbon-Steel	400	80	Interp
	C09RC080	208-230, 460, 380, 575 V, Carbon-Steel	300	70	Interp
	C30RC082	208-230, 460, 380, 575 V, Carbon-Steel	720	80	Interp
	C30RC090	208-230, 460, 380, 575 V, Carbon-Steel	720	90	Interp
	C38RC090	208-230, 460, 380, 575 V, Carbon-Steel	400	90	Interp
	C30RC092 C	208-230, 460, 380, 575 V, Carbon-Steel	720	90	Interp
	C30RC092	208-230, 460, 380, 575 V, Carbon-Steel	720	90	Interp

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

CBC 2022

TABLE 9 Control Boxes

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Control Boxes (UTEC)	C09RC095	208-230, 460, 380, 575 V, Carbon-Steel	300	95	Interp
	C30RC100	208-230, 460, 380, 575 V, Carbon-Steel	720	100	Interp
	C38RC100	208-230, 460, 380, 575 V, Carbon-Steel	400	100	Interp
	C30RC102 C	208-230, 460, 380, 575 V, Carbon-Steel	720	100	Interp
	C30RC102	208-230, 460, 380, 575 V, Carbon-Steel	720	100	Interp
	C30RC110	208-230, 460, 380, 575 V, Carbon-Steel	720	110	Interp
	C38RC110	208-230, 460, 380, 575 V, Carbon-Steel	400	110	Interp
	C30RC112	208-230, 460, 380, 575 V, Carbon-Steel	720	110	Interp
	C09RC115	208-230, 460, 380, 575, Carbon-Steel	300	115	Interp
	C30RC120 C	208-230, 460, 380, 575 V, Carbon-Steel	720	120	Interp
	C30RC120	208-230, 460, 380, 575 V, Carbon-Steel	720	120	Interp
	C30RC122 C	208-230, 460, 380, 575 V, Carbon-Steel	720	120	Interp
	C30RC122	208-230, 460, 380, 575 V, Carbon-Steel	720	120	Interp
	C30RC130	208-230, 460, 380, 575 V, Carbon-Steel	720	130	Interp
	C09RC130	208-230, 460, 380, 575 V, Carbon-Steel	300	130	Interp
	C38RC130	208-230, 460, 380, 575 V, Carbon-Steel	400	130	Interp
	C30RC132 C	208-230, 460, 380, 575 V, Carbon-Steel	720	130	Interp
	C30RC132	208-230, 460, 380, 575 V, Carbon-Steel	720	130	Interp

Manufacturer: Carrier Corporation
Product Type: Chillers - Air Cooled
Model Line: AquaSnap® Air-Cooled Chillers

Seismic Parameters

$S_{DS} = 1.85g$ for $z/h=1$
 $S_{DS} = 1.85g$ for $z/h=0$ $I_p = 1.5$

Building Codes

CBC 2022

TABLE 9

Control Boxes

Component (Manufacturer)	Model	Description	Weight lbs.	Nominal Power (kW)	UUT
Control Boxes (UTEC)	C09RC145	208-230, 460, 380, 575 V, Carbon-Steel	300	145	Interp
	C30RC150	208-230, 460, 380, 575 V, Carbon-Steel	720	150	Interp
	C38RC150	208-230, 460, 380, 575 V, Carbon-Steel	400	150	Interp
	C30RC152 C	208-230, 460, 380, 575 V, Carbon-Steel	720	150	Interp
	C30RC152	208-230, 460, 380, 575 V, Carbon-Steel	720	150	Interp
	C09RC160	208-230, 460, 380, 575 V, Carbon-Steel	300	160	Interp
	C30RC162 C	208-230, 460, 380, 575 V, Carbon-Steel	720	160	Interp
	C30RC162	208-230, 460, 380, 575 V, Carbon-Steel	720	160	Interp
	C09RC170	208-230, 460, 380, 575 V, Carbon-Steel	300	170	Interp
	C30RC182 C	208-230, 460, 380, 575 V, Carbon-Steel	720	180	Interp
	C30RC182	208-230, 460, 380, 575 V, Carbon-Steel	720	180	Interp
	C09RC185	208-230, 460, 380, 575 V, Carbon-Steel	300	185	Interp
	C09RC200	208-230, 460, 380, 575 V, Carbon-Steel	300	200	Interp
	C30RC202 C	208-230, 460, 380, 575 V, Carbon-Steel	720	200	Interp
	C30RC202	208-230, 460, 380, 575 V, Carbon-Steel	720	200	Interp
	C09RC230	208-230, 460, 380, 575 V, Carbon-Steel	300	230	Interp
	C30RC232 C	208-230, 460, 380, 575 V, Carbon-Steel	720	230	Interp
	C30RC232	208-230, 460, 380, 575 V, Carbon-Steel	720	230	Interp

UUT 1

Test Report# TR231342-01-R1

Manufacturer: Carrier Corporation
Model Line: AquaSnap® Air-Cooled Chillers
Model Number: 30RCA010561-1---0
Serial Number: n/a

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.85	1 0	1.5	2.96	2.22	1.24	0.5

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
78.0*	46.1	66.4	1,015

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
18.2	7.8	>33.3

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
Carbon steel, 10 ton capacity

UUT Mounting Details:



UUT bolted to table with four (4) 3/4" diameter Grade 8 bolts.

*Unit depth was 67" with the mounting feet extending out 5.5" on side of the unit for an overall depth of 78"

Unit included internal bracing straps. Part No. 38AP503685-04 & 38AP503683-05.

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model Number	Wt. (lbs.)
Compressor (Scroll Compressor)	GC30JN113	76.6
	GC30NV132	90.2
Condenser (Microchannel)	38AP404986	75
Condenser Fan Motor	HD54AH230	50
Cooler (BPHE)	LL01LV010	42.1
Single/Dual Speed Pump	38AP506327	165
Pump VFD	HR46TN013	31
Control Box	C30RC010	85
Fan VFD	HR46ZP001	31

UUT 2

Test Report# TR231342-01-R1

Manufacturer: Carrier Corporation
Model Line: AquaSnap® Air-Cooled Chillers
Model Number: 30RCA0676S6FFJ755
Serial Number: n/a

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.85	1 0	1.5	2.96	2.22	1.24	0.5

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
107.8	90.2	98.9	4,490

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
9.0	6.7	>33.3

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
Carbon steel, 65 ton capacity

UUT Mounting Details:



UUT bolted to table with four (4) 3/4" diameter Grade 8 bolts.

Unit included internal bracing straps. Part No.:

- 00PSN000035500A-42 00PSN000035500A-43 00PSN000035500A-44
- 00PSN000035500A-45 00PSN000035500A-46 00PSN000035500A-47
- 00PSN000035500A-48 2005879075-04

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model Number	Wt. (lbs.)
Compressor (Scroll Hermetic)	GC02PT004	158
Condenser (Microchannel)	2002632704	90
Fan Motor	HD58CH460	50
Cooler (Direct Expansion Shell & Tube)	00PSN800097401A	856
Desuperheater	LL01LB029	49.9
Control Box Assembly	C30RC067	300
Fan VFD	HK30WA462	9.9
Hail Guard/Security Grill	2V	88

UUT 3

Test Report# TR231342-01-R1

Manufacturer: Carrier Corporation
Model Line: AquaSnap® Air-Cooled Chillers
Model Number: 30RCA2526S0-6GD-F
Serial Number: n/a

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
1.85	1 0	1.5	2.96	2.22	1.24	0.5

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
342.9	90.2	98.9	14,580

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
7.6	4.4	11.4

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
Carbon steel, 250 ton capacity

UUT Mounting Details:



UUT bolted to table with nine (9) 3/4" diameter Grade 8 bolts.

Unit included internal bracing straps. Part No.:

00PSN000035500A-42 00PSN000035500A-43 00PSN000035500A-45
 00PSN000035500A-46 00PSN000035500A-47
 2005879075-02

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model Number	Wt. (lbs.)
Compressor (Scroll Hermetic)	GC02ZT008	388
Condenser (RTPF)	2003667558	250
	2003667560	250
Fan Motor	HD58CH460	50
Evaporator	LL01LV230	272
Desuperheater	LL01LB027	118
Single/Dual Speed Pumps	2003681881	1110
Pump VFD	HR46TN029	102
Control Box Assembly	C30RC252	720
Fan VFD	HR46JZ021	54
Hail Guard/Security Grill	7V	280

UUT 4

Test Report# TR241489-01-R0 (UUT1)

Manufacturer: Carrier Corporation
Model Line: AquaSnap® Air-Cooled Chillers
Model Number: 30RCA010561-1---0
Serial Number: n/a

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.00	1					
2.23	0	1.5	3.2	2.4	1.49	0.6

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
78.0*	44	66	995

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
12.2	9.7	12

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
Carbon steel, 10 ton capacity

UUT Mounting Details:



UUT bolted to table with four (4) 3/4" diameter Grade 8 bolts.

*Unit depth was 67" with the mounting feet extending out 5.5" on side of the unit for an overall depth of 78"

Unit included internal bracing straps. Part No. 38AP503685-04 & 38AP503683-05.

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model Number	Wt. (lbs.)
Compressor (Scroll Compressor)	GC30JN113	76.6
Compressors-Scroll Hermetic Digital	GC30JK133	90.2
Condenser (Microchannel)	38AP404986	75
Condenser Fan Motor	HD54AH230	50
Cooler (BPHE)	LL01LV010	42.1
Single/Dual Speed Pump	38AP506327	165
Centrifugal Pump	e-90, 1.25AAB	66
Control Box	C30RC010	85
Fan VFD	HR46ZP001	31

UUT 5

Test Report# TR241489-01-R0 (UUT 2)

Manufacturer: Carrier Corporation
Model Line: AquaSnap® Air-Cooled Chillers
Model Number: 30RCA0676S6FFJ755
Serial Number: n/a

Highest Passed Test Level						
S _{DS}	z/h	I _p	A _{flx-h}	A _{rig-h}	A _{flx-v}	A _{rig-v}
2.00	1					
2.23	0	1.5	3.2	2.4	1.49	0.6

Dimensions/Weights			
Depth (in)	Width (in)	Height (in)	Weight (lbs.)
105	88	99	5,250

Lowest Natural Frequency (Hz)		
Front-Back	Side-Side	Vertical
7.0	5.8	21.3

Building Codes
CBC 2022

Test Criteria
ICC-ES AC156

Construction/Option Summary
Carbon steel, 65 ton capacity

UUT Mounting Details:



UUT bolted to table with four (4) 3/4" diameter Grade 8 bolts.

Unit included internal bracing straps. Part No.:
 00PSN000035500A-42 00PSN000035500A-43 00PSN000035500A-44
 00PSN000035500A-45 00PSN000035500A-46 00PSN000035500A-47
 00PSN000035500A-48
 2005879075-04

Unit maintained structural integrity and remained operational per manufacturer requirement following shake table test. All contents were included in the unit per operating conditions.

List of Included Subcomponents

Description	Model Number	Wt. (lbs.)
Compressors-Scroll Hermetic Digital	GC30YK105	147
Condenser (Microchannel)	2002632704	90
Fan Motor	HD58CH460	50
Cooler (Direct Expansion Shell & Tube)	00PSN800097401A	856
Desuperheater	LL01LB029	49.9
Control Box Assembly	C30RC067	300
Fan VFD	HK30WA462	9.9
Hail Guard/Security Grill	2V	88
Centrifugal Pump	e-82, 4x4x7	700