



Product Catalog

Model #: RTAC 3504 UY0N UAGR H1TY 1CDB NN6U N10N GCEX N
Serial #: U13H07183

Air-Cooled Series R™ Chillers
Model RTAC
140 to 500 nominal tons (60 Hz)

Year: 2013
Size: 350 Tons



Shipping Weight: 21,550 lbs.
Operating Weight: 22,005 lbs.

L: 36' W: 7' 5" H: 8'



Model Number Descriptions

Digits 1, 2 - Unit Model

RT = Rotary chiller

Digit 3 - Unit Type

A = Air-cooled

Digit 4 - Development Sequence

C = Development sequence

Digits 5, 6 & 7 - Nominal Capacity

140 = 140 Nominal tons
 155 = 155 Nominal tons
 170 = 170 Nominal tons
 185 = 185 Nominal tons
 200 = 200 Nominal tons
 225 = 225 Nominal tons
 250 = 250 Nominal tons
 275 = 275 Nominal tons
 300 = 300 Nominal tons
 350 = 350 Nominal tons
 400 = 400 Nominal tons
 450 = 450 Nominal tons
 500 = 500 Nominal tons

Digit 8 - Unit Voltage

A = 200/60/3
 C = 230/60/3
 J = 380/60/3
 4 = 460/60/3
 5 = 575/60/3

Digit 9 - Manufacturing Location

U = Water Chiller Business Unit, Pueblo, CO USA

Digits 10, 11 - Design Sequence

XX = Factory Input

Digit 12 - Unit Basic Configuration

N = Standard efficiency/performance
 H = High efficiency/performance
 A = Extra efficiency/performance

Digit 13 - Agency Listing

N = No agency listing
 U = C/UL listing
 S = Seismic rated - IBC and OSHPD
 R = C/UL listed and seismic rated

Digit 14 - Pressure Vessel Code

A = ASME pressure vessel code
 C = Canadian code
 D = Australian code
 L = Chinese code

Digit 15 - Evaporator Application

F = Standard (40-60 F) leaving temp
 G = Low (Less than 40 F) leaving temp
 R = Remote (40-60 F) leaving temp

Digit 16 - Evaporator Configuration

N = 2 pass, 0.75" insulation
 P = 3 pass, 0.75" insulation
 Q = 2 pass, 1.25" insulation
 R = 3 pass, 1.25" insulation

Digit 17 - Condenser Application

N = Standard ambient (25-115°F)
 H = High ambient (25-125°F)
 L = Low ambient (0-115°F)
 W = Wide ambient (0-125°F)

Digit 18 - Condenser Fin Material

1 = Standard aluminum slit fins
 2 = Copper fins
 4 = CompleteCoat™ epoxy coated fins

Digit 19 - Condenser Fan/Motor Configuration

T = STD fans with TEAO motors
 W = Low noise fans

Digit 20 - Compressor Motor Starter Type

X = Across-the-line
 Y = Wye-delta closed transition

Digit 21 - Incoming Power Line Connection

1 = Single point power connection
 2 = Dual point power connection

Digit 22 - Power Line Connection Type

T = Terminal block connection
 D = Non-fused disconnect switch(es)
 C = Circuit breaker(s)

Digit 23 - Unit Operator Interface

D = DynaView operator interface

Digit 24 - Remote Operator Interface

N = No remote interface
 C = Tracer™ Comm 3 interface
 B = BACnet® interface
 L = LonTalk® compatible (LCI-C) interface

Digit 25 - Control Input Accessories/Options

N = No remote inputs
 R = Ext. evaporator leaving water setpoint
 C = Ext. current limit setpoint
 B = Ext. leaving water and current limit setpoint

Digit 26 - Control Output Accessories/Options

N = No output options
 A = Alarm relay outputs
 C = Ice making I/O
 D = Alarm relay outputs and ice making I/O

Digit 27 - Electrical Protection Options

0 = No short circuit rating
 5 = Default short circuit rating
 6 = High amp short circuit rating

Digit 28 - Flow Switch

T = Factory installed flow switch - water
 U = Factory installed flow switch glycol

Digit 29 - Control Panel Accessories

N = No convenience outlet
 A = 15A 115V convenience outlet (60Hz)

Digit 30 - Service Valves

1 = With suction service valves

Digit 31 - Compressor Sound Attenuation Option

0 = No compressor sound attenuation
 1 = Factory installed compressor sound attenuation

Digit 32 - Appearance Options

N = No appearance options
 A = Architectural louvered panels
 C = Half louvers

Digit 33 - Installation Accessories

N = No installation accessories
 F = Flange kit for water connections
 R = Neoprene in shear unit isolators
 G = Neoprene isolators and flange kit
 E = Seismic elastomeric isolation pads
 S = Seismic spring isolators

Digit 34 - Factory Testing Options

0 = Standard functional test
 C = Customer-witnessed performance test with report
 C = Customer-witnessed performance test plus Rapid Restart test
 E = Non-witnessed performance test with report

Digit 35 - Control, Label & Literature

C = Spanish
 E = English
 F = French

Digit 36 - Special Order

X = Standard unit configuration
 S = Unit has special order feature

Digit 37 - Safety Devices

N = Standard



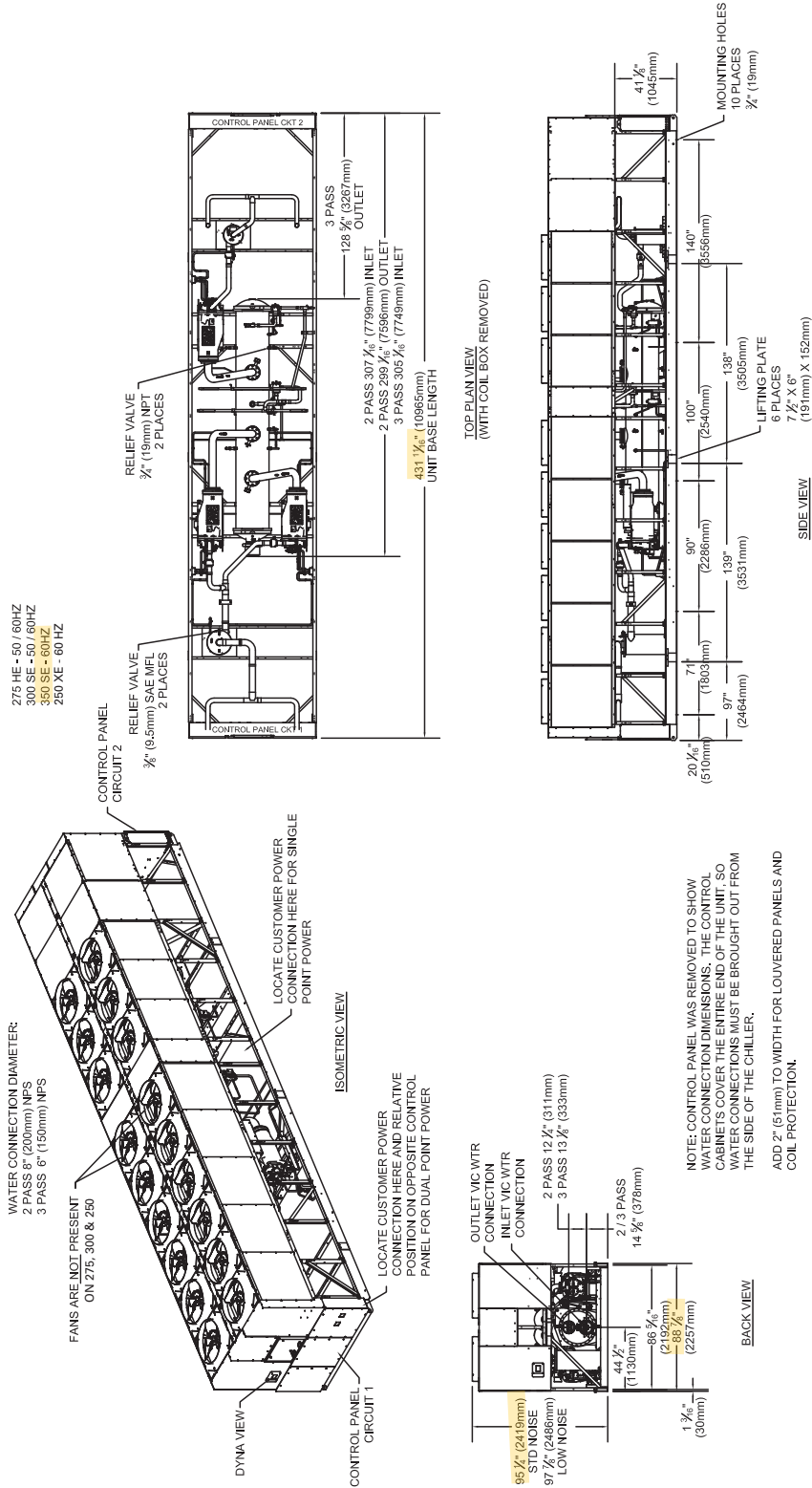
General Data

Table 1. 60 Hz standard efficiency – I-P

Size		140	155	170	185	200	225	250	275	300	350	400	450	500
Compressor		Screw												
Quantity	#	2	2	2	2	2	2	2	3	3	3	4	4	4
Nominal size @60Hz	(tons)	70/70	85/70	85/85	100/85	100/100	120/100	120/120	85-85/100	100-100/100	120-120/100	100-100/100-100	120-120/100-100	120-120/120-120
Evaporator		Flooded												
Water storage	(gal)	29	32	34	36	40	39	43	62	67	72	83	86	91
2 pass arrangement														
Min flow	(gpm)	193	214	202	217	241	217	241	309	339	375	404	422	461
Max flow	(gpm)	709	785	741	796	883	796	883	1134	1243	1374	1483	1548	1690
Water connection	(NPS-in)	4	4	6	6	6	6	6	8	8	8	8	8	8
3 pass arrangement														
Min flow	(gpm)	129	143	135	145	161	145	161	206	226	250	270	282	307
Max flow	(gpm)	473	523	494	531	589	531	589	756	829	916	989	1032	1127
Water connection	(NPS-in)	3.5	3.5	4	4	4	4	4	6	6	6	8	8	8
Condenser		Fin and tube												
Qty of coils	#	4	4	4	4	4	4	4	8	8	8	8	8	8
Coil length	(in)	156/156	180/156	180/180	216/180	216/216	252/216	252/252	180/108	216/108	252/108	216/216	252/216	252/252
Coil height	(in)	42	42	42	42	42	42	42	42	42	42	42	42	42
	(mm)	1067	1067	1067	1067	1067	1067	1067	1067	1067	1067	1067	1067	1067
# of rows	#	3	3	3	3	3	3	3	3	3	3	3	3	3
Fins per foot	(fpf)	192	192	192	192	192	192	192	192	192	192	192	192	192
Fan		Direct drive propeller												
Quantity	#	4/4	5/4	5/5	6/5	6/6	7/6	7/7	10/6	12/6	14/6	12/12	14/12	14/14
Diameter	(in)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Air flow per fan	(cfm)	9625	9394	9209	9209	9209	9210	9210	9209	9209	9208	9209	9210	9214
Power/motor	(hp)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Fan speed	(rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
Tip speed	(Ft/min)	8954	8954	8954	8954	8954	8954	8954	8954	8954	8954	8954	8954	8954
General Unit		HFC-134a												
# Refrig ckts	#	2	2	2	2	2	2	2	2	2	2	2	2	2
% min load	%	15	15	15	15	15	15	15	15	15	15	15	15	15
Refrigerant charge	(lb)	165/165	175/165	175/175	215/210	215/215	225/215	225/225	365/200	415/200	460/200	415/415	460/415	460/460
Oil charge	(gal)	1.3/1.3	1.3/1.3	1.3/1.3	1.9/1.3	1.9/1.9	1.9/1.9	1.9/1.9	4.2/1.9	4.6/2.9	4.6/1.9	4.6/4.6	4.6/4.6	4.6/4.6
Min ambient-std	(°F)	25	25	25	25	25	25	25	25	25	25	25	25	25
Min ambient-low	(°F)	0	0	0	0	0	0	0	0	0	0	0	0	0

1. Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.
 2. Minimum start-up/operating ambient is based on a 5 mph wind across the condenser.

Dimensions





Weights

Non-Seismically Rated Units

Table 21. Weight - packaged units - 60 Hz - aluminum or CompleteCoat coils

Unit Size (tons)	Standard Efficiency				High Efficiency				Extra Efficiency			
	Shipping		Operating		Shipping		Operating		Shipping		Operating	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
140	10832	4913	11146	5056	10859	4926	11160	5062	12171	5521	12585	5708
155	10910	4949	11146	5056	12114	5495	12445	5645	13984	6343	14293	6483
170	10877	4934	11218	5088	12171	5521	12585	5708	14454	6556	14721	6677
185	12479	5660	12899	5851	13984	6343	14293	6483	15915	7219	16413	7445
200	12884	5844	13193	5984	14454	6556	14721	6677	16016	7265	16413	7445
225	14635	6638	14966	6788	15915	7219	16413	7445	n/a			
250	14916	6766	15191	6890	16016	7265	16413	7445	20476	9288	21048	9547
275	19025	8630	19685	8929	20393	9250	21048	9547	21667	9828	22160	10052
300	20699	9389	21214	9622	21667	9828	22160	10052	24073	10919	24700	11204
350	21550	9775	22005	9981	24073	10919	24700	11204	27136	12309	27750	12587
400	25409	11525	25854	11727	27136	12309	27750	12587	n/a			
450	26816	12163	27393	12425	n/a				n/a			
500	27136	12309	27912	12661	n/a				n/a			

1. Operating weight includes refrigerant and water.
2. Shipping weight includes refrigerant.
3. All weights +/- 3%.

Table 22. Weight - packaged units - 60 Hz - copper coils

Unit Size (tons)	Standard Efficiency				High Efficiency				Extra Efficiency			
	Shipping		Operating		Shipping		Operating		Shipping		Operating	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
140	13407	6081	13734	6230	13426	6090	13734	6230	15590	7071	15998	7257
155	13420	6087	13734	6230	15647	7097	15854	7191	18250	8278	18613	8443
170	13442	6097	13733	6229	15590	7071	15998	7257	18701	8483	18958	8599
185	15870	7198	16253	7372	18250	8278	18613	8443	20794	9432	21290	9657
200	16304	7395	16630	7543	18701	8483	18958	8599	20881	9471	21290	9657
225	18739	8500	18156	8235	20794	9432	21290	9657	n/a			
250	18905	8575	19223	8719	20881	9471	21290	9657	26017	11801	26558	12046
275	23905	10843	24608	11162	26017	11801	26558	12046	27660	12546	28182	12783
300	26039	11811	26580	12056	27660	12546	28182	12783	30848	13992	31431	14257
350	27395	12426	27920	12664	30848	13992	31431	14257	35166	15951	35688	16188
400	32216	14613	32723	14843	35014	15882	35688	16188	n/a			
450	32682	14824	33178	15049	n/a				n/a			
500	35014	15882	35787	16233	n/a				n/a			

1. Operating weight includes refrigerant and water.
2. Shipping weight includes refrigerant.
3. All weights +/- 3%.