

Model #: 30RBF17064-L---C
Serial #: 1716Q83955

2016
170 Ton



United Technologies

Product Data

AquaSnap®

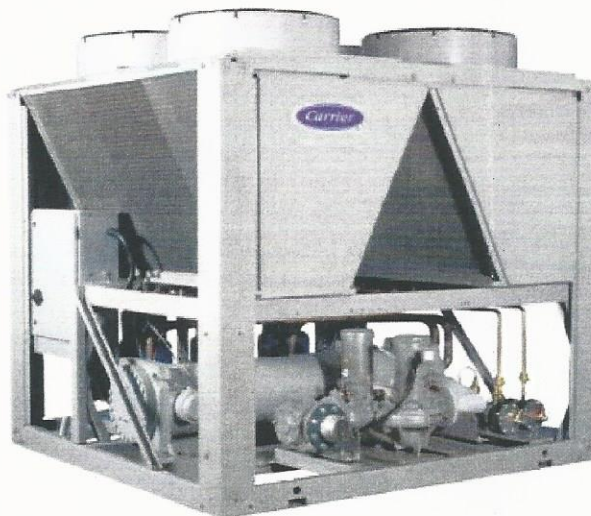
Air-Cooled Chillers

60 to 300 Nominal Tons

L: 19' 8"
W: 7' 4"
H: 7' 6"

Operating Weight: 9,799

AQUASNAP greenspeed



30RB060-300 Air-Cooled Chillers and
30RB080-300 Air-Cooled Chillers with
Greenspeed® Intelligence

Model number nomenclature



30RB F 170 6 4 - L - - - C

30RB – Air-Cooled AquaSnap® Chiller

Design Series

Nominal Sizes

060	110	170	275
070	120	190	300
080	130	210	
090	150	225	
100	160	250	

Voltage

- 1 – 575-3-60*
- 5 – 208/230-3-60
- 6 – 460-3-60

Condenser Coil Options

- – Aluminum Fin/Copper Tube
- 0 – Copper Fin/Copper Tube
- 1 – Aluminum Pre-Coat Fin/Copper Tube
- 2 – Aluminum E-Coat Fin/Copper Tube
- 3 – Copper E-Coat Fin/Copper Tube
- 4 – Microchannel (MCHX)
- 5 – E-Coat, Microchannel (MCHX)

Hydronics Option†

- – No Pump Installed
- 0 – Single Pump, 3 HP*
- 1 – Single Pump, 5 HP*
- 2 – Single Pump, 7.5 HP*
- 3 – Single Pump, 10 HP*
- 4 – Single Pump, 15 HP*
- 6 – Dual Pump, 3 HP*
- 7 – Dual Pump, 5 HP*
- 8 – Dual Pump, 7.5 HP, Low Head*
- 9 – Dual Pump, 7.5 HP, High Head*
- B – Dual Pump, 10 HP*
- C – Dual Pump, 15 HP*
- Z – Special order designation

Cooler Options

- 0 – Integral Cooler, Cooler Heater, CRN (Canada)
- 5 – Integral Cooler, Cooler Heater, Microchannel (MCHX), CRN (Canada)
- H – Integral Cooler, Cooler Heater, no CRN
- L – Integral Cooler, Cooler Heater, Microchannel (MCHX), no CRN

LEGEND

- CRN – Canadian Registration Number
- ETO – Engineered to Order
- MCHX – Microchannel Condenser Coil
- SCCR – Short Circuit Current Rating
- XL – Across-the-Line Start

*Available as ETO option.

†Hydronic pumps not available on units 30RB060-190 with high SCCR option.

NOTE: A "Z" in position 11 indicates a special order machine. Digits following do not correspond to tables.

Packaging/Security Options

- L – No Packaging
- 0 – Skid
- 1 – Skid, Top Crate, Bag
- 3 – Coil Trim Panels
- 4 – Skid, Coil Trim Panels
- 5 – Skid, Top Crate, Bag, Coil Trim Panels
- 7 – Coil Trim Panels, Upper and Lower Grilles
- 8 – Skid, Coil Trim Panels, Upper and Lower Grilles
- 9 – Skid, Top Crate, Bag, Coil Trim Panels, Upper and Lower Grilles
- C – Trim Panels, Upper and Lower Grilles, Upper Hall Guards
- D – Skid, Trim Panels, Upper and Lower Grilles, Upper Hall Guards
- F – Skid, Top Crate, Bag, Trim Panels, Upper and Lower Grilles, Upper Hall Guards
- H – Skid, Full End Covers
- J – Skid, Top Crate, Bag, Full End Covers
- K – Full End Covers

Controls/Communication Options

- – None
- 3 – BACnet Communication

Electrical/Low Sound/High SCCR Options

- – Single Point Power Connections, XL, Terminal Block
- 7 – Single Point Power Connections, XL, Non-Fused Disconnect
- 8 – Single Point Power Connections, XL, Non-Fused Disconnect, High SCCR
- G – Single Point Power Connections, XL, Terminal Block, Cmpr Blankets
- L – Single Point Power Connections, XL, Non-Fused Disconnect, Cmpr Blankets
- M – Single Point Power Connections, XL, Non-Fused Disconnect, Cmpr Blankets, High SCCR
- Q – Single Point Power Connections, XL, Terminal Block, Cmpr Blankets, Cmpr Enclosures
- V – Single Point Power Connections, XL, Non-Fused Disconnect, Cmpr Blankets, Cmpr Enclosures
- W – Single Point Power Connections, XL, Non-Fused Disconnect, Cmpr Blankets, Cmpr Enclosures, High SCCR

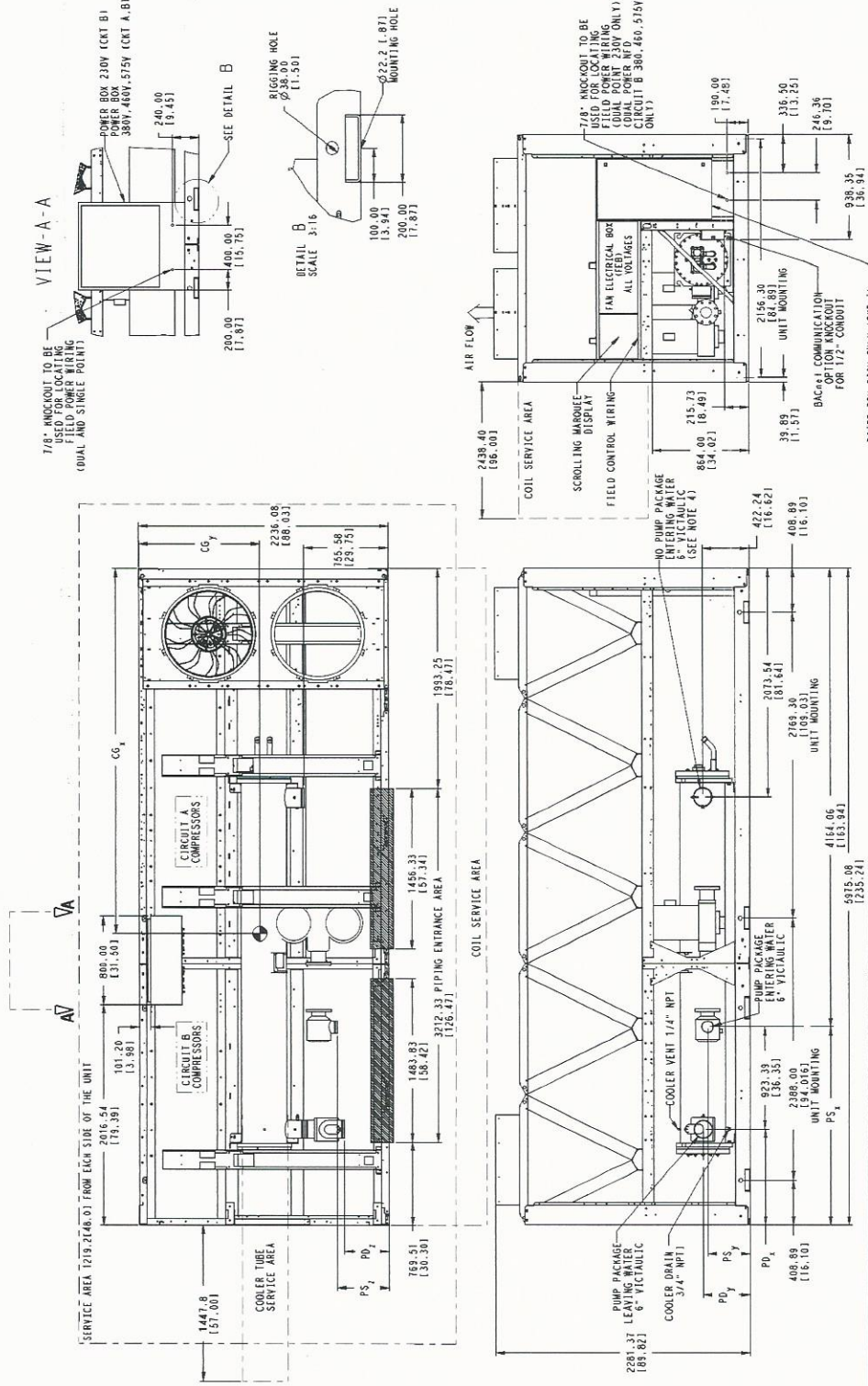
Refrigeration Circuit Options

- – None
- 0 – Suction Line Insulation
- 1 – Suction Service Valves
- 3 – Suction Line Insulation, Suction Service Valves
- B – Low Ambient Head Pressure Control Operation, Minimum Load Control
- D – Suction Line Insulation, Head Pressure Control, Minimum Load Control
- F – Suction Service Valves, Head Pressure Control, Minimum Load Control
- G – Suction Line Insulation, Suction Service Valves, Low Ambient Head Pressure Control, Operation, Minimum Load Control Operation
- H – Suction Service Valves, High-Efficiency Variable Condenser Fans
- J – Suction Line Insulation, Suction Service Valve, High-Efficiency Variable Condenser Fans
- K – High-Efficiency Variable Condenser Fans
- L – Suction Line Insulation, High-Efficiency Variable Condenser Fans
- M – Suction Service Valves, High-Efficiency Variable Condenser Fans, Minimum Load Control Operation
- N – Suction Line Insulation, Suction Service Valve, High-Efficiency Variable Condenser Fans, Minimum Load Control Operation
- P – High-Efficiency Variable Condenser Fans, Minimum Load Control Operation
- Q – Suction Line Insulation, High-Efficiency Variable Condenser Fans, Minimum Load Control Operation

Quality Assurance

ISO 9001: 2008-certified processes

30RB160, 170 AIR-COOLED CHILLER



WEIGHT	MAX. WEIGHT	WEIGHT	MAX. WEIGHT	WEIGHT	MAX. WEIGHT	WEIGHT	MAX. WEIGHT	WEIGHT	MAX. WEIGHT
CUYAL	CUYAL	CUYAL	CUYAL	CUYAL	CUYAL	CUYAL	CUYAL	CUYAL	CUYAL
160	160	160	160	160	160	160	160	160	160
188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82
188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82
188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82	188.82

- NOTES:
- Unit must have clearances as follows:
 Top — Do not restrict.
 Sides and End — 6' (1.8 m) from solid surface for airflow.
 Side — 8' (2.4 m) required for coil service area.
 - All pumps have drains located at the bottom of volute for draining.
 - Temperature relief devices located on suction line, liquid line and filter drier of each circuit and have 1/4" flare connection.
 - Units without a pump package have the same leaving water connection, Y and Z dimensions (entering water), and Pump Discharge X dimensions as units with a pump package.
 - Dimensions are in mm [inches].

LEGEND
 MCHX — Microchannel Condenser Coil



30RB060-300 — ENGLISH (CONT)

UNIT 30RB	160	170	190	210	225	250	275	300
OPERATING WEIGHT (lb)*								
Al-Cu Condenser Coil	10,266	10,601	12,013	13,734	14,067	15,468	16,915	18,306
Cu-Cu Condenser Coil	11,472	11,807	13,460	15,181	15,514	17,157	18,845	20,477
MCHX Condenser Coil	9,475	9,799	11,064	12,772	13,093	14,349	15,647	16,893
REFRIGERANT TYPE								
R-410A, EXV Controlled System								
Refrigerant Charge (lb)	162/106/—	162/130/—	162/162/—	133/106/133	133/133/133	133/133/162	162/162/133	162/162/162
Std Coil, Ckt A/Ckt B/Ckt C	83/55/—	83/64/—	83/87/—	59/53/64	59/59/64	59/59/89	83/87/68	83/87/94
MCHX Coil, Ckt A/Ckt B/Ckt C								
COMPRESSORS								
Scroll, Hermetic								
Quantity	7	7	8	9	9	10	11	12
Speed (rpm)	3500							
(Qty) Compressor Model Number Ckt A	(4) SH295	(4) SH295	(4) SH295	(3) SH295	(3) SH295	(3) SH295	(4) SH295	(4) SH295
(Qty) Compressor Model Number Ckt B	(3) SH240	(3) SH295	(4) SH295	(3) SH240	(3) SH295	(3) SH295	(4) SH295	(4) SH295
(Qty) Compressor Model Number Ckt C	N/A	N/A	N/A	(3) SH295	(3) SH295	(4) SH295	(3) SH295	(4) SH295
Oil Charge (Pt, Ckt A/Ckt B/Ckt C)	58.4/39.4/—	58.4/43.8/—	58.4/58.4/—	43.8/39.4/43.8	43.8/43.8/43.8	43.8/43.8/58.4	58.4/58.4/43.8	58.4/58.4/58.4
No. Capacity Steps								
Standard	7	7	8	9	9	10	11	12
Optional (Maximum)	8	8	9	10	10	11	12	13
Minimum Capacity Step (%)								
Standard	13	14	13	10	11	10	9	8
Optional	8	10	9	6	8	7	7	6
Capacity (%)								
Ckt A	62	57	50	36	33	30	36	33
Ckt B	38	43	50	28	33	30	36	33
Ckt C	N/A	N/A	N/A	36	33	40	28	33
COOLER								
Direct Expansion, Shell and Tube Type								
Weight (empty, lb)	1518	1518	1518	2382	2382	2382	2382	2382
Net Fluid Volume (gal)	73.5	73.5	73.5	86.6	86.6	86.6	86.6	86.6
Maximum Refrigerant Pressure (psig)	445	445	445	445	445	445	445	445
Maximum Water-Side Pressure without Pumps (psig)	300	300	300	300	300	300	300	300
Maximum Water-Side Pressure with Pumps (psig)	150	150	150	150	150	150	150	150
COOLER WATER CONNECTIONS (in.)								
Inlet and Outlet, Victaulic	6	6	6	6	6	6	6	6
Drain (NPT)	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
CONDENSER FANS								
Shrouded Axial Type, Vertical Discharge								
Standard Low Noise Type								
Fan Speed (rpm) Standard	1140	1140	1140	1140	1140	1140	1140	1140
No. Blades...Diameter (in.)	9...30	9...30	9...30	9...30	9...30	9...30	9...30	9...30
No. Fans (Ckt A/Ckt B/Ckt C)	6/4/—	6/4/—	6/6/—	4/4/4	4/4/4	4/4/6	6/6/4	6/6/6
CONDENSER COILS								
No. Coils (Ckt A/Ckt B/Ckt C)	6/4/—	6/4/—	6/6/—	4/4/4	4/4/4	4/4/6	6/6/4	6/6/6
Total Face Area (sq ft)	235	235	282	282	282	328	375	422
Max Working Refrigerant Pressure (psig)	656	656	656	656	656	656	656	656
HYDRONIC MODULE (Optional)								
Pump	Pump(s) with pressure/temperature taps and combination valve.				Not available			
	Single or Dual, 1800 or 3600 rpm							
CHASSIS DIMENSIONS (ft-in.)								
Length	19-8		23-7			27-6	31-5	35-4
Width	7-425/32							
Height	7-67/16							

LEGEND

- Al-Cu — Aluminum Fin/Copper Tube Condenser Coil
- Cu-Cu — Copper Fin/Copper Tube Condenser Coil
- EXV — Electronic Expansion Valve
- MCHX — Microchannel Condenser Coil
- N/A — Not Applicable

*Operating weight does not include any options.

NOTES:

1. 30RB chillers with Greenspeed® intelligence are not available in unit sizes 060 and 070.
2. No pumps are available for unit sizes 210-300 or 060-190 with high SCCR option.