

# Model number nomenclature (cont)



## AQUASNAP® CHILLER MODEL NUMBER DESIGNATION, 30RAP070-150

30RA P 090 6 F B F D 1 1 0

30RA – Air-Cooled AquaSnap Chiller

Refrigerant Type  
P – Puron®

Unit Sizes  
070 115  
080 130  
090 150  
100

Voltage  
1 – 575-3-60  
2 – 380-3-60  
5 – 208/230-3-60  
6 – 460-3-60  
9 – 380/415-3-50

### Condenser Coil and Low Sound Options

- 0 – Aluminum/Copper, Value Sound Fan
- 1 – Copper/Copper, Value Sound Fan
- 2 – Aluminum/Copper, Pre-Coat, Value Sound Fan
- 3 – Aluminum/Copper, E-Coat, Value Sound Fan
- 4 – Copper/Copper, E-Coat, Value Sound Fan
- 5 – MCHX, Value Sound Fan
- 6 – MCHX, E-Coat, Value Sound Fan
- 7 – Aluminum/Copper, AeroAcoustic™ Fan
- 8 – Copper/Copper, AeroAcoustic Fan
- 9 – Copper/Aluminum, Pre-Coat, AeroAcoustic Fan
- B – Copper/Aluminum, E-Coat, AeroAcoustic Fan
- C – Copper/Copper, E-Coat, AeroAcoustic Fan
- D – MCHX, AeroAcoustic Fan
- F – MCHX, E-Coat, AeroAcoustic Fan
- J – MCHX, AeroAcoustic Fan, Compressor Blanket(s)
- K – MCHX, E-Coat, AeroAcoustic Fan, Compressor Blanket(s)
- L – Aluminum/Copper, AeroAcoustic Fan, Compressor Blanket(s)
- M – Copper/Copper, AeroAcoustic Fan, Compressor Blanket(s)
- N – Aluminum/Copper, Pre-Coat, AeroAcoustic Fan, Compressor Blanket(s)
- P – Aluminum/Copper, E-Coat, AeroAcoustic Fan, Compressor Blanket(s)
- Q – Copper/Copper, E-Coat, AeroAcoustic Fan, Compressor Blanket(s)

Revision Level  
B – Current Revision Level

### Hydronic System

- 0 – No Pump
- 2 – Single Pump, 5 Hp
- 3 – Single Pump, 7.5 Hp
- 4 – Single Pump, 10 Hp
- 5 – Single Pump, 15 Hp
- 8 – Dual Pump, 7.5 Hp
- 9 – Dual Pump, 10 Hp
- B – Dual Pump, 15 Hp
- D – Single Pump, 5 Hp with VFD
- F – Single Pump, 7.5 Hp with VFD
- G – Single Pump, 10 Hp with VFD
- H – Single Pump, 15 Hp with VFD
- L – Dual Pump, 7.5 Hp with VFD
- M – Dual Pump, 10 Hp with VFD
- N – Dual Pump, 15 Hp with VFD

### Packaging/Security Options

- 0 – Std Packaging
- 4 – Security Grilles/Hail Guards Only
- 8 – Skid Only
- D – Skid, Security Grilles/Hail Guards
- J – Skid, Top Crate, Bag
- N – Skid, Top Crate, Bag, Security Grilles/Hail Guards

### Controls/Communications Options

- 0 – Std
- 1 – Std, BACnet Communication
- 5 – EMM
- 6 – EMM, BACnet Communication
- B – EMM, GFI
- C – EMM, GFI, BACnet Communication
- H – GFI
- J – GFI, BACnet Communication

### Electrical Options

- 0 – Single Point, No Disconnect, No Cooler Heater
- 1 – Single Point, No Disconnect, Cooler Heater
- 2 – Single Point, Non-Fused Disconnect, No Cooler Heater
- 3 – Single Point, Non-Fused Disconnect, Cooler Heater
- 4 – Dual Point, No Disconnect, No Cooler Heater
- 5 – Dual Point, No Disconnect, Cooler Heater

### Ambient/Capacity Control/High SCCR Options

- 0 – Std Comp
- 1 – Hot Gas Bypass
- 2 – Digital Comp
- 3 – Std Comp, High SCCR
- 4 – Hot Gas Bypass, High SCCR
- 5 – Digital Comp, High SCCR
- 6 – Low Ambient, Std Comp
- 7 – Low Ambient, Hot Gas Bypass
- 8 – Low Ambient, Digital Comp
- 9 – Low Ambient, Std Comp, High SCCR
- B – Low Ambient, Hot Gas Bypass, High SCCR
- C – Low Ambient, Digital Comp, High SCCR
- D – Std Comp, Suction Service Valve
- F – Hot Gas Bypass, Suction Service Valve
- G – Digital Comp, Suction Service Valve
- H – Std Comp, High SCCR, Suction Service Valve
- J – Hot Gas Bypass, High SCCR, Suction Service Valve
- K – Digital Comp, High SCCR, Suction Service Valve
- L – Low Ambient, Std Comp, Suction Service Valves
- M – Low Ambient, Hot Gas Bypass, Suction Service Valves
- N – Low Ambient, Digital Comp, Suction Service Valves
- P – Low Ambient, Std Comp, High SCCR, Suction Service Valves
- Q – Low Ambient, Hot Gas Bypass, High SCCR, Suction Service Valves
- R – Low Ambient, Digital Comp, High SCCR, Suction Service Valves

### 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: 2008-certified processes





ENGLISH (cont)

UNIT 30RAP	070	080	090	100	115	130	150	
<b>OPERATING WEIGHT (lb)</b>								
MCHX Condenser Coil, No Pump	3410	3641	3697	4690	5008	6451	6938	
MCHX Condenser Coil, Single Pump (60 Hz only)	3812	4035	4061	5089	5407	6850	7337	
MCHX Condenser Coil, Dual Pump (60 Hz only)	4092	4390	4411	5374	5692	7135	7622	
Al-Cu Condenser Coil, No Pump	3759	4064	4119	5548	5939	7113	7673	
Al-Cu Condenser Coil, Single Pump (60 Hz only)	4161	4457	4483	5947	6338	7512	8072	
Al-Cu Condenser Coil, Dual Pump (60 Hz only)	4441	4737	4763	6232	6623	7797	8357	
Cu-Cu Condenser Coil, No Pump	4359	4784	4839	6388	6899	8193	8873	
Cu-Cu Condenser Coil, Single Pump (60 Hz only)	4761	5177	5203	6787	7298	8592	9272	
Cu-Cu Condenser Coil, Dual Pump (60 Hz only)	5041	5457	5483	7072	7583	8877	9557	
<b>REFRIGERANT TYPE</b>								
Total Refrigerant Charge MCHX (lb)	60.5	70.2	R-410A, EXV Controlled System		88.3	100.9	110.4	119.5
Refrigerant Charge MCHX (lb) Ckt A/Ckt B	25.5/35	35.1/35.1	35.5/35.5	39.3/49.0	50.6/50.3	51.2/59.2	60.0/59.5	
Total Refrigerant Charge RTPF (lb)	150.0	169.2	170.0	192.0	213.0	239.2	264.0	
Refrigerant Charge RTPF (lb) Ckt A/Ckt B	65.5/84.5	84.6/84.6	85.0/85.0	87.0/105.0	106.5/106.5	107.5/131.7	132.0/132.0	
<b>COMPRESSORS</b>								
Quantity	5	6	6	5	6	6	6	
Speed (Rpm)			3500 (60 Hz)/2900 (50Hz)	2900 (50Hz)				
(Qty, Tons) Ckt A	(2) 15	(3) 13	(3) 15	(1) 20 (1) 25	(3) 20	(3) 20	(3) 25	
(Qty, Tons) Ckt B	(3) 15	(3) 15	(3) 15	(3) 20	(3) 20	(3) 25	(3) 25	
Oil Charge (Pt) Ckt A/Ckt B	13.8/20.6	20.6/20.6	20.6/20.6	28.4/42.6	42.6/42.6	42.6/42.6	42.6/42.6	
No. Capacity Steps								
Standard	5	6	6	5	6	6	6	
With Hot Gas Bypass	6	7	7	6	7	7	7	
Digital Compressor Option	55	66	66	—	—	—	—	
Minimum Capacity Step (%)								
Standard	20	15	17	19	17	15	17	
With Hot Gas Bypass	13	9	11	13	11	9	11	
Digital Compressor Option	7	5	6	—	—	—	—	
Capacity (%)								
Circuit A	40	46	50	43	50	44	50	
Circuit B	60	54	50	57	50	56	50	
<b>COOLER</b>								
			Braze, Direct-Expansion Plate Heat Exchanger					
Weight (lb) (empty)	197	228	245	267	304	334	378	
Net Fluid Volume (gal)	4.3	5.0	6.8	7.4	8.6	9.5	10.9	
Maximum Refrigerant Pressure (psig)	450	450	450	450	450	450	450	
Maximum Water-Side Pressure Without Pump(s) (psig)	300	300	300	300	300	300	300	
Maximum Water-Side Pressure With Pump(s) (psig)	150	150	150	150	150	150	150	
<b>CHILLER WATER CONNECTIONS (in.)</b>								
Inlet and Outlet, Victaulic (IPS Carbon Steel)*	3	3	3	4	4	4	4	
Drain (NPT)	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
<b>CONDENSER FANS</b>								
Standard Low-Sound AeroAcoustic™ Type								
Fan Speed (Rpm)	Plastic Type, Axial, Vertical Discharge 850 (60 Hz)/710 (50 Hz)							
No. Blades...Diameter (in.)	9...30	9...30	9...30	9...30	9...30	9...30	9...30	
No. Fans	5	6	6	7	8	9	10	
Total Airflow, 60 Hz (Cfm)	48,500	58,200	58,200	67,900	77,600	87,300	97,000	
Total Airflow, 50 Hz (Cfm)	40,512	48,614	48,614	56,716	64,819	72,921	81,024	
Optional Value Sound Type								
Fan Speed (Rpm)	Propeller Type, Axial, Vertical Discharge 1140 (60 Hz)/950 (50 Hz)							
No. Blades...Diameter (in.)	4...30	4...30	4...30	4...30	4...30	4...30	4...30	
No. Fans	5	6	6	7	8	9	10	
Total Airflow, 60 Hz (Cfm)	51,250	61,500	61,500	71,750	82,000	92,250	102,500	
Total Airflow, 50 Hz (Cfm)	42,809	51,371	51,371	59,932	68,494	77,056	85,618	
<b>CONDENSER COILS</b>								
	Novation® MCHX Aluminum Tube, Aluminum Fin or RTPF							
Quantity (Ckt A/Ckt B)	2/3	3/3	3/3	3/4	4/4	4/5	5/5	
Total Face Area (sq ft)	124.7	149.6	149.6	174.5	199.4	224.4	249.3	
Maximum Refrigerant Pressure (psig)	656	656	656	656	656	656	656	
<b>HYDRONIC MODULE (Optional, 60 Hz Only)†</b>								
Pump	Pump(s), Strainer with Blowdown Valve, Expansion Tank, Pressure Taps, Drain and Vent Plugs, Flow Switch, and Balance Valve							
Expansion Tank Volume (gal) Total/Acceptance	Single or Dual, Centrifugal Monocell Pump(s), 3500 Rpm. Dual pumps with check valves and isolation valves.							
	—	—	—	—	—	—	—	
<b>CHASSIS DIMENSIONS (ft - in.)</b>								
Length	12-7	12-7	12-7	15-11	15-11	19-4	19-4	
Width	7-4	7-4	7-4	7-4	7-4	7-4	7-4	
Height	6-6	6-6	6-6	6-6	6-6	6-6	6-6	

LEGEND

- EXV — Electronic Expansion Valve
- MCHX — Microchannel Heat Exchanger
- RTPF — Round Tube, Plate Fin (Condenser Coil)

\*Unit connection is IPS Carbon Steel piping.

†Flow switch and strainer are standard on all units, with or without hydronic package.

NOTE: 30RAP chillers with Greenspeed® intelligence are not available on unit sizes 070-150.