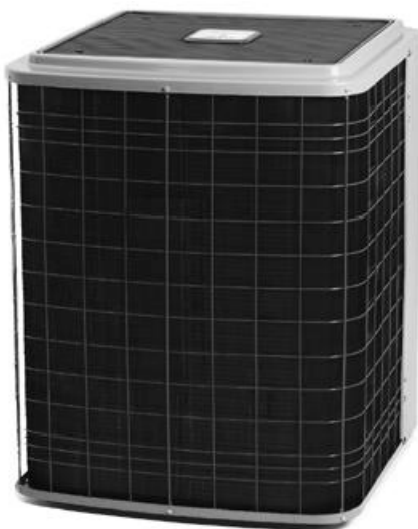


CHC SERIES 6-1/3 TON



Representative photo only, some models may vary in appearance.



9800161
CERTIFIED/CERTIFIED TO
CAN/CSA B140.4



Rated in accordance with ARI Standard
210. Certification applies only when used
with proper components as listed with ARI.

COMMERCIAL SPLIT SYSTEM HEAT PUMPS

FEATURES

- Standard scroll compressor on all models
- Triple-coated steel, consisting of a polyester top coat, a urethane primer coat preceded by an oxide pretreatment.
- Heavy Duty coil guard is offset to protect coil from accidental damage.
- Enhanced aluminum fins mechanically bonded to copper tubes for improved heat transfer
- Pre-painted fins provide additional corrosion resistance.
- High and low pressure switches to provide compressor protection.
- Electronic defrost control insures fast, efficient defrost cycle.
- Anti-cycle timer to protect compressor.
- 0° F Low ambient fan control device.
- Crankcase heaters for compressor protection in low ambient conditions.
- Externally mounted gauge ports allow for easy, accurate reading of operating conditions while servicing.
- Top Discharge Condensor Fan.
- 24 Volt control circuit.
- One (1) year limited warranty on parts and a five (5) year limited warranty on the compressor.
- **Optional Factory Installed Hail Guard**
(See model number nomenclature)

RESIDENTIAL AND COMMERCIAL SYSTEMS • SPLIT SYSTEMS • PACKAGED AIR CONDITIONERS •
COMBINATION GAS / ELECTRIC UNITS • HEAT PUMPS • AIR HANDLERS • MANUFACTURED HOME AIR
CONDITIONERS • GAS, OIL AND ELECTRIC FURNACES

International Comfort Products
650 Heil Quaker Avenue
Lewisburg, Tn. 37091

506 71 1501 00

	UNIT SPECIFICATIONS		
Electrical	CHC075HA	CHC075LA	CHC075SA
Volts / Phase / Hertz	230/3/60	460/3/60	575/3/60
Voltage Min - Max	187-253	414-506	517-633
Total Unit Amps	24.0	12.1	8.8
Min. Circuit Amp.	28.7	14.5	10.7
Minimum Fuse Size	35	20	15
Max. Fuse	45	20	15
Compressor			
RLA	18.91	9.49	7.56
LRA	146	73	58.4
Type	Single Scroll	Single Scroll	Single Scroll
Condenser Fan Data			
Quantity	1	1	1
Volts/Phase/Hertz	230/1/60	460/1/60	575/1/60
FLA	5.1	2.6	1.2
LRA	10.3	5.33	3.9
Blades/Diameter/Pitch	3/26/28	3/26/28	3/26/28
Hp - Rpm - Speeds	3/4-1100-1	3/4-1100-1	3/4-1140-1
Bearing Type	Sleeve	Sleeve	Sleeve
Rotation (Shaft End)	CW	CW	CW
Condenser Coil			
Rows / Fins per Inch	2 / 18	2 / 18	2 / 18
Total Face Area-Sq. ft.	23.58	23.58	23.58
Tube Diameter	3/8	3/8	3/8
Refrigerant			
Type	R-22	R-22	R-22
Ounces	Units Shipped with Holding Charge		
Approximate Operating Charge - Ounces, Based On BHC Series Air Handler	317		
Line Size Liquid I.D. (in.)	5/8	5/8	5/8
Line Size Suction I.D. (in.)	1-1/8	1-1/8	1-1/8
Controls			
Compressor IPR Valve (psi) Average	450	450	450
High Press. Switch Auto Reset - Open / Close psi	420-300	420-300	420-300
Low Press. Switch Auto Reset - Open - Close psi	5 - 20	5 - 20	5 - 20
Contactors Amps. (FLA)	30	30	30
Low Ambient Control - Actuation / Release	250 / 100	250 / 100	250 / 100
Crankcase Heater Type	70 Watt Strap On	70 Watt Strap On	70 Watt Strap On
Misc.			
Shipping Weight (lbs.)	345	345	345

PERFORMANCE DATA COOLING				
UNIT SIZE	Rated Capacity Btuh ¹	S/T	EER	I.P.L.V.
6 - 1/3 TON	77,000	.80	10.1	N / A

¹ Net Capacity Ratings based on ARI Test Standards, 95° F Amb. 80° F DB / 67° F WB.

Expanded Performance Data (Cooling) - CHC075 with BHC090**A - (Gross Capacity, See Notes on bottom page 4)

			Outdoor Ambient Temperature - Degrees F. Dry Bulb																								
			65				75				85				95				105				115				
IDB*	Airflow		Entering Indoor Temperature - Degrees F. Wet Bulb																								
			59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	
70	3450	MBh	78.1	80.9	88.7	-	76.3	79.1	86.6	-	74.5	77.2	84.6	-	72.7	75.3	82.5	-	69.0	71.5	78.4	-	63.9	66.3	72.6	-	
		S/T	0.74	0.62	0.43	-	0.77	0.64	0.45	-	0.79	0.66	0.46	-	0.82	0.68	0.47	-	0.85	0.71	0.49	-	0.85	0.71	0.49	-	
		KW	5.25	5.37	5.55	-	5.68	5.81	6.01	-	6.06	6.21	6.42	-	6.40	6.55	6.78	-	6.69	6.85	7.09	-	6.94	7.11	7.36	-	
	3080	MBh	75.8	78.6	86.1	-	74.1	76.8	84.1	-	72.3	74.9	82.1	-	70.5	73.1	80.1	-	67.0	69.5	76.1	-	62.1	64.3	70.5	-	
		S/T	0.71	0.59	0.41	-	0.73	0.61	0.43	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.81	0.68	0.47	-	
		KW	5.20	5.32	5.50	-	5.63	5.76	5.96	-	6.01	6.15	6.37	-	6.35	6.50	6.72	-	6.63	6.79	7.03	-	6.88	7.04	7.29	-	
	2940	MBh	75.1	77.8	85.2	-	73.3	76.0	83.3	-	71.6	74.2	81.3	-	69.8	72.4	79.3	-	66.3	68.8	75.3	-	61.4	63.7	69.8	-	
		S/T	0.70	0.59	0.41	-	0.73	0.61	0.42	-	0.75	0.62	0.43	-	0.77	0.64	0.45	-	0.80	0.67	0.46	-	0.81	0.67	0.47	-	
		KW	5.14	5.26	5.44	-	5.57	5.70	5.89	-	5.94	6.08	6.29	-	6.28	6.42	6.65	-	6.56	6.71	6.95	-	6.80	6.96	7.21	-	
	75	3136	MBh	79.4	81.8	88.5	95.0	77.6	79.9	86.5	92.8	75.7	78.0	84.4	90.6	73.9	76.1	82.3	88.4	70.2	72.3	78.2	84.0	65.0	66.9	72.5	77.8
			S/T	0.84	0.76	0.57	0.37	0.88	0.78	0.59	0.38	0.90	0.80	0.61	0.39	0.93	0.83	0.63	0.40	0.96	0.86	0.65	0.42	0.97	0.87	0.66	0.42
			KW	5.29	5.41	5.60	5.79	5.73	5.86	6.07	6.28	6.12	6.26	6.48	6.71	6.46	6.61	6.85	7.09	6.75	6.91	7.16	7.41	7.00	7.17	7.42	7.69
2800		MBh	77.1	79.4	85.9	92.2	75.3	77.5	83.9	90.1	73.5	75.7	81.9	87.9	71.7	73.9	79.9	85.8	68.1	70.2	75.9	81.5	63.1	65.0	70.3	75.5	
		S/T	0.81	0.72	0.55	0.35	0.84	0.75	0.57	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.92	0.82	0.62	0.40	0.93	0.83	0.63	0.40	
		KW	5.25	5.37	5.55	5.74	5.68	5.81	6.01	6.22	6.07	6.21	6.42	6.65	6.40	6.56	6.79	7.03	6.69	6.85	7.09	7.35	6.94	7.11	7.36	7.62	
2464		MBh	73.3	75.4	81.6	87.6	71.6	73.7	79.7	85.6	69.8	71.9	77.8	83.5	68.1	70.2	75.9	81.5	64.7	66.7	72.1	77.4	60.0	61.7	66.8	71.7	
		S/T	0.77	0.69	0.52	0.34	0.80	0.72	0.54	0.35	0.82	0.73	0.56	0.36	0.85	0.76	0.57	0.37	0.88	0.79	0.59	0.38	0.89	0.79	0.60	0.39	
		KW	5.16	5.27	5.45	5.64	5.58	5.71	5.91	6.11	5.96	6.10	6.31	6.53	6.29	6.44	6.66	6.90	6.57	6.73	6.97	7.21	6.82	6.98	7.23	7.49	
80	3136	MBh	80.8	82.6	88.2	94.3	79.0	80.7	86.2	92.1	77.1	78.8	84.1	89.9	75.2	76.8	82.1	87.8	71.4	73.0	78.0	83.4	66.2	67.6	72.2	77.2	
		S/T	0.93	0.87	0.71	0.53	0.96	0.90	0.73	0.55	1.00	0.92	0.75	0.56	1.00	0.95	0.78	0.58	1.00	1.00	0.81	0.60	1.00	1.00	0.81	0.61	
		KW	5.34	5.46	5.65	5.84	5.78	5.92	6.12	6.33	6.17	6.32	6.54	6.77	6.52	6.67	6.91	7.15	6.81	6.98	7.22	7.48	7.07	7.24	7.49	7.76	
	2800	MBh	78.5	80.2	85.7	91.6	76.7	78.3	83.7	89.5	74.8	76.5	81.7	87.3	73.0	74.6	79.7	85.2	69.4	70.9	75.7	80.9	64.2	65.6	70.1	75.0	
		S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.00	0.95	0.77	0.58	
		KW	5.29	5.41	5.60	5.79	5.73	5.86	6.07	6.28	6.12	6.26	6.48	6.71	6.46	6.61	6.85	7.09	6.75	6.91	7.16	7.41	7.00	7.17	7.42	7.69	
	2464	MBh	74.6	76.2	81.4	87.0	72.8	74.4	79.5	85.0	71.1	72.6	77.6	83.0	69.4	70.9	75.7	80.9	65.9	67.3	71.9	76.9	61.0	62.4	66.6	71.2	
		S/T	0.85	0.79	0.65	0.48	0.88	0.82	0.67	0.50	0.90	0.84	0.69	0.51	0.93	0.87	0.71	0.53	0.96	0.90	0.74	0.55	0.97	0.91	0.74	0.55	
		KW	5.20	5.32	5.50	5.69	5.63	5.76	5.96	6.17	6.01	6.15	6.37	6.59	6.35	6.50	6.72	6.96	6.63	6.79	7.03	7.28	6.88	7.04	7.29	7.55	
	85	3136	MBh	82.2	83.8	87.8	93.7	80.3	81.9	85.8	91.5	78.4	79.9	83.7	89.3	76.5	78.0	81.7	87.1	72.7	74.1	77.6	82.8	67.3	68.6	71.9	76.7
			S/T	0.97	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.93	0.75	1.00	1.00	0.96	0.78	1.00	1.00	0.97	0.79
			KW	5.38	5.51	5.69	5.89	5.83	5.97	6.17	6.39	6.23	6.37	6.60	6.83	6.58	6.73	6.97	7.22	6.87	7.04	7.29	7.55	7.13	7.30	7.56	7.83
2800		MBh	79.9	81.4	85.2	90.9	78.0	79.5	83.3	88.8	76.1	77.6	81.3	86.7	74.3	75.7	79.3	84.6	70.6	71.9	75.3	80.4	65.4	66.6	69.8	74.5	
		S/T	0.93	0.89	0.81	0.65	0.96	0.93	0.84	0.68	0.98	0.95	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.75	
		KW	5.34	5.46	5.65	5.84	5.78	5.92	6.12	6.33	6.17	6.32	6.54	6.77	6.52	6.67	6.91	7.15	6.81	6.98	7.22	7.48	7.07	7.24	7.49	7.76	
2464		MBh	75.9	77.3	81.0	86.4	74.1	75.5	79.1	84.4	72.3	73.7	77.2	82.4	70.6	71.9	75.3	80.4	67.0	68.3	71.6	76.4	62.1	63.3	66.3	70.7	
		S/T	0.89	0.86	0.77	0.63	0.92	0.89	0.80	0.65	0.94	0.91	0.82	0.67	0.97	0.94	0.85	0.69	1.00	0.97	0.88	0.71	1.00	0.98	0.89	0.72	
		KW	5.25	5.37	5.55	5.74	5.68	5.81	6.01	6.22	6.06	6.21	6.42	6.65	6.40	6.55	6.78	7.03	6.69	6.85	7.09	7.35	6.94	7.11	7.36	7.62	

*Entering Indoor Temperature-Degrees F. Dry Bulb  Standard Rating

Extended Performance Data (Heating) - CHC075 with BHC090**A

			Outdoor Ambient Temperature																	
IDB*	Airflow		65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0	-5	-10
70	3080	M Bh	90.9	86.0	81.0	75.7	72.3	70.1	65.1	60.0	58.4	53.9	49.6	46.8	45.1	40.5	35.9	31.3	26.7	21.9
		T/R	30.1	28.5	26.8	25.0	23.9	23.2	21.5	19.8	19.3	17.8	16.4	15.5	14.9	13.4	11.9	10.3	8.8	7.2
		KW	7.20	7.04	6.89	6.74	6.65	6.58	6.44	6.28	6.35	6.19	6.03	5.94	5.88	5.72	5.56	5.40	5.24	5.09
		COP	3.70	3.58	3.44	3.29	3.18	3.11	2.96	2.80	2.69	2.55	2.41	2.31	2.25	2.07	1.89	1.69	1.49	1.26
		EER	12.6	12.2	11.8	11.2	10.9	10.6	10.1	9.6	9.2	8.7	8.2	7.9	7.7	7.1	6.5	5.8	5.1	4.3

Condensor Capacity Data

SATURATED SUCTION TEMP. - °F		OUTDOOR TEMPERATURE °F								
		75	80	85	90	95	100	105	110	115
		GROSS CONDENSER CAPACITY (MBTU/HR)								
35		73	71	70	68	66	64	62	60	58
40		81	79	77	75	72	71	68	66	63
45		88	86	84	82	80	77	75	72	70
50		97	94	92	89	87	84	82	79	76
		COMPRESSOR & CONDENSER FAN POWER (KW)								
35		4.9	5.2	5.4	5.7	6.0	6.3	6.6	6.9	7.3
40		5.6	5.9	6.1	6.4	6.7	7.0	7.3	7.6	8.3
45		5.8	6.0	6.3	6.5	6.8	7.1	7.4	7.8	8.1
50		5.9	6.2	6.4	6.7	7.0	7.3	7.6	7.9	8.3
		GROSS EER (GROSS CAPACITY ÷ COMPRESSOR & FAN POWER)								
35		14.8	13.8	12.8	11.9	11.0	10.2	9.4	8.6	7.9
40		14.3	13.4	12.5	11.7	10.8	10.1	9.3	8.6	7.7
45		15.3	14.3	13.4	12.5	11.6	10.8	10.0	9.3	8.6
50		16.4	15.3	14.3	13.4	12.4	11.6	10.8	10.0	9.2

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	C	H	C	075	G	H	A	
PRODUCT FAMILY								SALES CODE
C = Condensor								ELECTRICAL
PRODUCT TYPE								CODE
H = Heat Pump								VOLTS
								PHASE
								CYCLE
								H 208/230 3 60
								L 460 3 60
								S 575 3 60
SERIES								Optional Factory Installed Hail Guard
C = Series								CAPACITY BTUH 075 = 75,000

MAXIMUM ALLOWABLE TONNAGE FOR EQUIVALENT LINE LENGTH

O. D. (Inches)	Equivalent Line Length (Line + Valves + Fittings) - Type L Copper Tube			
	25' (7.6m)	50' (15.2m)	75' (22.9m)	100' (30.5m)
Liquid 5/8"	13.7 Ton	9.4 Ton	7.4 Ton	n/a
Suction 1-1/8"	12.5 Ton	8.5 Ton	n/a	n/a
Suction 1-3/8"	20.4 Ton	14.6 Ton	11.6 Ton	10.0 Ton

NOTE: Equivalent suction line length is designed for a pressure drop due to friction equivalent to 2° F (1.1° C)

NOTES AND FORMULAS FOR USING EXPANDED PERFORMANCE DATA

To find leaving wet bulb and dry bulb from the expanded performance charts on the previous page, use the following formulas. Direct interpolation is permissible. Do not extrapolate.

$$t_{db} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{wb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{wb}).

$$h_{wb} = h_{ewb} - \frac{\text{sensible capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil.

LEGEND

MBh = Total Capacity (Gross)

KW = Unit Operating Watts

t_{db} = Leaving Dry Bulb

edb = Entering Dry Bulb

h_{wb} = Enthalpy of leaving wet bulb

S/T = Sensible to Total Ratio

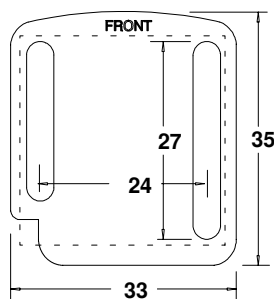
IDB = Indoor Dry Bulb

t_{wb} = Leaving Wet Bulb

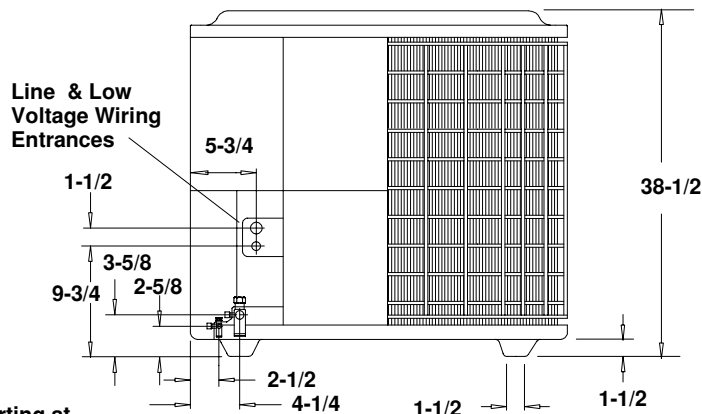
ewb = Entering Wet Bulb

DIMENSIONS

ALL DIMENSIONS IN INCHES



Chassis #3



Line & Low Voltage Wiring Entrances

Minimum Mounting Pad Sizes with pad starting at 9" from structure for minimum clearance of 6".

Chassis #3 27" W X 28" D