

Heat Exchangers

DX



Build your system on the best... 10RT Series DX coolers

Choose Carrier 10RT Series direct expansion (DX) shell-and-tube liquid coolers for built-up systems in office buildings, hospitals, or any commercial application. 10RT coolers are designed for unique cooling requirements where space limitations dictate the need for separate location of the cooler from the condenser, compressors, or air-handling components.

The 10RT is designed for optimum heat transfer rates and features rolled in tubes and removable heads. Shell side baffling is selected for high operating efficiency and minimal fluid pressure drops.

10RT Series DX Coolers (7-1/2 - 350 Ton)

Tons	Standard Models	Dia.	Length	Wgt. Lbs.
7.5	10RT0401-A-147--AB	5	56-5/8	190
10	10RT0501-A-147--AB	5	68-5/8	215
15	10RT0501-B-147--AB	6	68-5/8	250
20	10RT0401-C-247--AB	8	56-7/8	360
25	10RT0501-C-247--AB	8	66-7/8	415
30	10RT0602-C-227--AB	8	80-1/4	470
40	10RT0702-C-227--AB	8	92-1/4	530
50	10RT0704-D-227--AB	10	93	700
60	10RT0804-D-227--AB	10	105	720
75	10RT0904-D-227--AB	10	117	850
100	10RT0804-E-227--AB	12	105-3/8	1140
125	10RT1004-F-227--AB	14	130-1/2	1540

Tons	Built to order Models	Dia.	Length	Wgt. Lbs.
16	10RT0601-B-147--AB	6	80	300
34	10RT0503-D-247--AB	10	69	555
37	10RT0604-D-247--AB	10	81	665
57	10RT0702-D-227--AB	10	93	700
82	10RT0806-E-227--AB	12	105-3/8	1140
130	10RT1104-F-227--AB	14	142-1/2	1675
150	10RT1004-G-227--AB	16	131-1/2	1900
160	10RT1104-G-227--AB	16	143-1/2	2150
170	10RT0903-H-227--AB	18	119-1/2	2385
200	10RT1003-H-227--AB	18	131-1/2	2655
220	10RT1205-H-227--AB	18	155-1/2	3205
250	10RT1003-J-227--AB	20	132-1/2	2995
263	10RT1104-J-227--AB	20	144-1/2	3295
284	10RT1204-J-227--AB	20	156-1/2	3595
286	10RT0902-L-227--AB	24	120-1/2	3710
324	10RT1002-L-227--AB	24	132-1/2	3790
352	10RT1103-L-227--AB	24	144-1/2	3850
384	10RT1203-L-227--AB	24	156-1/2	3920

Nominal capacity based on 14,400 BTUH per ton, 85°F condenser water temperature, 10°F range with R22 service at 105°F condensing temperature. Comprehensive ratings tables are available for R22, R134a and R404a. Windows selection software available. Pump-down capacity is based on 80% of free shell volume with R22 at 90°F per ARI. Capacity includes 0.0001 hr*12°F/ftBu additive fouling.

Choose MXH condensers for your sea water environment...

MXH condensers are manufactured with the latest marine condenser materials to provide compact size and cost effective use for sea water duty.

- Standard MXH seawater condensers are available from 5 to 330 nominal tons. Non-standard marine condensers are available to meet virtually any chiller application. Vessels can be equipped with cupro-nickel tubes and tube sheets or titanium tubes for sea water duty.
- Modern Materials – MXH condensers utilize the latest technology tubing. All condensers are manufactured with 3/4" diameter 90/10 cupro-nickel tubes. Tubes are expanded into grooved tube sheets to provide heavy wall construction and ease of service for commonly available tube cleaning devices. Tube sheets are 90/10 cupro-nickel manufactured to ASME specifications and precision machined for excellent sealing. Heads are cast bronze to withstand the corrosive effects of sea water duty. Single-pass 14" and 16" heads are fabricated from steel, and epoxy coated. Tube support sheets are manufactured to close tolerance to minimize vibration. All water-side connections are FPT except 12" 1-pass, 14" and 16" models which have flanges. Refrigerant connections are steel and bored to the OD's of copper tubing. Relief, vent and drain connections are provided. Shells are manufactured from steel pipe to ASME specification.
- Modifications – Refrigeration heat exchangers are available with special materials of construction as required. Fresh water condensers can be made from stainless steel for increased life with poor quality cooling water. If your application calls for something special, just ask.

MXH



Marine Condensers (5 - 330 Tons)

Tons	Standard Models	Dia.	Length	Wgt. Lbs.
5	MXH 602B-4	6-5/8	27-13/16	100
7.5	MXH 602D-4	6-5/8	27-13/16	107
15	MXH 603D-4	6-5/8	39-13/16	142
20	MXH 604D-4	6-5/8	51-13/16	175
25	MXH 606D-2	6-5/8	63-13/16	210
30	MXH 606D-2	6-5/8	75-13/16	244
35	MXH 805A-2	8-5/8	66	310
45	MXH 806A-2	8-5/8	78	357
50	MXH 1005A-2	10-3/4	69	480
65	MXH 1006A-2	10-3/4	81	550
70	MXH 1205A-2	12-3/4	69	670
85	MXH 1006A-2	10-3/4	105-1/8	695
130	MXH 1206A-2	12-3/4	105	980

Tons	Built to order Models	Dia.	Length	Wgt. Lbs.
60	MXH 808A-2	8-5/8	102	455
90	MXH 1206A-2	12-3/4	81	765
110	MXH 1206A-1	12-3/4	108	990
130	MXH 1405B-2	14	69	955
140	MXH 1406B-2	14	81	1100
150	MXH 1210A-1	12-3/4	132	1155
200	MXH 1406B-2	14	105	1400
220	MXH 1410B-1	14	139-3/8	1740
280	MXH 1606B-1	16	120-1/2	1750
275	MXH 1606B-2	16	105	1790
330	MXH 1610B-1	16	144-1/2	2085

Nominal capacity based on 14,400 BTUH per ton, 85°F condenser water temperature, 10°F range with R22 service at 105°F condensing temperature. Comprehensive ratings tables are available for R22, R134a and R404a. Windows selection software available. Pump-down capacity is based on 80% of free shell volume with R22 at 90°F per ARI. Capacity includes 0.00025 hr*12°F/ftBu additive fouling.

Heat Exchangers

CX



Complete your system with a P701 Condenser...

AHX and CX condensers feature the latest tube technology to provide compact size and cost effective use.

- Standard Designs – Condensers are available in standard designs for fresh water duty. These models feature high-efficiency tube surfaces and are available from 5 to over 400 nominal tons.
- Modern Materials – All condensers utilize the latest technology tubing. All condensers are manufactured with enhanced 3/4" diameter copper tubing, expanded into multiple grooved tube sheets. Tubing to provide heavy wall construction and ease of service for commonly available tube cleaning devices. Other materials available for corrosive duty. Tube sheets are flanged steel manufactured to ASME specifications and precision machined for excellent sealing. Heads are cast iron or fabricated steel. Tube support sheets are manufactured to close tolerance to minimize vibration. All water side connections are FPT except 12" 1-pass, 14" and 16" models which have flanges. Refrigerant connections are steel and bored to the OD's of copper tubing. Relief, vent and drain connections are provided. Numerous nozzle orientations are available to facilitate ease of packaging. Shells are steel pipe to ASME specification.
- Modifications – Vessels are available with special materials of construction as required. Condensers can be made from stainless steel for increased life. If your application calls for something special, just ask.

Contact Carrier Today:

For application or product support, please contact your Carrier Sales Representative or visit www.carrier.com under the Building and Industrial Systems tab.



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AX



Standard Condensers (5 - 400 Tons)

Tons	Standard Models	Dia.	Length	Wgt. Lbs.
5	P701-0605CX	6-5/8	27-9/16	100
7.5	P701-0607CX	6-5/8	27-9/16	105
10	P701-0610CX	6-5/8	39-9/16	130
15	P701-0615CX	6-5/8	51-9/16	160
20	P701-0620CX	6-5/8	51-9/16	170
25	P701-0625AX	6-5/8	63-13/16	185
30	P701-0630AX	6-5/8	63-13/16	195
40	P701-0840AX	8-5/8	66	300
50	P701-0850AX	8-5/8	78	340
65	P701-1065AX	10-3/4	69-1/8	460
75	P701-1075AX	10-3/4	81-1/8	475
90	P701-1290AX	12-3/4	69	590
110	P701-12110AX	12-3/4	81	665
140	P701-12140AX	12-3/4	108	855
150	P701-12150AX	12-3/4	108	890
200	P701-12200AX	12-3/4	132	1060

Tons	Built to Order Models	Dia.	Length	Wgt. Lbs.
140	P701-14140AX	14	69	895
165	P701-14165AX	14	81	1410
200	P701-16200AX	16	69	1220
210	P701-14210AX	14	115-3/8	1240
210	P701-16210AX	16	81	1190
230	P701-16230AX	16	81	1360
270	P701-14270AX	14	139-3/8	1420
290	P701-14290AX	14	139-3/8	1480
300	P701-16300AX	16	120-1/2	1723
360	P701-16360AX	16	144-1/2	1825
400	P701-16400AX	16	144-1/2	2085

Nominal capacity based on 14,400 BTUH per ton, 85°F condenser water temperature, 10°F range with R22 service at selection software available. Pump-down capacity is based on 80% of free shell volume with R22 at 90°F per ARI. Capacity includes 0.00025 hr*12°F/ftBu additive fouling.



Base Mounted Compressors, Water Cooled Condensing Units and DX Coolers Designed for every application



06D/E, 07D/E Semi-Hermetic; 05F/H, 07F/H Open-Drive Compressor/Condensing Units & 10RT, DX Cooler Units

Literature Number 570-375

Semi-Hermetic Compressor/Condensing Units



06E Compressor Unit

06D/06E Compressor Base Units

A quality compressor for the right application. The Carlyle line of 06D, 06E semi-hermetic compressors is designed for light, medium, or heavy duty applications from 3 through 40 tons. Use them with complete confidence for air conditioning or refrigeration, with either water-cooled, air-cooled, or evaporative condensers.

System dependability

Reliable trouble-free operation and long unit life are assured with this motor-compressor. The hermetically sealed unit eliminates dirt, air, and moisture contamination in the refrigeration system, and also eliminates shaft seal and alignment problems. Compressor wear is minimized by the positive pressure lubrication provided with a built-in oil pressure regulator and an automatically reversible oil pump.

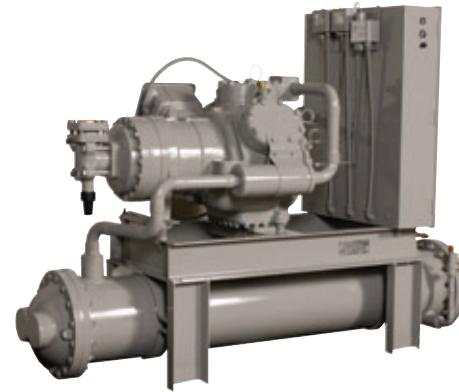
07D/07E Condensing Units

An excellent choice for your built-up system – Carrier 07D/E condensing units – built for the engineer who writes a spec that provides the most for the money. Compare the features you prefer in a condensing unit with those offered by the 07D/E, and you'll see the advantages in choosing Carrier.

Wide application range

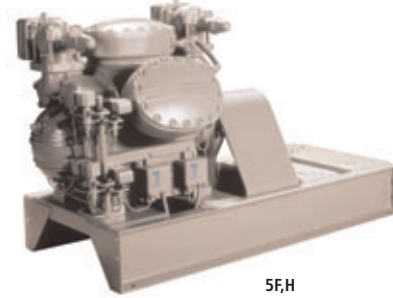
Model 07 condensing units are designed for a wide range of commercial and industrial air conditioning and refrigeration applications. They give the engineer great design flexibility, since an 07 unit can be combined with a wide variety of coils or chillers to provide a cooling system that closely matches actual load requirements. This results in an energy-saving system that operates efficiently at maximum load conditions.

There are many standard units to choose from, in addition to special orders available by calling your Carrier representative. Thus, you are assured of the economy, capacity, and distribution voltage your application requires.



07E Condensing Unit

Open-Drive Compressor/Condensing Units



5F,H
Base-Mounted Compressors

5F or 5H Base-Mounted Compressors

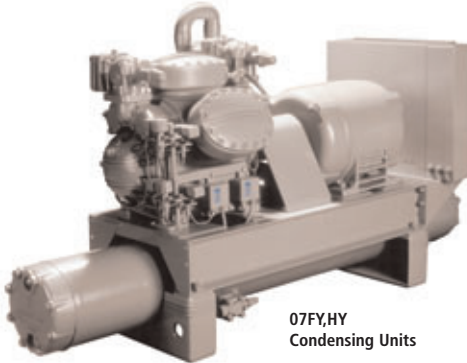
If a base-mounted compressor is required, it can be manufactured in a direct-drive or belt-driven configuration where the compressor is provided on a heavy duty channelled steel base with a coupling or belt guard. The base comes drilled to your motor specification. You can select your base-mounted compressor using readily available performance data or let Carrier know your specifications and a base-mounted compressor will be selected for you.

5F or 5H Compressor Units

Do you need more than a base-mounted compressor? Carrier offers turnkey 5F and 5H base-mounted compressors with a factory installed motor and control panel. Let Carrier know what your specifications are and a compressor unit can be selected to meet your jobsite requirements.



05FY,HY
Compressor Units



07FY,HY
Condensing Units

07FY/07HY Condensing Units

Need to go one step further? Carrier can select a condenser to match your compressor unit.

From a wide selection of compressors, condensers, and accessories, Carrier now provides a factory assembled compressor unit that you can combine with either a remote condenser or a factory-assembled condensing unit.

Included in the factory assembled condensing units are the compressor, steel base, motor, control panel, and condenser. The factory-assembled condensing unit has the required interconnecting wiring and piping included to minimize field start up time and costs. Accessories, such as a water-cooled oil cooler or a control transformer, are available. Contact your Carrier representative for any special requirements.

Base-Mounted Compressors

ARI Standard Rating Conditions For 06D/06E and 5F/5H Units

Refrigerant	SST				SDT				Refrigerant	SST				SDT			
	R-22	45	130	65	15	1750	R-404a/507	-10		105	65	5	1750	R-407c	45	130	65

06D/06E Series

Compressor	R-22			R-134a			R-404a/507			R-407c		
	Cap.	kW	THR	Cap.	kW	THR	Cap.	kW	THR	Cap.	kW	THR
06DA8081	3.28	3.48	4.23	—	—	—	—	—	—	—	—	—
06DH3131	5.12	5.20	6.61	1.84	2.60	2.58	1.69	3.20	2.60	4.92	5.20	6.41
06DA8181	7.46	7.60	9.63	3.02	4.00	4.17	2.85	5.20	4.33	7.21	7.55	9.37
06DE251	9.51	9.80	12.29	3.79	5.00	5.20	3.49	6.20	5.27	9.28	9.77	12.05
06DE281	11.49	11.70	14.83	4.67	6.20	6.43	4.41	7.80	6.53	11.15	11.87	14.47
06E5371	15.76	17.20	23.64	6.43	8.40	8.83	5.74	10.50	8.73	15.03	16.82	19.81
06EV022	20.72	22.00	26.97	6.95	9.60	9.68	6.09	15.70	12.56	19.25	20.20	25.00
06EW027	27.26	29.30	35.60	9.05	12.40	12.58	9.95	18.40	15.20	26.34	28.88	34.55
06EW033	30.06	32.90	39.43	11.05	15.00	15.30	11.61	21.90	17.83	29.19	32.41	38.40
06EW044	39.66	45.60	53.61	14.82	21.00	21.70	14.35	29.10	22.64	38.67	44.64	51.36

5F/5H Series

Compressor	R-22			R-134a			R-404a/507			R-407c		
	Cap.	Bhp	THR	Cap.	Bhp	THR	Cap.	Bhp	THR	Cap.	Bhp	THR
5F20	8.30	10.90	10.40	2.90	5.20	4.00	2.30	5.90	3.60	7.97	10.90	10.28
5F30	12.60	16.20	15.70	4.40	7.80	6.10	3.50	8.80	5.40	12.10	16.20	15.53
5F40	16.70	21.80	20.80	5.90	10.90	8.10	4.70	11.60	7.20	16.03	21.80	20.81
5F60	25.10	32.20	31.30	8.80	15.40	12.10	7.10	17.40	10.80	24.10	32.20	30.92
5H40	39.90	49.00	49.40	13.80	23.40	18.80	11.40	26.40	17.00	38.30	49.00	48.69
5H46	49.10	63.70	61.40	17.10	32.30	23.90	14.10	34.30	21.40	47.14	63.70	60.63
5H60	59.60	73.40	73.70	20.70	36.90	28.60	17.10	39.30	26.40	57.22	73.40	72.77
5H66	73.90	95.50	92.40	25.80	48.10	36.00	21.30	51.20	32.20	70.94	95.50	91.18
5H80	79.40	97.50	98.20	27.60	48.90	38.00	22.80	52.10	33.90	76.22	97.50	96.88
5H86	98.60	126.80	123.00	34.30	63.70	47.80	28.40	68.00	42.80	94.66	126.80	121.52
5H120	145.90	189.70	184.50	51.50	92.10	71.10	42.30	101.20	64.00	141.98	189.70	182.18

Water-Cooled Condensing Units

07D/07E Series

ARI Standard Rating Conditions For 07D/07E Units:
RGT (F) 65; SC (F) 2

Compressor	R-22			R-134a			R-404a/507			R-407c		
	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR
07DA203	3.35	2.63	4.10	—	—	—	—	—	—	—	—	—
07DB205	5.30	4.19	6.49	3.51	2.86	4.32	1.66	3.19	2.57	5.15	4.16	6.34
07DA208	7.64	5.99	9.35	5.35	4.26	6.57	2.80	5.18	4.27	7.45	5.94	9.14
07DB210	9.98	7.70	12.07	7.06	5.74	8.69	3.42	6.25	5.20	9.69	7.71	11.88
07DB212	11.78	9.22	14.41	7.95	6.58	9.82	4.32	7.81	6.54	11.47	9.15	14.08
07DB215	16.02	13.35	19.83	10.60	8.84	13.12	5.63	10.51	8.62	15.23	13.23	19.00
07EA022	21.38	17.60	26.40	12.90	11.40	16.14	7.93	15.69	12.99	19.68	16.01	24.23
07EB027	28.18	23.40	34.85	17.67	15.35	22.05	9.75	18.43	15.00	27.38	23.05	33.94
07EB033	30.56	26.50	38.12	19.88	17.20	24.78	11.38	21.87	17.60	29.88	26.11	37.90
07ED044	40.10	37.31	50.73	26.80	25.25	33.99	14.07	29.14	22.36	39.22	36.53	49.61

07FY/07HY Series

ARI Standard Rating Conditions For 07FY/07HY Units:
RGT (F) 65; SC (F) 15

Condenser	R-22			R-134a			R-404a/507			R-407c		
	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR	SST (F) 40	SDT (F) 105	THR
07FY 020BC	9.06	8.73	10.82	5.70	5.83	8.83	3.43	9.45	11.44	—	—	—
07FY 030BD	13.61	13.01	16.36	8.52	8.70	10.36	14.11	14.08	17.10	13.06	13.01	15.82
07FY 040BE	18.07	17.28	21.74	11.42	11.48	13.86	18.83	18.70	22.80	17.35	17.28	21.51
07FY 060BF	27.26	25.99	32.77	17.11	17.12	20.74	28.26	27.98	34.20	26.17	25.99	31.67
07HY 040BJ	46.82	39.52	51.01	27.11	27.51	32.94	43.22	42.90	52.32	40.92	39.52	49.29
07HY 060BK	63.89	59.01	76.40	40.67	40.75	49.32	64.83	64.06	78.43	61.33	59.01	73.83
07HY 080BM	85.22	78.38	101.18	54.21	54.62	65.80	86.46	85.12	104.52	81.81	78.38	98.42
07HY 120BN	127.93	117.10	152.77	81.41	80.56	94.34	129.68	127.22	156.67	122.81	117.10	147.62
Direct Drive												
07HY 040DG	42.62	39.52	51.01	27.11	27.51	32.94	43.22	42.90	52.32	40.92	39.52	49.29
07HY 046DJ	52.74	51.36	63.63	33.58	35.35	41.08	53.59	55.67	65.41	50.63	51.36	61.51
07HY 060DK	63.89	59.01	76.40	40.67	40.75	49.32	64.83	64.06	78.43	61.33	59.01	73.83
07HY 060DL	79.27	76.75	95.55	50.51	53.07	61.77	80.39	83.22	98.04	76.10	76.75	92.36
07HY 080DM	85.22	78.38	93.51	54.21	54.62	65.80	86.46	85.12	104.52	81.81	78.38	98.42
07HY 086DN	105.71	101.94	127.34	67.29	70.46	82.24	107.22	110.67	130.70	101.48	101.94	123.08
07HY 120DP	127.93	117.10	152.77	81.41	80.56	94.34	129.68	127.22	156.67	122.81	117.10	147.62
07HY 126DP	158.65	152.33	190.97	101.03	101.39	122.55	160.82	165.41	195.91	152.30	152.33	184.58

Motor Sizes: (9th location)

C = 10 HP	E = 20 HP	G = 30 HP	J = 50 HP	L = 75 HP	N = 125 HP
D = 15 HP	F = 25 HP	H = 40 HP	K = 60 HP	M = 100 HP	P = 150HP

Legend

BHP	Brake Horsepower	SDT	Saturated Discharge Temp (F)
Cap	Capacity	SST	Saturated Suction Temp (F)
RGT	Return Gas Temp to Comp (F)	THR	Total Heat Rejection (Tons)
SC	Liquid subcooling (F)		