

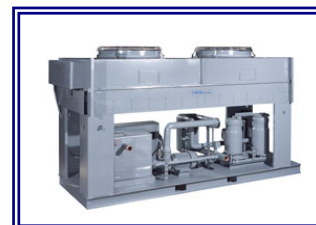
ICA – Integral Air Cooled Chillers



	ICA-15	ICA-20	ICA-30	ICA-40	ICA-50	ICA-60	ICA-70	ICA-90	ICA-110	ICA-140
Refrigeration Capacity (Btu/Hr.)										
Capacity @ 20°F LFT	62,400	96,000	144,000	216,000	253,200	320,400	361,200	478,800	614,400	707,400
Capacity @ 30°F LFT	93,600	123,600	184,800	278,400	313,200	396,000	446,400	591,600	759,600	951,600
Capacity @ 40°F LWT	124,800	157,200	234,000	351,600	387,600	492,000	554,400	734,400	942,000	1,180,800
Capacity @ 50°F LWT	156,000	195,600	291,600	438,000	479,400	607,200	684,000	906,000	1,162,800	1,456,800
Compressor	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Screw	Screw	Screw	Screw	Screw	Screw
Compressor HP	15	20	30	40	50	60	70	90	110	140
Condenser	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Fan Arrangement	1 x 2	1 x 2	1 x 2	1 x 3	2 x 2	2 x 2	2 x 3	2 x 3	2 x 4	2 x 5
Pump HP	3	5	5	7½	7½	7½	10	10	15	15
Evaporator	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate
MDPE Tank Size (gallons)	65	65	65	65	65	65	125	125	125	125
Chilled Water Flow Rate @ 50°F LWT (gpm@ psi)		39.1	58.3	87.6	95.7	121.4	136.8	181.2	232.5	291.3
Dimensions (in.)										
Length	117	117	117	174	117	117	174	174	231	288
Width	48	48	48	48	93	93	93	93	93	93
Height	72	72	72	72	72	72	72	72	72	75
Shipping Weight (lbs.)										
Electrical Rating										
FLA @ 230-3-60	67.0	77.2	112	169.8	175.6	265.6	292.6	379.6	494.6	621.6
FLA @ 460-3-60	33.5	38.6	56.0	84.9	84.8	126.8	139.8	182.8	250.8	297.8
Connection Sizes										
Chilled Water Conn. (in.)	1½"	1½"	1½"	2	2	2½	2½	3	4	4
Lifting Eyes	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
Hot Gas By-Pass	standard	standard	standard	standard	n/a	n/a	n/a	n/a	n/a	n/a
Options										
Automatic Water Make-Up	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
Low Water Level Alarm	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
High Temperature Alarm	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional
On Site- Start-Up	optional	optional	optional	optional	optional	optional	optional	optional	optional	optional

1 ton = 12,000 btu/hr.
 Specifications based on 95°F ambient temp.

Note: Cooling Technology, Inc. reserves the right to change manufacturers of components as found necessary.



Basic Construction

CONSTRUCTION

Frame	Heavy gauge carbon steel base. Bolted frame construction.
Finish	Primed & Painted with Acrylic Enamel

COMPRESSOR

Compressor Type	Reciprocating (ICA 15-40) Screw (ICA 50-140)
Unloading	Cylinder unloading followed by Hot Gas By-Pass
Features	Integral force feed lubrication system Motor winding protection

CONDENSER

Type	Remote Air Cooled, forced draft, vertical discharge
Design Air Temp	20°F to 95°F
Construction	Seamless, deoxidized heavy wall smooth copper tubes with 12 aluminum fins per inch
Casing Material	Heavy-gauge G-90 galvanized steel, plated hardware
Pressure Control	Fan cycling with variable speed control on header end
Features	Side access panels for cleaning and inspection

EVAPORATOR

Type	Direct expansion – Brazed plate design
Construction	AISI 316L Stainless Steel plate with copper brazing
Insulation	Closed cell foam
Fluid Pressure Drop	<6 psig (typical)

ELECTRICAL CONTROLS

Nema 12 rated enclosure	Motor overload protection
Low-flow cutout	High pressure cut-out
Freeze stat protection	Motor starters
Long-life LED indicators	Time delay low pressure cutout

INLINE WATER FILTER WITH STAINLESS STEEL MESH

Construction	AISI 304 Stainless Steel filter element with bronze or ABS body
Filter Size	18 mesh

TANK

Construction	MDPE - Medium Density Polyethylene
Insulation	½" foam insulation
Features	Sight glass Drain Make-up connection

REFRIGERATION SPECIALTIES

Thermal expansion valve
Liquid line solenoid valve
High pressure relief valve
Sight glass / moisture indicator
Filter Dryer

ICA TYPICAL PIPING LAYOUT

