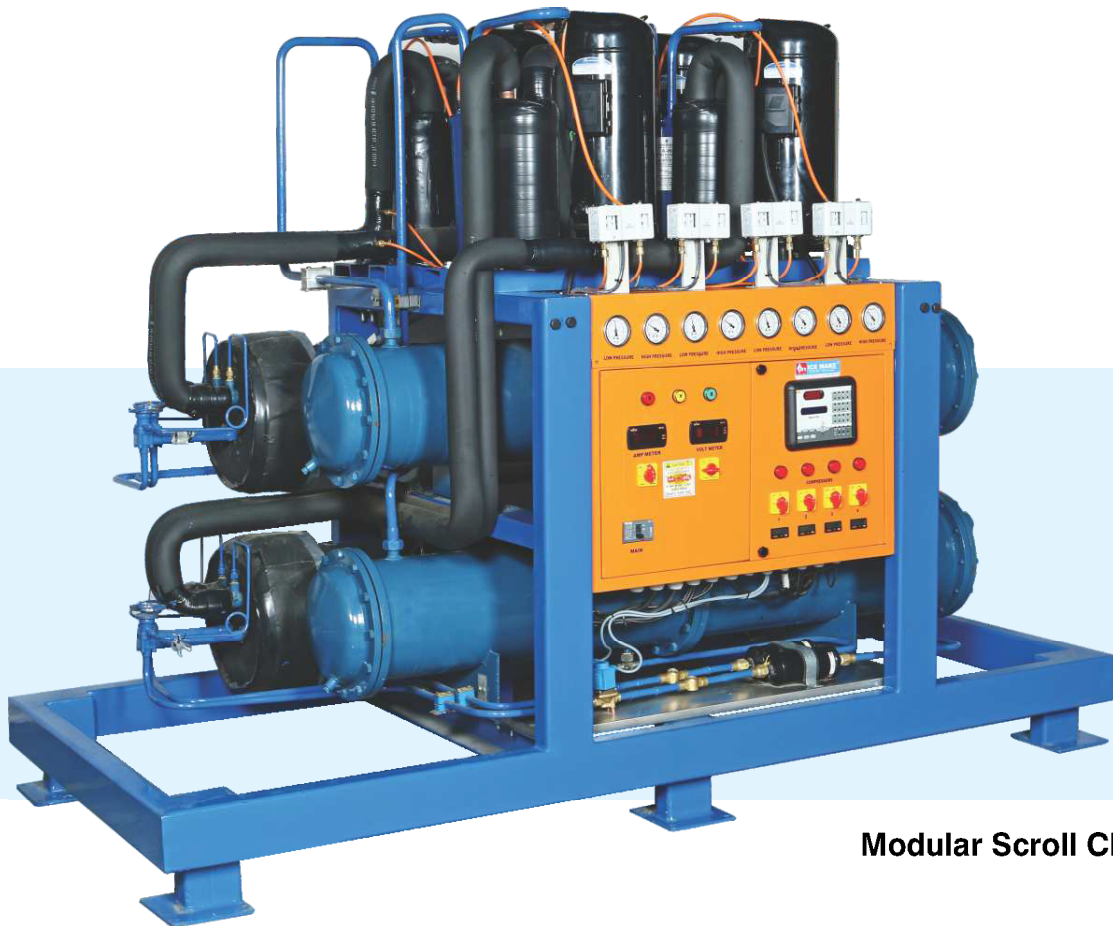


CHILLING PLANT



Ice Make is a leading refrigeration company dealing with various kind of industrial chillers for end to end solutions. We are committed to provide best solution to customers, which fulfill their needs. We have a wide range of air cooled & water cooled chillers. We have an ISO 9001 certified production unit. The range of our chillers is 5 TR to 200 TR

Ice Make chillers are ideal for various industries like Pharmaceuticals, Plastics, Foods & Beverages, Dairy & Milk Processing, Chemical Industries etc.



Modular Scroll Chiller

Chilling Plant Application



Dairy & Beverages Applications



Chemical Industries



Pharmaceutical Industries



Process Industries

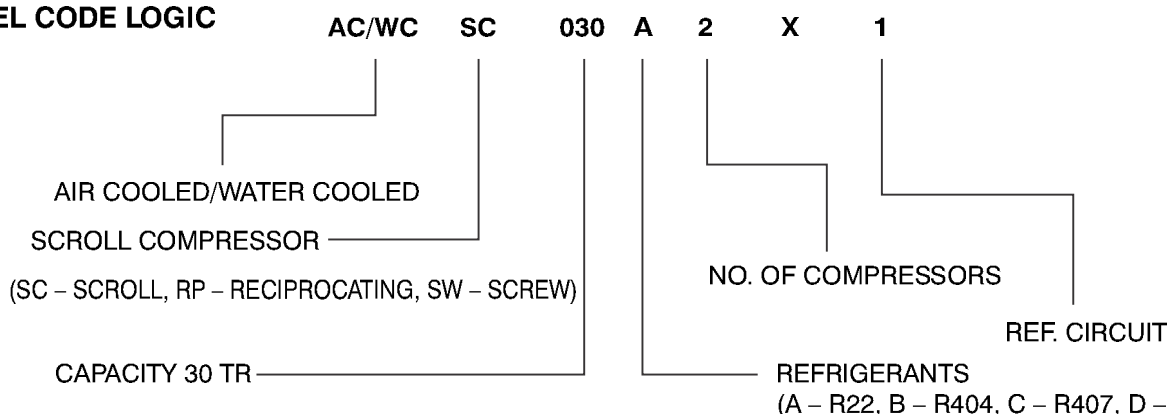


Mineral Water Applications



Plastic Process Industries

MODEL CODE LOGIC



Note : No. of Comp. per Ref. Circuit : For Ex. 2x1 – Double Comp. per Single Circuit, 2x2 – Double Comp. per Double Circuit

Table - 1 (Scroll Chiller – Air Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D			
			R22	R404	R407	R134a	Comp. Qty	Ref. Cct.	
01	ACSC005A1/-x1	05	✓	OP	OP	OP	1	x	1
02	ACSC008A1/-x1	08	✓	OP	OP	OP	1	x	1
03	ACSC010A1/2x1	10	✓	OP	OP	OP	1	2	1
04	ACSC012A1/2x1	12	✓	OP	OP	OP	1	2	1
05	ACSC016A1/2x1	16	✓	OP	OP	OP	1	2	1
06	ACSC020A1/2x1	20	✓	OP	OP	OP	1	2	1
07	ACSC025A1/2x1	25	✓	OP	OP	OP	1	2	1
08	ACSC032A1/2x1	32	✓	NO	✓	NO	x	2	1
09	ACSC040A1/2x1	40	✓	NO	✓	NO	x	2	1
10	ACSC050A1/2x1	50	✓	NO	✓	NO	x	2	1

Capacity rated on the base of Refrigerant R-22, water inlet temp. 15°C & water outlet temperature 10°C, Condensing temperature +50°C, Ambient Temperature +40°C.

Table – 2 (Scroll Chiller – Water Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate
			A	B	C	D				
			R22	R404	R407	R134a	Comp. Qty	Ref. Cct.		(LPM)
01	WCSC005A1/-x1	5	✓	OP	OP	OP	1	x	1	75
02	WCSC008A1/-x1	08	✓	OP	OP	OP	1	x	1	110
03	WCSC009A1/-x1	09	✓	OP	OP	OP	1	x	1	140
04	WCSC011A1/2x1	11	✓	OP	OP	OP	1	2	1	200
05	WCSC013A1/2x1	13	✓	OP	OP	OP	1	2	1	260
06	WCSC018A1/2x1	18	✓	OP	OP	OP	1	2	1	365
07	WCSC023A1/2x1	23	✓	OP	OP	OP	1	2	1	420
08	WCSC027A1/2x1	27	✓	OP	OP	OP	1	2	1	530
09	WCSC036A2x1	36	✓	NO	OP	NO	x	2	1	725
10	WCSC046A2x1	46	✓	NO	OP	NO	x	2	1	850
11	WCSC054A2X1	54	✓	NO	OP	NO	x	2	1	1070

Capacity rated on the base of Refrigerant R-22, water inlet temp. 15°C & water outlet temperature 10°C, Condensing temperature +40°C, Ambient Temperature +40°C. • Water Cooled chiller, Condenser water inlet temperature 30°C.

Table – 3 (Screw Chiller – Air Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D			
			R22	R404	R407	R134a	Comp.Qty.	Ref. Cct.	
01	ACSW045A1x1	045	✓	OP	OP	OP	1	x	1
02	ACSW060A1x1	060	✓	OP	OP	OP	1	x	1
03	ACSW070A1x1	070	✓	OP	OP	OP	1	x	1
04	ACSW080A1x1	080	✓	OP	OP	OP	1	x	1
05	ACSW090A1x1	090	✓	OP	OP	OP	1	x	1

Capacity rated on the base of Refrigerant R-22, water inlet temp. 15°C & water outlet temperature 10°C, Condensing temperature +50°C, Ambient Air Temperature +40°C

CHILLING PLANT



Table – 4 (Screw Chiller – Water Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate (LPM)
			A	B	C	D				
			R22	R404	R407	R134a	Comp. Qty		Ref. Cct.	
01	WCSW045A1x1	045	✓	OP	OP	OP	1	x	1	850
02	WCSW060A1x1	060	✓	OP	OP	OP	1	x	1	1130
03	WCSW070A1x1	070	✓	OP	OP	OP	1	x	1	1270
04	WCSW080A1x1	080	✓	OP	OP	OP	1	x	1	1400
05	WCSW090A1x1	090	✓	OP	OP	OP	1	x	1	1650
06	WCSW100A1x1	100	✓	OP	OP	OP	1	x	1	1800
07	WCSW115A1X1	115	✓	OP	OP	OP	1	x	1	2100

Capacity rated on the base of Refrigerant R-22, water inlet temp. 15°C & water outlet temperature 10°C, Condensing temperature +40°C, Ambient Temperature +40°C

For Water Cooled chiller, Condenser water inlet temperature 30°C.

Table – 5 (Glycol Chiller - Air Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D			
			R22	R404	R407	R134a	Comp. Qty		Ref. Cct.
01	ACRP01.5B1x1	1.5	OP	P	OP	OP	1	x	1
02	ACRP002B1x1	02	OP	✓	OP	OP	1	x	1
03	ACRP003B1x1	03	OP	✓	OP	OP	1	x	1
04	ACRP004B1x1	04	OP	✓	OP	OP	1	x	1
05	ACRP005B1x1	05	OP	✓	OP	OP	1	x	1
06	ACRP007B1x1	07	OP	✓	OP	OP	1	x	1
07	ACRP009B1x1	09	OP	✓	OP	OP	1	x	1

Capacity rated on the base of Refrigerant R-404, water inlet temp.-15°C & water outlet temperature -20°C, Condensing temperature +50°C, Ambient Temperature +40°C

Table – 6 (Glycol Chiller – Water Cooled)

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate (LPM)
			A	B	C	D				
			R22	R404	R407	R134a	Comp. Qty	Ref. Cct.		
01	WCRP002B1x1	02	OP	✓	OP	OP	1	x	1	110
02	WCRP003B1x1	03	OP	✓	OP	OP	1	x	1	210
03	WCRP004B1x1	04	OP	✓	OP	OP	1	x	1	250
04	WCRP005B1x1	05	OP	✓	OP	OP	1	x	1	350
05	WCRP07.5B1x1	7.5	OP	✓	OP	OP	1	x	1	425
06	WCRP009B1x1	09	OP	✓	OP	OP	1	x	1	440
07	WCRP011B1x1	11	OP	✓	OP	OP	1	x	1	650

Capacity rated on the base of Refrigerant R-404, water inlet temp. -15°C & water outlet temperature -20°C, Condensing temperature +40°C, Ambient Temperature +40°C

Note1 :For Water Cooled chiller, Condenser water inlet temperature 30°C.

Note2 :Glycol Chiller outlet temperature ranging from -10°C to -30°C, For other temperature, higher ambient, other capacity please refer to Ice Make sales team.

Table – 7 (Mineral Water Chiller - Air Cooled (Online & Offline))

Sr. No.	Model No.	*Capacity (In TR)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D			
			R22	R404A	R407A	R134a	Comp.Qty.		Ref. Cct.
1	ACRP002A1x1	2	✓	OP	OP	OP	1	x	1
2	ACRP003A1x1	3	✓	OP	OP	OP	1	x	1
3	ACSC005A1x1	5	✓	OP	OP	OP	1	x	1

Note: All Chillers are Indoor Type

Controller Options

- 1) Microprocessor Based
- 2) PLC Based (Applicable for Screw Chiller, Scroll Chiller and Reciprocating Chiller)

(1) Microprocessor Based Controller :



The LCD screen shows description of the controller parameters, and any other information concerning the controlled variables.

Display Size : **2 Rows X 16 Characters**

Liquid Crystal Display (LCD) Character Size : **5.65 X 2.96 mm**

Controller has following Analog Inputs (Probe)	Controller has following Digital Outputs (Relay)	System Safety features (Trip Signals)
COND IN – Indicates Condenser Inlet temperature	Chiller Pump ON/OFF	• High Pressure • Low Pressure • High Voltage • Low Voltage • Phase Failure • Chiller Pump Overload • Compressor Overload • Condenser Fan Overload • Condenser Pump Overload • Low Water Flow in Chiller • Low Water Flow in Condenser • Single Phase Prevent • Anti-freeze Trip • Phase Input
COND OUT – Indicates Condenser Outlet temperature	Compressor1 ON/OFF	
WATER IN – Senses Water (Chiller) Inlet temperature	Condenser Fan1 ON/OFF	
WATER OUT – Senses Water (Chiller) Outlet temperature	Liquid SV1 for Pump Down1	
ANTI FREEZE – Used as an Internal Anti Freeze Control	Compressor2 ON/OFF	
–	Liquid SV2 for Pump Down2	
–	Alarm	

Note : Controller informs the user of a fault condition via a Buzzer and an Alarm Relay or by Message on display

(2) PLC Based Controller :

Its programmable logic controller that is fully compatible (hardware and software), which includes programmable controllers, user terminals, gateways, communication devices and remote management devices

Controller has following Analog & Digital inputs :

Suction Pressure, Discharge Pressure, Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, Anti-Freeze, Emergency Stop, Compressor OLR, HP Switch & LP Switch, Evaporator Flow, Condenser Flow, Condenser Pump Overload, Chiller Pump Overload.



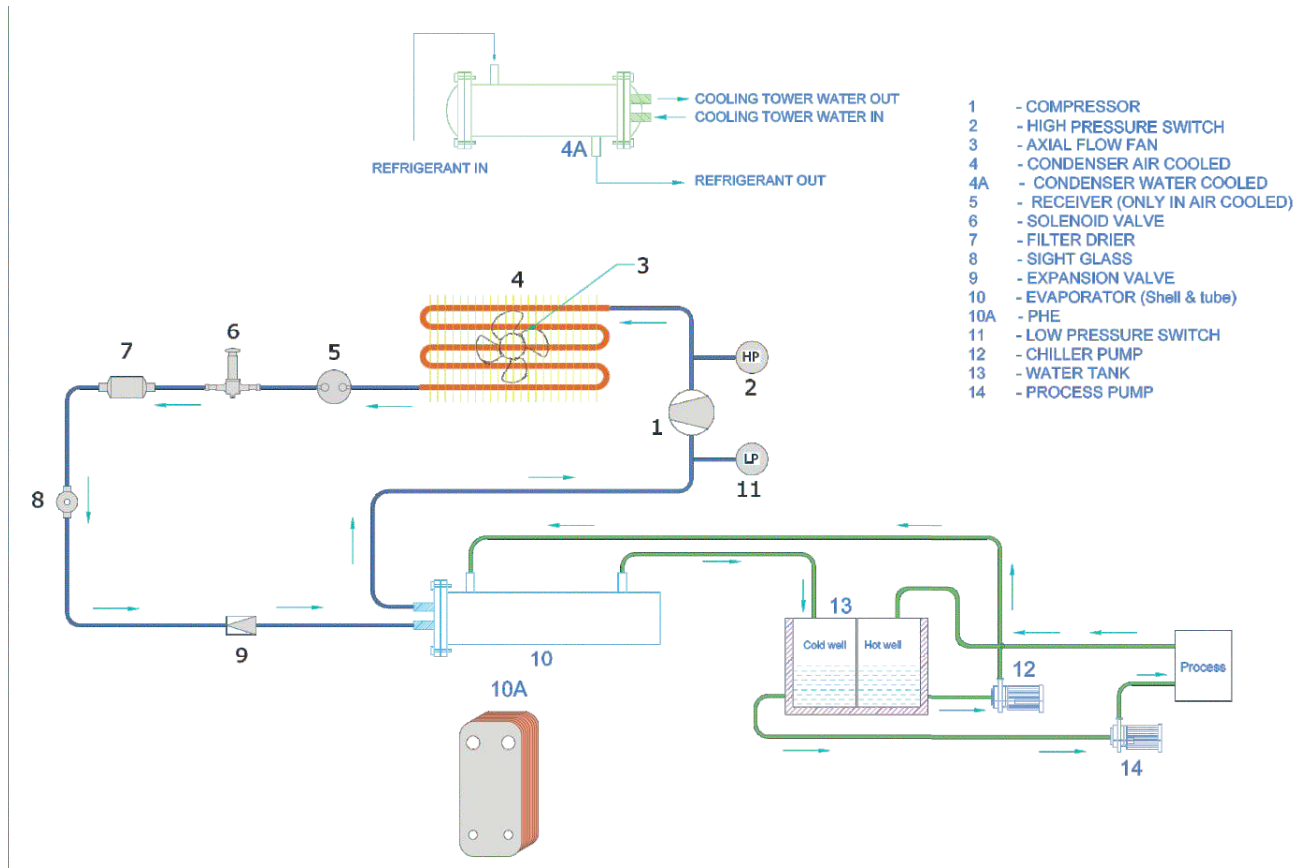
Self Identification Functions:-

1. All digital inputs & outputs such as Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, current, Voltage, Low water flows in condenser etc.
2. Trouble shooting identification function: - Show history of trips with date & time as well as cause of trips.

Note : Other Customize inputs & outputs in controller, please refer to Ice Make sales team.



Refrigeration Cycle



Key Features :

- Availability of Customized Solution
- Eco-friendly Refrigerant
- Wide Range of Water/Glycol Temp. (+15°C to -25°C)
- Closed Circuit operation
- Modular Design
- Easy operation & less Maintenance
- Compact in size

We are Dealing with Following Compressor

1) Scroll Compressor

Make : Emerson/Copeland & Danfoss or Equivalent

2) Reciprocating Compressor Type: Semi-Hermetic & Hermetic sealed

Make : Emerson/Copeland, Danfoss, Frascold & Bitzer or Equivalent

3) Screw Compressor

Make : Frascold & Bitzer or Equivalent

Dimple Plate in Tank Type Chiller

Evaporator : Dimple Plate Type (S.S plate)
 Condenser : Air Cooled/Water Cooled
 Water Temperature Range : +2°C to +4°C
 Application : Food & Bakery Industry
 Tank M.O.C : Inner S.S 304 & Outer G.I.PP/S.S 304
 Insulation : PUF



Dimple Plate Type Evaporator



**Air Cooled V Condenser
Screw Chiller**



Air Cooled Screw Chiller



Air Cooled Scroll Chiller



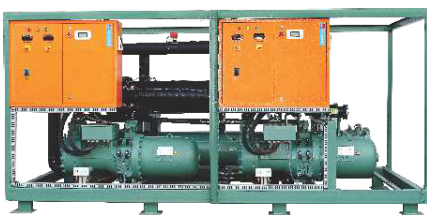
Air Cooled Scroll Chiller



Air Cooled Glycol Chiller



Online Chilling Plant



Water Cooled Screw Chiller



Water Cooled Scroll Chiller



Water Cooled Glycol Chiller



Water Cooled Screw Chiller



Modular Scroll Chiller



Industrial Chilling Plant