



Enviro Systems

Simplifying climatic world



We offer a wide range of products that are unique and designed to handle any cooling problem. Our product range includes:

TEMPERATURE RANGE	: -70°C TO 100 °C
MEDIA	: WATER, OIL, AIR, ETHANOL, GLYCOL , BRAINE ,

Introduction



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About us

Q Vary Systems designs and manufactures all types of refrigeration equipments that are suitable to industrial, laboratory, hospital and research centers. We pride ourselves in offering our customers with competitive rates while maintaining the high standards of customer service we have built our reputation on. We also provide you with the products tailored to suit your individual requirements within your budget and timeline. The company aims to be a complete solution provider for process cooling problems, with its reputed brand Q Vary and manufactures refrigerated Chillers, Oil Coolers, Panel coolers and Special purpose industrial refrigeration / air conditioner process equipments.

Special Purpose Industrial Refrigeration, Air conditioner Equipments can also be designed and manufactured based on the specific process requirement and clients specification.



Q vary equipments is committed to make it's mark as a Total Solution Provider in the field of Industrial Process Cooling. We are out to prove that an effective water chillers/cooling system that is less expensive and less costly to maintain can provide peak productivity and operating economy throughout its work life. We will specialize in manufacturing a custom chiller unit to fit your specific industries.

Introduction



Q vary water chillers are designed in wide range from 1 TR to 50TR, there will be a hot water tank in our system from where the water is being pumped through the evaporator, gets cooled to the required temperature and sent to the user department. There will be a temperature indicating controller which controls the temperature of the chilled water. The system working is controlled by the set point of the temperature controller to stabilize the chilled water generated to the required level. Fresh water is used freely for cooling production processes. Today, most processes require cooling water with much closer defined tolerances. Water chillers provide cooling in a controlled closed circuit. This means that the water used for your production processes is reliable, constant, and defined.

Q vary Water chillers will maintain the temperature range from 5°C To $30^{\circ}\text{C} \pm 1^{\circ}\text{C}$ capacity from 450 Kcal/Hr to 150000 Kcal/Hr, 3 LPM to 650 LPM with different flow capacity. Water or other liquid from the chiller is pumped through process or industrial equipment specially for the plastics industry uses process chillers to reduce cycle times in injection molding and blow molding by regulating temperatures.

TYPICAL APPLICATIONS FOR Q VARY CHILLER

- | | | |
|-----------------------------|-----------------------|--------------------------------|
| ❖ Diffusion Pumps | ❖ Lasers | ❖ X-Ray Machines |
| ❖ Vapour Recovery | ❖ Jacketed Vessels | ❖ Pouch Sealing Machines (FFS) |
| ❖ Electronic Equipment | ❖ Plastic Processing | ❖ Centralized Drinking Water |
| ❖ Heat Exchangers | ❖ Printing Equipment | ❖ Lamination Process |
| ❖ Heat Treatment Equipment | ❖ Rubber Machinery | ❖ Gas scrubbers |
| ❖ Food Processing Equipment | ❖ Spot Welders | ❖ Lamination Process |
| ❖ Bio-Gas Power Plants | ❖ Anodizing & Plating | ❖ Ozone Generators |

Water chiller



Q vary ULTRA air chiller economic model energy efficient and continues running (24X7) capability, less maintenance machine. Ultra air chiller can be used on non moisturized or dry air (minimum 2% RH) and 50 to 100 psig pressurized air (+25 to 30°C) ambient temperature give to inlet ,which will be cooled with in few second output getting -60°C instantly at outlet port

Salient features

Model	: UACB009-DX-03
Cooling capacity	: 09KW/3 PORT
Power	: 440VAC_3PNE/ 7KW
Controller type	: Microprocessor based PLC
Cooling type	: Pressurized air flow
Defrost	: Manual ON / auto re-start
Safety alarm	: High pressure, over current Phase failure, over/under , voltage, defrost
Safety device	: MCB , OLR, Emergency stop switch

Ultra temperature air chiller Can be connected to three lath at a time. The speciality of our Ultra air chillier that is various machines in parallel. Separate switches facilitated to ON the flow as needed.

ULTRA AIR CHILLERS



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Q VARY variants has been shown below based on different model: on circulating chiller

Specifications	ECONOMIC Features	PREMIUM Features
Temperature range	-70°C to +200°C with 1°C display resolution and increment.	-70°C to +200°C with 0.1°C display resolution and increment.
Inbuilt tank	Yes, 15L	Yes, 35L
Tank material	Stainless steel SS304	Stainless steel SS304
Outer material	Powder coated CRCA	Powder coated CRCA
Controller type	PID controller with set & process value display	Microprocessor PLC based controller with HMI set & process value display data logging function.
Temp. sensor	RTD type PT100 sensor	RTD type PT100 A class sensor
Temp. deviation alarm	Set value +/- 2°C	Set value +/- 2°C
Evaporator	Shell and tube	Shell and tube
Refrigerant	R134a, R22, R407C (CFC, HCFC free refrigerant)	R134a, R134a, R22, R407C (CFC, HCFC free refrigerant)
Communication	–	RS485 Interface available
Defrost	–	Auto defrosting function
Condenser	Air & Water cooled type	Air & Water cooled type
Drawers load capacity	Maximum 18 bags per tray (BFZ50 model)	Maximum 20Kgs per tray (BFZ100 model)
Alarm function	Temperature deviations only	Door open, Temperature deviation, power failure, Probe failure, defrosting
Data logging	–	yes

CHILLERS



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Q VARY variants has been shown below based on different parameters: on water chiller

Model-1	TR	Inlet temp°C	Out temp°C	Temperature Deference °C	Water Flow L/Min	(Q) KW
	0.5	25	10	15	2	1.8
	1	25	10	15	3	3.5
	3.5	25	10	15	12	12.3
	4	25	10	15	13	14.1
	5	25	10	15	17	17.6
	5.5	25	10	15	18	19.3
	8.5	25	10	15	28	29.9
	11	25	10	15	37	38.7
	13.5	25	10	15	45	47.5
	18	25	10	15	60	63.3
	22	25	10	15	74	77.4
Model-2	0.5	15	10	5	5	1.8
	1	15	10	5	10	3.5
	3.5	15	10	5	35	12.3
	4	15	10	5	40	14.1
	5	15	10	5	50	17.6
	5.5	15	10	5	55	19.3
	8.5	15	10	5	85	29.9
	11	15	10	5	111	38.7
	13.5	15	10	5	136	47.5
	18	15	10	5	181	63.3
	22	15	10	5	221	77.4

CHILLERS



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Q VARY variants has been shown below based on different parameters: on air chiller

Model Nomenclature – UACB009-XX-03

Temperature low range	Media	Chiller	Power	Capacity	Ports
U	A	C	A	009	03
U : +20°C to -80°C D : +20°C to -40°C L : +20°C to -20°C M : +20°C to 0°C	Media : A : Air E : ethanol O : OIL W : Water G :Glycol	Only C XX	A : 220VAC B : 440VAC	Cooling capacity in (Q) KW	Outlet ports
: Refrigeration cooling method					

Design specification required

Media	: ?
Inlet temperature	: °C ?
Required or Outlet temperature	: °C ?
Flow rate	: ?/LPM or L/Hr
Design type	: vertical / horizontal.
antifreeze /Defrost	: Auto function
Safety alarm	: High pressure, over current Phase failure, over/under , voltage, defrost
Safety device	: MCB , DLR, Emergency stop switch

Chambers

- ⇒ Temperature Chambers (T)
- ⇒ Humidity Chambers (T & RH)
- ⇒ Stability Chambers
- ⇒ Walk In Chambers
- ⇒ Cold Rooms
- ⇒ Freezer Rooms
- ⇒ Cyclic Chambers
- ⇒ Growth Chambers

Chillers

- ⇒ Air Cooled Chillers
- ⇒ Water Cooled Chillers
- ⇒ Process Chillers

Incubators & Ovens

- ⇒ Incubator s
- ⇒ Cooling Incubators (BOD)
- ⇒ Hot Air Ovens
- ⇒ Vacuum Ovens

Freezers

- ⇒ Ultra Low Temperature Freezers (-80°C)
- ⇒ Blood Component Freezers (-80°C)
- ⇒ Deep Freezers & Plasma Freezers (-40°C)
- ⇒ Low Temperature Freezers (-20°C)
- ⇒ Glycol Freezers
- ⇒ Blast Freezers
- ⇒ Spot Freezers

Refrigerators

- ⇒ Lab Refrigerators
- ⇒ Blood Bag Refrigerators
- ⇒ Glycol Refrigerators

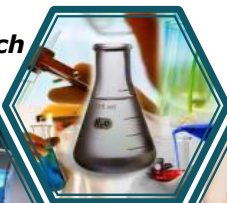
Ice Makers

- ⇒ Ice Cubes Makers
- ⇒ Ice Flakes Makers

Freeze Dryers

- ⇒ Lyophilizes

Research



Industries



Medical



Blood Banks



Institutes





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