

Air Cooled Scroll Chiller



Cooling capacity 15 ~ 110 kw

Feature :

- High cooling capacity, low power consumption
- q Low starting torque
- q Silent and low vibration
- q High efficiency , durable and easy maintenance
- q Intelligent electronics protector for motor compressor

Low power consumption and Easy maintenance

thermo Q presents the line of Air cooled packaged Scroll Water Chiller . Range from 4 to 34 TR Capacity.

Economical, easy installation and operation in a complete packaged design. Ideal for modern cooling applications in industrial process plant .

All units are compact , completely factory assembled , shape and modular system to be installed as outdoor and weather proof . its can reach on site easy to handling on transportation .

The unit is pressure tested , evacuated and fully charge with Refrigerant 22

Main Components

▪ Durable Scroll Compressor

With Copeland Scroll Compressor , End Users can improve the reliability of their refrigeration system and reduce their running costs :

- ❑ Annual running cost reduction with increased compressor seasonal efficiency

Smaller compressors that are easier to service and replace

- ❑ No risk of capacity shortfall at high ambient conditions Stable operation and less compressor Cycling

Improved reliability: less installed compressors, better oil return No need to use a mechanical subcooler between the medium and low temperature circuits and over sizing the medium temperature rack is no longer necessary .



▪ Low Noise Condenser with Axial Fan



The highly efficient and compact Cross finned coil type are designed with corrugated surface aluminum fins and extended surface in inner tube. Outdoor fan with best quality fan made convenience with low noise level , saving energy and high ambient resistance temperature use until 60 °C . Axial type with external rotor motor , IP 54 motor protector and Class F insulation (DIN EN 60 034-1)

The fan motor totally encloses weather proof type .

▪ High efficiency Evaporator

Dry expansion Shell and Tube type Evaporator, compact and height efficiency heat transfer.

All evaporator equipped with Anti freeze to protect the cooling tube from being damage due to chilled water freeze up and chilled water temperature sensor to reduce precision chilled water temperature .

A drain plug is provided in the evaporator inlet pipe to extract chilled water .

Manufacture standard TEMA , ASTM .



Protection and safety control equip.

Dual pressure switch , Freezing protection thermostat , Oil pressure safety switch , Thermostat control .

Easy maintenance and safe

Unit full equipped witch operation indicator , hi / low pressure indicator ; temperature indicator .

Liquid receiver and stop valve an attached on the liquid line for refrigerant pump down. Sight glass , filter drier and a moisture indicator

Optional features :

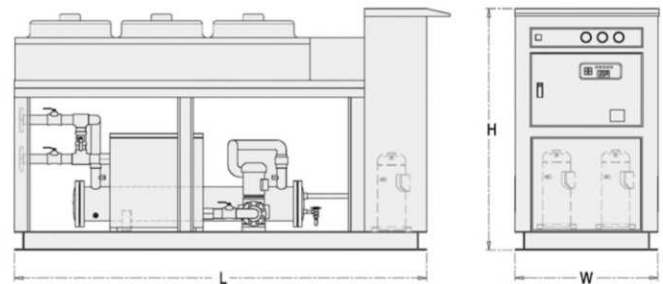
- Ozone friendly refrigerant use
- Brine Chiller with chilled water temp min 40 °C
- Heat recovery from refrigerant to reduce hot water

AIR COOLED SCROLL CHILLER

SPEIFICATION DATA

Model	CA Series	5 AScr	8 AScr	10 AScr	15 AScr	20 AScr2	30 AScr2
Cooling Capacity	[KW]	11.75	19.60	25.70	37.40	51.40	74.80
	[TR]	3.34	5.57	7.30	10.63	14.61	21.26
Power Input	[KW]	4.63	6.79	9.27	13.35	17.74	25.90
Current Ampere	[Amp]	8.08	11.86	16.18	23.31	30.98	45.23
Power Source		380 V / 3 Ph / 50 Hz					
Refrigerant		R 407 C					
COMPRESSOR	Type	FULL HERMATIC SCROLL					
	Model	ZR 61	ZR 94	ZR 125	ZR 190	ZR 125 x 2	ZR 190 X 2
	Qty	1	1	1	1	1	2
	Capacity Control [%]	ON/OFF	ON/OFF	ON/OFF	ON/OFF	50 -100	50-100
CONDENSER	Type	PLATE FIN COIL					
	Model	GA 75	GA 100	GA 120	GA 200	GA 250	GA 350
	Fan Dia - No	500 x 1	500 x 2	500 x 2	500 x 3	500 x 3	500 x 4
	Material	Cooper Tube ; Aluminium Fin					
EVAPORATOR	Type	SHELL AND TUBE					
	Model	DX 5	DX 8	DX 10	DX 15	DX 20	DX 30
	Material	Cu Tube ; carbon steel Casing					
	Press. Drop. [Bar]	0.25	0.26	0.29	0.3	0.31	0.29
Chilled Water Flow - min.	[Ltr/min]	40	65	80	120	160	230
Chilled Water Connection		DN 25	DN 40	DN 40	DN 50	DN 50	DN 65
No of Circuit		1	1	1	1	1	2
IMMERSE EVAPORATOR	Type	Immerse Coil					
	Model	5 C	8 C	10 C	15 C	20 C	30 C
	Tank Volume [Ltr]	100	170	220	320	450	650
	Circ. Pump. [Ltr/min]	45	70	90	135	175	250
	Tot. Head [m]	15	15	15	15	15	15
Tank Material		Stainless Steel – Hermaflex Insulation					
Chilled Water Temp. - IN/OUT	[°C]	12.0 / 7.0					

Model	Dimension			
	L	W	H	H Immerse
5 AScr	1380	920	1400	1400
8 AScr	1930	920	1400	1400
10 AScr	1930	920	1400	1500
15 AScr	2440	920	1400	1500
20 AScr	2430	920	1400	1600
30 A2Scr2	3430	920	1400	1600





Fabrikator :

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