

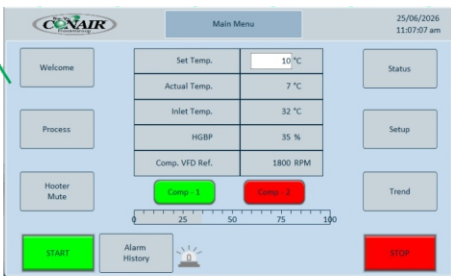
Water Cooled Air Chiller

AC3W - Series



Best For:

- Blown Film
- Pulverizers

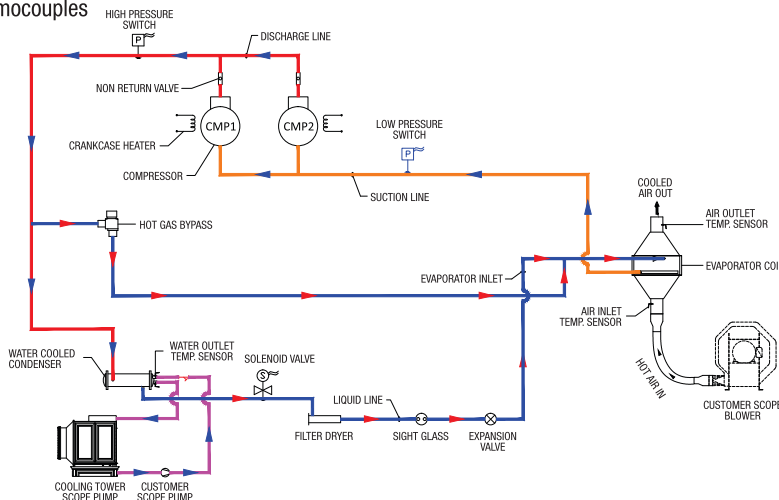


Unique Features

- Energy efficient & reliable scroll compressor with hermetically sealed suction gas cooled motor
- Each model is equipped with PLC based control platform. Control features include 2 line 16 character LCD display, onboard fault indication with audio alarm
- Accurate temperature control with the help of modulating hot gas bypass valve
- Intelligent program to save energy for dual compressor chiller circuit specifically for part load application
- Display of set value and actual value on the screen
- Display of return air temperature on screen
- Scroll and function buttons allow you to navigate the chiller's control platform
- Neatly organized internal component layout
- Proven component supplier i.e Copeland, Danfoss, Siemens, Emerson, IFM have been chosen for ultimate reliability and availability
- All chillers are factory tested under load prior to shipment
- Shell & Tube Condenser - high surface area with externally finned copper tube
- Finned & Tube Evaporator – high surface area due to internally grooved copper tube, generously sized for industrial environment and tested to 300 PSIG with lower pressure drop
- RTD temperature sensors yield higher precision and repeatability than thermocouples
- Three phase monitor protects against unit damage due to phase reversal or loss of phase

Optional Features

- Refrigerant pressure gauges
- Eco friendly refrigerant – R407c
- Air filter at the inlet of evaporator
- Condensing pressure regulator - regulates flow of water coming from cooling tower depending upon the condensing pressure
- SCADA communication
- Water eliminator



Technical Specifications

Model	AC3W 10	AC3W 15	AC3W 20	AC3W 30	AC3W 40	AC3W 55	AC3W 70-DR	AC3W 80-DR	AC3W 100-DR
Nominal Cooling Capacity KW (TR) *	23.5 (6.7)	30.2 (8.32)	36.4 (10.4)	51.6 (14.7)	68.5 (19.5)	100 (28.4)	117.5 (33.4)	134.4 (38.3)	149.2 (42.5)
Design Air Flow Rate (m³/hr)	2105	2620	3265	3350	4445	6490	7500	8700	9650
Air Inlet Temperature (°C)	42								
Air Outlet Temperature (°C)	15			10					
Relative Humidity (%)	25								
Max. Allowed Ambient Temperature (°C)	50 °C								
Control Range (°C)	Plus (+) 5 up to Plus (+) 20								
Minimum Cooling Capacity KW (TR) *	6.9 (1.96)	7.1 (2)	17.5 (4.9)	15 (4.3)	16.9 (4.8)	24.6 (6.99)	15 (4.3)	16.9 (4.8)	
Cooling Circuit									
Refrigerant	R410a								
No. of Compressor	1						2		
Speed of Compressor	Variable Speed						1 Variable speed & 1 Fix speed		
No. of Refrigeration Circuit	1						2		
Compressor Power (KW)	4.6	5.8	7.4	12.2	15.8	22.4	12.2 + 13.6	15.8 + 13.6	15.8 + 30.7
Process Air Data									
Pressure Drop of Air Through Evaporator Pa	100	110		150	165	250		350	
Air Connection IN / OUT mm	200				250	300		350	
Electrical Power Supply	415V, 50 Hz, 3 phase								
Control Voltage	24V DC								
Total Connected Load KW	4.6	5.8	7.4	12.2	15.8	22.4	25.8	29.4	46.5
Cooling Tower Water Requirement for Condenser									
Cooling capacity require - TR	9.5	13	16	22	28	42	50	55	68
Flow Rate LPM	100	130	160	220	280	420	500	550	680
Pressure Bar	2.5 - 3.5								
Main Dimensions (mm)									
W x D x H	1674 x 1800 x 1650		1674 x 2100 x 1722		1680 x 2400 x 2030		1780 x 2500 x 2030		2200 x 2500 x 2200
Weight Kg.	650	700	730	800	900		1100		1350
Color	RAL 9005 Black / RAL 7047 Telegrey 4								

All specifications are subject to change without prior notice.

*Nominal cooling capacity based at 30°C water from cooling tower to condenser.

**Water cooled air chiller requires good quality of water from cooling tower. Ph value: 8.5 to 9.5 and hardness < 50 ppm.

Advantages

- Water Cooled Air Chiller is used to supply cooled air to air ring of blown film extrusion line. Cooling of air with the help of direct expansion of refrigerant saves energy compared to conventional water chiller plus heat exchanger system
- Water Cooled Air Chillers provide consistent air temperature irrespective of ambient condition which is very essential for processing of plastics on blown film lines
- AC3W series chillers have cooling capacity of 6 TR to 42 TR with operating temperature of 5°C to 20°C in ambient air temperature of up to 42°C
- Compact in size which reduces foot print up to 25% compared to conventional water chiller plus heat exchanger system

LEADING MANUFACTURER OF PLASTIC AUXILIARY EQUIPMENT

Material Storage | Conveying | Drying | Blending | Heat Transfer | Size Reduction



(An ISO 9001:2015 Certified Organization)

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