

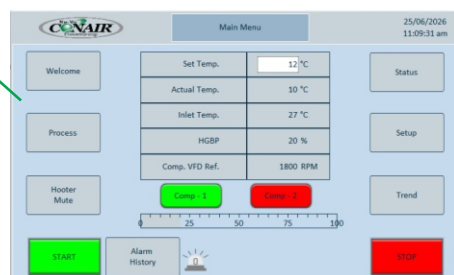
Air Cooled Air Chiller

AC3A - Series



Best For:

- Blown Film
- Pulverizers



Advantages

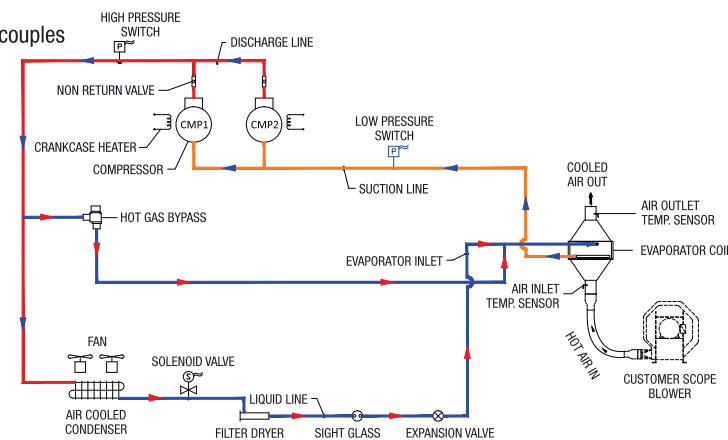
- Air Cooled Air Chiller is used to supply cooled air to air ring of blown film extrusion line. Cooling of air with the help of direct expansion of refrigerant saves energy compared to conventional water chiller plus heat exchanger system
- Air Cooled Air Chillers provide consistent air temperature irrespective of ambient condition which is very essential for processing of plastics on blown film lines
- AC3A series chillers have cooling capacity of 5 TR to 41 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

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
- Tool free access panel with neatly organized internal component layout. Simply remove the panel to get the access of entire cabinet of the chiller
- Proven component supplier i.e. Copeland, Danfoss, Siemens, Emerson, EBM, IFM have been chosen for ultimate reliability and availability
- All chillers are factory tested under load prior to shipment
- Condenser fan blade, motor, nozzle, and guard are a single piece assembly for improved reliability with the fan motors having rugged external rotor design
- MCHC condenser having greater surface area, suitable for harsh ambient condition and tested to 700 PSIG
- 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
- Air filter at the inlet of condenser
- Water eliminator
- Condenser fan cycling – regulates chiller capacity when the ambient air temperature is below the normal design temperature
- SCADA communication



Technical Specifications

Model	AC3A 10	AC3A 20	AC3A 30	AC3A 40	AC3A 55	AC3A 70-DR	AC3A 80-DR	AC3A 100-DR
Nominal Cooling Capacity KW (TR) *	20.4 (5.8)	31 (8.8)	42.2 (12)	56.3 (16)	82.2 (23.4)	98.3 (28)	125 (35.6)	144.34 (41)
Design Air Flow Rate (m³/hr)	1830	2800	2740	3650	5330	6370	8100	9365
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) *	5.8 (1.6)	11.3 (3.2)	12.8 (3.6)	17.3 (4.9)	25.2 (7.2)	12.8 (3.6)	17.3 (4.9)	19.3 (5.49)
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		
Fan Quantity x Fan Power (KW)	1 x 1.1		2 x 1.1	2 x 2.63	2 x 2.2		3 x 1.84	
Compressor Power (KW)	6.2	9.2	14.9	19.3	27.2	14.9 + 18.5	19.3 + 22.47	29.32 + 22.52
Process Air Data								
Pressure Drop of Air Through Evaporator (Pa)	125	150		165	250	350		
Air Connection IN / OUT (mm)	150	200		250		300		350
Electrical Power Supply	415V, 50 Hz, 3 phase							
Control Voltage	24V DC							
Total Connected Load KW	7.3	10.3	17.1	24.56	31.6	37.8	46.17	57.36
	Air Cooled Air Chiller require fresh air suction on condenser side and hot air exhaust on top of the chiller							
Main Dimensions (mm)								
W x D x H	1675 x 1833 x 2295		1675 x 2278 x 2373		1819 x 2637 x 2600	2280 x 2609 x 2517	2300 x 2700 x 2350	
Weight Kg.	675	750	950		1200	1550		2500
Color	RAL 9005 Black / RAL 7047 Telegrey 4							

All specifications are subject to change without prior notice.

*Air cooled air chiller require fresh air suction on condenser side and hot air exhaust from the top of the chiller.

**Nominal cooling capacity based at 42°C ambient temperature & 25% RH.

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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