

EarthSmart™ Chiller (Air Cooled)



EP3AP 36 to EP3AP 165



EP3A 3 to EP3A 35

- All chilled water contact surfaces are non ferrous for protection against corrosion. All wetted surfaces are stainless steel, copper or other non ferrous material
- Proven component suppliers like Danfoss, Copeland, Grundfos, EBM, Siemens have been chosen for ultimate reliability
- Tool free access panels and a neatly organized internal component layout provide easy access and service. Simply remove the panels to gain access to the entire cabinet of the chiller
- 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
- MCHE condenser having greater surface area, suitable for harsh ambient condition and tested to 700 PSIG
- Brazed Plate Evaporator / Shell and Tube Evaporator – provide higher heat transfer coefficients due to reduced fouling
- Evaporator Strainer - protects the evaporator from solid contaminants in the process water stream

ENVIRONMENT FRIENDLY & ENERGY EFFICIENT R-410A REFRIGERANT

New EP3A series portable chillers are quality engineered for year - round, 24 / 7 operation under demanding industrial applications. Combining a compact design, durable construction and a new control platform, EP3A chillers will provide maximum cooling for your application.

EP3A series chillers have cooling capacity of 3 TR to 184 TR with operating temperature of 8°C to 25°C suitable for extreme ambient temperature up to 50°C.

Unique Features

- Micro-controller / PLC based control
- Energy efficient & reliable scroll compressor with hermetically sealed suction gas cooled motor
- High performance, low maintenance system with switching cycle control
- Crank case heater to prevent liquid migration of refrigerant in compressor
- Filter dryer to ensure moisture free system
- Sight glass with moisture indicator
- Large size stainless steel insulated tank to prevent heat loss
- Dry running protection of pump by water level sensor in the tank
- Water re-feeding valve to maintain level in the tank automatically
- Antifreeze thermostat for protection of evaporator and compressor
- High volume, high pressure pump with stainless steel impeller
- Inbuilt process water bypass with valves
- Suction and discharge refrigerant gauges

Technical Specifications

Model	EP3A 3	EP3A 5	EP3A 8	EP3A 9	EP3A 10.5
Performance Characteristics					
Nominal Capacity in KW (TR)	11 (3)	19.6 (5.6)	29.2 (8.3)	33 (9.4)	37.6 (10.7)
Compressor Quantity / KW	1 / 3.4	1 / 5.5	1 / 8.4	1 / 9.4	1 / 10.7
Refrigerant	R 410 A				
No. of Refrigerant Circuits	1				
Standard Evaporator Pump KW / Qty.	1.1 / 1				1.5 / 1
Maximum Flow to Evaporator LPM	120				230
Maximum Pressure Bar	6				4.8
Nominal Flow LPM @ Bar	83 @ 4				150 @ 3.8
Water Reservoir Capacity Liters	40	80	160	200	
Fan Quantity x Fan KW	1 x 0.5	1 x 1.1	1 x 2.63	2 x 1.1	
Ambient Temperatures °C					
Rated Ambient Temperature °C	42				
Maximum Allowed Ambient Temperature °C	50				
Dimension (mm)					
W - Width	850	950	1120		
D - Depth	1350	1420	2070		
H - Height	1600	1930	2070		
Weight (Installed Kg)	275	375	550	750	
Chiller Connections In / Out BSP	1"				1 1/2"
Voltage / Connected Load KW					
Voltage	415V, 50 Hz, 3 Phase				
Connected Load (KW)	5.00	7.70	12.13	13.13	14.40
Control Voltage	24V DC				
Control Range in Degree Celsius	Plus (+) 8 to Plus (+) 25				
Water Quality	Require treated water with PH value in 7.5 to 8.5, hardness less than 50 PPM, Electrical Conductivity < 10-30 µS/ cm2				
Color	Black RAL 9005 / RAL 7047 Telegrey 4				

All specifications are subject to change without prior notice.

Description of Functions	Micro-Controller Based	Premium Control PLC Based
Display Parameters		
Process Fluid Supply Temperatures	●	●
Process Fluid Return Temperatures	-	●
Evaporator Fluid Leaving Temperature	●	●
Compressor Running Hours	●	●
Pump Running Hours	●	●
Control Parameters		
Prevent Short Cycling of Compressor	●	●
Adjustable Deviation Alarm Timer	●	-
Freeze Protection Safety	●	●
Automatic Water Make-up Valve	●	●
Master Reset Function to Restore Factory Defaults	●	●
Three Phase Monitor Feature	●	●
Compressor Running Current	-	●
Remote Control Option	●	●
Alarms & Warnings		
High Process Fluid Temperature	●	●
Low Process Fluid Temperature	●	●
Evaporator Fluid Freeze	●	●
Evaporator Fluid Low Flow	●	●
Refrigerant High Pressure	●	●
Refrigerant Low Pressure	●	●
Compressor Overload	●	●
Pump Overload	●	●
Condenser Fan Overload	●	●
Reservoir Low Level	●	●
Communications & Remote Interfaces		
Modbus RTU	○	○
Modbus TCP/IP	-	○

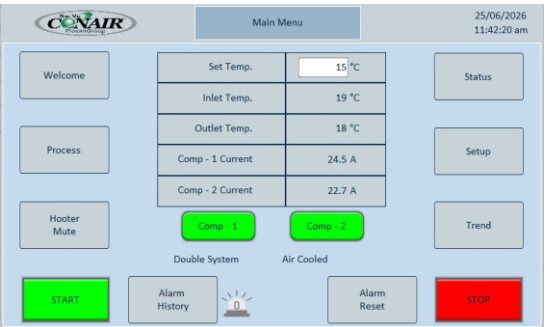
● = Standard, ○ = Optional, - = Not Available

EP3A 12	EP3A 13.5	EP3A 18	EP3A 22	EP3A 27	EP3A 35	EP3AP 36	EP3AP 44	EP3AP 54	EP3AP 70	EP3AP 88	EP3AP 108	EP3AP 132
43 (12.2)	48.1 (13.7)	65.6 (18.6)	80.4 (22.9)	99.6 (28.3)	129 (36.8)	130 (37)	160.8 (45.8)	199.2 (56.6)	258 (73.6)	299 (85)	387 (110)	516 (147)
1 / 12.2	1 / 13.6	1 / 18.5	1 / 22.6	1 / 28.3	1 / 35.8	2 / 18.5	2 / 22.6	2 / 28.3	2 / 35.8	3 / 28.3	3 / 35.8	4 / 35.8
R 410 A												
1						2				3		4
1.5 / 1				3.0 / 1		2.2 / 1		4.0	7.5		15	
230				380		480		960	1600		2500	
4.8				5.3		2.8						3.7
150 @ 3.8				290 @ 4.2		351 @ 2.2		588 @ 2.4	1350 @ 2.1		1800 @ 3.5	
200		240		280	360	500 (Optional)		900 (Optional)	1500 (Optional)		2000 (Optional)	
2 x 1.1			2 x 2.2		2 x 1.84	0.9 x 4	4 x 2.2		4 x 1.84	6 X 1.84		8 x 1.84
42												
50												
1120		1360				1950			2320	2287		2357
2070		2060			3060	3331			3331	4760		6200
2070		2300			2340	2200			2491			
750		900	1000	1050	1300	1850		2000	2500	3900		5000
1 1/2"				2"		2 1/2"			3"	2" X 3 Nos	2.5" x 3 Nos	2.5" x 4 Nos
415V, 50 Hz, 3 Phase												
15.90	17.30	22.20	28.50	35.70	42.48	40.60	54.00	65.40	78.96	95.94	118.44	157.92
24V DC												
Plus (+) 8 to Plus (+) 25												
Require treated water with PH value in 7.5 to 8.5, hardness less than 50 PPM, electrical conductivity < 10-30 µS/ cm2												
Black RAL 9005 / RAL 7047 Telegrey 4												

* Nominal capacity based at leaving water temperature of 15°C & ambient temperature of 42°C.

** Evaporator pump and water reservoir are available as optional features for EP3AP-36 To EP3AP-132 chiller models.

*** There are individual evaporator pump option also available for multiple refrigeration circuit chiller.



PLC Based



Micro-controller Based

Optional Features

- Water pressure gauge
- Water flow meter
- Solenoid valve & NRV for overhead plumbing
- Tankless / Pumpless kits
- High pressure (high flow process pumps)
- Variable speed compressor & EC fan technology
- VFD for process pumps

LEADING MANUFACTURER OF PLASTIC AUXILIARY EQUIPMENT

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



(An ISO 9001:2015 Certified Organization)

Nu-Vu Conair Pvt. Ltd.

Plot No. 147 & 148, Devraj Industrial Park, Piplaj-Pirana Road, Piplaj, Ahmedabad - 382405, Gujarat, India

+91 79 2970 8147 | +91 97129 28201, +91 90990 76206

marketingindia@conairgroup.com | www.conairgroup.in

