

REFRIGERATION AIR DRYER

CENX-XX



Features :

- Flow range : 20 to 1500 CFM
- Pressure range : ≤ 1.6 Mpa (16 barg)
- Maximum intake air temperature : 45°c
- Maximum ambient temperature : 48°c
- Cooling method : air-cooled
- Power supply : 220V/1Ph/50Hz (20 to 400 cfm)
415V/3Ph/50Hz (500 cfm & Above)
- Refrigerant : R407c/R134a/R22a
- Rated working conditions : working pressure 7 bar, intake air temperature 45°c, ambient temperature 48°, dew point +3°c (+1-4°c)



Refrigerated dryers ensure dry compressed air, prolonging the life of equipment and ensuring excellent production quality. Efficient removal of water to avoid corrosion in compressed air networks and air tools. All in all, can reduce maintenance cost and improve overall level.

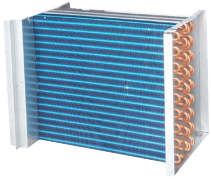
Features :

- The pre-cooler, evaporator and separator adopt an integrated design.
- The special thickened alloy aluminium heat exchanger assembly has a much higher corrosion resistance than similar designs.
- The surface of the condenser adopts nano anti-corrosion coating to prolong the service life.

Energy saving & environmental protection :

- The heat exchanger 3-IN-1 type (Fin & Tube or PHE Aluminium).
- The temperature difference between the inlet and outlet of the pre-cooler is 5-8°c, which is much better than that of similar products, which not only ensure extremely low relative humidity at the outlet, but also prevents condensation at the nozzle.
- Since the pre-cooler recovers more than 90% of the cooling capacity, the load on the evaporator is effectively reduced.





Condenser

- Air cooled (20-1500 cfm) / water cooled above 1500 cfm or as per customer requirement.
- Inner grooved copper tubes with blue aluminium fins.
- Blue fins prevent corrosion & dust accumulation and inner grooved copper tubes increase surface area means more heat transfer.
- Housing with powder coating.

Front Control Panel :

- MCB, Contactor, Relay, SPP, Fuses are accessible from front panel
- Spares fuses are provided for easy and quick replacement
- MCB, Contactor, Relay, and Fuse protection for compressor
Fuse protection for drain valve, controller and fan
- Dryer operation is visible at a glance at the control panel



Design Parameters

- Ambient Temperature 45°C
- Air Inlet Temperature 48°C
- Working Pressure 7Kg/cm²
- PDP + 3°C (for PDP at other parameters, please refer correction factor table below).

Indications & Controls :

- PDP
- Suction Pressure Gauge (Upto 80 cfm)
- Discharge Pressure Gauge (100 cfm & Above)
- Fuse Protection, Over Load and Short Circuit
- Single Phase Protection, Phase Unbalance and Phase Failure for 3Ø supply

Eco-Friendly Refrigerant :

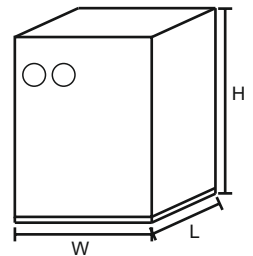
- R-134a / R-404a / R-407c
- R-22a (Available)
- HP Trip Indication

MODEL	Heat Exchanger Fin & Tube	3-IN-1 PHE Aluminium	MWP	Working Pressure
CENX-FT	√	x	16 Kg/cm ²	7 Kg/cm ²
CENX-PH	x	√	16 Kg/cm ²	7 Kg/cm ²
CENX-FH	√	x	40 Kg/cm ²	40 Kg/cm ²
CENX-FL	√	x	5 Kg/cm ²	2-4 Kg/cm ²

Correction Factor :

Inlet Air Temp. °C	40	45	48	55	60	
Factor C1	1.14	1.05	1.0	0.8	0.7	
Ambient Temp. °C	25	30	35	40	45	50
Factor C2	1.2	1.1	1.02	1.01	1.0	0.85
Working Pressure Kg./cm ²	4	5	6	7	8	10
Factor C3	0.8	0.85	0.9	1.0	1.01	1.09

S. NO.	NOMINAL FLOW		ELECTRIC SUPPLY V/Ph/Hz	NOMINAL POWER KW	AIR CONNECTION		DIMENSIONS IN MM			Wt. Kg.
	CFM	M3/HR			PHE TYPE	FIN & TUBE TYPE	L	W	H	
1	20	35	230/1/50	0.245	½ INCH	½ INCH	500	450	450	57
2	40	69	230/1/50	0.245	½ INCH	½ INCH	550	500	500	60
3	50	69	230/1/50	0.450	¾ INCH	¾ INCH	700	500	650	75
4	60	104	230/1/50	0.450	¾ INCH	¾ INCH	700	500	650	75
5	80	138	230/1/50	0.615	¾ INCH	¾ INCH	700	500	650	85
6	100	173	230/1/50	0.675	1 INCH	1 INCH	800	600	700	110
7	150	260	230/1/50	0.975	1½ INCH	1½ INCH	850	650	700	120
8	200	346	230/1/50	0.975	1½ INCH	1½ INCH	900	650	800	145
9	250	433	230/1/50	1.750	1½ INCH	2 INCH	850	800	850	170
10	300	519	230/1/50	1.750	1½ INCH	2 INCH	850	800	850	170
11	350	606	230/1/50	1.750	2 INCH	2 INCH	900	850	1000	180
12	400	692	415/3/50	2.275	2 INCH	2 INCH	900	850	1000	180
13	450	779	415/3/50	2.275	2 INCH	2 INCH	900	850	1000	190
14	500	865	415/3/50	2.365	2 INCH	3 INCH	900	850	1100	190
15	600	1038	415/3/50	3.3	2½ INCH	3 INCH	1050	1000	1100	225
16	650	1125	415/3/50	3.3	2½ INCH	3 INCH	1050	1000	1100	240
17	700	1211	415/3/50	6.6	2½ INCH	3 INCH	1500	1000	1100	-
18	800	1384	415/3/50	6.6	3 INCH (F)	3 INCH (F)	1500	1000	1100	-
19	1000	1730	415/3/50	7.1	4 INCH (F)	4 INCH (F)	1800	1100	1100	-
20	1250	2163	415/3/50	8.2	4 INCH (F)	4 INCH (F)	1800	1100	1100	-
21	1500	2595	415/3/50	10.7	4 INCH (F)	4 INCH (F)	1900	1200	1400	-



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