

Refrigerated Air Dryer, Compressed Air Dryer

Refrigerated Air Dryer- remove water by cooling the compressed-air temperature and causing condensation. An internal moisture separator collects the liquid water and sends it to a drain. Refrigerated dryers typically generate air with pressure dew points between 35 and 40° F. They tend to be used in general plant operations. They may not be suitable for more-critical processes that demand extremely dry air, and they aren't designed for circuits that see sub-freezing temperatures.

Refrigerated dryers are considered fairly economical to purchase and operate. They fall into two categories, cycling and non-cycling. As the names imply, one type runs intermittently and the other runs continuously. Users should consider cycling dryers, which only power up to meet demand—and thus reduce electricity consumption and energy costs.



Detailed Images

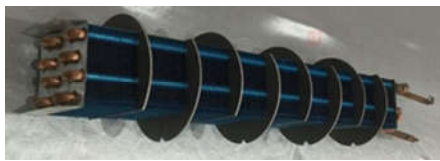


Copper tube heat exchanger

Air-to-Air heat exchanger

For the hot air: First step cooling, hot air-to-cold air heat exchange ;

For the cold air: as the outgoing air is reheated, it protects the outlet piping against pipe sweating



Evaporator

Air-to-refrigerant heat exchanger

The evaporator with anti-corrosion can keep stable pressure dew point for years, prevent the corrosion of evaporator encountered oil and water, and lead to poor heat transfer, can't keep stable pressure dew point



Stainless steel air connections

All the screw air connections all are stainless steel materials



Refrigeration compressor

Brand: LG or Panasonic

Original: Korea or Japan Brand

The refrigeration effect is good, stable performance

- Capacity:1.2~600m³/min
- Pressure dew point:2~10C°
- Copper tube heat exchanger (air-to-air heat exchanger)
- Anti-corrosion of evaporator (air-to-refrigerant heat exchanger)
- Air connection made of stainless steel material
- Environmentally friendly refrigerant R134a, R410a and R407c

Air dryer - Refrigeration type

Model	Volume flow (Nm ³ /min)	Power supply (V/Ph/Hz)	Refrigerating Capacity (HP)	Air connect or	Weight (Kg)	Measure Length(mm)*Wide(mm)*Height(mm)
TIN-10F	1.5	220/1/60	0.5	G1"	50	750*420*750
TIN-20F	2.5	220/1/60	0.75	G1"	65	850*430*780
TIN-30F	4	220/1/60	1.25	G1 1/2"	110	950*500*850
TIN-50F	7	220/1/60	1.5	G1 1/2"	130	1050*580*950
TIN-75F	10.6	220/1/60	2.5	G2"	170	1250*550*1000
TIN-100F	14.5	440/3/60	3	G2"	220	1350*580*1110
TIN-150F	21	440/3/60	4	DN65	300	1450*630*1200
TIN-200F	26	440/3/60	5	DN65	380	1500*650*1300
TIN-250F	33	440/3/60	6	DN80	440	1500*650*1300
TIN-300F	39	440/3/60	8	DN80	850	2100*900*1400
TIN-400F	49	440/3/60	9	DN100	1050	2200*1100*1400
TIN-500F	65	440/3/60	10	DN100	1300	2200*1000*1400

Data refers to the following working conditions: working pressure 7bar, ambient temperature 38°C, according to ISO7183 standard, weight are net (without packing)

Maximum working pressure 10bar; maximum ambient temperature 50°C; maximum inlet temperature 70°C

The connection factors in the follow table should be used as a guide only; for accurate selection at conditions differing from the above the selection software should be utilized.

Capacity Correction Factors (indicative values): CAPACITY = RETED VALUS 7bar * K1 * K2 * K3

Correction factor K1	Working pressure (Mpa)						
Inlet temperature (°C)	0.4	0.5	0.6	0.7	0.8	0.9	1
30	0.88	1.05	1.23	1.4	1.46	1.5	1.54
35	0.77	0.92	1.08	1.23	1.28	1.32	1.35
40	0.69	0.83	0.97	1.1	1.14	1.18	1.21
45	0.63	0.75	0.88	1	1.04	1.07	1.1

Ambient temperature (°C)	20	25	30	35	38	40	45	50
Correction factor K2	1.16	1.12	1.08	1.03	1	0.98	0.8	0.52

Dewpoint temperature (°C)	3	5	7	10
Correction factor K3	0.66	0.78	0.91	1