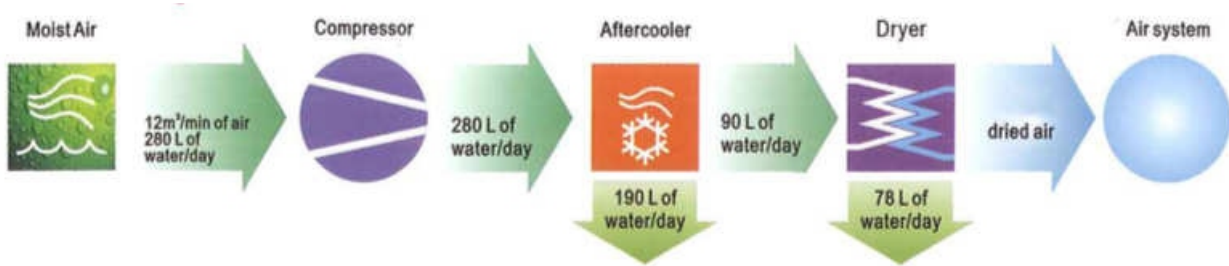




Robust, Reliable, Highly Efficient

Airox Technologies Pvt. Ltd.

Refrigerated Compressed Air Dryer



REFRIGERATED AIR DRYERS



 **ATPL** &  **ATHP** Series of Products

REFRIGERATED AIR DRYERS

WORKING PRINCIPAL OF AIR DRYER

Warm Compressed air enters into the air to air heat exchanger, where it is pre-cooled by outgoing cold refrigeration air. Pre-cooling makes it possible to use a smaller "more economical" refrigeration unit. Then the pre-cooled air enters into the Freon Heat Exchanger, where it is cooled down to +3°C. At this cool temperature, moisture condenses into liquid droplets, which are removed from the air stream by a very efficient demister and automatically drained by an Automatic Drain Valve. The cold dry compressed air passes back through the secondary side of the Air to Air Heat Exchanger, where it is re-heated by the incoming warm air. Reheating the outgoing compressed air increases temperature by heat with incoming warm air.

The dry air coming out from the air dryer is ready to use for instrumentation and process air applications.

TECHNICAL SPECIFICATION

REFRIGERATED AIR DRYERS (ATPL SERIES)

Model	Capacity	Working Pressure kg/cm ²	Connections BSP	Refrigerant	Power Supply w/ph	Condensor Type	Power Consumption kw	Overall Dimensions in mm			Approx Weight (Kgs.)
								L	B	H	
ATPL-15	15	16	1/2"	R134a	220/1	Air	0.19	500	400	605	32
ATPL-25	25	16	1/2"	R134a	220/1	Air	0.19	500	400	605	32
ATPL-45	45	16	1/2"	R134a	220/1	Air	0.37	500	400	605	35
ATPL-60	60	16	3/4"	R134a	220/1	Air	0.37	550	520	780	60
ATPL-80	80	16	3/4"	R134a	220/1	Air	0.60	550	700	780	65
ATPL-100	100	16	1"	R134a	220/1	Air	0.60	750	700	975	78
ATPL-125	125	16	1 1/2"	R134a	220/1	Air	0.60	750	700	975	80
ATPL-150	150	16	1 1/2"	R134a/R 407c	220/1	Air	1.40	750	700	975	90
ATPL-200	200	16	1 1/2"	R134a/R 407c	220/1	Air	1.40	750	700	975	92
ATPL-250	250	16	1 1/2"	R134a/R 407c	220/1	Air	1.70	750	700	975	155
ATPL-300	300	16	2"	R134a/R 407c	220/1	Air	1.70	750	700	975	155
ATPL-400	400	16	2"	R 22/R 407c	440/3	Air	2.30	1000	800	1500	164
ATPL-500	500	16	3"	R 22/R 407c	440/3	Air	3.10	1500	1500	1750	250
ATPL-600	600	16	3"	R 22/R 407c	440/3	Air	3.20	1500	1500	1750	250
ATPL-800	800	16	3"	R 22/R 407c	440/3	Air	4.20	1500	1500	1750	250
ATPL1000	1000	16	4"Flange	R 22/R 407c	440/3	Air/Water	5.80	1500	1500	1750	400
ATPL1250	1250	16	4"Flange	R 22/R 407c	440/3	Air/Water	6.20	1500	1500	1750	450
ATPL1500	1500	16	5"Flange	R 22/R 407c	440/3	Air/Water	7.80	1500	1700	2250	640
ATPL2000	2000	16	6"	R 22/R 407c	440/3	Air/Water	9.90	1500	1700	2250	770

REFRIGERATED AIR DRYERS (ATHP SERIES)

Model	Capacity	Working Pressure kg/cm ²	Connections BSP	Refrigerant	Power Supply w/ph	Condensor Type	Power Consumption kw	Overall Dimensions in mm			Approx Weight (Kgs.)
								L	B	H	
ATHP-25	25	40	1/2"	R134a	220/1	Air	0.21	500	400	605	40
ATHP-45	45	40	1/2"	R134a	220/1	Air	0.21	500	400	605	45
ATHP-60	60	40	1/2"	R134a	220/1	Air	0.37	550	400	605	48
ATHP-80	80	40	3/4"	R134a	220/1	Air	0.39	550	520	780	65
ATHP-100	100	40	3/4"	R134a	220/1	Air	0.39	750	520	780	75
ATHP-150	150	40	1 1/2"	R134a/R 407c	220/1	Air	0.66	750	700	975	95
ATHP-200	200	40	1 1/2"	R134a/R 407c	220/1	Air	0.66	750	700	975	100
ATHP-250	250	40	1 1/2"	R134a/R 407c	220/1	Air	1.02	750	700	975	120
ATHP-300	300	40	1 1/2"	R134a/R 407c	220/1	Air	1.40	750	700	975	130
ATHP-400	400	40	1 1/2"	R 22/R 407c	220/1	Air	1.40	750	900	1150	135
ATHP-500	500	40	1 1/2"	R 22/R 407c	220/1	Air	1.78	750	900	1150	160
ATHP-600	600	40	1 1/2"	R 22/R 407c	220/1	Air	1.90	750	900	1150	160
ATHP-800	800	40	3"	R 22/R 407c	440/3	Air	4.20	1500	1500	1750	250
ATHP1000	1000	40	4"Flange	R 22/R 407c	440/3	Air/Water	5.80	1500	1500	1750	400
ATHP1250	1250	40	4"Flange	R 22/R 407c	440/3	Air/Water	6.20	1500	1500	1750	450
ATHP1500	1500	40	5"Flange	R 22/R 407c	440/3	Air/Water	7.80	1500	1700	2250	640

APPLICATION

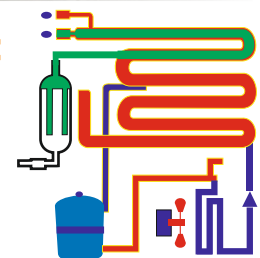
- Automobile Industry
- Chemical Industry
- Electronics Industry
- Beverages Industry
- Cement Plants
- Spray Painting
- Paper Mills
- Printing & Textile Industry
- Rice and Sugar Mills
- Hospitals
- Tools Room
- Power Plan.
- PET- Blow Moulding
- CNC & CMM Machines
- General Instrumentations
- Pharmaceutical Industry and Many More...

SALIENT FEATURES

- Compact Design
- Low Pressure Drop
- Power Saving
- High Quality Finishing
- More Reliability
- Ease Of Installation
- Environment Friendly
- Reduced Maintenance
- Constant dew point at all varying load



SCHEMATIC DIAGRAM



■ AUTOMATIC DRAIN VALVE

Auto drain valves are used to remove accumulated water particles from the air line equipments. **Airox** has developed different varieties of auto drain valves with respect to the application and ease of operation. ■ Dual timer, solenoid operated ■ Single timer, solenoid operated ■ Zero air loss/ float type ■ High pressure (40 Bar) Drain valve ■ High discharge, pilot air operated.

■ AIR FILTER

ATPL series is the latest filters designed by **Airox** with a capability of withstanding air temperature upto 90°C. It can remove dust, moisture, rust scales & oil particles from compressed air. ■ Flow Ranges from 15CFM to 2500 CFM ■ $1\ \mu$ $5\ \mu$ $0.01\ \mu$ & activated Carbon filters ■ Borosilicate Fiber glass filtration media ■ Coalescing elements covered with hydrophobic material Aluminum die cast body upto 350 CFM ■ MS Construction with multiple element for higher flow capacities ■ Models are available for 16 bar & 45 Bar range ■ Auto drains & DP gauges are optional

Coalescing is a continuous natural process in which oil, water and solid particles that pass through the filter element come into contact with a fibre strand and unite with other collected aerosol to form droplets. The droplets fall to the bottom of the housing and drained away.



AIROX[®]

Airox Technologies Pvt. Ltd.

D-27, 4th Floor, Prozon Trade Center,
API Corner, Aurangabad-431210 (M.H.) India
Phone No.0240 6602686 M-09168666007
www.airoxtechnologies.com

How to Order

Requirement :	Inlet flow	100 scfm
	working pressure	5 Kg / cm ²
	Inlet temperature	45° C
	Ambient temperature	38° C
Referring tables :	Factor Pi	= 0.84
	Factor Ti	= 1
	Factor Ta	= 1
Dryer capacity	Flow	= 100
required :	Pi x Ti x Ta	0.84 x 1 x 1
		= 119 scfm
Choose the nearest higher model :		= ME 150

Correction Factor

Air Inlet T emperature °C	30	38	45	50	55	60
Correction Factor (Ti)	1.14	1.08	1.0	0.75	0.63	0.5
Ambient T emperature °C	25	30	38	43		
Correction Factor (Ta)	1.36	1.18	1.0	0.86		
Inlet Pressure Kg/cm ²	3	5	7	9	12	
Correction Factor (Pi)	0.6	0.84	1.0	1.11	1.21	

