

Atlas Copco

# Compressed air dryers

FX-series refrigerant dryers

## The high-performance, reliable dry air solution

Atlas Copco FX refrigerant dryers provide the clean, dry air you need with a stable pressure dewpoint as low as 3-5°C. The FX-series is designed in-house and tested using the most stringent methods to ensure strong performance and reliability.

### Control panel

Large LCD display with PDP indicator and main on/off switch.

### Air/air & air/refrigerant heat exchanger

3-in-1 high-efficiency heat exchanger ensures high thermal exchange and low load losses.

### Dual timer and float drain

Ensures proper condensate removal.

### Capillary tube

Reduces refrigerant pressure and temperature for improved cooling.

### Refrigerant compressor

Driven by an electric motor and cooled with refrigerant fluid. Comes with high-pressure and start-up protection.

### Hot gas bypass valve

- Keeps refrigeration capacity in all load conditions.
- Maintains constant pressure in the evaporator to avoid freezing.

### Refrigerant condenser

Air-cooled and with a large exchange surface for high thermal exchange.



## Why dry compressed air?

Compressed air contains water vapors, which are the inherent result of the compression process. Left untreated, this saturated compressed air introduces a substantial risk of corrosion in your air system and end products. An air dryer is therefore essential to protect your production.



## Performance & reliability

- Stable 3-5°C pressure dewpoint.
- High efficiency thanks to innovative 3-1 heat exchanger.
- Quality gas bypass valve on the full range to manage the risk of heat exchanger freeze.
- Dual drain to ensure reliability and air quality.
- Advanced controller to boost dependability and reduce power consumption at low load.



## User friendly & easy maintenance

- Compact design with small footprint.
- Quick plug-and-play installation.
- Digital controller with big LCD screen shows the LAT and running status.
- Effortless access to key components for maintenance.



## Energy savings

- Best-in-class refrigerant compressor with low power consumption.
- Energy savings thanks to low pressure drop.
- Variable fan speed to save energy.



## Environment-friendly

- Eco-friendly refrigerant R134a/R410a with zero ozone depletion potential.
- Low power consumption contributes to lower emissions and a smaller environmental footprint.

## Applications

- Pneumatic tools and equipment
- Pneumatic control systems
- Painting
- Packaging
- Injection molding
- Car mechanics
- Tire inflation
- Professional and industrial applications

## Technical specifications

Model	Air treatment capacity	Pressure drop	Nominal electrical power @ 50Hz	Maximum working pressure	Voltage	Dimensions			Weight	Connections
	l/s	bar	W	bar	V/ph/Hz	Length	Width	Height	kg	
						mm	mm	mm		
FX 6	6	0.28	220	13	230/1/50	517	500	805	50	G 3/4
FX 11	11	0.28	220	13	230/1/50	517	500	805	50	G 3/4
FX 18	18	0.28	550	13	230/1/50	520	550	820	55	G 3/4
FX 25	25	0.28	550	13	230/1/50	520	550	820	55	G 3/4
FX 35	35	0.28	550	13	230/1/50	570	550	820	55	G 1
FX 45	45	0.28	990	13	230/1/50	615	766	875	75	G 1
FX 60	60	0.28	990	13	230/1/50	685	726	875	80	G 1
FX 75	75	0.28	990	13	230/1/50	673	766	955	90	G 1.5
FX 100	100	0.28	1320	13	230/1/50	750	766	955	110	G 1.5
FX 120	120	0.28	1430	13	230/1/50	782	766	995	125	G 1.5
FX 160	160	0.28	1760	13	230/1/50	845	816	995	140	G 2
FX 200	200	0.28	1760	13	230/1/50	845	816	995	140	G 2.5
FX 230	230	0.28	2100	13	230/1/50	960	950	1015	175	G 2.5
FX 285	285	0.28	2800	13	230/1/50	960	950	1015	180	G 2.5
FX 335	335	0.28	2900	13	230/1/50	1045	950	1035	185	G 2.5
FX 400	400	0.28	3500	13	230/1/50	1045	950	1035	190	G 2.5

### Refrigerant types:

R134a for FX 6-35, R410a for FX 45-400

### Reference conditions:

Ambient temperature: 25°C  
Inlet temperature: 35°C  
Working pressure: 7 bar(g)

### Limitations:

Maximum ambient temperature: 46°C  
Minimum ambient temperature: 5°C  
Maximum inlet temperature: 62°C  
Maximum working pressure: 13 bar

### Correction factors:

Correction factors for different pressure dewpoints									
PDP °C	3	5							
Correction factor	0.7	1							
Correction factors for different ambient temperatures									
Ambient temperature °C	25	30	35	40	45	46			
Correction factor	1	0.91	0.81	0.72	0.61	0.60			
Correction factors for different inlet temperatures									
Inlet temperature °C	25	30	35	40	45	50	55	60	62
Correction factor	1	1	1	0.82	0.67	0.55	0.44	0.36	0.34
Correction factors for different inlet pressures									
Inlet pressure (bar)	5	6	7	8	9	10	11	12	13
Correction factor	0.75	0.88	1	1.08	1.15	1.22	1.28	1.34	1.39

## ISO 8573-1 Class 4 quality

Thanks to their 3°C/38°F pressure dewpoint, Atlas Copco FX dryers can be used for applications that require ISO 8573-1 Class 4 air quality.

Quality classes	Particle size	Maximum pressure dewpoint		Maximum oil content (droplets, aerosols, and vapor ppm)	
	microns	°C	°F	w/w	mg/m <sup>3</sup>
0	as specified	as specified		as specified	
1	0.1	-70	-94	0.008	0.01
2	1	-40	-40	0.08	0.1
3	5	-20	-4	0.8	1
4	15	3	38	4	5
5	40	7	45	21	25
6	-	10	50	-	-



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