REFRIGERANT AIR DRYERS

FX 1-21

Atlas Copco

AIR TREATMENT, A CRUCIAL INVESTMENT

WHY YOU NEED QUALITY AIR

Compressed air contains oil, solid particles and water vapors. Together, they form an abrasive, often acidic, oily sludge. Without air treatment, this murky mix will enter the compressed air system, corroding pipe work, damaging pneumatic tools and potentially compromising final products.

THE COST OF POOR AIR QUALITY

Untreated compressed air can cause substantial problems and costs:

- Your air tools have less power, more failures and, ultimately, a shorter lifetime.
- Materials and products that come into contact with untreated air run the risk of contamination or damage.
- Compressed air pipe work will corrode, leading to leaks. For example, a small 3 mm leak causes a 3.7 kW per year loss. That means a waste of an estimated €1800.

ATLAS COPCO QUALITY AIR, THE SMART CHOICE

ATLAS COPCO FX: DEPENDABLE DRY AIR

To avoid condensation, compressed air must be dried. The Atlas Copco FX refrigerant dryer is a reliable, cost effective and easy to use solution. Available in 22 sizes (7-1236 l/s or 14-2516 cfm), the FX offers a pressure dew point as low as +3 °C/+37.4 °F for a wide range of applications and industries. The dryer can be used at different pressures and consumes hardly any processed compressed air.

FX: THE BENEFITS ADD UP

- **Strong performance.**
- **Pressure dew point display.**
- **Straightforward reliability.**
- **Easy installation.**
- **Minimal maintenance.**
- **Significant cost savings.**

A COMPLETE QUALITY AIR SYSTEM

Atlas Copco offers complete quality air systems that provide the clean, dry air that supports your operational needs.

A NAME YOU CAN TRUST

For more than 100 years, you have turned to Atlas Copco for the better compressors in the business. Our commitment to your operational objectives doesn't end there. Atlas Copco air treatment equipment is developed and tested in-house to offer you quality air with accuracy, reliability and efficiency. Why compromise using third party add-ons when you can extend the Atlas Copco peace of mind to your entire compressed air system?

FX

REFRIGERANT DRYERS

Quality air made easy

PRESSURE DEW POINT PRECISION

The FX comes in a wide range of sizes (7-1236 l/s or 14-2516 cfm) to offer a steady pressure dew point as low as +3 °C/+37.4 °F. Its easy to use digital display precision-measures and monitors the pressure dew point and dryer performance.

Digital display: provides peace of mind through precise monitoring of pressure dew point.

Refrigerant separator: no chance of moisture entering the compressed air system.

Single electrical connection: allows for plug-and-play installation.

Hot gas bypass: ensures stable pressure dew point and eliminates the possibility of condensate freezing.

Easy access to key components for straightforward servicing.

Water separator: offers high efficiency for better pressure dew point.

Compact design for a small footprint.

NEW: DIGITAL DISPLAY

- Pressure dew point: exact measurement and visual monitoring.
- Status: refrigerant compressor and fan.
- Alarms: high/low pressure dew point and probe failure.
- Service warning.

RELIABLE

Built according to the stringent Atlas Copco standards, the FX is made of high quality, generously sized components.

HOT ENVIRONMENTS

High ambient temperatures can put your equipment to the test. The FX range offers several high temperature models that ensure dependable performance in conditions up to 46 °C/115 °F.

SIGNIFICANT COST SAVINGS

- Increased reliability and lifetime of tools and equipment.
- Reduced pipe work leaks and thus a lower energy bill.
- Less equipment breakdowns and operational interruptions.
- Minimal chance of product damage as a result of moisture carryover.

YOUR CHOICE: STANDALONE OR INTEGRATED?

The FX comes as a standalone dryer and as part of the full feature version of many Atlas Copco compressors. Which one is best for you? It all depends on your requirements and priorities …

Separate dryer:
- Plug-and-play installation.
- Single electrical connection.
- All units pre-commissioned.
- Self-regulating.
- Pressure dew point display with high/low pressure dew point alarm and status of refrigerant, compressor and fan.

Full feature:
- Saves space when footprint is a priority.
- Compressor and air treatment components are designed, built and tested to work together to provide optimal quality air.

TECHNICAL SPECIFICATIONS 50 Hz

FX REFRIGERANT DRYER RANGE 50 Hz

Model	Outlet pressure dew point +5 °C/41 °F				Outlet pressure dew point +3 °C/37 °F				Maximum working pressure		Electrical supply	Dimensions						Weight		Compressed air connections
	Inlet capacity		Pressure drop		Inlet capacity		Pressure drop					Length		Width		Height				
	l/s	cfm	bar	psi	l/s	cfm	bar	psi	bar	psi		mm	inch	mm	inch	mm	inch	kg	lb	
FX 1	7	14	0.20	2.88	6	13	0.15	2.18	16	232	230/1/50Hz	500	19.69	350	13.78	484	19.06	19	42	3/4" M
FX 2	12	24	0.33	4.79	10	21	0.25	3.63	16	232	230/1/50Hz	500	19.69	350	13.78	484	19.06	19	42	3/4" M
FX 3	16	35	0.33	4.79	14	30	0.25	3.63	16	232	230/1/50Hz	500	19.69	350	13.78	484	19.06	20	44	3/4" M
FX 4	23	49	0.33	4.79	20	42	0.25	3.63	16	232	230/1/50Hz	500	19.69	350	13.78	484	19.06	25	55	3/4" M
FX 5	35	74	0.40	5.75	30	64	0.30	4.35	16	232	230/1/50Hz	500	19.69	350	13.78	484	19.06	27	60	3/4" M
FX 6	45	95	0.42	6.14	39	83	0.32	4.64	13	189	230/1/50Hz	500	19.69	370	14.57	804	31.65	51	112	1" F
FX 7	58	122	0.50	7.29	50	106	0.38	5.51	13	189	230/1/50Hz	500	19.69	370	14.57	804	31.65	51	112	1" F
FX 8	69	146	0.24	3.45	60	127	0.18	2.61	13	189	230/1/50Hz	560	22.05	460	18.11	829	32.64	61	135	1 1/2" F
FX 9	79	167	0.33	4.79	68	144	0.25	3.63	13	189	230/1/50Hz	560	22.05	460	18.11	829	32.64	68	150	1 1/2" F
FX 10	100	211	0.24	3.45	87	184	0.18	2.61	13	189	230/1/50Hz	560	22.05	460	18.11	829	32.64	73	161	1 1/2" F
FX 11	125	264	0.26	3.84	108	229	0.20	2.90	13	189	230/1/50Hz	560	22.05	580	22.83	939	36.97	90	198	1 1/2" F
FX 12	148	313	0.36	5.18	128	271	0.27	3.92	13	189	230/1/50Hz	560	22.05	580	22.83	939	36.97	90	198	1 1/2" F
FX 13	192	407	0.33	4.79	167	354	0.25	3.63	13	189	400/3/50Hz	898	35.35	735	28.94	1002	39.45	128	282	2" F
FX 14	230	488	0.40	5.80	200	424	0.30	4.35	13	189	400/3/50Hz	898	35.35	735	28.94	1002	39.45	146	322	2" F
FX 15	288	611	0.40	5.80	250	530	0.30	4.35	13	189	400/3/50Hz	898	35.35	735	28.94	1002	39.45	158	348	2" F
FX 16	345	731	0.40	5.80	300	636	0.30	4.35	13	189	400/3/50Hz	898	35.35	735	28.94	1002	39.45	185	408	2" F
FX 17	424	899	0.28	4.07	400	848	0.25	3.63	13	189	400/3/50Hz	1082	42.59	1020	40.15	1560	61.41	325	717	3" F
FX 18	530	1124	0.34	4.89	500	1060	0.30	4.35	13	189	400/3/50Hz	1082	42.59	1020	40.15	1560	61.41	335	739	3" F
FX 19	618	1310	0.39	5.70	583	1236	0.35	5.08	13	189	400/3/50Hz	1082	42.59	1020	40.15	1560	61.41	350	772	3" F
FX 19.5	795	1685	0,28	4.07	750	1527	0,25	3.63	13	189	400/3/50Hz	1123	44,2	1020	40.15	1560	61.41	380	838	Flanged DN 125
FX 20	883	1872	0.34	4.89	833	1766	0.30	4.35	13	189	400/3/50Hz	2099	82.6	1020	40.15	1560	61.41	550	1213	Flanged DN 125
FX 21	1236	2516	0.28	4.07	1166	2374	0.25	3.63	13	189	400/3/50Hz	2099	82.6	1020	40.15	1560	61.41	600	1323	Flanged DN 125

OPTIONAL FILTER SELECTION

Model	Outlet pressure dew point +5 °C/41 °F		Outlet pressure dew point +3 °C/37 °F	
	Inlet capacity	Filter	Inlet capacity	Filter
	l/s		l/s	
FX 1	7	UD9+	6	UD9+
FX 2	12	UD15+	10	UD15+
FX 3	16	UD15+	14	UD15+
FX 4	23	UD25+	20	UD25+
FX 5	35	UD45+	30	UD45+
FX 6	45	UD45+	39	UD45+
FX 7	58	UD60+	50	UD60+
FX 8	69	UD100+	60	UD60+
FX 9	79	UD100+	68	UD100+
FX 10	100	UD100+	87	UD100+
FX 11	125	UD140+	108	UD140+
FX 12	148	UD180+	128	UD140+
FX 13	192	UD220+	167	UD180+
FX 14	230	UD310+	200	UD220+
FX 15	288	UD310+	250	UD310+
FX 16	345	UD425+	300	UD310+
FX 17	424	UD425+	400	UD425+
FX 18	530	UD550+	500	UD550+
FX 19	618	UD850+	583	UD850+
FX 19.5	795	UD850+	750	UD850+
FX 20	883	UD850+	833	UD850+
FX 21	1236	UD1400+	1166	UD1400+

REFERENCE CONDITIONS

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

LIMITATIONS

Maximum ambient temperature:	43 °C*
Minimum ambient temperature:	5 °C
Maximum inlet temperature:	55 °C**

*46 °C for FX 1-16
**60 °C for FX 17-21

NOTES

Refrigerant types:	R134a for FX 1-5
	R404a for FX 6-12
	R410A for FX 13-16
	R404a for FX 17-21

TECHNICAL SPECIFICATIONS 60 Hz

FX REFRIGERANT DRYER RANGE 60 Hz

Model	Outlet pressure dew point +5 °C/41 °F				Outlet pressure dew point +3 °C/37 °F				Maximum working pressure		Electrical supply	Dimensions						Weight		Compressed air connections
	Inlet capacity		Pressure drop		Inlet capacity		Pressure drop					Length		Width		Height				
	l/s	cfm	bar	psi	l/s	cfm	bar	psi	bar	psi		mm	inch	mm	inch	mm	inch	kg	lb	
FX 1	7	14	0.20	2.88	6	13	0.15	2.18	16	232	115-230/1/60Hz	500	19.7	350	13.8	484	19.1	19	42	3/4" NPT
FX 2	12	24	0.33	4.79	10	21	0.25	3.63	16	232	115-230/1/60Hz	500	19.7	350	13.8	484	19.1	19	42	3/4" NPT
FX 3	16	35	0.33	4.79	14	30	0.25	3.63	16	232	115-230/1/60Hz	500	19.7	350	13.8	484	19.1	20	44	3/4" NPT
FX 4	23	49	0.33	4.79	20	42	0.25	3.63	16	232	115-230/1/60Hz	500	19.7	350	13.8	484	19.1	25	55	3/4" NPT
FX 5	35	74	0.40	5.75	30	64	0.30	4.35	16	232	115-230/1/60Hz	500	19.7	350	13.8	484	19.1	27	60	3/4" NPT
FX 6	45	95	0.42	6.14	39	83	0.32	4.64	13	189	115-230/1/60Hz	500	19.7	370	14.6	804	31.7	51	112	1" NPT
FX 7	58	122	0.50	7.29	50	106	0.38	5.51	13	189	115-230/1/60Hz	500	19.7	370	14.6	804	31.7	51	112	1" NPT
FX 8	69	146	0.24	3.45	60	127	0.18	2.61	13	189	115-230/1/60Hz	560	22.0	460	18.1	829	32.6	61	135	1 1/2" NPT
FX 9	79	167	0.33	4.79	68	144	0.25	3.63	13	189	115-230/1/60Hz	560	22.0	460	18.1	829	32.6	68	150	1 1/2" NPT
FX 10	100	211	0.24	3.45	87	184	0.18	2.61	13	189	115-230/1/60Hz	560	22.0	460	18.1	829	32.6	73	161	1 1/2" NPT
FX 11	125	264	0.26	3.84	108	229	0.20	2.90	13	189	230/1/60Hz	560	22.0	580	22.8	939	37.0	90	198	1 1/2" NPT
FX 12	148	313	0.36	5.18	128	271	0.27	3.92	13	189	230/1/60Hz	560	22.0	580	22.8	939	37.0	90	198	1 1/2" NPT
FX 13	192	407	0.26	3.77	167	354	0.20	2.90	13	189	460/3/60Hz	898	35.35	735	28.9	1002	36.4	173	381	2" NPT
FX 14	230	488	0.33	4.79	200	424	0.25	3.63	13	189	460/3/60Hz	898	35.35	735	28.9	1002	36.4	178	392	2" NPT
FX 15	288	611	0.46	6.67	250	530	0.35	5.08	13	189	460/3/60Hz	898	35.35	735	28.9	1002	36.4	183	404	2" NPT
FX 16	345	731	0.46	6.67	300	636	0.35	5.08	13	189	460/3/60Hz	898	35.35	735	28.9	1002	36.4	183	404	2" NPT
FX 17	424	899	0.28	4.07	400	848	0.25	3.63	13	189	460/3/60Hz	1082	42.59	1020	40.15	1560	61.41	325	717	3" NPT
FX 18	530	1124	0.34	4.89	500	1060	0.30	4.35	13	189	460/3/60Hz	1082	42.59	1020	40.15	1560	61.41	335	739	3" NPT
FX 19	618	1310	0.39	5.70	583	1236	0.35	5.08	13	189	460/3/60Hz	1082	42.59	1020	40.15	1560	61.41	350	772	3" NPT
FX 19.5	795	1685	0,28	4.07	750	1527	0,25	3.63	13	189	460/3/60Hz	1123	44,2	1020	40.15	1560	61.41	380	838	Flanged DN 125
FX 20	883	1872	0.34	4.89	833	1766	0.30	4.35	13	189	460/3/60Hz	2099	82.6	1020	40.15	1560	61.41	550	1213	Flanged DN 125
FX 21	1187	2516	0.28	4.07	1120	2374	0.25	3.63	13	189	460/3/60Hz	2099	82.6	1020	40.15	1560	61.41	600	1323	Flanged DN 125

OPTIONAL FILTER SELECTION

Model	Outlet pressure dew point +5 °C/41 °F		Outlet pressure dew point +3 °C/37 °F	
	Inlet capacity	Filter	Inlet capacity	Filter
	cfm		cfm	
FX 1	14	UD9+	13	UD9+
FX 2	24	UD15+	21	UD15+
FX 3	35	UD15+	30	UD15+
FX 4	49	UD25+	42	UD25+
FX 5	74	UD45+	64	UD45+
FX 6	95	UD45+	83	UD45+
FX 7	122	UD60+	106	UD60+
FX 8	146	UD100+	127	UD60+
FX 9	167	UD100+	144	UD100+
FX 10	211	UD100+	184	UD100+
FX 11	264	UD140+	229	UD140+
FX 12	313	UD180+	271	UD140+
FX 13	407	UD220+	354	UD180+
FX 14	488	UD310+	424	UD220+
FX 15	611	UD310+	530	UD310+
FX 16	731	UD425+	636	UD310+
FX 17	899	UD425+	848	UD425+
FX 18	1124	UD550+	1060	UD550+
FX 19	1310	UD850+	1236	UD850+
FX 19.5	1685	UD850+	1527	UD850+
FX 20	1872	UD850+	1766	UD850+
FX 21	2516	UD1400+	2374	UD1400+

REFERENCE CONDITIONS

Ambient temperature:	100 °F
Inlet temperature:	100 °F
Working pressure:	102 psi (g)

LIMITATIONS

Maximum ambient temperature:	110 °F*
Minimum ambient temperature:	41 °F
Maximum inlet temperature:	131 °F**

*115 °F for FX 1-16
**140 °F for FX 17-21

NOTES

Refrigerant types:	R134a for FX 1-5
	R404a for FX 6-12
	R410A for FX 13-16
	R404a for FX 17-21

COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.

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Designs and specifications are subject to change without notice or obligation.
Read all safety instructions in the manual before usage.

Atlas Copco