

# TXK · FLEX · HXK Series



Jemaco Refrigerated Air Dryeis

Compressed air user around the world have relied on Jemaco to provide innovative compressed air treatment solutions for critical applications. Jemaco maintain a long standing reputation for manufacturing products that deliver superior performance, time proven reliability and optimal energy savings. Jemaco is the preferred choice for providing clean, dry compressed air for the most challenging industries.

Compressed air contains ingested and generated contamination in the form of solid particulate, extraneous oils and water vapor. If untreated, the air will adversely affect pneumatically operated components and equipment. Jemaco refrigerated air dryers are recognized for reliable, effective and efficient contaminant removal systems.

#### About SPX

Based in Charlotte, NC, USA, SPX Corporation is a global Fortune 500 multi-industry manufacturing leader with over \$5 billion in annual revenue, operations in more than 35 countries and approximately 15,000 employees. The company's highly-specialized, engineered products and technologies are concentrated in Flow Technology and energy infrastructure.

www.spx.com

### Refrigerated Air Dryers

# **TXK** Series

# 15~50 scfm

Research indicates that many customers want reliability and dry compressed air at an affordable price. No fancy bells and whistles-just dry air, pure and simple. The TXK series non-cycling dryers were designed to meet these demands.

#### **Feature**

#### Static condenser with no cooling fan

- ► Worldwide-patented product
- ▶ No maintenance required
- ▶ Excellent quiet operation
- ▶ Lowest operating cost

Perfect application for indoor installation such as hospital and laboratory

Robust design & compact size

#### Unique refrigerant control system

► Air-to-refrigerant reheating system

#### Energy saving through waste heat recovery

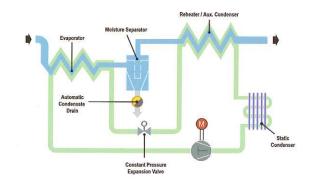
▶ No condensate on outlet pipe

Excellent dew point performance under all conditions



### How it works

Warm saturated air enters the evaporator where it is cooled by refrigerant being controlled by a constant pressure expansion valve. Water vapor condenses into a liquid for removal at the moisture separator by a drain. The cold, dry air is reheated as it passes through the reheater. This prevents dryer outlet air pipeline sweating. The static condenser eliminates the need for a cooling fan and simplifies the system.



# **TXK Series Specification**

	mm)	ensions(	Dim	Weight	Inlet/Outlet	Power	Unit	Flow Capacity	Model
Refrigerants	D	w	Н	(k g)	Connections (PT)	Supply	(k W)	(m³/min)	Model
	320	320	382	20	3/8"	222 2424	0.24	0.50	TX15K
	394	368	568	32	3/4"	220~240V	0.34	1.00	TX25K
R-134a	394	368	568	32	3/4"	1PH	0.42	1.33	TX35K
	500	500	568	44	3/4"	50Hz	0.58	1.67	TX50K

<sup>\*</sup> Rating Conditions : 45°C inlet temperature, 7.0 bar G inlet pressure, 100% relative humidly, 35°C ambient temperature.

# **Capacity Correction Factor**

#### Inlet Air Pressure (barG)

barG	4	5	6	7	8	9	10	11	12
Factor	0.82	0.88	0.95	1.00	1.05	1.09	1.13	1.16	1.18

#### Inlet Air Temperature (°C)

°C	30	35	40	42	45	50	55	60
Factor	1.80	1.77	1.36	1.08	1.00	0.89	0.74	0.62

#### Ambient Air Temperature (°C)

°C	20	25	30	35	40	45	50
Factor	1.20	1.13	1.07	1.00	0.94	0.85	0.74

#### Dew Point Changes (°C)

°C	3	5	7	9	10
Factor	1.00	1.09	1.18	1.30	1.33

<sup>\*</sup> Maximum/minimum inlet pressure: 16 barG/2 barG. Maximum/minimum inlet air temperature : 60°C/4°C, Maximum/minimum ambient air temperature " 50°C/2°C

# **FLEX Series**

# Refrigerated Air Dryers

The FLEX series are optimized air dryers for hot and humid climate in the tropical regions. An advanced stainless steel brazed plate heat exchanger is applied, and it deters refrigeration load with great efficiency of heat-transfer. The innovative and simplified refrigeration circuit provides reliable operation, low operating cost and versatile installation.

### Feature

Optimized for hot and humid climate in the tropical regions

Stainless steel brazed plate heat exchangers optimize heat transfer and service life

Separator, re-heater and evaporator combined into 1 compact efficiency unit

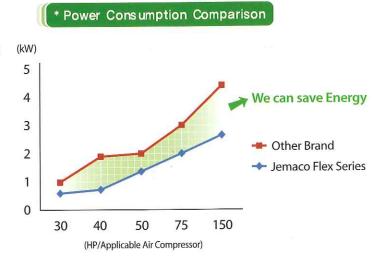
Improved ventilation by up-flow coding air design

Low pressure drop reduces operating costs

Low power consumption

Easy to install package saves time and money

Environmentally friendly R-134a & R-407C refrigerants



# User friendly Digital Control Board II



: Dewpoint Temperature Indicator

: Compressor On Light



: Selection



: Drain Push-to-Test

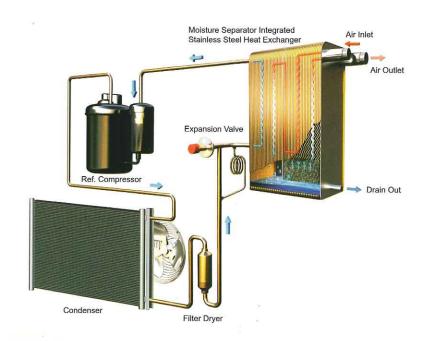


: Condensate Draining



# How it works

Warm, saturated compressed air enters the air to air heat exchanger and is cooled by the exiting air. The precooled air then enters the air to refrigerant heat exchanger and is further chilled causing water vapor to condense. Condensed moisture is collected from the air stream by an integral separator with stainless steel demister. Liquid condensate is removed from the separator by an automatic timer. Cold air is then reheated in the air to air heat exchanger to eliminate sweating on the downstream pipe line. Clean, dry air exits the dryer and is now qualified for use of purpose.



# **FLEX Series Specification**

Model	Flow Capacity	Unit	Power	Inlet/Outlet Connecions	Weight	Di	mensions(r	nm)	D-fulm
Model	(m³/min)	(kW)	Supply	(PT)	(k g)	Н	W	D	Refrigerants
FLX85	2.76	0.52		1"	50	641	363	881	R-134a
FLX110	3.56	0.59		1"	52	641	363	881	R-134a
FLX150	4.87	0.71	220~240V	2"	67	761	443	931	R-407C
FLX240	7.79	1,36	1PH	2"	77	761	443	1031	R-407C
FLX370	12.01	2.00	50Hz	2"	97	811	493	1111	R-407C
FLX450	14.06	2.38		2"	100	811	493	1111	R-407C
FLX530	17.00	2.66		2"	128	811	553	1211	R-407C

<sup>\*</sup>Standardrated condition: 50°C inlet air temperature, 7.0 barG inlet pressure, 100% relative humidity, 35°C ambient air temperature, 50Hz

# **Capacity Correction Factors**

#### Inlet Air Pressure (barG)

barG	4	5	6	7	8	9	10	13	16
Factor	0.75	0.84	0.92	1.00	1.03	1.07	1.09	1.18	1.23

#### Inlet Air Temperature (°C)

°C	40	45	50	5.5	60	65
Factor	1.15	1.08	1.00	0.83	0.70	0.60

### Ambient Air Temperature (C)

°C	25	30	35	40	43
Factor	1.20	1.06	1.00	0.75	0.60

#### Dew Point Changes (°C)

°c	3	5	7	9	10
Factor	1.00	1.09	1.18	1.30	1.33

<sup>\*</sup>Max./Min. inlet pressure: 16 barG/3 barG, Max./Min. inlet air temperature: 65°C/4°C, Max./Min ambient air temperature: 50°C/4°C

### Refrigerated Air Dryers

# **HXK** Series

# 800~12000 scfm

The HXK series, built-in with our highly advance stainless steel plate heat exchanger, deters refrigeration load with great efficiency of heat-exchanging. Saving in electrical power and convenient in maintenance are its unique feature.

## **Feature**

#### Stainless steel brazed plate heat exchanger

- No rust water and corrosion
- One-pass structure: Heat exchanger and reheater

Automatically adapts to system needs

Fully automatic operation saves money

Every unit comes pre-assembled with quality components

#### User friendly controller

Power-on LED, Compressor-on LED, On/Off rocker switch and dew point bar graph LED display

Reliable timed electric drain with push-to-test button on the front panel

# Electro-galvanized steel cabinet with two part epoxy coating

Providing long term corrosion resistance

Environmentally friendly R-407C refrigerant

No loss drain valve (Optional)

## Optional / SCMII (System Control MonitorII)

### LCD main window displays

Dryer run, Autodrain valve on, Fan motor on, Alarm

#### LCD monitor displays

Inlet, Ambient/Coding water, Chiller inlet & discharge refrigerant temperatures, Discharger refrigerant temperatures

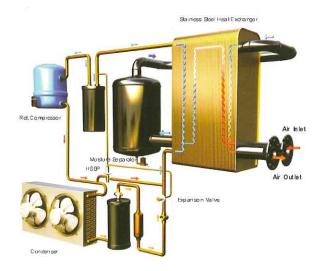
Membrane touch panel

Programmable timer drain settings



# How it works

Saturated incoming compressed air is quickly chilled in the air-to-air heat exchanger by the cold compressed air as it exits the air-to-refrigerant (evaporator). Here, the cold, dry air is reheated to prevent pipeline sweating and reduce compressor energy before exiting the dryer. In the evaporator, the air temperature is reduced to that of the cold refrigerant. A moisture separator lowers the velocity and mechanically separates the condensate from the air stream. An automatic drain removes the condensate. The air-to-air heat exchanger re-heats the air and clean, dry compressed air exits the dryer.



# **HXK Series Specification**

Model	Flow Capacity	Unit	Power	Inlet/Outlet Connections	Weight	Din	ensions(	mm)	Defuigevente	
Model	(N m³/min)	(kW)	Supply	(FLG)	(kg)	lil	w	D	Refrigerants	
HX800K	24.06	4.5		3"	385	1470	750	1400		
HX1050K	31.48	6.1		4"	400	1470	750	1400		
HX1250K	37.52	7.6		4"	440	1470	750	1400		
HX1500K	45.10	8.6		4"	850	1582	860	1600		
HX2000K	60.00	9.5		6"	1000	1628	1050	1800		
HX2500K	75.00	10.3	380~420V 3PH	6"	1050	1628	1050	1800		
HX3000K	90.10	11.8		6"	1100	1628	1050	1800	R-407C	
HX4000K	120,00	15.1			50Hz	8"	2000	2320	1500	2850
HX5000K	150.10	20.8	OOTIE	8"	2300	2320	1500	2850		
HX6000K	180.30	25.7		8"	2500	2320	1500	2850		
HX8000K	240.10	38.5		8"	3500	2320	1500	3800		
HX10000K	300,30	46.6		10"	4800	2400	1600	4800		
HX12000K	360.30	52.7		10"	5000	2400	1600	4800		

<sup>\*</sup> Rating Conditions: 45°C inlet temperature. 7.0 barG inlet pressure, 100% relative humidty, 35°C ambient temperature.

# Capacity Correction Factor

#### Inlet Air Pressure (barG)

barG	4	5	6	7	8	9	10	11	12
Factor	0.87	0.92	0.96	1.00	1.03	1.07	1.10	1.12	1.14

#### Inlet Air Temperature (°C)

°C	30	35	40	45	50	55	60	65
Factor	1.43	1.30	1.20	1.00	0.87	0.83	0.70	0.60

°C	3	5	7	9	10
Factor	1.00	1.09	1 18	1.30	1 33

Dew Point Changes (°C)

#### Ambient Air Temperature (°C)

°C	25	30	35	40	50
Factor	1.11	1.07	1.00	0.85	0.72

<sup>\*</sup> Maximum/minimum inlet pressure: 12.1 barG/3barG. Maximum/minimum inlet air temperature: 65°C/4°C, Maximum/minimum ambient air temperature: 50°C/4°C

<sup>\*</sup> Dimension is for air-coded condenser type. Water-coded condenser type is available, consult factory.

<sup>\*</sup> Models for the high temperature condition are optional, consult factory.



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