

➔ FXS Series

REFRIGERANT AIR DRYERS

0.5 to 1.6 m³/min



➔ Simple Efficiency

The FXS series refrigerant dryer uses an incredibly simple design to create a robust and efficient refrigerant dryer. Producing pure, clean and dry compressed air, it's ideal for low volume applications.

➔ Design Features

Static condenser - With no noisy cooling fan the static condenser is virtually maintenance free and contributes to the low operating costs of the FXS series refrigerant dryer.

Waste heat recovery - Risk of discharge pipe condensation is eliminated by the inclusion of a reheating coil.

Consistent dew point - The FXS series design provides excellent dew point performance under all conditions.

Intelligent design - Low noise levels and a compact footprint make the FXS series dryer ideal for use in applications such as in hospitals and laboratories.

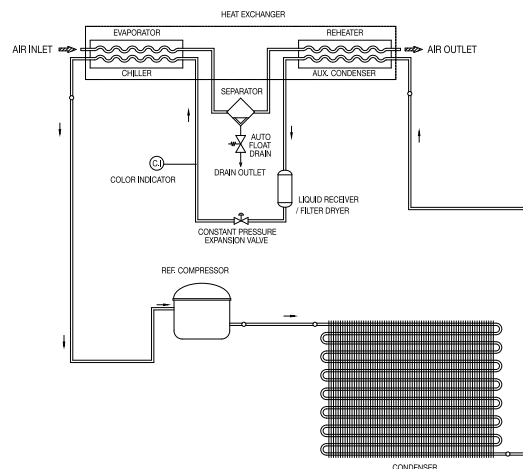
How they work

Warm saturated air from the compressor enters the evaporator where it is cooled by refrigerant. A constant pressure expansion valve maintains refrigerant pressure inside the evaporator irrespective of load.

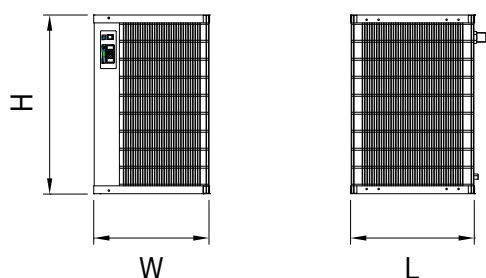
Water vapour within the inlet air condenses and collects in the separator where it is removed through the condensate drain.

Cool dry discharge air then enters the re-heater where the elevated refrigerant temperature warms the discharge air, preventing condensation forming on outlet piping.

The dimensions of the FXS Series refrigerant dryer are reduced through the use of a static condensor design. This not only eliminates the need for a cooling fan but also simplifies the refrigerant dryer operation.



Technical Specifications



Model	Flow Capacity m ³ /min ⁽¹⁾	Total Power (kW)	Power Supply (VAC 50hz)	Refrigerant Type	Dimensions (L x W x H) (mm)	Connection (Male BSP)	Weight (Kg)
FXS05	0.5	0.2	230 /1	R134A	382 x 320 x 320	DN15	20
FXS10	1.0	0.3			568 x 368 x 394	DN20	32
FXS13	1.3	0.4			568 x 368 x 394	DN20	32
FXS16	1.6	0.6			568 x 500 x 500	DN20	44

Correction factors⁽²⁾

To calculate drying capacity for specific conditions, multiply the volume flow capacity by the correction factors (volume flow x A x B x C).

Operating Pressure bar(g) ⁽³⁾	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
A	0.88	0.90	0.95	0.98	1.00	1.03	1.05	1.07	1.09	1.11	1.13	1.15	1.16	1.17	1.18	1.18	1.18

Inlet Temp °C	30	35	40	45	50	55	60
B	1.77	1.36	1.08	0.89	0.74	0.62	0.52

Ambient Temp °C	22	25	30	35	40	45	50
C	1.18	1.13	1.07	1.00	0.94	0.85	0.74

The performance of the dryer (pressure dew point, power consumption, pressure drop etc.) depends mainly on the volume flow and pressure of the compressed air to be dried and the condenser refrigerant temperature.

⁽¹⁾ Measured and stated in accordance with ISO 1217 Annex C at the following conditions: Operating Pressure 7 bar, Air Intake Temperature 35°C, Ambient Temperature 25°C, Outlet Dewpoint 3°C.

⁽²⁾ Stated correction factors are **guide values only**.

⁽³⁾ Maximum operating pressure 16 Bar.