

THE DX SERIES

DIRECT EXPANSION AIR DRYERS



morehouse
AIR DRYERS SINCE 1958

Dx 4-285

DIRECT EXPANSION REINVENTED

Innovative heat exchanger

The DX air dryer is equipped with an innovative all-in-one heat exchanger with integrated water separator that offers many advantages. Its sustainable character is characterised by its design in stainless steel. The design took numerous optimisations into account, such as reducing the refrigerant, a guaranteed pressure drop of less than 0.3 bar, a well-engineered water separator without mesh that prevents clogging and contamination and the condensate cannot cause the heat exchanger to freeze. The standard operating pressure for all dryers is 16 bar.

Ecological design

The DX dryers are equipped as standard with an electronically controlled fan motor to minimise power consumption and ensure a more stable pressure dew point. In the design, the environmentally friendly HFC refrigerant gas R513A was chosen which has a low GWP value and consequently reduces the CO₂ value of the dryer significantly. Starting with the model DX 80, the dryers are also equipped with energy-efficient scroll compressors, resulting in lower power consumption and noise reduction. To protect the compressors, all DX dryers are equipped with high and low pressure switches as standard. The capacity control of the dryer is enabled by properly adjusted hot gas bypass valves. On all models, the pressure dew point is digitally displayed and condensate is drained by an electronic no-loss drain. The DX dryers are built on robust frames with dimensions optimised for transport.

Quality

Morehouse has been manufacturing compressed air dryers for 65 years and is known for quality and durability. The DX dryers are built with European A-brands in our own production facility in Malle. With the purchase of a DX dryer the customer buys an operationally safe and highly reliable product that will guarantee years of dry air.

Low-maintenance

DX dryers require almost no maintenance. Keeping the condenser free of dust and cleaning the no-loss drain are the only operations that are required. To make maintenance of the drain easier, the DX dryers are standard fitted with a service valve at the water separator. By using the refrigerant gas R513A and its associated low GWP value (631), the annual mandatory refrigerant leak detection by a certified refrigeration technician is completely unnecessary on all models.



TECHNICAL CHARACTERISTICS

Model	Capacity @ 3°C PDP m ³ /min	Power Supply V/Ph/Hz	Nominal Power kW	Air Connections*	Dimensions L x W x H cm
DX 4	0.4	230V/1ph/50Hz	0.122	3/4" BSPF	39 x 40 x 67
DX 6	0.6	230V/1ph/50Hz	0.154	3/4" BSPF	39 x 40 x 67
DX 9	0.9	230V/1ph/50Hz	0.176	3/4" BSPF	39 x 40 x 67
DX 12	1.2	230V/1ph/50Hz	0.229	3/4" BSPF	39 x 40 x 67
DX 17	1.7	230V/1ph/50Hz	0.321	3/4" BSPF	39 x 40 x 67
DX 20	2.0	230V/1ph/50Hz	0.355	1 1/2" BSPF	59 x 50 x 79
DX 25	2.5	230V/1ph/50Hz	0.629	1 1/2" BSPF	59 x 50 x 79
DX 30	3.0	230V/1ph/50Hz	0.629	1 1/2" BSPF	59 x 50 x 79
DX 45	4.5	230V/1ph/50Hz	0.812	1 1/2" BSPF	59 x 50 x 79
DX 65	6.5	230V/1ph/50Hz	1.088	1 1/2" BSPF	59 x 50 x 79
DX 80	8.0	400V/3ph/50Hz	1.068	2" BSPF	77 x 77 x 101
DX 105	10.5	400V/3ph/50Hz	1.312	2" BSPF	77 x 77 x 101
DX 145	14.5	400V/3ph/50Hz	1.647	2" BSPF	77 x 77 x 101
DX 180	18.0	400V/3ph/50Hz	2.053	3" BSPF	77 x 117 x 144
DX 205	20.5	400V/3ph/50Hz	2.326	3" BSPF	77 x 117 x 144
DX 250	25.0	400V/3ph/50Hz	2.924	3" BSPF	77 x 117 x 144
DX 285	28.5	400V/3ph/50Hz	3.128	3" BSPF	77 x 117 x 144

* Connection drain 1/2" BSPF

REFERENCE CONDITIONS

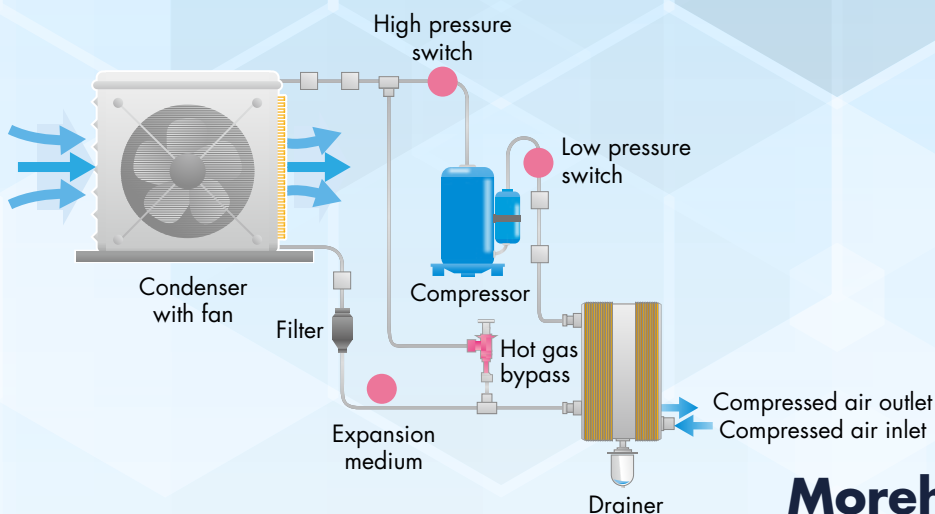
Inlet compressed air pressure	7 bar g
Inlet compressed air temperature	35°C (100%RH)
Ambient temperature	25°C
Min. pressure dewpoint	3°C

OPERATING LIMITATIONS

Operating pressure	2 tot 16 bar e
Inlet air temperature	0°C tot 55°C
Ambient temperature	0°C tot 43°C
Max. pressure refrigerant R513A	30 bar g

In accordance with ISO 7183

PRINCIPLE OF OPERATION



Morehouse

Ambachtsstraat 16 • 2390 Malle • Belgium
 Tel. +32 3 309 25 26
 info@morehouse.be • www.morehouse.be

BE 0433.517.942

65 YEARS

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A HISTORY SINCE 1958

