

DE·X

Refrigeration Dryers

Nominal air-flow 0,35 – 14 m³/min.



Cooling, conditioning, purifying.

DE-X, the fail-safe industrial solution

Quality, performance and reduced carbon footprint

MTA DE-X dryers offer accurate dew point control in an easy-to-use package with very wide operating parameters and a strong focus on reducing overall global impacts. Unique features and patented technologies ensure the requirements of individual industrial applications are fully catered for.

DE-X: designed to perform, always

Optimum operation in all conditions

DE-X offers 70 °C air inlet (65 °C for DE-X 120-140) and 50 °C ambient temperature limits, with a 16 barg maximum pressure and automatic continuous adjustment to all operating conditions.

Peace of mind

A robust construction with field-proven technologies, premium quality components, extensive factory testing and easy frontal access offers reliability and ease-of-use.

Advanced microprocessor

The multi-icon microprocessor features a digital dew point reading, multiple alarms, maintenance scheduling and extensive remote connectivity. DE-X is Industry 4.0 ready.

Low Load Function

LLF automatically cycles operation at zero load, offering stand-by energy savings. LLF furthermore protects against dryer freezing and simplifies seasonal adjustment needs.

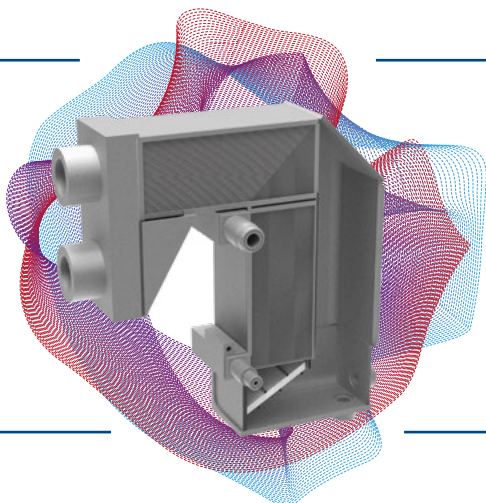
Condensate drains

Timed drains, Smart electronic zero-loss drains (DE-X 003-060) and electronic zero-loss drains with a visual alarm are available. All offer a protective filter, shut-off valve and test button.



Xtraordinary DE-X – the benefits

- ▶ **Low pressure drop**
Market leading pressure drops (average < 0,11 bar)
- ▶ **Environmentally friendly**
Refrigerant R513A on DE-X 003-090, offering a 70% GWP reduction (GWP = 573)
- ▶ **Always operates**
Air inlet up to 70 °C, 50 °C ambient limit
- ▶ **High reliability**
Field proven technology, premium components
- ▶ **Unique X-MODULE exchanger**
Patented 3-in-1 heat exchanger, designed by MTA
- ▶ **Easy to use**
Intuitive controller, avoids field adjustments, low maintenance



X-MODULE

The innovative patented heat exchanger

- Market leading pressure drops (average < 0,11 bar)
- Compact and robust construction
- Optimum dew point control
- Patented MTA design

Technical data

Model	Nominal air flow				Overall dimensions (mm)			Nominal absorbed power kW	Weight (Kg)	Air connections (Rp)
	CLASS 4 dew point ≤ 3 °C		CLASS 5 dew point ≤ 7 °C		A (width)	B (depth)	C (height)			
	m³/min	m³/h	m³/min	m³/h						
DE-XG 003	0,35	21	0,43	26	390	407	400	0,11	21	1/2"
DE-XG 005	0,5	30	0,6	37	390	407	400	0,15	21	1/2"
DE-XG 007	0,65	39	0,8	48	390	407	400	0,18	21	1/2"
DE-XG 010	0,95	57	1,15	69	390	407	400	0,23	23	1/2"
DE-XG 012	1,2	72	1,5	88	390	407	400	0,3	24	1/2"
DE-XG 015	1,5	90	1,8	108	380	497	661	0,35	36	3/4"
DE-XG 018	1,8	108	2,2	131	380	497	661	0,41	41	3/4"
DE-XG 022	2,2	132	2,7	161	380	497	661	0,46	42	3/4"
DE-XG 027	2,7	162	3,2	195	380	497	661	0,58	45	1"
DE-XG 032	3,2	192	3,8	229	720	536	856	0,81	54	1"
DE-XG 040	4,0	241	4,8	290	720	536	856	1,01	57	1"
DE-XG 045	4,5	270	5,4	325	720	518	856	1,01	68	1"
DE-XG 060	6,0	361	7,2	429	720	518	856	1,1	71	1 1/2"
DE-XG 070	7,0	420	8,3	498	720	518	856	1,13	75	1 1/2"
DE-XG 090	9,0	541	10,6	638	885	703	1086	1,35	110	1 1/2"
DE-XK 120	12,0	720	14,2	853	885	710	1086	1,21	115	2"
DE-XK 140	14,0	840	16,5	990	885	710	1086	1,67	115	2"

Data refers to the following working conditions: air FAD 20 °C / 1bar A, pressure 7 bar(g), ambient temperature 25 °C, air inlet temperature 35 °C, according to ISO 8573.1 standard. Weights are net (without packing and for timed drain configuration).

Refrigerant fluids: R513A (DE-X 003-090), R410A (DE-X 120-140). Protection class IP22.

Maximum working pressure 16 bar(g). Maximum ambient temperature 50 °C. Maximum inlet temperature 70 °C (DE-X 003-090), 65 °C (DE-X 120-140).

Power supply: 230V ±10% / 1Ph / 50Hz; other power supplies on request.

A pre-filter (minimum filtration grade P - 3 µm) must be installed to protect the dryer and improve air quality.

Timed drains are mounted internally; electronic zero-loss drains are mounted internally on DE-X 015-140, while on DE-X 003-012 they are packaged separately to be mounted externally using the supplied couplings.

The correction factors in the following table should be used as a guide only; for accurate selection at conditions differing from the above please contact MTA.

Capacity Correction Factors (indicative values): CAPACITY = RATED VALUE CLASS 4 at 7 bar(g) x K1 x K2 x K3 x K4.

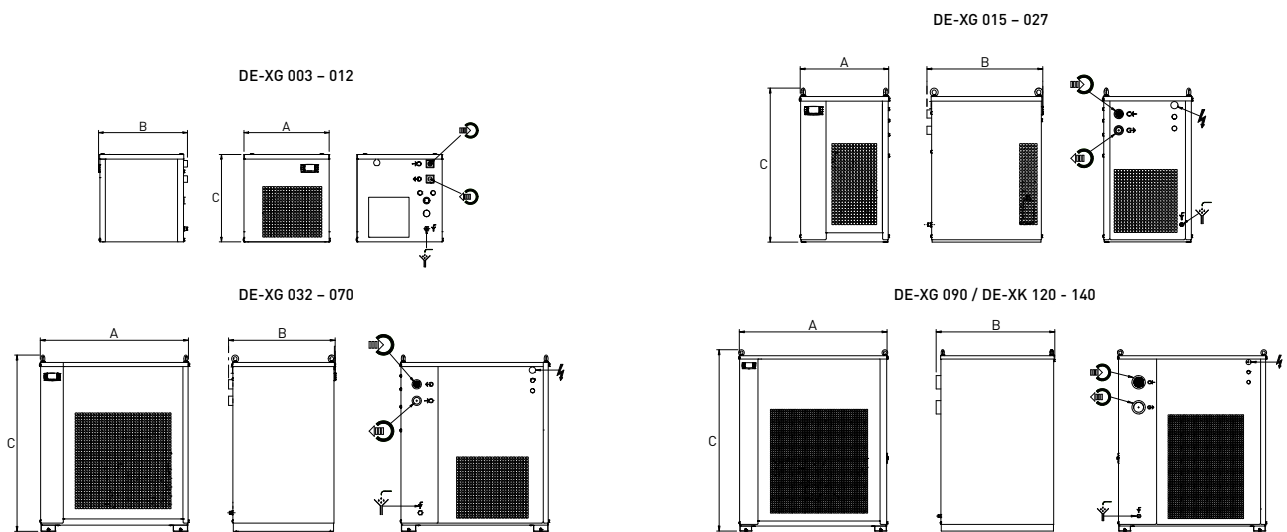
Working pressure	bar (g)	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor	K1	0,68	0,79	0,88	0,95	1,00	1,04	1,07	1,10	1,13	1,15	1,17	1,18	1,20	1,21

Air inlet temperature	°C	30	35	40	45	50	55	60	65	70
Correction factor	K2	1,19	1,00	0,82	0,66	0,55	0,48	0,48	0,48	0,48

Note: DE-X 120-140 max air inlet temperature = 65 °C.

Pressure dew point	°C	3	4	5	6	7	8	9	10
Correction factor	K3	1,00	1,05	1,10	1,15	1,20	1,25	1,30	1,37

Ambient temperature	°C	20	25	30	35	40	45	50
Correction factor	K4	1,04	1,00	0,95	0,90	0,84	0,78	0,72



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