



**DETROITAIR**

*COMPRESSED AIR INNOVATION THROUGH TECHNOLOGY*

**PRODUCT CATALOGUE**

**AIR DRYERS**

DT Series refrigerated air dryers combine technology and quality to produce a very stable air-drying solution.

PLC control allows for full protection against power fluctuations, motor overload, high or low gas pressures and freezing. The self-diagnosing PLC system enhances stability of the system, thereby enhancing service life. Cabinet designs are based around client servicing needs with fans, heat exchange units and electrical systems being very accessible. All models come fitted with an electrical auto-drain for automatic water purging from the system.

The use of 3-in-1 plate coolers allows for a compact footprint and reduced manufacturing cost while offering increased cooling capacity and energy savings. Savings of 15% - 50% have been achieved over older models fitted with conventional heat exchange systems. In line with international standards, environmentally friendly refrigerants, 134A and 407C are used. Both 134A and 407C refrigerants meet high international standards for environmental protection.

Operating in ambient temperatures of up to 45°C with inlet temperatures of up to 65°C, the DT Series dryers will perform as they should. Sized up to 80m<sup>3</sup> flow at pressures of up to 1.6MPa/16 bar, the DT Series of dryers are suitable for small and large installations.

## DT SERIES AIR DRYER

## DX DESICCANT DRYER SERIES

## MODULAR DESICCANT DRYERS

## GENERAL FEATURES

- Environmentally friendly refrigerants
- Built-in Electronic Auto Drain
- Adjustable expansion valve
- Built-in air/water separation device
- Three-in-one heat exchanger design and increased efficiency and cooling capacity
- Air flow channel design for uniform heat exchange
- Up to 45°C ambient operating temperature
  - Inlet temperature up to 65°C
  - Pressure dew point of 2~10°C
  - PLC protection and control
- Powder coated cabinet



### INTELLIGENT PLC CONTROL

The PLC utilises multi-channel pressure and temperature monitoring with real-time dew point temperature display to accurately self-diagnose and self-protect. Protection functions include anti-freeze, high and low voltage, high current, high motor temperature. Fault codes are displayed on-screen, should a fault occur.



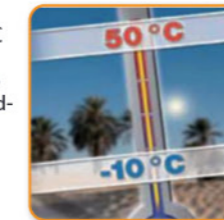
### ENERGY SAVINGS

The higher efficiency of the three-in-one plate cooler means smaller compressor motors can be used to achieve the same cooling capacity as larger models utilising tube type coolers. This also means lower production costs and smaller footprints. These savings are passed on to you.



### AMBIENT TEMPERATURE

DT Series refrigerated dryers can effectively operate in ambient temperatures of up to 45°C with inlet temperatures of up to 65°C. Should the ambient temperature become too low, the PLC will shut down the motor to avoid ice build-up in the system. Low air flow ice build-up is also avoided and protected against.



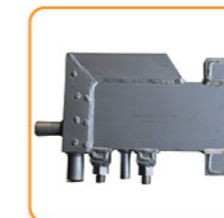
### EXCELLENT ACCESSIBILITY OPTIMUM SERVICEABILITY

Large removable enclosure doors provide excellent component accessibility for unrivalled ease of maintenance. Service and maintenance work can therefore be performed quickly and efficiently, which means maximum efficiency and compressed air availability.



### OPTIMISED COOLING SYSTEM

Heat exchange is provided by an aluminium plate cooler. The design of this cooler enables between 15% - 50% energy savings over standard tube-type coolers. These coolers are significantly smaller than the standard type and have a far longer service life with significant energy savings.

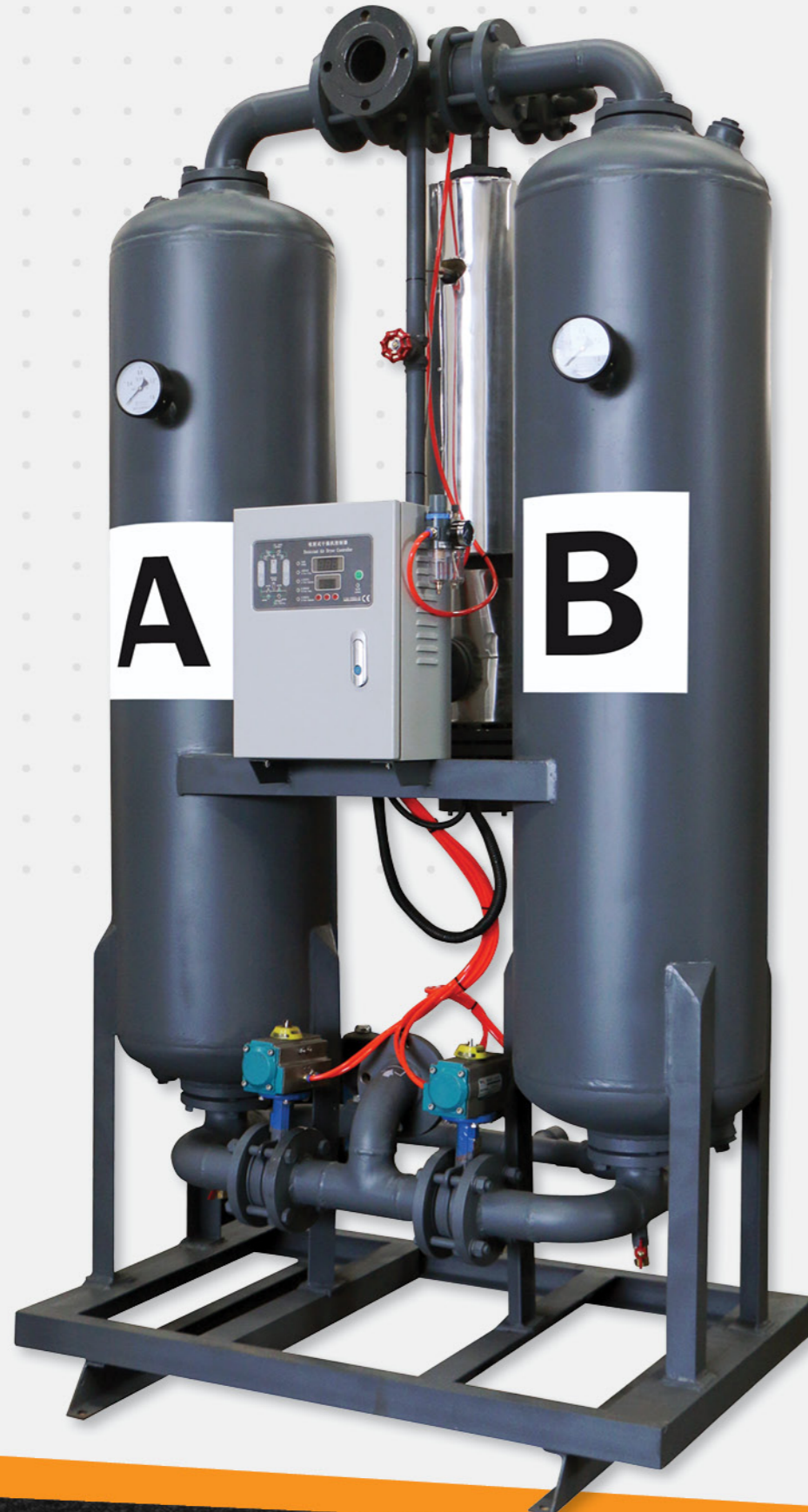


# DT SERIES AIR DRYER

Reliable Machinery from the Experts.



MODEL	DT-10A	DT-20A	DT-30A	DT-50A	DT-60A	DT-75A	DT-100A	DT-125A	DT-150A	DT-200A	DT-300A	DT-400A	DT-500A	DT-600A	DT-700A	
AMBIENT TEMPERATURE	°C 38/Max. 45															
INLET TEMPERATURE	°C 38/Max. 65															
WORKING PRESSURE	MPa 0.7/Max 1.6															
PRESSURE DEW POINT	°C 2~10 (Air dew point: 23~17)															
MAX. AIR VOLUME	1.2	2.4	3.6	6.5	8.5	11	13	14.5	17	21	44	49	60	70	80	
POWER SUPPLY	V/Hz 220/50							380/50								
INPUT POWER	0.37	0.52	0.73	1.26	1.87	2.43	2.63	2.7	3.7	4	5.5	6.3	7.5	9.2	11.2	
AIR PIPE CONNECTION	RC3/4"	RC1"	RC1-1/2"	RC2"			RC2.5"		DN80	DN100		DN125				
EVAPORATOR TYPE	Aluminium ALLOY PLATE															
REFRIGERANT MODEL	R134A			R410A						R407C						
SYSTEM MAX. PRESSURE DROP	MPa 0.025															
INTELLIGENT CONTROL & PROTECTION	INCLUDED															
DISPLAY INTERFACE	LED dew point display, LED alarm code display, operation status indication															
INTELLIGENT ANTI-FREEZING PROTECTION	Constant pressure expansion valve and compressor automatic start / stop															
TEMPERATURE CONTROL	Automatic control of condensing temperature / dew point temperature															
HIGH VOLTAGE PROTECTION	Temperature sensor	Temperature sensor and inductive intelligent protection														
LOW VOLTAGE PROTECTION	Temperature sensor and inductive intelligent protection															
WEIGHT	Kg	34	42	50	63	73	85	94	135	150	220	310	360	385	530	630
DIMENSIONS	L	480	520	640	700	770	770	800	1000	1100	1100	1300	1450	1450	1600	1650
	W	380	410	520	540	590	590	610	850	900	950	1000	1100	1100	1100	1200
	H	665	725	850	950	990	990	1030	1160	1200	1300	1550	1700	1700	1800	1900



## WIDE RANGE OF APPLICATIONS

DX Series desiccant dryers are an excellent choice for any industry requiring sub-zero cooling capabilities. With pricing comparable with high-end refrigeration dryers, we offer a cost-effective solution to your dry air needs. DX Series Dryers offer among the lowest Total Cost of Ownership in the industry with excellent quality to match.

## WIDE RANGE OF APPLICATIONS

Pressure Dew Points as low as -70°C are offered across the range with air flow capacities up to 155m<sup>3</sup>/min. All vessels are manufactured to CE standards and conform to local pressure vessel laws. Customised systems are available to suit your specific needs and industry on request.

MODEL		DX-10A	DX-20A	DX-25A	DX-50A	DX-60A	DX-75A	DX-100A	DX-125A	DX-150A	DX-175A	DX-200A	DX-250A	DX-350A
MAX CAPACITY	M <sup>3</sup> /MIN	1,2	2,4	3,2	6,5	8,5	11,5	13,5	17	23	27	34	45	55
MAX CAPACITY	CFM	42,4	84,8	113,1	229	300	406	477	600	812	954	1201	1590	1766
INLET PRESSURE	MPa/PSI	Rated 0,7, max. 1,0, / 100, max. 145. Customised for high voltage												
INLET TEMPERATURE	°C	Rated 38°C, max. 45°C												
POWER SUPPLY	V/Hz	220V/50Hz												
INPUT POWER	kW	0,2												
GAS CONSUMPTION		10% ~ 22% rated treatment gas												
PRESSURE DEW POINT		-20 ~ 40 (Up to -70°C optional)												
PRESSURE DROP	MPa	≤0,021												
WORKING MODE		Automatic switching of two towers, adjustable cycle of 4-10 minutes												
MAIN ACCESSORIES														
ADSORBENT		Activated alumina / molecular sieve												
PNEUMATIC VALVE		304 stainless steel angle seat valve						304 stainless steel angle seat valve / butterfly valve						
CHECK VALVE		304 stainless steel lift check valve												
TWO POSITION FIVE WAY SOLENOID VALVE		Adek / CHINT												
AIR PIPE CONNECTION		RC1"		RC1-1/2"		RC2"		DN65		DN80		DN100		
OVERALL DIMENSIONS	L	670	670	850	1000	1100	1200	1300	1280	1380	1650	1700	1960	2010
	W	460	500	500	700	700	700	700	820	820	900	955	960	960
	H	1350	1765	1385	1700	2050	2030	2285	2480	2515	2450	2410	2600	2670
WEIGHT	KG	105	135	187	238	282	466	520	670	798	980	1287	1624	1624

# MODULAR DESICCANT DRYERS

Reliable Machinery from the Experts.



## DESIGNED FOR EFFICIENCY

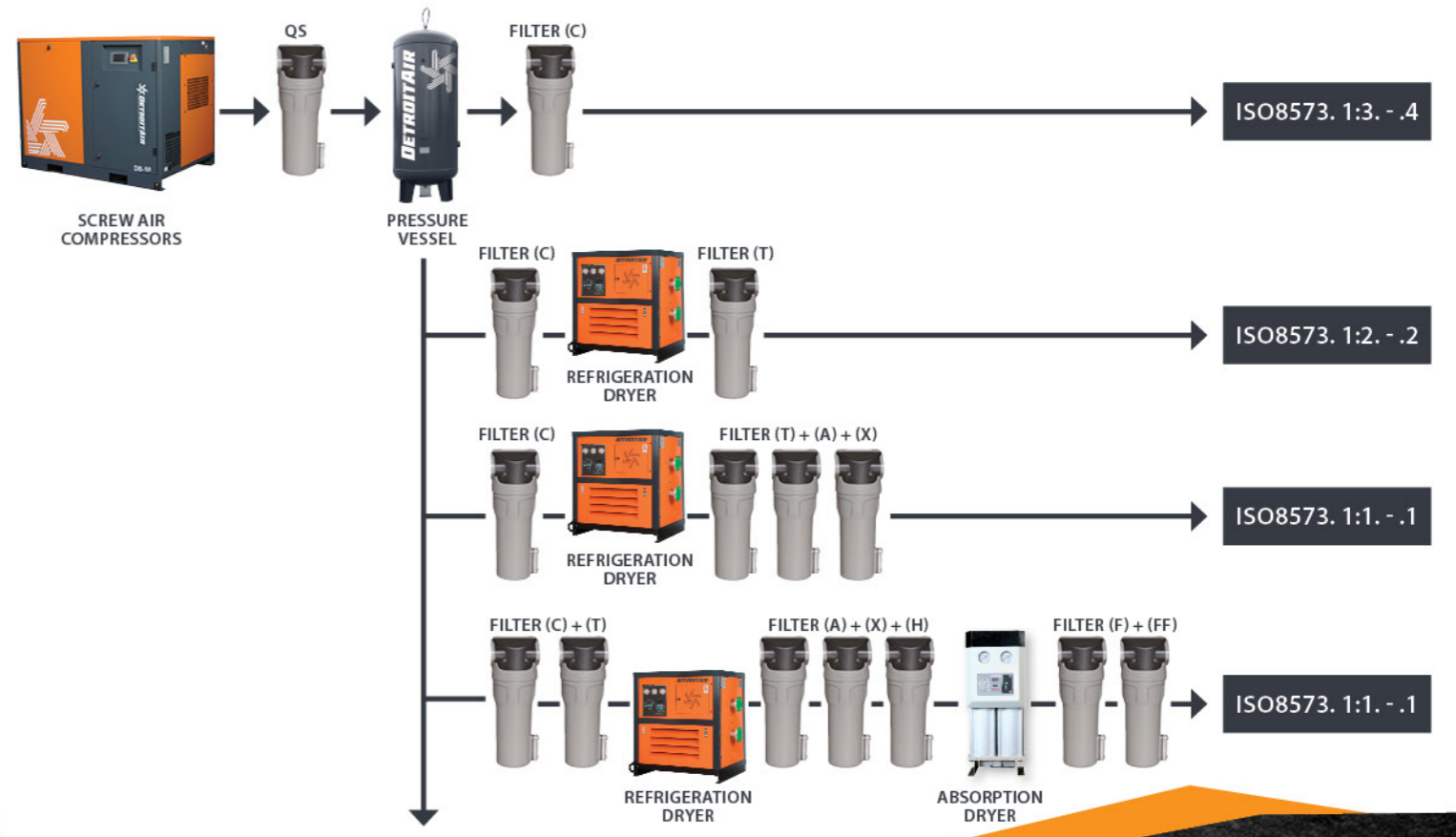
MDX series Modular Desiccant Dryers offer an excellent space-saving solution over the standard DX range, but with reduced maintenance times and manpower. Increases in efficiency above the DX range means savings of up to 10% in energy costs can be realised.

## LOW OWNERSHIP COSTS

Low cost of ownership is part of the package we offer at Detroit Air, coupled with long warranties backed by excellent service and parts availability, we ensure plant operation is stable and efficient. Our goal is to always ensure our clients save money and remain efficient in all aspects of compressed air production.

MODEL	MDX-15A	MDX-20A	MDX-30A	MDX-50A	MDX-75A	MDX-100A	MDX-125A	MDX-150A	MDX-175A	MDX-200A	MDX-250A	MDX-300A	MDX-350A	MDX-400A	MDX-450A	
MAX CAPACITY	M <sup>3</sup> /MIN	1.6	2.5	3.5	7.0	10.5	14.0	17.5	21.0	24.5	28.0	35.0	42.0	49.0	56.0	63.0
CONNECTION SIZE		G1			G1-1/2	G2	G2-1/2					DN80	DN100	DN125	DN150	
DIMENSIONS	L	325	325	325	615	777	939	1101	1263	1425	1587	1101	1263	1425	1587	1263
	W	240	240	240	445	445	445	445	445	445	445	445	445	445	445	445
	H	790	1090	1390	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
WEIGHT	KG	42	55	72	155	212	270	325	385	440	500	670	770	880	1000	1155
REFILL WEIGHT	KG	16	24	32	64	96	128	160	192	224	256	320	384	448	512	576

## CONNECTION DIAGRAM MEET THE REQUIREMENTS OF ALL INDUSTRIES





[www.detroitcompressors.co.za](http://www.detroitcompressors.co.za)