

Drytec Refrigerant Dryers

Drytec knows the importance of high quality compressed air and guarantees to provide you the highest available quality air in the market. Using clean and dry air is very important for all kinds of applications. The moisture and contaminants which will come from the standard compressor outlet will cause important system failures and decrease the productivity. Bad quality air will not just affect the production processes, it will also affect the quality of the final products.

Advantages

- Low pressure drop saves compressor power
- Quick start and reaction time gives you additional time to work
- Each dryer is specially designed with the right components to consume lowest energy.
- The highly energy efficient R134a refrigerant is standard for the whole range.
- State of the art heat exchanger is one of the highest cost saving in the market.
- Best class refrigerant compressors consume less energy.
- Pressure switches control the condenser's fan motor for saving energy and letting the system always operate at desired conditions.



The SDE Series Refrigerant Circuit and Insulation

Drytec only uses R134a refrigerant gas in the dryers which is environmentally friendly. This refrigerant is suitable for low temperature as well as for high temperature applications. Excellent thermodynamic properties are the main advantage. It operates at lower pressure than many other refrigerants which increases the compressor life.

With R134a the Drytec dryers give the flexibility to work in high ambient temperatures. On top of that Drytec engineers add extra power to the heat exchangers with our excellent and extraordinary no loss insulation system. Drytec dryers supply constant dew point at all flow ranges. The perfect insulation idea continues also on the refrigerant circuit side. Thanks to the perfect insulation and the oversized condensers (even for ultra-high ambient temperatures) Drytec refrigerant air dryers offer the highest technology with its custom solutions.

SDE Series



Dew point indicator is standard

Dew point indicator is standard on control panel.

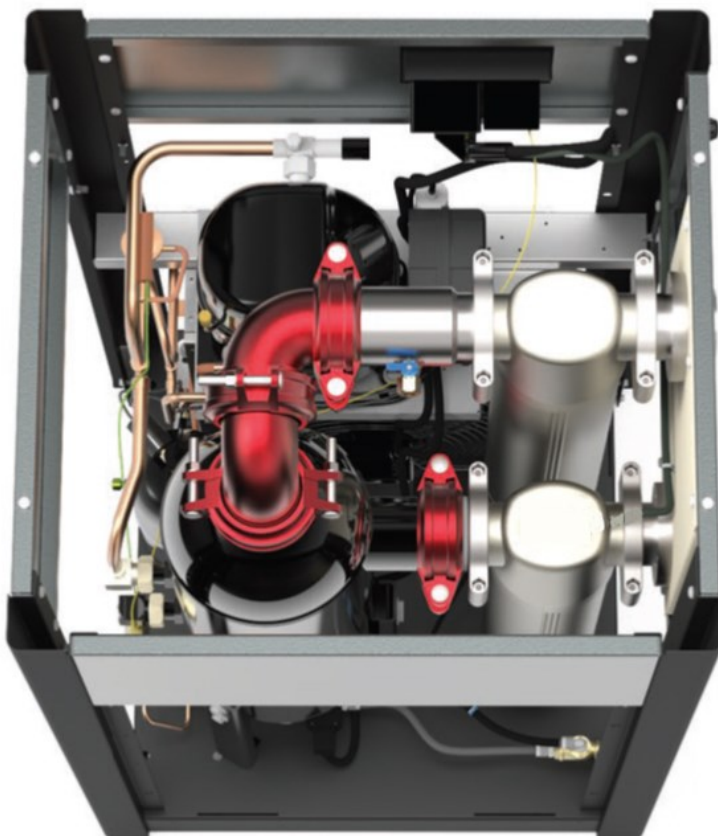
Separate electrical wiring

There are very few electrical wires inside the refrigerant side of the dryer. Electrical box is accessible from the outside of the dryer . There is no need to open dryer panels to reach the electrical parts.



Compact design

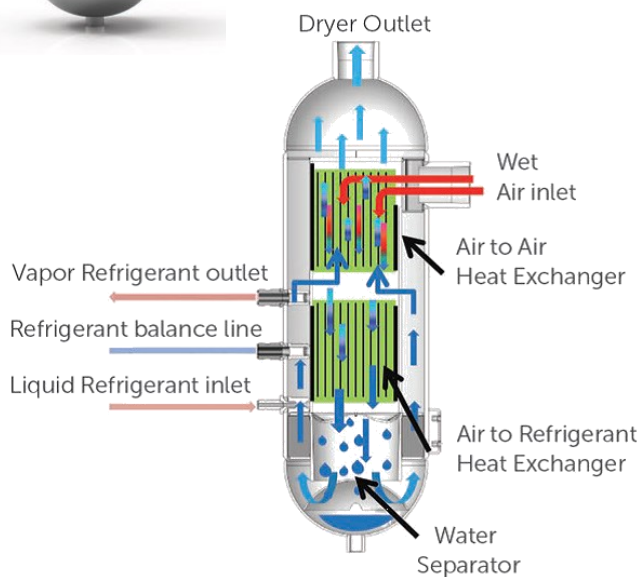
Drytec dryers are highly reliable, efficient, space saving and offer a low cost of ownership. Drytec refrigerant dryers have a small footprint. Having two integrated filters into the dryer frame offers a huge advantage to the installation company and end users because they do not have to install any filters before or after the dryer. That saves labor time and piping cost at the facilities where Drytec dryers are used. The compact design offers also flexibility and economy during their transportation.





Aluminum Heat Exchanger

- Very low pressure drop
- Thick aluminum plates
- High heat transfer surface area
- Thick external cylindrical wall
- Optimized water separator for best performance



Scroll compressors

Scroll compressors are energy efficient and strong against liquid chocks. For energy saving scroll compressors are used for SDE dryers above 1300 Nm³/h.

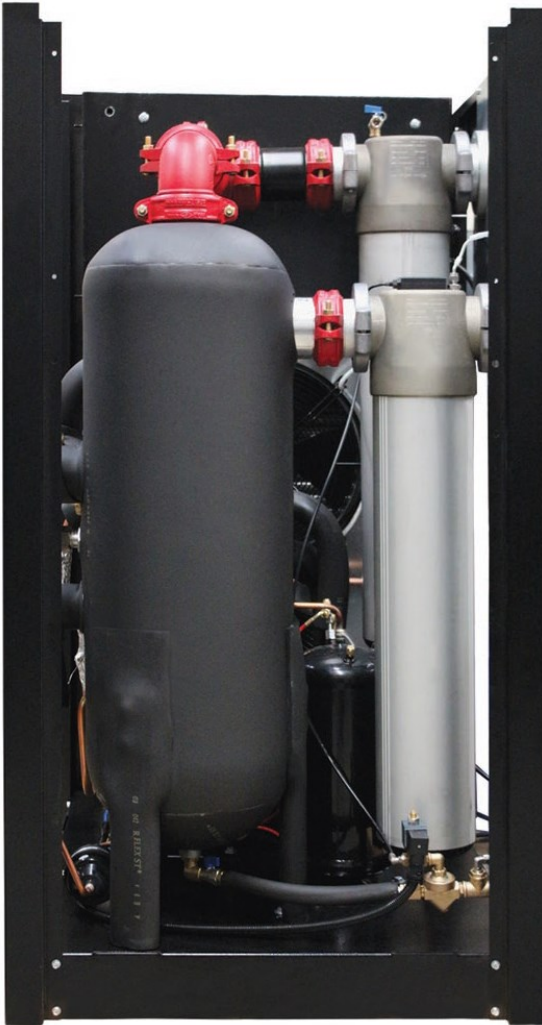


Aeasy access

Easy access in to the cooling components in seconds by the help of screw free panels and plastic handles. Easy and time saving for service technicians.



SDE Series



Zero clearance compressed air filters with high performance elements

Compressed air filter kit is standard on the Drytec dryers. The filter with X element (coalescing filter) is for the removal of up to 1 micron particles and the filter with Y element will remove down to 0.01 ppm residual oil. Zero clearance design helps service technicians to replace the elements in a couple of minutes. The service friendly design makes Drytec dryers very unique in the industry. Filter kits with 2 elements, 2 automatic drains and 2 viton o-rings allows the customer to run his dryer at its best performance until next planned maintenance.

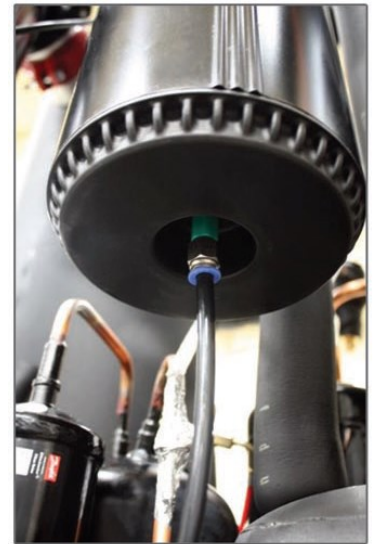
Replacing drains together with the elements on the filters is very critical because they may get clogged with dirt and oil.





Grooved couplings and fittings

On the compressed air side, grooved couplings and fittings are commonly used in the industry. These couplings increase flexibility on connections, helps service people to dimantle and assemble pipes easily and quickly



Pressure drop alarm sensor

Pressure drop is a big concern on compressed air systems because it means wasting energy. In many applications high pressure drops will cause machine or process failures due to low pressure. Dirt particles and oil in the compressed air systems may bloc the filters quickly. It is important to help service engineers and end user to find the cause of their problem. The controller generates a filter elemnt change alarm once the set value is reached. That signal triggers an alarm located on the front panel. Filter elements and auto drains are to be replaced by a service engineer.

Drains

Liquid water droplets coming from the line to the inlet of the dryer are separated by the inlet filter and directly drained. The filter auto drains have integrated manual valves that allows the system to be depressurised for service.



Technical Specifications

Model	Capacity (m³/h)	Voltage	Connection Size	Filter Type	Pressure drop (mbar)	Control Type	Dimensions			Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
SDE-25	23	230-1-50	1/2"	GKO50X + Y	150	Digipro	413	363	557	32
SDE-40	38	230-1-50	1/2"	GKO50X + Y	220	Digipro	413	363	557	32
SDE-55	53	230-1-50	1/2"	GKO50X + Y	350	Digipro	413	363	557	32
SDE-100	100	230-1-50	3/4"	GKO150X + Y	100	Digipro	473	453	832	51
SDE-160	155	230-1-50	3/4"	GKO150X + Y	220	Digipro	473	453	832	53
SDE-190	190	230-1-50	3/4"	GKO150X + Y	320	Digipro	473	453	832	55
SDE-210	210	230-1-50	1 1/2"	GKO500X + Y	220	Digipro	553	503	874	78
SDE-310	305	230-1-50	1 1/2"	GKO500X + Y	320	Digipro	553	503	874	83
SDE-380	375	230-1-50	1 1/2"	GKO500X + Y	200	Digipro	553	503	874	86
SDE-500	495	230-1-50	2"	GKO851X + Y	310	Digipro	678	648	1157	160
SDE-600	588	230-1-50	2"	GKO1210X + Y	210	Digipro	678	648	1157	165
SDE-830	825	230-1-50	2"	GKO1210X + Y	120	Digipro	948	728	1370	220
SDE-1100	1100	230-1-50	2"	GKO1210X + Y	160	Digipro	948	728	1370	230
SDE-1300	1310	400-3-50	3"	GKO1820X + Y	310	Digipro	948	798	1460	270
SDE-1650	1628	400-3-50	3"	GKO1820X + Y	320	Digipro	948	798	1460	285
SDE-2200	2200	400-3-50	3"	GKO2700X + Y	150	Digipro	1163	778	1725	392
SDE-2600	2620	400-3-50	3"	GKO2700X + Y	310	Digipro	1163	778	1725	410
SDE-3150	3144	400-3-50	DN100	EXTERNAL	240	Digipro	1397	847	1770	492
SDE-3700	3696	400-3-50	DN100	EXTERNAL	340	Digipro	1397	847	1770	520
SDE-4800	4800	400-3-50	DN100	EXTERNAL	280	ESD-3	1467	1077	1930	696
SDE-5500	5522	400-3-50	DN100	EXTERNAL	310	ESD-3	1467	1077	1930	718
SDE-6600	6584	400-3-50	DN150	EXTERNAL	280	ESD-3	2188	1062	1925	900
SDE-7450	7434	400-3-50	DN150	EXTERNAL	310	ESD-3	2188	1062	1925	925
SDE-8500	8496	400-3-50	DN150	EXTERNAL	310	ESD-3	2697	897	1975	975
SDE-9900	9912	400-3-50	DN200	EXTERNAL	310	ESD-3	2697	897	1975	1100
SDE-11800	11800	400-3-50	DN200	EXTERNAL	310	ESD-3	2550	1550	2100	1600

Capacity is given at atmospheric pressure at 20°C (ISO 1217) in accordance with ISO8573.1 (7 bar—35°C Inlet—25°C Ambient—60% Relative Humidity).

Drytec dryers are ISO8573.1 Class 1.4.1 depending on the inlet conditions.

CORRECTION FACTORS FOR SDE DRYERS								
Inlet temperature (°C)	30	35	40	45	50	60		
F1	1,29	1	0,92	0,78	0,65	0,45		
Ambient temparture (°C)	20	25	30	35	40	50		
F2	1,05	1	0,98	0,93	0,84	0,7		
Pressure (bar)	4	6	7	8	10	12	14	16
F3	0,8	0,94	1	1,04	1,11	1,16	1,22	1,25

Example for choosing the correct dryer : If an air compressor delivers 200 m³/h at 6 bars, the dryer inlet temperature is 40°C and the ambient temperature is 30°C, than choose your dryer as follows :

$200/0.94/0.92/0.98=236 \text{ m}^3/\text{h}$. The correct dryer is SDE-310.



Drytec reserves its rights to change the specifications without any prior notice.

FOR ALL MODELS	
Maximum pressure	16 bar(g)
Maximum ambient temperature	50°C
Minimum ambient temperature	5°C
Maximum inlet temperature	60°C
Refrigerant	R134a