



 zephyr®

Compressed air treatment

 zephyr®





Who are we?

Zephyr is a traditional Swiss manufacturer of air compressors and their accessories for all industries, from heavy industry to the food and pharmaceutical industries. The production and development of Zephyr's compressor technology is realised across several continents in a production area of more than 80,000 square metres, including the most demanding production of its own screw elements.

In the area of oil-free compressors, cooperation with GHH, the largest German manufacturer of oil-free screw blocks, had already begun at the beginning of production. These compressors are used for technologies designed for applications requiring 100% oil-free air, and they meet the strictest ISO Class 0 standard. Similarly, close cooperation with a Japanese manufacturer of spiral oil-free blocks, which the world's largest manufacturers of compressor technology use for their products, began in 2015.

In the actual development and subsequent production of our products, we place the main emphasis on creating products of a high quality, on low service costs, and on products with energy efficient operation so as to minimise the impact on the environment and the overall carbon footprint. We have, therefore, been specialised in the development of high-efficiency EPM screw elements with an output that is up to 15% higher compared to standard screw compressors, systems for heat recovery in the production of compressed air, and drives with permanent magnet synchronous motors with an efficiency of up to 97% in the entire control range. ISO, CE, TÜV, GC, and other certificates are a matter of course.

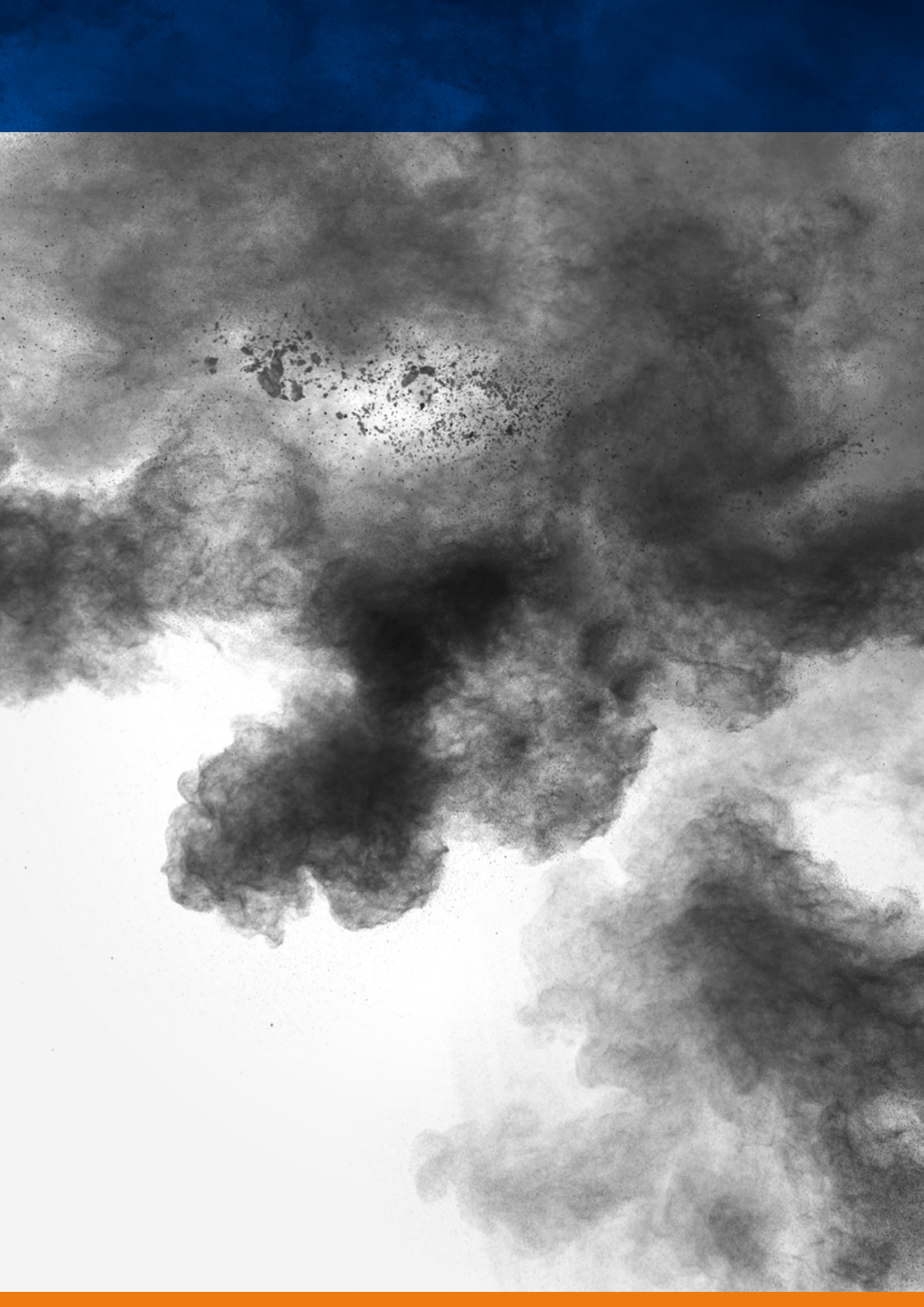
To meet all the needs of our customers, we have a worldwide network of distributors and service organisations, as well as above-standard warranty periods for all our products.



Zephyr compressed air treatment

In most production applications, high-quality compressed air is absolutely essential to ensure the protection of terminal equipment using air pressure, as well as to prevent quality issues in manufactured products and/or the degradation of the compressed air distribution system itself. In general, all intake air contains impurities such as water, solid particles and oil aerosols.

In order to meet the most stringent requirements of our customers, we offer a comprehensive range of compressed air treatment products designed to ensure that the content of undesirable substances at the compressor station outlet is kept to a minimum or completely eliminated.



Zephyr ZD refrigerated air dryers

Refrigerated dryers are the most common type of compressed air dryer used for water vapour removal. Their function is based on the process of water vapour condensation as the compressed air is cooled. Moisture is removed from the compressed air stream to obtain the required dew point in two stages. First, the incoming warm air is cooled by the previously dried air and any residual water vapour is subsequently condensed in an evaporator and discharged via a condensate trap.



Reliability and efficiency

- The compact design of the exchanger with the evaporator provides greater operational safety. The precooling function allows the evaporator to operate at lower loads, thereby reducing the operating costs by as much as 30%.

Environmentally responsible operation

- The refrigeration circuit contains an environmentally safe refrigerant, while the dryer parameters are guaranteed in accordance with the ISO 8573-1:2001 international standard.

Demanding operating conditions

- The dryer design has been adapted to the most demanding conditions. All components have been designed to ensure that the dryer functions flawlessly even at an ambient temperature of 50°C.

Model	Capacity at DPT of -3°C m ³ /min	Power consumption kW	Power connection V/Ph/Hz	Maximum pressure bar(g)	Dimensions mm (L×W×H)	Weight kg	Pipe connection
ZD-24	2,4	0,47	220/1/50	16	750×360×550	50	G 3/4
ZD-30	3,0	0,49	220/1/50	16	750×360×550	50	G 3/4
ZD-40	4,0	0,65	220/1/50	16	750×360×550	55	G 3/4
ZD-60	6,5	1,40	220/1/50	15	750×592×913	78	G 1 1/2
ZD-80	8,8	1,40	220/1/50	15	750×592×913	80	G 1 1/2
ZD-100	11,0	1,85	220/1/50	15	750×592×913	85	G 1 1/2
ZD-120	13,0	2,30	220/1/50	15	1000×710×1030	130	G 2
ZD-150	17,0	3,03	220/1/50	15	1000×710×1030	140	G 2
ZD-200	22,0	3,10	380/3/50	15	1000×710×1030	150	G 2
ZD-250	27,0	3,63	380/3/50	15	1000×820×1600	250	G 2 1/2
ZD-300	33,0	4,40	380/3/50	15	1000×820×1600	260	G 2 1/2
ZD-350	37,0	5,10	380/3/50	15	1000×820×1600	270	G 2 1/2
ZD-400	45,0	3,13	380/3/50	15	1250×1120×1750	500	DN100
ZD-500	55,0	6,90	380/3/50	15	1250×1120×1750	510	DN100
ZD-600	65,0	8,34	380/3/50	15	1250×1120×1750	550	DN100
ZD-700	73,0	9,81	380/3/50	15	1250×1120×1750	580	DN125
ZD-800	80,0	11,90	380/3/50	15	2000×1460×1770	800	DN150
ZD-900	90,0	13,10	380/3/50	15	2000×1460×1770	810	DN150
ZD-1000	100,0	16,70	380/3/50	15	2000×1460×1770	850	DN150
ZD-1200	120,0	21,00	380/3/50	15	2000×1460×1770	870	DN150
ZD-1500	150,0	33,00	380/3/50	15	2135×1225×1800	1 150	DN200
ZD-1800	180,0	39,10	380/3/50	15	2135×1225×1800	1 350	DN200

Data applicable to the following conditions: Pressure dew point +3°C, pressure 7bar(g), Air FAD 20°C/1bar(a), Ambient temperature 38°C, Inlet air temperature 38°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Zephyr HP (high pressure) refrigerated dryers

Compressed air drying in high-pressure applications necessitates the use of dryers able to withstand the strain involved. This has led us to develop a range of HP dryers designed for inlet pressures of up to 45bar(g).



High-performance refrigeration system

- *HP dryers incorporate only the most efficient components, including a high-quality cooling compressor, a heat exchanger with excess capacity and an innovative air flow system. This combination facilitates reliable operation even at high temperatures and guarantees a stable pressure due point at the outlet.*

Optimized compressed air flow

- *The lower the pressure gradient in the dryer is, the higher overall efficiency the dryer will achieve, delivering the best possible performance. All HP dryers work with an exceptionally low pressure gradient.*

Loss-free condensate discharge

- *HP dryers are outfitted with high-pressure electronic condensate drains that allow for condensate to be discharged without the use of compressed air. This leads to considerable energy savings.*

Model	Capacity at TRB -3°C m ³ /min	Power consumption kW	Maximum pressure bar(g)	Dimensions mm (L×W×H)	Weight kg	Pipe connection
ZD-24HP	2,4	0,46	45	750×360×550	50	G 3/4
ZD-30HP	3,0	0,50	45	750×360×550	50	G 3/4
ZD-40HP	4,0	0,55	45	750×360×550	55	G 3/4
ZD-60HP	6,0	0,80	45	750×550×880	80	G 1 1/4
ZD-80HP	8,0	0,85	45	750×550×880	80	G 1 1/4
ZD-90HP	9,0	0,90	45	750×550×880	80	G 1 1/4
ZD-100HP	10,0	1,10	45	750×550×880	80	G 1 1/4
ZD-120HP	12,0	1,22	45	750×550×880	80	G 1 1/4
ZD-150HP	15,0	2,10	45	1100×860×1200	150	G 1 1/4
ZD-200HP	20,0	2,30	45	1100×860×1200	150	G 1 1/4
ZD-250HP	25,0	2,80	45	1100×900×1550	270	G 2 1/2
ZD-300HP	30,0	2,90	45	1100×900×1550	270	G 2 1/2
ZD-350HP	35,0	3,10	45	1100×900×1550	300	G 2 1/2
ZD-400HP	40,0	4,20	45	1100×900×1550	350	G 2 1/2
ZD-500HP	50,0	4,56	45	1100×900×1550	470	G 2 1/2
ZD-600HP	60,0	5,60	45	1450×1130×1650	550	DN80
ZD-700HP	70,0	5,80	45	1450×1130×1650	570	DN80
ZD-800HP	80,0	5,94	45	1450×1130×1650	600	DN80

Data applicable to the following conditions: Pressure dew point +3°C, pressure 45bar(g), Air FAD 20°C/1 bar(a), Ambient temperature 38°C, Inlet air temperature 38°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Zephyr HT (high temperature) refrigerated dryers

These dryers are designed for applications where inlet air temperatures entering the dryer can reach up to 80°C. The efficient heat exchanger and all-in-one design translate into additional advantages in terms of space requirements.



Reliability and efficiency

- *The compact heat exchanger with excess capacity, combined with a counter flow design and a robust compressor, guarantees energy savings of up to 25% and a maximum service life.*

Environmentally responsible operation

- *The refrigeration circuit employs only environment-friendly refrigerants, such as R134a and R407C, meeting the applicable international standards.*

Constant dew point temperature (DPT)

- *The use of a demister ensures that the DPT value is kept constant.*

<i>Model</i>	<i>Capacity at TRB -3°C m³/min</i>	<i>Power consumption kW</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm (L×W×H)</i>	<i>Weight kg</i>	<i>Pipe connection</i>
ZD-24HT	2,4	0,61	15	800x420x600	70	G 1
ZD-30HT	3,0	0,76	15	800x420x600	75	G 1
ZD-60HT	6,0	1,09	15	750x695x1260	125	G 1 1/2
ZD-80HT	8,0	1,45	15	750x695x1260	128	G 1 1/2
ZD-100HT	10,0	1,82	15	750x695x1260	133	G 1 1/2
ZD-120HT	12,0	2,18	15	1000x840x1450	165	G 2
ZD-150HT	15,0	2,73	15	1000x840x1450	175	G 2

Data applicable to the following conditions: Pressure dew point +3°C, pressure 7bar(g), Air FAD 20°C/1bar(a), Ambient temperature 38°C, Inlet air temperature 60°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Zephyr L high performance refrigerated dryers

Major industrial applications require the use of L-range dryers designed for flow rates of up to 500m³/min. at pressures of up to 10bar(g). These dryers are tailored to meet the most demanding requirements for environmentally responsible and efficient operation while maintaining long lifetime performance despite the high outputs.



Reliable design

- Cooperation with leading international manufacturers of key components guarantees the high quality and efficiency of all our equipment.

Energy saving

- The dryers utilize special-design heat exchangers with fins to ensure superb heat transfer. The inlet-outlet temperature difference is 8 to 10°C to prevent freezing. The precooler recuperates over 90% of the refrigeration capacity, effectively reducing the strain on the evaporator, while significantly cutting operating costs.

Customer requirement variability

- A wide range of options, including RS485, Profibus, Modbus and Ethernet connectivity, are available at extra cost.

<i>Model</i>	<i>Capacity at TRB -3°C m³/min</i>	<i>Power consumption kW</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm (L×W×H)</i>	<i>Weight kg</i>	<i>Pipe connection</i>
ZD-800L	80,0	11,20	15	2260×1100×2140	1780	DN150
ZD-900L	90,0	14,10	15	2400×1200×2100	1850	DN150
ZD-1000L	100,0	14,70	15	2500×1600×1750	2100	DN150
ZD-1200L	120,0	18,37	15	2600×1850×1780	2300	DN150
ZD-1500L	150,0	22,05	15	2750×1850×1900	2680	DN200
ZD-1800L	180,0	29,40	15	2900×1900×1930	3300	DN200
ZD-2000L	200,0	36,75	15	3000×1950×1970	3600	DN200
ZD-2500L	250,0	36,75	15	3300×2050×2065	4100	DN250
ZD-3000L	300,0	44,10	15	3500×2120×2200	4800	DN250
ZD-3500L	350,0	51,45	15	3700×2200×2300	5500	DN300
ZD-4000L	400,0	58,80	15	<i>On request</i>		DN300
ZD-4500L	450,0	66,15	15		DN350	
ZD-5000L	500,0	73,50	15		DN350	
ZD-5500L	550,0	93,80	15		DN350	

Data applicable to the following conditions: Pressure dew point +3°C, pressure 7bar(g), Air FAD 20°C/1 bar(a), Ambient temperature 38°C, Inlet air temperature 38°C, Cooling water temperature 30°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Zephyr HR Heatless Dessicant Dryers

Since compressed air quality has a major effect on the final product, adsorption dryers are extensively used in applications wherein a particular emphasis is placed on extreme quality and the minimization of residual water vapour in compressed air. By applying this drying principle in combination with a molecular sieve, a pressure dew point ranging from -40°C to -70°C DPT can be achieved.

The regeneration process is based on the principle of utilizing produced compressed air to dry the saturated desiccant in a single container. Cold regeneration adsorption dryers consume approximately 10 to 15% of the produced compressed air to maintain their operation. This consumption can be further reduced



Reliable design

- Ceramic balls at the bottom of the adsorption tower ensure uniform air flow distribution. This helps protect the adsorption content of the dryer against uneven loading.
- Dryers in this line are equipped with high-performance, heat-resistant low pressure drop pneumatic valves with inlet and outlet filtration and a long service life.

Energy saving

- The container regeneration cycles are controlled via LDCS and DPOS (Load Dependent Control System, Dew Point Operating System), containing a microprocessor control system to constantly monitor desiccant saturation and switch the container drying cycle when necessary.

Customer requirement variability

- A wide range of options, including RS485, Profibus, Modbus and Ethernet connectivity, are available at extra cost.

<i>Model</i>	<i>Capacity at TRB -40°C m³/min</i>	<i>Power consumption kW</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm (L×W×H)</i>	<i>Weight kg</i>	<i>Pipe connection</i>
ZD-20HR	2,0	0,2	10	779×549×1788	198	DN25
ZD-30HR	3,0	0,2	10	839×549×1703	325	DN25
ZD-60HR	6,0	0,2	10	1060×618×2020	510	DN40
ZD-80HR	8,0	0,2	10	1060×618×2020	520	DN40
ZD-100HR	10,0	0,2	10	1200×738×1824	585	DN50
ZD-120HR	12,0	0,2	15	1200×738×1824	600	DN50
ZD-150HR	15,0	0,2	15	1200×733×2028	680	DN50
ZD-200HR	20,0	0,2	15	1500×914×1973	870	DN65
ZD-250HR	25,0	0,2	15	1530×962×2056	975	DN65
ZD-300HR	30,0	0,2	15	1630×1199×2019	1150	DN80
ZD-350HR	35,0	0,2	15	1790×1207×2049	1275	DN80
ZD-400HR	40,0	0,2	15	1830×1232×2059	1350	DN80
ZD-500HR	50,0	0,2	15	2012×1293×2238	1600	DN100
ZD-600HR	60,0	0,2	15	2150×1321×2518	2100	DN100

Data applicable to the following conditions: Pressure dew point -40°C, pressure 7bar(g), Air FAD 20°C/1 bar(a), Ambient temperature 38°C, Inlet air temperature 35°C, Cooling water temperature 30°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Zephyr EH Heated Dessiccant Dryers

Since compressed air quality has a major effect on the final product, adsorption dryers are extensively used in applications wherein a particular emphasis is placed on extreme quality and the minimization of residual water vapour in compressed air. By applying this drying principle in combination with a molecular sieve, a pressure dew point ranging from -40°C to -70°C DPT can be achieved.

The regeneration process is based on the principle of utilizing electrically heated air to dry the desiccant. Hot air removes moisture from the desiccant, releasing it into the atmosphere. The main advantage lies in lower energy consumption compared to hot cold regeneration dryers. This system does not consume any compressed air.



Reliable design

- Ceramic balls at the bottom of the adsorption tower ensure uniform air flow distribution. This helps protect the adsorption content of the dryer against uneven loading.
- Dryers in this line are equipped with high-performance, heat-resistant low pressure drop pneumatic valves with inlet and outlet filtration and a long service life.
- The electric heating of the dryer features multiple protection layers.

Energy saving

- The container regeneration cycles are controlled via LDCS and DPOS (Load Dependent Control System, Dew Point Operating System), containing a microprocessor control system to constantly monitor desiccant saturation and switch the container drying cycle when necessary.

Customer requirement variability

- A wide range of options, including RS485, Profibus, Modbus and Ethernet connectivity, are available at extra cost.

Model	Capacity at TRB -40°C m ³ /min	Power consumption kW	Maximum pressure bar(g)	Dimensions mm (L×W×H)	Weight kg	Pipe connection
ZD-30EH	3,0	0,9	10	800×400×1700	360	DN25
ZD-60EH	6,0	1,8	10	1100×600×1950	600	DN40
ZD-80EH	8,0	2,4	10	1100×600×2000	850	DN50
ZD-100EH	10,0	3,0	10	1200×650×2000	950	DN50
ZD-120EH	12,0	3,6	10	1200×650×2120	1000	DN65
ZD-150EH	15,0	4,5	10	1300×700×2200	1150	DN65
ZD-200EH	20,0	6,0	10	1400×720×2100	1400	DN65
ZD-250EH	25,0	7,5	10	1400×720×2400	1750	DN80
ZD-300EH	30,0	9,0	10	1700×760×2500	2000	DN80
ZD-400EH	40,0	12,0	10	1750×840×2650	2450	DN80
ZD-600EH	60,0	18,0	10	1900×1000×2780	3700	DN125
ZD-800EH	80,0	24,0	10	2200×1200×2850	4500	DN150
ZD-1000EH	100,0	30,0	10	2600×1500×3020	5000	DN150
ZD-1200EH	120,0	36,0	10	2800×1600×3100	5500	DN150
ZD-1500EH	150,0	45,0	10	3000×1600×3200	6000	DN200
ZD-2000EH	200,0	60,0	10	On request		DN200
ZD-2500EH	250,0	75,0	10		DN200	
ZD-3000EH	300,0	90,0	10		DN250	
ZD-3500EH	350,0	105,0	10		DN300	
ZD-4000EH	400,0	120,0	10		DN300	
ZD-5000EH	500,0	150,0	10		DN350	

Inlet and outlet filters are supplied with the dryer.

Pressure dew point -40°C, pressure 7bar(g), Air FAD 20°C/1 bar(a), Ambient temperature 38°C, Inlet air temperature 35°C, Cooling water temperature 30°C. Applicable to pressure dew points in compliance with ISO8573-1:2001.

Zephyr BP Heated Blower Dessiccant Dryers

Heated Blower Dessiccant Dryers from the ZD BP series will meet even the most demanding customer requirements in terms of very high compressed air quality (DPT -40°C to -70°C) and low operating costs. The system utilizes external heating, a highly efficient blower and a quality adsorbent, which brings its operating costs down to a minimum.



Reliable design

- Ceramic balls at the bottom of the adsorption tower ensure uniform air flow distribution. This helps protect the adsorption content of the dryer against uneven loading.
- Dryers in this series are equipped with high-performance, heat-resistant low pressure drop pneumatic valves with a long service life and inlet/outlet filtration to filter out both solid particles and oil aerosols.
- The electric heating of the dryer features multiple protection layers.

Energy saving

- High-performance and energy-efficient blowers guarantee very low operating costs.
- The container regeneration cycles are controlled via LDCS and DPOS (Load Dependent Control System, Dew Point Operating System), containing a microprocessor control system to constantly monitor desiccant saturation and switch the container drying cycle when necessary.

Customer requirement variability

- A wide range of options, including RS485, Profibus, Modbus and Ethernet connectivity, are available at extra cost.

<i>Model</i>	<i>Capacity at TRB -40°C m³/min</i>	<i>Power consumption kW</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm (L×W×H)</i>	<i>Weight kg</i>	<i>Pipe connection</i>
ZD-150BP	15,0	11,4	10	1602×926×2324	1250	DN50
ZD-180BP	18,0	20,5	10	2899×1100×2284	1400	DN65
ZD-220BP	22,0	20,5	10	1959×1130×2458	1530	DN65
ZD-250BP	25,0	20,5	10	2009×1110×2559	1715	DN65
ZD-330BP	33,0	23,5	10	2083×1212×2569	2100	DN80
ZD-440BP	44,0	34,5	10	2750×1274×2613	2690	DN100
ZD-500BP	50,0	42,0	10	2835×1284×2693	2980	DN100
ZD-600BP	60,0	42,0	10	2865×1341×2648	3390	DN100
ZD-700BP	70,0	58,0	10	2965×1691×2744	4190	DN125
ZD-800BP	80,0	58,0	10	3103×1617×2869	4600	DN125
ZD-900BP	90,0	86,5	10	3900×2189×2775	5800	DN150
ZD-1000BP	100,0	86,5	10	4230×2194×2872	6300	DN150
ZD-1200BP	120,0	107,0	10	4400×2204×2855	6800	DN150
ZD-1500BP	150,0	130,0	10	5016×2503×2947	9200	DN200
ZD-2000BP	200,0	165,0	10	5516×2518×3077	11700	DN200

Inlet and outlet filters are supplied with the dryer.

Data applicable to the following conditions: Pressure dew point -40°C, pressure 7bar(g), Air FAD 20°C/1 bar(a), Ambient temperature 38°C, Inlet air temperature 35°C, Cooling water temperature 30°C. Applicable to pressure dew points in compliance with ISO8573-1:2001.

Zephyr HOC Heat of Compression Dessiccant Dryers

The HOC dryers have been specially developed for oil-free compressors suitable for utilizing compressor heat for desiccant regeneration. This is the most energy efficient principle of compressed air drying to a pressure dew point of -40°C as it does not involve any consumption of compressed dry air or electricity to regenerate the desiccant content.

Hot compressed air is conducted from the oil-free compressor directly into the adsorption dryer via a two-way valve. A portion of the hot air is utilized for desiccant regeneration and subsequently returns through a water cooler to the regeneration vessel wherein the air is rid of the condensate and dried to the required dew point.



Reliable design

- Unlike rotary drum dryers, these help maintain a constant dew point.
- Ceramic balls at the bottom of the adsorption tower ensure uniform air flow distribution. This helps protect the adsorption content of the dryer against uneven loading.
- Dryers in this series are equipped with high-performance, heat-resistant low pressure drop pneumatic valves with a long service life and inlet/outlet filtration to filter out both solid particles and oil aerosols.

Energy saving

- These are the most economical adsorption dryers in that they require no electricity or compressed air for regeneration.
- The container regeneration cycles are controlled via LDCS and DPOS (Load Dependent Control System, Dew Point Operating System), containing a microprocessor control system to constantly monitor desiccant saturation and switch the container drying cycle only when necessary.

Customer requirement variability

- A wide range of options, including RS485, Profibus, Modbus and Ethernet connectivity, are available at extra cost.

<i>Model</i>	<i>Capacity at TRB -40°C m³/min</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm (L×W×H)</i>	<i>Weight kg</i>	<i>Pipe connection</i>
ZD-60HOC	6,0	10	2000×900×1900	1000	DN50
ZD-80HOC	8,0	10	2000×900×1900	1050	DN50
ZD-100HOC	10,0	10	2066×950×1916	1151	DN50
ZD-120HOC	12,0	10	2066×1000×2000	1250	DN50
ZD-150HOC	15,0	10	2165×1000×2316	1550	DN65
ZD-200HOC	20,0	10	2225×1000×2567	1640	DN65
ZD-220HOC	22,0	10	2325×1050×2647	1900	DN65
ZD-250HOC	25,0	10	2325×1050×2647	1980	DN65
ZD-350HOC	35,0	10	2452×1250×2510	2470	DN80
ZD-450HOC	45,0	10	2900×1400×2690	3000	DN100
ZD-600HOC	60,0	10	3100×1650×2717	3800	DN100

Inlet and outlet filters are supplied with the dryer.

Data applicable to the following conditions: Pressure dew point -40°C, pressure 7bar(g), Air FAD 20°C/1bar(a), Ambient temperature 38°C, Inlet air temperature 35°C, Cooling water temperature 30°C. Applicable to pressure due points in compliance with ISO8573-1:2001.

Compressed air filtration

The objective of compressed air filtration is to achieve the lowest possible initial pressure gradient. The unique Zephyr technology allows for the initial pressure gradient to be brought down to an astounding 0.07bar. This substantially reduces operating costs due to the lower power input of the compressors and extends the service life of the filter element.



Reliable design

- High-quality bodies and filter elements ensure a low pressure gradient and a long service life.
- The filter includes a pressure gradient indicator allowing the user to easily monitor its operating condition.
- High-quality condensate drains come as standard.
- The filter design facilitates easy servicing.

Energy saving

- The clogging indicator signals when the filter element should be replaced to prevent higher operating costs due to the higher power input of the compressors.

Filtration level as per customer specifications

Coarse G filters

- Removal of coarse pollutants up to $1\mu\text{m}$ in size, including oil and water aerosols
- Residual oil up to $0.6\text{mg}/\text{m}^3$

Fine H filters

- Removal of fine pollutants up to $0.01\mu\text{m}$ in size, including oil and water aerosols
- Residual oil up to $0.01\text{mg}/\text{m}^3$

Dust D filters

- Removal of dust particles up to $1\mu\text{m}$ in size

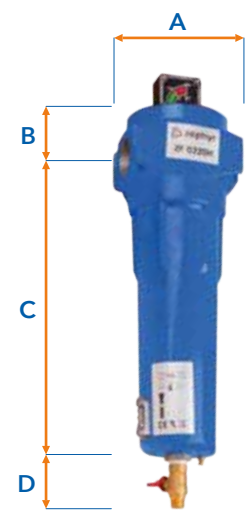
Active carbon A filters

- Removal of oil vapours up to $0.003\text{mg}/\text{m}^3$

AX high performance filtration

- Removal of fine pollutants up to $0.01\mu\text{m}$ in size, including oil and water aerosols
- Residual oil up to $0.001\text{mg}/\text{m}^3$

Model	Capacity at 7bar(g) m ³ /min	Maximum pressure bar(g)	Dimensions mm				Weight kg	Pipe connection
			A	B	C	D		
ZF-0080*	4,8	16	120	58	352	-	3,2	G1
ZF-0145*	8,7	16	120	58	352	-	3,2	G1 1/2
ZF-0220*	13,2	16	162	74	350	180	6,6	G2
ZF-0330*	19,8	16	162	74	664	180	10,9	G2
ZF-0430*	25,8	16	200	90	398	180	12,9	G3
ZF-0620*	40,0	16	200	90	659	180	17,5	G3
ZF-1000*	60,0	16	500	270	840	200	115	DN100
ZF-1300*	80,0	16	600	310	910	200	150	DN125
ZF-1950*	120,0	16	645	325	910	200	195	DN150
ZF-2500*	160,0	16	666	343	1037	200	240	DN200
ZF-3250*	200,0	16	840	400	1065	200	425	DN200
ZF-4650*	280,0	16	840	400	1065	200	450	DN250
ZF-5200*	312,0	16	740	410	1275	200	515	DN250
ZF-7800*	468,0	16	1070	485	1295	200	960	DN300



Inlet pressure-based correction

Inlet pressure	bar(g)	1	2	3	5	7	9	11	13	15	16
Correction factor	KA	0,38	0,53	0,65	0,85	1	1,13	1,25	1,36	1,46	1,51

Filtration stage	Solids residue microns	Oil particles residue mg/m ³	Pressure gradient bar	Max. operating temperature °C	Max. working pressure bar
G	1	0,5	0,07	66	16
H	0,01	0,01	0,1	66	16
D	1	-	0,07	66	16
A	-	0,003	0,1	66	16

WS water separators

Over 99% of the volume of water from compressed air can be easily and efficiently removed using a water separator. It then allows the compressed air system to function much more effectively and at lower operating and maintenance costs. In addition, the separator enhances the efficiency of other equipment, such as coolers, refrigerated dryers or filtration systems.



<i>Model</i>	<i>Capacity m³/min</i>	<i>Maximum pressure bar(g)</i>	<i>Dimensions mm</i>				<i>Pipe connection</i>
			<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	
ZWS-45	4,5	16	85	23	197	60	G1
ZWS-100	10,0	16	120	58	251	80	G1 1/2
ZWS-250	25,0	16	160	67	511	100	G2
ZWS-420	42,0	16	202	79	603	100	G1 1/2
ZWS-500	50,0	16	202	79	603	100	G3
ZWS-600	60,0	16	450	201	805	113	DN100
ZWS-1200	120,0	16	580	273	835	164	DN150
ZWS-1800	180,0	16	750	361	920	215	DN200
ZWS-2880	288,0	16	740	410	1010	241	DN250
ZWS-4320	432,0	16	1000	485	990	279	DN300

Other Zephyr products

Compressors

Zephyr EPM compressors

Maximize the potential of variable speed technology

Zephyr PM compressors

Allow for precise adjustment of the required amount of compressed air supplied

Zephyr DV compressors

Variable speed drive technology facilitating maximum utilization and high efficiency

Zephyr D compressors

The most reliable and most efficient solution for processes with constant compressed air consumption

Zephyr D-2S two-stage screw compressors

Superb efficiency thanks to unique two-stage helices

Zephyr OF oil-free screw compressors

Deliver top quality air without oil additives, meeting Class 0 parameters in accordance with ISO 8573-1

Zephyr oil-free scroll compressors

Ensure maximum compressed air purity in compliance with the most stringent parameter requirements

Control systems and waste heat utilization for the reduction of CO₂ emissions

HiVision® Air control system

A system for the continuous online monitoring of the environment and compressor operating data

Recovery systems for Zephyr compressors

Systems for utilizing compression heat for temperature control in adjacent rooms, DHW heating or other applications

Zephyr water and oil filtration

Water filters with automatic purification

Filters for applications where the temperature of the liquid reaches up to 60°C

Oil filters with automatic purification

Filters for the most demanding applications with a liquid temperature of up to 120°C





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