

ATS

Air
Treatment
Solutions

2023 CATALOGUE
North America





*Our mission is research and development of high-performance products but
our primary objective is always to safeguard the environment*

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THE COMPANY

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2023-09-25

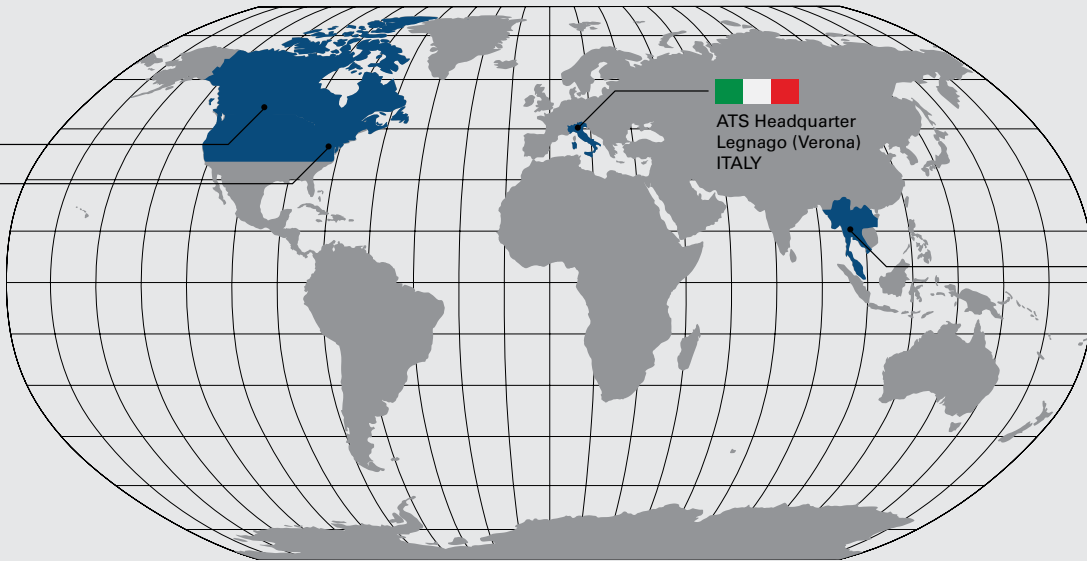
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ATS Subsidiary
Orangeville (Ontario)
CANADA



ATS Subsidiary
1064 1st New
Hampshire
Turnpike
Northwood NH
03262
USA



ATS Headquarter
Legnago (Verona)
ITALY



ATS Subsidiary
Chon Buri
THAILAND

01. About us

For decades ATS s.r.l. (Air Treatment Solution) has worked in partnership with company leaders in the compressed air's world.

In a little more than 10 years, ATS has become one of the leading companies at global level for the production of air dryers, filters and accessories for compressed air treatment. In 2013, the company launched its brand, positioning itself at the forefront of the international (or global) market. ATS products provide quality, flexibility, reliability and respect for the environment.

We distinguish ourselves for the multi-year experience of our staff and the intermediate and long-term quality controls performed with state-of-the-art technologies.

Using competence and passion, the company designs, develops and sells an extensive range of products for compressed air treatment.

Our Goals:

ATS listens, understands and satisfies its customers' needs on an equal footing with economic growth, ATS main priorities are focused on sustainable development as well as the protection of and the respect for the environment and energy resources, the main goals are the protection of and the respect for the environment and the energy resources, like economic productivity and growth. To meet the demanding requirements of high-tech markets, as well as the most recent EU directives, ATS constantly invests in development of the innovative technologies finalized to the performance of its products, in terms of energy saving and reduction of environmental pollution.

02. Group

ATS is an expert in the treatment of compressed air. The production is based in Italy, near Verona where the R&D department, the warehouse, the production and servicing of special machines are located, and in Thailand, where there is the production of machines mostly targeted to Asian market. The volume of production output is 10,000 air dryers per year with the possibility of further increasing this benchmark to 20,000 pieces.

In Italy ATS sells through a comprehensive network of sales agents. Although ATS sells branded products with different names all over the world, nevertheless its main market remains in Europe where ATS sells most of the products. Currently ATS produces a wide range of air dryers 24- 21.600 m³/h and a complete range of filters and accessories for compressed air.

Our technical offices are ready to satisfy any requests, both for standard as well as customized solutions, in compliance with the latest EU directives, and offering new and innovative solutions to optimize the performance of our products, in terms of energy saving and reduction of the environmental pollution.

03. Products

ATS provides a wide range of efficient and highly-performing products for compressed air treatment to meet your application needs.

ATS offers a wide range of dryers, filters, separators and any additional product that can be useful to the processing of compressed air. To simplify selection, ATS divides its product ranges in:

Atmospheric air always includes water vapour and impurities. For the end user it is extremely important that the air is free from moisture and particulate contaminants, such as oil and dust. If these contaminants come into direct contact with the final equipment, the costs for maintenance would be very high, and a device for air treatment, that originally would be practical and economical, then could prove very costly.

ATS target is to provide our customers with the tools necessary to obtain high-quality compressed air, clean and dry, that is free from elements that can decrease the efficiency and reliability of the system. Depending on the use of compressed air and the area of its application, these substances can have different impacts in the production process.

It is important that the selection is accurate and detailed in order to choose the best possible combination of accessories for air treatment, to optimize the available resources and reduce unnecessary waste.

PREMIUM SERVICE WARRANTY OF 24 MONTHS FROM INVOICE DATE.

Unit replacement under warranty or spare parts delivered under warranty and service cost paid as per Service ATS Table.

OPTIONAL - 5 - YEAR EXTENDED WARRANTY AVAILABLE

PREMIUM SERVICE WARRANTY FOR RANGE

DGU - DHU - HGU - HLU - OWU - ORU - FGU - FCU - FHU - SGU - ECU

STANDARD WARRANTY OF 12 MONTHS FROM INVOICE DATE.

Spare parts delivered under warranty or unit repaired under warranty at ATS factory.

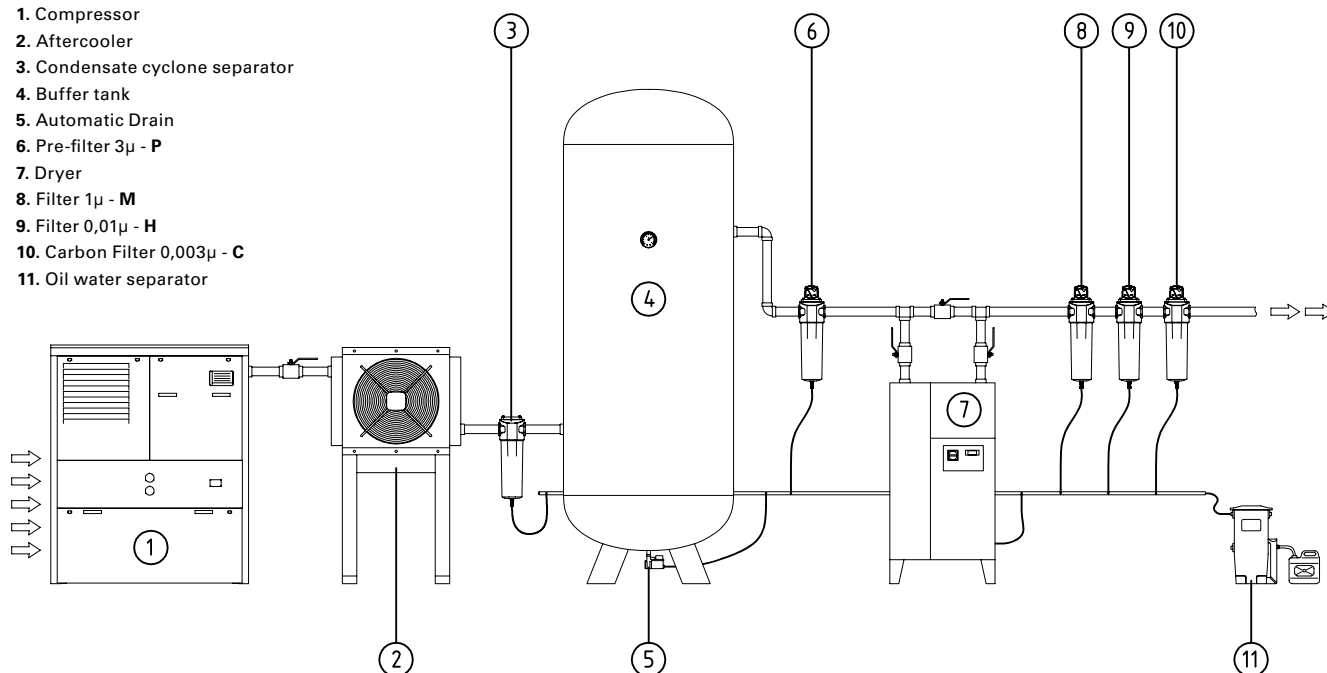
OPTIONAL - 5 - YEAR EXTENDED WARRANTY AVAILABLE

STANDARD WARRANTY FOR RANGE

DSU - DTU - HSU

COMPRESSOR ROOM EXAMPLE

1. Compressor
2. Aftercooler
3. Condensate cyclone separator
4. Buffer tank
5. Automatic Drain
6. Pre-filter 3μ - P
7. Dryer
8. Filter 1μ - M
9. Filter 0,01μ - H
10. Carbon Filter 0,003μ - C
11. Oil water separator



REFRIGERATED AIR DRYERS

DPU SERIES
DGU SERIES
DSU SERIES
DTU SERIES
DHU SERIES

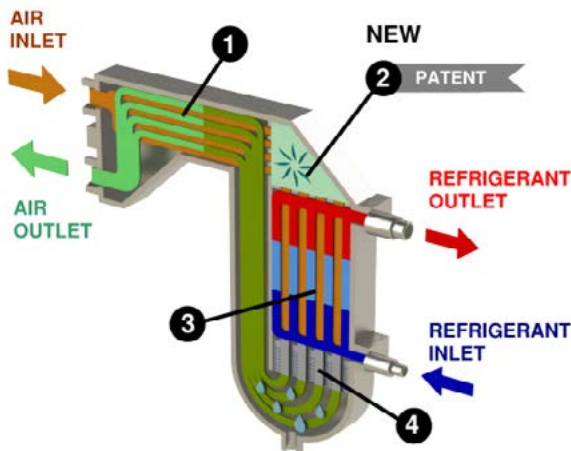
ATS has designed and manufactured a new range of refrigerated compressed air dryers that provide a combination of technology and performance



01. Functionality principle

The warm compressed air enters the air/air heat exchanger and becomes pre-cooled by the outgoing cold air. Secondly, the pre-cooled air passes through the evaporator where it is cooled to the required temperature. Thirdly, the condensate,

separated from the compressed air in the demister, is discharged automatically by the condensate drain. Finally the refrigerant and the temperature are regulated by a by-pass pressure valve.



Main features

- Low pressure drop
- High technology ultra-compact aluminum heat exchanger
- Easy maintenance
- Oversize components

exchanger

1. Air/air exchanger
2. Flow mixing chamber
3. Evaporator
4. Demister

Technical details of control panels

The control panels are user friendly, allowing the monitor of:

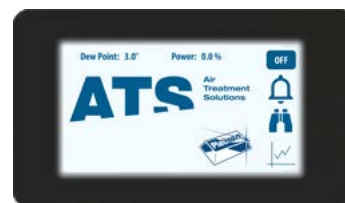
- Dew point
- Operating modes
- Drain management
- Alarm management



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02. Ultra compact heat exchanger

The main component of the refrigeration air dryers is the heat exchanger. This compact aluminium unit contains various stages of the treatment of compressed air.

03. Air/air exchanger.

Where the first phase is carried out.

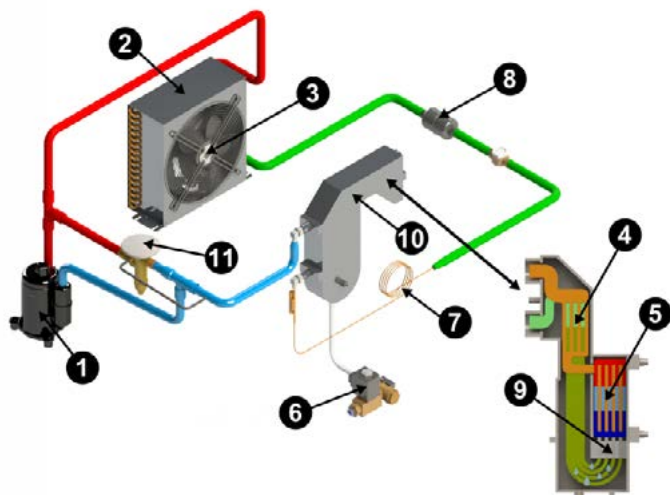
In this section the inlet air is pre-cooled and the outlet air is post- heated. This allows the reduction of energy consumption of the chiller circuit and reduces the possibility of condensate forming on the outer surface of the outlet pipe.

04. Flow mixing chamber.

Unlike other exchangers on the market, the unit designed has a flow mixing chamber at the air/air exchanger outlet. This passage is very important because the air temperatures at the exit of the air/air exchanger channels are not uniform. The mixing chamber enables the air flow to enter the evaporator channels at a uniform temperature, allowing an optimum exchange.

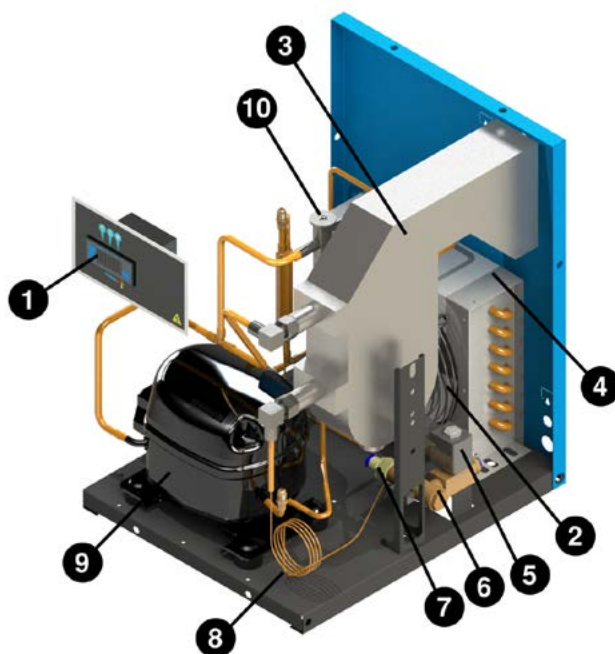
05. Evaporator.

The air cooled in the evaporator passes through a demister separator which allows the condensate to drain into a large collecting chamber. The design of both module and demister allows pressure drop values to be kept low.



circuit

1. Compressor
2. Condensator
3. Fan motor
4. Air/Air heat exchanger
5. Evaporator
6. Condensate discharge valve
7. Capillary tube
8. Dryer filter
9. Demister
10. Ultra compact heat exchanger
11. By-pass valve



open dryer

1. Controller
2. Fan motor
3. Heat exchanger
4. Condenser
5. Discharge valve
6. Valve strainer
7. Solenoid valve
8. Capillary tube
9. Compressor
10. Hot gas by-pass valve

DSU SERIES



With the DSU series, ATS has developed a product to meet the needs of its most demanding customers, and guaranteeing good value for money on the market. All models have an electronic board system, with a double sensor system that keeps the dew point and the condensing pressure under control. The aluminium heat exchanger has been studied and patented in order to offer the maximum

performance and minimum pressure drop. DSU series are suitable for small and medium-scale businesses. Silver series meet the needs of customers in search of best value for money.

ATS designed and developed the DSU series with total respect for the environment through the use of eco-friendly gases and recyclable materials.

Correction factor for operating pressure changes

Inlet air pressure (psig)	60	80	100	120	140	160	180	200
Factor	0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27

Correction factor for operating pressure changes

Ambient Temperature (°F)	80	90	100	110	115
Factor	1.10	1.07	1.00	0.83	0.70

Correction factor for inlet air temperature changes

Air Temperature (°F)	90	100	110	120	130
Factor	1.11	1.00	0.80	0.65	0.53

Correction factor for dew-point changes

Dew-point (°F)	37	41	44	50
Factor	0.91	1.00	1.10	1.26

Refrigerated air dryers

DSU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 5 (ISO 8573-1:2010)
- UL / CSA Certified

Max working conditions:
please refer to datasheet

Optional: No Loss Drain



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Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	Type	scfm	m³/h	NPT	W x L x H [in]	Kg	lbs	V/ph/F
DSU 15	R134a	15	25	3/4"	12 x 14.7 x 17.3	18	40	115 / 1 / 60
DSU 20	R134a	20	34	3/4"	12 x 14.7 x 17.3	18	40	115 / 1 / 60
DSU 35	R134a	35	59	3/4"	12 x 14.7 x 17.3	24	53	115 / 1 / 60
DSU 50	R134a	50	85	3/4"	13.6 x 16.1 x 18.9	21	46	115 / 1 / 60
DSU 75	R134a	75	127	1"	15.7 x 18.2 x 21.3	27	60	115 / 1 / 60
DSU 100	R134a	100	170	1"	15.7 x 18.2 x 21.3	30	66	115 / 1 / 60
DSU 125	R134a	125	211	1"	15.7 x 18.2 x 21.3	40	88	115 / 1 / 60
DSU 150	R134a	150	254	1"	15.7 x 18.2 x 21.3	41	90	115 / 1 / 60
DSU 175	R407C	175	297	1.1/2"	21.2 x 21.2 x 26.9	55	121	115 / 1 / 60
DSU 220	R407C	220	374	1.1/2"	20.7 x 24.7 x 44.2	72	159	230 / 1 / 60
DSU 300	R407C	300	510	1.1/2"	20.7 x 24.7 x 44.2	78	172	230 / 1 / 60

Optional: No Loss Drain

Notes: for special requirements please contact our technical department

Refrigerated air dryers

DGU SERIES



ATS, with the gold series, wants to introduce in the market a high-efficiency , high-reliability and energy save machines. The new and innovative electronic board, developed by our technical department, allows to control the entire machine functionality, from the simplest to the most complex functions, such as hard alarms (high and low temperature).

Main features are:

- reduced energy consumption thanks to a careful selection of components and management by electronic board
- low pressure drop in its category thanks to the heat exchanger made of aluminum with a mixing chamber (ATS patent) that allows the air mixing and thus increasing the exchanger yield while reducing the pressure drop at a minimum
- dew point maintained stable at 3°C under any conditions of use thanks to the work carried out simultaneously by both the electronic board and heat exchanger with high efficiency

- DGU series are suitable for small and large-scale businesses
- DGU dryers are equipped with electronic drain or programmable timer according to needs and requirements
- any other type of intelligent drain available upon request
- the only dryer on the market with a thermal protection switch on every model

Correction factor for operating pressure changes

Inlet air pressure (psig)	60	80	100	120	140	160	180	200
Factor	0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27

Correction factor for operating pressure changes

Ambient Temperature (°F)	80	90	100	105	110	115	120
Factor	1.11	1.09	1.00	0.94	0.87	0.78	0.69

Correction factor for inlet air temperature changes

Air Temperature (°F)	90	100	110	120	130	140	150	160
Factor	1.16	1.00	0.82	0.68	0.61	0.52	0.45	0.40

Correction factor for dew-point changes

Dew-point (°F)	37	41	44	50
Factor	1.00	1.09	1.19	1.37

Refrigerated air dryers

DGU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet air temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 4 (ISO 8573-1:2010)
- UL / CSA Certified

Max working conditions:

please refer to datasheet

Optional: No Loss Drain



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Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	Type	scfm	m³/h	NPT	W x L x H [in]	Kg	lbs	V/ph/F
DGU 21	R134a	21	34	3/4"	12 x 14.7 x 17.3	19	42	115 / 1 / 60
DGU 36	R134a	36	59	3/4"	12 x 14.7 x 17.3	21	46	115 / 1 / 60
DGU 55	R134a	55	85	3/4"	13.6 x 16.1 x 18.9	24	53	115 / 1 / 60
DGU 76	R134a	76	127	1"	15.7 x 18.2 x 21.3	35	77	115 / 1 / 60
DGU 105	R134a	105	170	1"	15.7 x 18.2 x 21.3	41	90	115 / 1 / 60
DGU 155	R407C	155	254	1.1/2"	21.2 x 21.2 x 26.9	55	121	115 / 1 / 60
DGU 176	R134a	176	297	1.1/2"	21.2 x 21.2 x 26.9	56	123	115 / 1 / 60
DGU 200	R407C	200	339	1.1/2"	20.7 x 24.7 x 44.2	72	158	230 / 1 / 60
DGU 305	R407C	305	510	1.1/2"	20.7 x 24.7 x 44.2	78	172	230 / 1 / 60
DGU 350	R407C	350	583	2"	26.6 x 28.1 x 56.1	78	172	230 / 1 / 60
DGU 400	R407C	400	678	2"	26.6 x 28.1 x 56.1	125	275	230 / 1 / 60
DGU 500	R407C	500	847	2"	26.6 x 28.1 x 56.1	140	308	460 / 3 / 60
DGU 600	R407C	600	1.017	2.1/2"	26.6 x 28.1 x 56.1	150	330	460 / 3 / 60
DGU 800	R407C	800	1.356	2.1/2"	26.6 x 28.1 x 56.1	155	341	460 / 3 / 60
DGU 1000	R407C	1.000	1.700	3"	25.9 x 53.3 x 62.1	250	550	460 / 3 / 60
DGU 1500	R407C	1.500	2.542	3"	25.9 x 53.3 x 62.1	300	660	460 / 3 / 60
DGU 1600	R407C	1.600	2.712	4" FLANGE	25.9 x 53.3 x 62.1	300	660	460 / 3 / 60
DGU 2000	R407C	2.000	3.400	5" FLANGE	25.9 x 53.3 x 62.1	400	880	460 / 3 / 60
DGU 2500	R407C	2.500	4.250	5" FLANGE	41.6 x 55.4 x 69.5	430	946	460 / 3 / 60
DGU 3000	R407C	3.000	5.100	6" FLANGE	41.6 x 55.4 x 69.5	460	1.012	460 / 3 / 60

Optional: No Loss Drain

Notes: for special requirements please contact our technical department

Refrigerated air dryers

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DGU WATER SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 4 (ISO 8573-1:2010)
- inlet water temperature: 90°F
- water pressure: Min. 23 psig
- UL / CSA Certified

Max working conditions:

please refer to datasheet



Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	Type	scfm	m³/h	NPT	W x L x H [mm]	Kg	lbs	V/ph/F
DGU 800W	R407C	800	1.356	2 1/2"	26.6 x 28.1 x 56.1	145	320	460 / 3 / 60
DGU 1000W	R407C	1.000	1.700	3"	25.9 x 53.3 x 62.1	230	507	460 / 3 / 60
DGU 1500W	R407C	1.500	2.542	3"	25.9 x 53.3 x 62.1	250	551	460 / 3 / 60
DGU 1600W	R407C	1.600	2.712	4" FLANGE	25.9 x 53.3 x 62.1	280	617	460 / 3 / 60
DGU 2000W	R407C	2.000	3.400	4" FLANGE	25.9 x 53.3 x 62.1	355	783	460 / 3 / 60
DGU 2500W	R407C	2.500	4.250	6" FLANGE	54.7 x 55.0 x 51.2	395	871	460 / 3 / 60
DGU 3000W	R407C	3.000	5.100	6" FLANGE	54.7 x 55.0 x 51.2	435	959	460 / 3 / 60

From model DGU 2000W naked version

Optional: No Loss Drain

Notes: for special requirements please contact our technical department

Refrigerated air dryers

DPU SERIES

Energy Saving



Up to 90% energy savings with the new DPU (dryer platinum) range

Over 35% of a dryer's life cycle cost is the energy it consumes. To cut energy costs, we offer compressed air dryers with DPU refrigeration with variable speed working cycle (Inverter). The DPU range entails significant savings, reducing the consumption of energy that produces fuels and protecting the environment for future generations.

How it works

Companies have a fluctuating demand for air, which is why we have been pioneers of inverter technology coupled with a dryer, to ensure that your processes receive the required air at the required time. This ensures that the dryer is not using more energy than necessary, effectively reducing energy consumption to over **90%**

Main features are:

- All features already present on the DGU series
- Variable speed compressor from **20%** to **110%** of the capacity
- Energy accumulation function with compressor OFF with load lower than **20%**
- Variable speed fan
- Touch screen control panel

Correction factor for operating pressure changes

Inlet air pressure (psig)	60	80	100	120	140	160	180	200
Factor	0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27

Correction factor for operating pressure changes

Ambient Temperature (°F)	80	90	100	105	110	115	120
Factor	1.11	1.09	1.00	0.94	0.87	0.78	0.69

Correction factor for inlet air temperature changes

Air Temperature (°F)	90	100	110	120	130	140	150	160
Factor	1.16	1.00	0.82	0.68	0.61	0.52	0.45	0.40

Correction factor for dew-point changes

Dew-point (°F)	37	41	44	50
Factor	1.00	1.09	1.19	1.37

Refrigerated air dryers

DPU SERIES

Energy Saving

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 4 (ISO 8573-1:2010)
- UL / CSA Certified

Max working conditions:

please refer to datasheet

Included: No Loss Drain



Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	Type	scfm	m³/h	NPT	W x L x H [in]	Kg	lbs	V/ph/F
DPU 500	R407C	500	850	2"	26.6 x 28.2 x 60.9	150	330	230 / 1 / 50-60
DPU 800	R407C	800	1.360	2"1/2"	26.6 x 28.2 x 60.9	165	363	460 / 3 / 60
DPU 1000	R407C	1.000	1.700	3"	25.9 x 45.5 x 67.3	260	572	460 / 3 / 60
DPU 1500	R407C	1.500	2.550	3"	25.9 x 45.5 x 67.3	280	616	460 / 3 / 60
DPU 2000	R407C	2.000	3.400	4" FLANGE	25.9 x 45.5 x 67.3	410	902	460 / 3 / 60
DPU 2500	R407C	2.500	4.250	6" FLANGE	41.6 x 55.4 x 69.5	430	946	460 / 3 / 60
DPU 3000	R407C	3.000	5.950	6" FLANGE	41.6 x 55.4 x 69.5	460	1.012	460 / 3 / 60
DPU 4000	R407C	4.000	6.800	6" FLANGE	83.1 x 55.4 x 69.5	855	1.885	460 / 3 / 60
DPU 5000	R407C	5.000	8.500	8" FLANGE	83.1 x 55.4 x 69.5	892	1.967	460 / 3 / 60

Modbus ready

Notes: for special requirements please contact our technical department

DTU SERIES



The DTU series incorporates the after-cooler, the dryer and, optionally, the pre-filter in a single machine; it is the evolution of the Gold series, updated to new technologies in order to work with high temperature.

All models are equipped with an all-aluminum heat exchanger, unique in its category, combined with a successful aluminum heat exchanger. Its design has been patented by ATS. This configuration allows also to install a complete pre-filter with automatic condensate drain.

The product has many features:

- very compact dimension
- high performance guaranteed even under extreme operating conditions (up to ambient temperature of 50°C and inlet air temperature up to 100°C)
- energy saving is enhanced by high-efficiency heat exchanger

Correction factor for operating pressure changes								
Inlet air pressure (psig)	60	80	100	120	140	160	180	200
Factor	0.79	0.91	1.00	1.07	1.13	1.18	1.23	1.27

Correction factor for operating pressure changes							
Ambient Temperature (°F)	80	90	100	105	110	115	120
Factor	1.22	1.11	1.00	0.94	0.89	0.83	0.78

Correction factor for inlet air temperature changes						
Air Temperature (°F)	140	160	170	180	195	210
Factor	1.26	1.13	1.07	1.00	0.90	0.81

Correction factor for dew-point changes				
Dew-point (°F)	37	41	44	50
Factor	0.78	0.90	1.00	1.12

Refrigerated air dryers

DTU SERIES

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Standard reference conditions ISO 7183:

- ambient temperature: 100°C
- inlet temperature: 140°C
- inlet air pressure: 100 psig
- inlet air temperature: 60°C
- dew point: Class 5 (ISO 8573-1:2010)
- UL / CSA Certified

Max working conditions:

please refer to datasheet



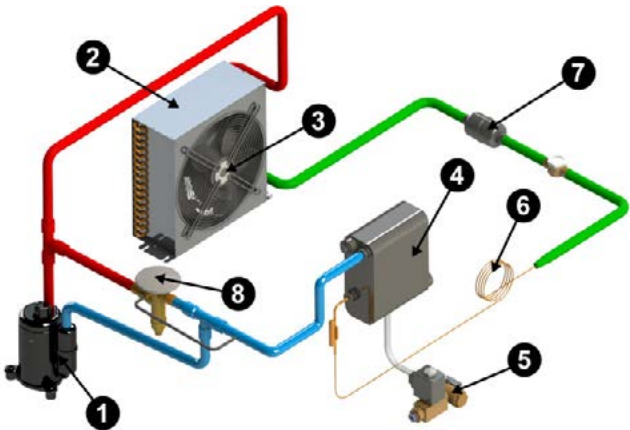
Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	Type	scfm	m³/h	NPT	W x L x H [in]	Kg	lbs	V/ph/F
DTU 25	R134a	25	42	3/4"	13.6 x 16.1 x 18.9	24	53	115 / 1 /60
DTU 40	R134a	40	68	1"	15.7 x 18.2 x 21.3	35	77	115 / 1 /60
DTU 60	R134a	60	102	1"	16.9 x 20.9 x 22.4	40	88	115 / 1 /60
DTU 75	R134a	75	127	1"	16.9 x 20.9 x 22.4	41	90	115 / 1 /60
DTU 100	R134a	100	170	1"	20.1 x 28.0 x 29.9	58	128	115 / 1 /60
DTU 127	R134a	127	216	1"	20.1 x 28.0 x 29.9	60	132	115 / 1 /60

DHU SERIES 652 PSI



ATS has designed and manufactured a new range of refrigerated compressed air dryers for high pressure application. **DHU** High pressure refrigerated air dryers are available in operating up to 651 psi. Unique mono block stainless steel heat exchanger. Heavy duty construction, reliable and long lasting for high pressure applications. **DHU** series have the advantages of size reducing and anti-corrosion.

DHU series is a perfect solutions for refrigerated air dryers applying in PET blow molding, pharmaceutical, injection molding and other application that require high pressure compressed air.



Circuit

- 1. Compressor
- 2. Condenser
- 3. Fan motor
- 4. High pressure heat exchanger
- 5. Condensate discharge valve
- 6. Capillary tube
- 7. Dryer filter
- 8. By-pass valve

Correction factor for operating pressure changes						
Inlet air pressure (bar)	362	435	507	580	652	
Factor	0,80	0,88	0,94	1	1,05	

Correction factor for inlet temperature changes								
Air temperature (°C)	90	100	110	120	130	140	150	160
Factor	1.16	1.00	0.82	0.68	0.61	0.52	0.45	0.40

Correction factor for ambient temperature changes							
Ambient temperature (°C)	80	90	100	105	110	115	120
Factor	1.11	1.09	1.00	0.94	0.87	0.78	0.69

Correction factor for dew-point changes				
Dew-point (°C)	37	41	44	50
Factor	1.00	1.09	1.19	1.37

Refrigerated air dryers

DHU SERIES 652 PSI

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Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 652 psig
- dew point: Class 4 (ISO 8573-1:2010)
- UL / CSA Certified

Max working conditions:

please refer to datasheet



Model	Refrigerant	Flow - Rate		Connection	Dimension	Weight		Power-Supply
		scfm	m³/h			Kg	lbs	
	Type			NPT	W x L x H [in]			V/ph/F
DHU 50	R134a	50	85	3/4"	13.6 x 16.1 x 18.9	21	46	115 / 1 / 60
DHU 90	R134a	90	153	3/4"	15.7 x 18.2 x 21.3	27	60	115 / 1 / 60
DHU 100	R134a	100	170	3/4"	15.7 x 18.2 x 21.3	35	77	115 / 1 / 60
DHU 150	R134a	150	255	3/4"	15.7 x 18.2 x 21.3	41	90	230 / 1 / 60
DHU 210	R407C	210	357	1"	21.2 x 21.2 x 26.9	55	121	230 / 1 / 60
DHU 370	R407C	370	629	1"	20.7 x 24.7 x 44.2	72	159	230 / 1 / 60
DHU 650	R407C	650	1.105	1"	20.7 x 24.7 x 44.2	78	172	230 / 1 / 60
DHU 750	R407C	750	1.274	2"	26.6 x 37.5 x 61.4	190	419	460 / 3 / 60
DHU 1200	R407C	1.200	2.039	2"	25.9 x 45.5 x 67.3	265	584	460 / 3 / 60
DHU 1850	R407C	1.850	3.144	2"	25.9 x 45.5 x 67.3	280	617	460 / 3 / 60

Optional: DGH

optional converter TTL/RS485

Notes: for special requirements please contact our technical department

DESICCANT DRYERS HGU - HLU SERIES

HSU SERIES



Several industrial and process compressed air applications must be completely free of all suspended water vapor. A refrigeration dryer is suitable for most general applications, but for those requiring absolutely dry air, an adsorption dryer is the only solution.

01. Applications

A refrigeration dryer is suitable for most general applications, but for those requiring absolutely dry air, an adsorption dryer is the only solution. Where compressed air applications must be completely free of all suspended water vapor. Some of these applications are: outside air lines & instrumentation subject to freezing conditions, air conveying of hygroscopic materials, special manufacturing processes, chemical, pharmaceutical & laboratory equipment. For these applications, a heatless adsorption dryer will provide a constant pressure dew point of -40°C or , for special applications, even -70°C .

02. Operation

The compressed air flows upwards within one tower, while the second tower is regenerated with a stream of dried air. Then the cycle is automatically reversed. In operation, the activated alumina adsorbs a quantity of moisture in proportion to its weight and depending on working conditions. Complete drying cycle switch normally every 10 minutes. This adsorbing phase is followed by a depressurising and a regeneration phase. A portion of dried air - from 7 to 15% - is taken from the working receiver's outlet and directed to the tower to be regenerated. The dried air, thanks to its low humidity content and the expansion that occurs inside the second depressurised receiver, causes the

drying material "washing" by removing its humidity. The humid purge air is vented to atmosphere through the purge valve and muffler. The regenerated tower is then gradually re-pressurised before it reverts to drying the compressed air stream.

03. Main features

- extremely reduced size and weight, ease of assembly thanks to the aluminum design that guarantees excellent resistance to corrosion
- upon request, supplied with coalescing filter H type ($0,01\mu$ - $0,01$ mg/m³) on the inlet and filter M type ($0,1\mu$ - $0,1$ mg/m³) on the outlet. Both filters are fitted with a differential pressure indicator
- CE code available depending on model
- slow re-pressurization prevents bed lifting, abrasion and extends desiccant life
- easy mounting of both pre- and after filters
- pneumatic valve exclusive system; easy to maintain and purposely designed for heavy duty conditions
- innovative design, studied for End Users
- microprocessor control panel with regulation control and operation cycle, to adapt the working conditions (dew point) to the end user's requirements
- three working systems:
 1. Standard
 2. Energy Saving (opt.)
 3. Combined (directly connected to the compressor)

04. Controls and instrumentation

- electronic controller with microprocessor to set time and regeneration cycles (Energy Saving, opt)
- display showing dryer operating conditions
- working pressure control gauge (opt.)

06. Energy saving

In order to select the right adsorption dryer it is important to know the actual working condition and air consumption of the system. Based on the standard working conditions listed in the technical data section and the below mentioned correction factors you will be able to select the correct model, suitable for the application.

06. Energy saving

The standard 10-minutes cycle is designed for full load operating conditions and the standard purge rate of 15% is normally "consumed" regardless of whether the dryer is operating on full or partial load. Considerable energy savings can be obtained by reducing this purge loss in proportion

to the real working conditions. A probe, located on the dryer outlet, checks the pressure dew point and keeps the drying column working until the outlet compressed air reaches the chosen pressure dew point. The working cycles are now automatically modified and the saving is directly proportional to the load reduction.

07. How it works

It takes advantage from the use of a hygrometric sensor. One of the most important features of this technology is the high speed of the sensor in measuring small variations, a dew point measure in real time during the test.



Correction factor for operating pressure changes

Inlet air pressure (psig)	60	70	80	90	100	110	120	130	140	150
Factor	0.65	0.74	0.83	0.91	1.00	1.12	1.16	1.20	1.25	1.29

Correction factor for inlet air temperature changes

Air Temperature (°F)	90	95	100	105	110	115	120
Factor	1.07	1.04	1.00	0.86	0.73	0.64	0.55

Correction factor for dew-point changes

Dew-point (°F)	-13	-22	-40
Factor	1.10	1.04	1.00



Dessicant dryers

HGU SERIES - 40°F

Alluminium

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Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 2 (ISO 8573-1)
- CRN Approved

Max working conditions:

please refer to datasheet



HGU from 282 to 2070

HGU from 24 to 188

Model	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	scfm	m ³ /h			Kg	lbs	
HGU 24	24	40	3/4"	7.5 x 18.5 x 24.8	37	81	115 to 230 VAC - 60 Hz
HGU 47	47	80	3/4"	7.5 x 18.5 x 40.6	55	121	115 to 230 VAC - 60 Hz
HGU 71	71	120	3/4"	7.5 x 18.5 x 56.3	75	165	115 to 230 VAC - 60 Hz
HGU 94	94	160	3/4"	7.5 x 18.5 x 68.2	90	198	115 to 230 VAC - 60 Hz
HGU 142	142	240	1"	14.0 x 19.7 x 57.1	155	341	115 to 230 VAC - 60 Hz
HGU 188	188	320	1"	14.0 x 19.7 x 69.0	185	407	115 to 230 VAC - 60 Hz
HGU 282	282	480	1" 1/2"	31.9 x 19.7 x 76.8	306	674	115 to 230 VAC - 60 Hz
HGU 376	376	640	1" 1/2"	38.2 x 19.7 x 76.8	410	903	115 to 230 VAC - 60 Hz
HGU 471	471	790	2"	45.7 x 19.7 x 76.8	525	1.157	115 to 230 VAC - 60 Hz
HGU 564	564	960	2"	52.4 x 19.7 x 76.8	630	1.389	115 to 230 VAC - 60 Hz
HGU 659	659	1.120	2"	58.7 x 19.7 x 76.8	750	1.653	115 to 230 VAC - 60 Hz
HGU 753	753	1.280	2" 1/2	65.8 x 19.7 x 76.8	860	1.896	115 to 230 VAC - 60 Hz
HGU 847	847	1.440	2" 1/2	74.1 x 19.7 x 76.8	990	2.182	115 to 230 VAC - 60 Hz
HGU 1035	1.035	1.760	2" 1/2	80.8 x 19.7 x 76.8	1.120	2.469	115 to 230 VAC - 60 Hz
HGU 1317	1.317	2.240	3"	66.8 x 43.3 x 76.8	1.650	3.637	115 to 230 VAC - 60 Hz
HGU 1505	1.505	2.560	3"	83.7 x 43.3 x 76.8	1.890	4.166	115 to 230 VAC - 60 Hz
HGU 1693	1.693	2.880	4" FLANGE	90.6 x 43.3 x 76.8	2.180	4.806	115 to 230 VAC - 60 Hz
HGU 2070	2.070	3.520	4" FLANGE	94.6 x 43.3 x 76.8	2.460	5.423	115 to 230 VAC - 60 Hz

Modbus ready



Dessicant dryers

HGU SERIES - 40°F

Alluminium- Option

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HGU from 282 to 2070

HGU from 24 to 188

Model	Mechanical gauge	Pressure transducer	Filtration Kit <small>filter H + auto drain + filter M + manual drain + diff. gauges</small>	Desiccant replacement kit
HGU 24			FGO.K0080	HGO.K0040
HGU 47			FGO.K0080	HGO.K0080
HGU 71			FGO.K0120	HGO.K0120
HGU 94			FGO.K0160	HGO.K0160
HGU 142			FGO.K0320	HGO.K0240
HGU 188			FGO.K0320	HGO.K0320
HGU 282	STANDARD	ON REQUEST	FGO.K0640	HGO.K0480
HGU 376	STANDARD	ON REQUEST	FGO.K0640	HGO.K0640
HGU 471	STANDARD	ON REQUEST	FGO.K0800	HGO.K0790
HGU 564	STANDARD	ON REQUEST	FGO.K1200	HGO.K0960
HGU 659	STANDARD	ON REQUEST	FGO.K1200	HGO.K1120
HGU 753	STANDARD	ON REQUEST	FGO.K1800	HGO.K1280
HGU 847	STANDARD	ON REQUEST	FGO.K1800	HGO.K1440
HGU 1035	STANDARD	ON REQUEST	FGO.K1800	HGO.K1760
HGU 1317	STANDARD	ON REQUEST		HGO.K2240
HGU 1505	STANDARD	ON REQUEST		HGO.K2560
HGU 1693	STANDARD	ON REQUEST		HGO.K2880
HGU 2070	STANDARD	ON REQUEST		HGO.K3520

Dew point meter energy saving option available on request

Filtration kit as option upon request for the entire range

Notes: for special requirements please contact our technical department

Desiccant dryers

HLU SERIES - 100°F

Alluminium

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- inlet temperature: 100°F
- inlet air pressure: 100 psig
- dew point: Class 1 (ISO 8573-1)
- CRN Approved

Max working conditions:

please refer to datasheet

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HLU from 221 to 1552



HLU from 18 to 141

Model	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	scfm	m³/h			Kg	lbs	
HLU 18	18	30	3/4"	7.5 x 18.5 x 24.8	37	82	110 to 230 VAC - 60 Hz
HLU 35	35	60	3/4"	7.5 x 18.5 x 40.6	55	121	110 to 230 VAC - 60 Hz
HLU 53	53	90	3/4"	7.5 x 18.5 x 56.3	75	165	110 to 230 VAC - 60 Hz
HLU 71	71	120	3/4"	7.5 x 18.5 x 68.2	90	198	110 to 230 VAC - 60 Hz
HLU 106	106	180	1"	14.0 x 19.7 x 57.1	155	341	110 to 230 VAC - 60 Hz
HLU 141	141	240	1"	14.0 x 19.7 x 69.0	185	407	110 to 230 VAC - 60 Hz
HLU 221	221	360	1" 1/2"	31.9 x 19.7 x 76.8	306	674	110 to 230 VAC - 60 Hz
HLU 283	283	480	1" 1/2"	38.2 x 19.7 x 76.8	410	903	110 to 230 VAC - 60 Hz
HLU 353	353	600	2"	45.7 x 19.7 x 76.8	525	1.157	110 to 230 VAC - 60 Hz
HLU 423	423	720	2"	52.4 x 19.7 x 76.8	630	1.389	110 to 230 VAC - 60 Hz
HLU 494	494	840	2"	58.7 x 19.7 x 76.8	750	1.653	110 to 230 VAC - 60 Hz
HLU 564	564	960	2" 1/2"	65.8 x 19.7 x 76.8	860	1.895	110 to 230 VAC - 60 Hz
HLU 635	635	1.080	2" 1/2"	74.1 x 19.7 x 76.8	990	2.182	110 to 230 VAC - 60 Hz
HLU 776	776	1.320	2" 1/2"	80.8 x 19.7 x 76.8	1.120	2.469	110 to 230 VAC - 60 Hz
HLU 988	988	1.680	3"	66.8 x 43.3 x 76.8	1.650	3.637	110 to 230 VAC - 60 Hz
HLU 1129	1.129	1.920	3"	83.7 x 43.3 x 76.8	1.890	4.166	110 to 230 VAC - 60 Hz
HLU 1270	1.270	2.160	4" FLANGE	90.6 x 43.3 x 76.8	2.180	4.806	110 to 230 VAC - 60 Hz
HLU 1552	1.552	2.640	4" FLANGE	94.6 x 43.3 x 76.8	2.460	5.423	110 to 230 VAC - 60 Hz

Modbus ready

Filtration kit as option upon request for the entire range

Notes: for special requirements please contact our technical department

Desiccant dryers

HLU SERIES - 100°F

Alluminium- Option

HLU from 221 to 1552



HGO from 18 to 141

Model	Mechanical gauge	Pressure transducer	Filtration kit (filter H + auto drain + filter M + manual drain + diff. gauges)	Desiccant replacement kit
HLU 18			FGO.K0080	HGL.K0040
HLU 35			FGO.K0080	HGL.K0080
HLU 53			FGO.K0120	HGL.K0120
HLU 71			FGO.K0160	HGL.K0160
HLU 106			FGO.K0320	HGL.K0240
HLU 141			FGO.K0320	HGL.K0320
HLU 221	STANDARD	ON REQUEST	FGO.K0640	HGL.K0480
HLU 283	STANDARD	ON REQUEST	FGO.K0640	HGL.K0640
HLU 353	STANDARD	ON REQUEST	FGO.K0800	HGL.K0790
HLU 423	STANDARD	ON REQUEST	FGO.K1200	HGL.K0960
HLU 494	STANDARD	ON REQUEST	FGO.K1200	HGL.K1120
HLU 564	STANDARD	ON REQUEST	FGO.K1800	HGL.K1280
HLU 635	STANDARD	ON REQUEST	FGO.K1800	HGL.K1440
HLU 776	STANDARD	ON REQUEST	FGO.K1800	HGL.K1760
HLU 988	STANDARD	ON REQUEST		HGL.K2240
HLU 1129	STANDARD	ON REQUEST		HGL.K2560
HLU 1270	STANDARD	ON REQUEST		HGL.K2880
HLU 1552	STANDARD	ON REQUEST		HGL.K3520

Dew point meter energy saving option available on request

Filtration kit as option upon request for the entire range

Notes: for special requirements please contact our technical department

Heatless adsorption dryers

HSU SERIES

Standard reference conditions ISO 7183:

- working pressure: 100 psg
- inlet air temperature: 100 F
- dew point: Class 2 (ISO 8573-1)
- non-continuous use

Max working conditions:
please refer to datasheet



Model	Flow - Rate		Max pressure	Connection	Dimension	Weight		Power-Supply
	scfm	m³/h				Kg	lbs	
HSU 4	4	6	145	1/4"	8.7 x 15.4 x 4.9	5,5	12.2	110 to 230 VAC - 60 Hz
HSU 7	7	12	145	1/4"	9.1 x 18.9 x 4.9	6.6	14.5	110 to 230 VAC - 60 Hz
HSU 14	14	24	145	3/8"	10.6 x 26 x 5.5	12.5	28	110 to 230 VAC - 60 Hz

Filtration kit as option upon request for the entire range
Notes: for special requirements please contact our technical department

OIL WATER SEPARATORS OWU SERIES

ATS offers wide range of solutions which, by working together in perfect harmony, ensure a compressed air perfectly free from condensate, oil and other impurities. High efficiency, reduced downtime/maintenance costs and improved quality product to meet individual customers' needs. Advanced patented technologies ensuring the most energy efficient solution.



Condensate treatment:

During the standard function, compressors produce huge quantities of condensate contaminated by oil. This liquid cannot be discharged outdoors and has to be treated by a specialized company in order to protect the environment. ATS

developed the Gold series of oil water separators OWU, which remove oil contaminants from the condensate, in order to discharge the water directly in the drainage.

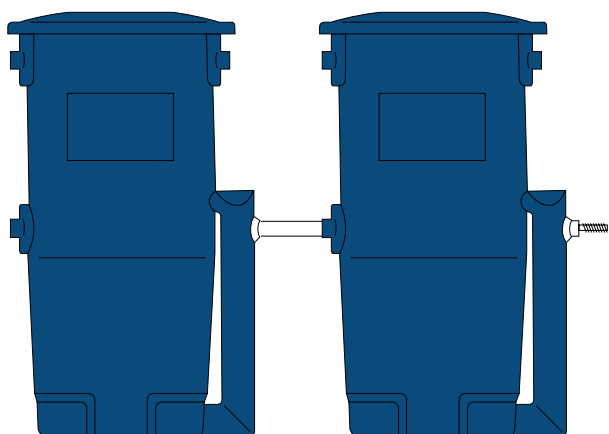
This is not a normal oil water separator: no decantation tank; no external tank to collect oil; simple, fast and effective condensate treatment. The unique advanced design and bag material of high quality, assure an extreme level of filtration.

The OWU separators offer:

- high performances also for new synthetic oils for compressors, that cannot be separated from condensate by traditional ways, such as decantation
- simplified maintenance and consequent reduction of maintenance costs
- lower concentrations of oil, less than 10 ppm/l or lower (by a regular replacement of bags)
- compact dimensions and easy installation
- TWIN Solution, the only separators that can work by this particular combination with two or more separators
- ecological and user-friendly material
- high reliability: the production in our factories in compliance with high quality standard, skilled workers and high quality materials assure high reliability and performances

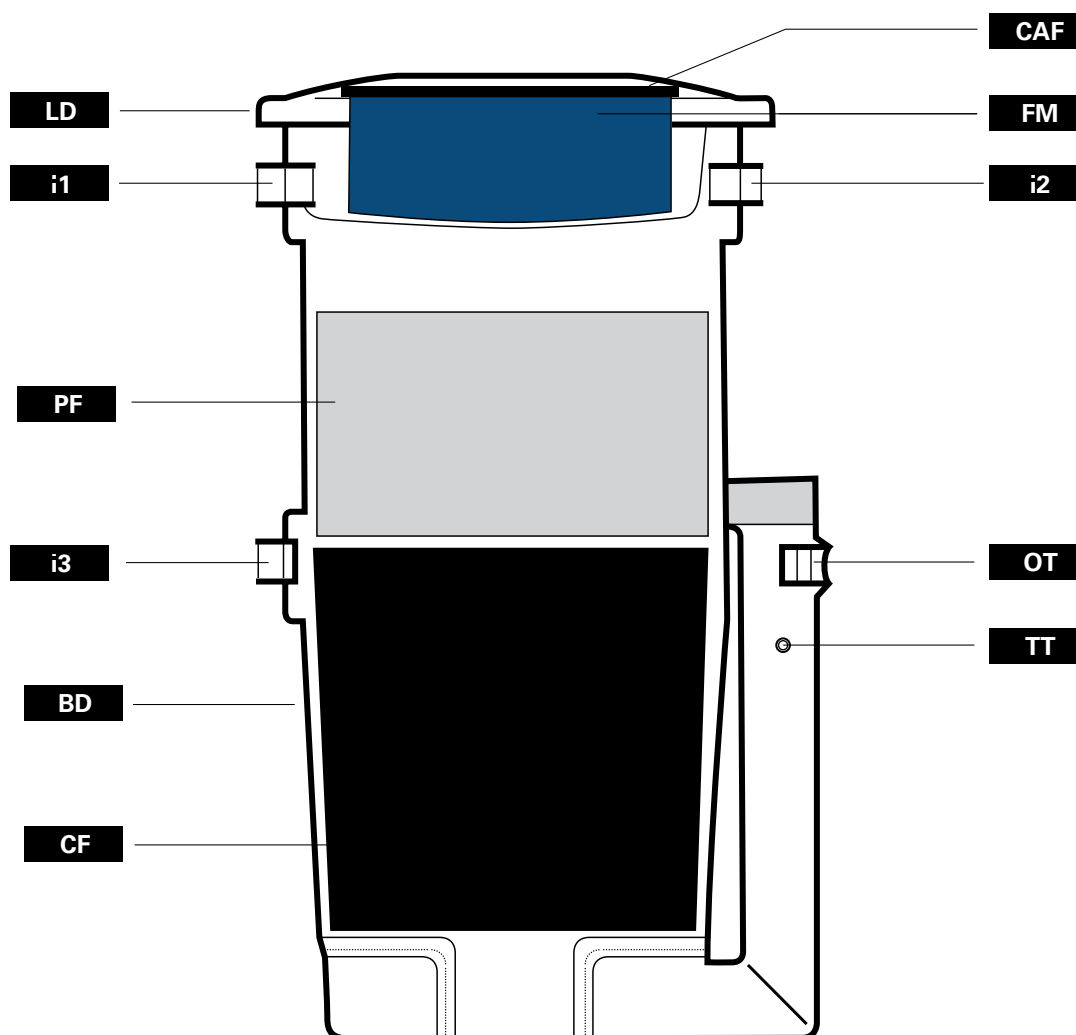
Components and operation

- depressurization chamber removable and directable to allow front or rear connection to drain for an easy installation; depressurization chamber containing an activated carbon filter to avoid atmospheric contamination
- heavy-duty monobloc plastic tank to avoid any leakage
- synthetic pre-filter to assure a long life period and protection to carbon filters
- over-sized activated carbon filter



TWIN system:

- possibility to increase double or triple quantities of treated condensate or increase the quality of drain water
- possibility to install it at any time, not only during the first installation
- sole separator that can work as single or double column



TAG	DESCRIPTION	TAG	DESCRIPTION
LD	lid	CAF	carbon air filter
i1	inlet 1	FM	foam
PF	pre-filter	i2	inlet 2
i3	inlet 3	OT	outlet
BD	separator body	TT	test connection
CF	carbon filter		

- Condensate is introduced in separator through depressurisation chamber of lid (LD)
- Then condensate goes down in separator tank (BD) through the hole of lid (LD)
- Prefilter bag (PF) and activated carbon bag (CF) purify condensate from oil and solid particles
- After this process, condensate can be drained in sewers or can be treated in compliance with National laws

Oil water separators

OWU SERIES

Data refer to the following nominal conditions:

- ambient temperature: 100°F
- inlet air pressure: 100 psig

Consider to oversize the separators if ambient temperature and humidity are higher than nominal ones.

Nominal data considered for screw compressors.



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Model	Compressor combination	Flow - Rate		Connection	Dimension	Weight	
	HP	scfm	m ³ /h	NPT	H x D [in]	kg	lbs
OWU 24	1 / 4	24	40	0,39 inch	17.7 x 3.9	1	2.2
OWU 47	5 / 10	47	80	0,39 inch	29.5 x 3.9	2	4.4
OWU 71	11 / 15	71	120	0,39 inch	41.3 x 3.9	3	6.6
OWU 100	10 / 25	100	170	1/2"	18.1 x 8.7	5	11
OWU 300	30 / 60	300	510	1/2"	23.6 x 11.8	11	24
OWU 750	80 / 150	750	1.275	3/4"	36.6 x 17.7	29	64
OWU 1500	150 / 270	1.500	2.550	3/4"	36.6 x 17.7 (x2)	58	128
OWU 2117	270 / 350	2.117	3.600	3/4"	36.6 x 17.7 (x2)	67	147
OWU 3000	300 / 540	3.000	5.100	3/4"	36.6 x 17.7 (x2)	67	147
OWU 4237	540 / 700	4.237	7.200	3/4"	36.6 x 17.7 (x2)	67	147

REPLACEMENT KIT

OWU 100K	170	100	2	4,4
OWU 300K	510	300	6	13
OWU 750K	1.275	750	10	22
OWU 1500K	2.550	1.500	19	42
OWU 2117K	3.600	2.117	25	62
OWU 3000K	3.000	5.100	38	84
OWU 4237K	4.237	7.200	56	124

Notes: for special requirements please contact our technical department

REFINER ORU SERIES

ATS is proud to introduces on the market ORU a refiner filter that installed after the separator (OWU) is able to reduce the concentration of oil and hydrocarbons still present in the condensate, reducing them by about 90%.



ORU uses a special nano-structured material, mainly composed of carbon, completely inert and stable against chemically aggressive substances and ecologically indifferent (it has no impact on the environment). During the purification process through ORU, called nano-filtration, no chemical reactions occur avoiding the formation of any contaminants.

The result of the filtration of the OWU separator coupled to the OWU refiner is a particularly clean water able to respect the environment around us like never before.

Oil water separators

ORU SERIES

Max working conditions:
please refer to datasheet



Model	m ³ / h	Connection	Dimension		Weight	
			H x D [in]		kg	lbs
ORU 100K	170	1/2"	7.9 x 5.3		1	2.2
ORU 300K	510	1/2"	9.8 x 5.3		1.5	3.3
ORU 750K	1275	3/4"	12.6 x 5.3		2	4.4

Replacement kit
ORU 100K
ORU 300K
ORU 750K

FGU FILTERS SERIES

The compressed air contains harmful solid, liquid and vaporous contaminants that can damage pneumatic equipment, control and instruments. The removal of these contaminants is necessary to ensure equipment maintenance and keep the production operations efficient.



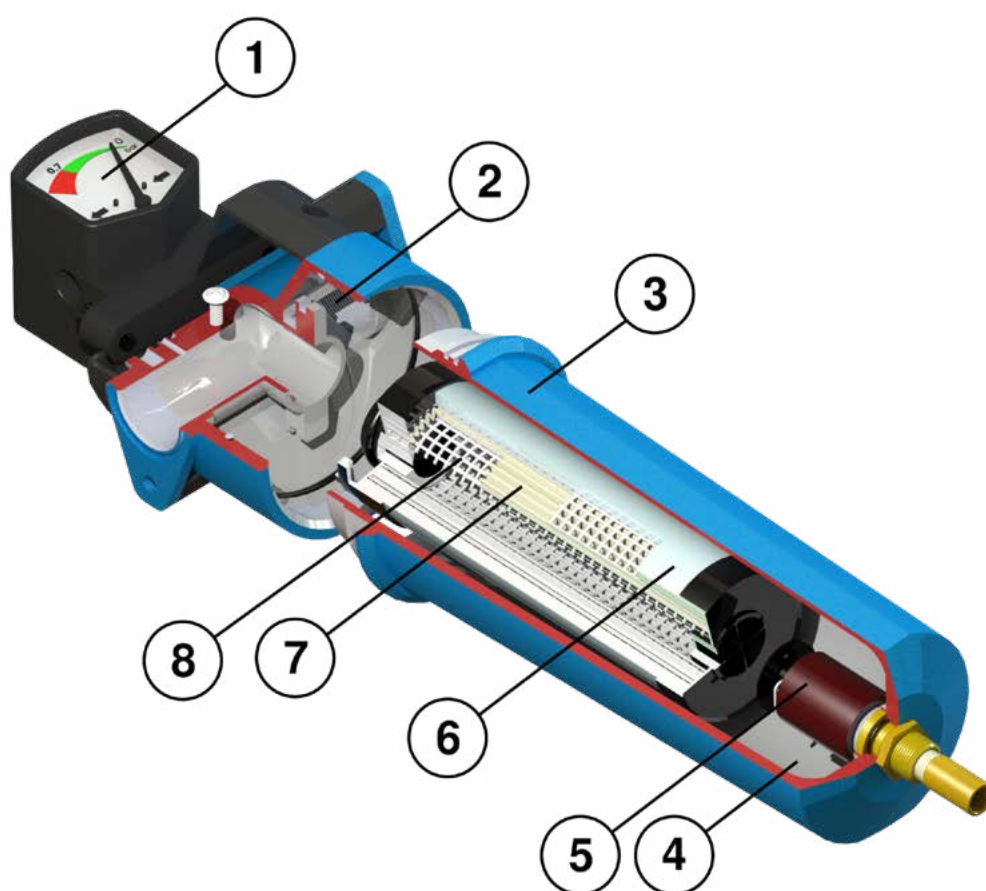
Normally compressed air contains high concentrations of dust, oil, moisture and other impurities. These contaminants can lead to high-maintenance costs and result in damage to equipment and finished products. Gold Filters FGO have been specifically designed to prevent these problems, by offering a wide range of filters for compressed air able to satisfy the most various industry needs. The secret of FGO Gold is the high efficiency of the elements which is able to offer a high capability of retention (99,999%) and very low pressure drops. The final result is an extremely purified compressed air and low operating costs.

Features:

- wide range of models and filtration level for every kind of industry application
- certified performances
- the body configuration, with an innovative design, able to reduce pressure drops assuring high energy savings
- increase of efficiency and reduction of productions stops
- reduction of maintenance costs
- tool and machinery protection

Filter

1. Differential pressure gauge
2. O-ring bowl seal
3. Diecasting aluminium housing chromated with polyester epoxy powder coating for corrosion resistance
4. Large capacity reservoir allow large condensate volume
5. Auto drain
6. Drainage layer
7. High efficiency filtration media
8. Support cylinder



The differential pressure gauge shows the level of element saturation.

Separator body in aluminum, chromo phosphate and externally powder painted.

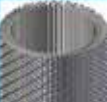




The closure provided by seal cannot be opened while the filter is under pressure, offering additional protection.

All filters are available with a complete accessories list: differential gauge, all kind of drains, as automatic, manual, timed, floating and the exclusive thermodynamic drain. The green loss (AGD) zero loss drain, completes the range of accessories for Gold filters.

In order to keep the compressed air quality standards, filter elements have to be replaced with original ATS elements every 6/12 months depending on ambient and compressor. The replacement of filter elements are fundamental to assure:

- the maintenance of high performances
- quality of compressed air in compliance with international standard
- low operating costs
- protection of components and process downstream. Omitted replacement of elements causes an increase of pressure drop through system and subsequently an increase of operating cost



Degrees of filtration		Filters	
		Solid	Oil
P		Filtration by interception For particles up to 3 micron. P is the degree specifically designed to remove of dust before and after the dryer	
M		Filtration by coalescence principle For particles up to 1 micron	For concentration up to 0,1 mg/m³
H		Filtration by coalescence principle For particles up to 0,01 micron	For concentration up to 0,01mg/m³
C		Filtration by adsorption process	Maximum concentration up to 0,003 mg/m³
		FGC full carbon For particles up to 1 micron	Maximum concentration up to 0,003 mg/m³

P	General filtration	Removal of liquid and solid particles, protection of vacuum pump; blowers; refrigerant dryers; pneumatic tools
P+M	Fine filtration	Pneumatic tools and actuators; air conveyors; compressed air engines; sandblasting; naval storage and freight; filtration downstream vacuum pump; automotive; refinery; machining; prefiltration of adsorption dryer (oil-free)
P+M+H	Oil free filtration	Air conveyors; painting; packaging air; transport; instruments; manometers; pneumatic precision instruments; electronical instruments; prefiltration of adsorption dryers (oil-free)
P+M+H+C*	Critical filtration	Medical; pharmacology; membrane production; not critical breathable air (without removal of CO/CO2); critical instrumentation; removal of smell and taste; food and drink production or packaging of food and drink; beer production; dairy production

The combination is not always adequate for critical use: For example this solution is not enough to obtain sterile air.

Standard reference conditions ISO8573-1

Filters

FGU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- working pressure: 100 psig
- Inlet air temperature: 68°F
- CRN Approved

Max working conditions:

please refer to datasheet

$P = 3\mu$ (class 3 ISO8573-1)

$M = 1\mu$ solid / 0,1 mg/m³ oil (class 2 ISO8573-1)

$H = 0,01\mu$ solid / 0,01 mg/m³ oil (class 1 ISO8573-1)

$C = 0,003\mu$ mg/m³ oil (class 1 ISO8573-1)



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Model	Flow - Rate		Connection	Dimension	Element Model
	scfm	m ³ /h			
FGU 20	20	34	1/2"	3.74 x 8.07	0034 E
FGU 21	21	36	3/4"	3.74 x 8.07	0034 E
FGU 35	35	59	1/2"	3.74 x 8.07	0077 E
FGU 45	45	77	3/4"	3.74 x 8.07	0077 E
FGU 70	70	119	3/4"	3.74 x 10.06	0119 E
FGU 100	100	170	3/4"	3.74 x 10.06	0170 E
FGU 125	125	212	1"	4.92 x 11.8	0212 E
FGU 175	175	299	1"	4.92 x 11.8	0306 E
FGU 180	180	306	1.1/2"	4.92 x 11.8	0306 E
FGU 265	265	451	1.1/2"	4.92 x 15.0	0451 E
FGU 370	370	629	1.1/2"	4.92 x 15.0	0629 E
FGU 550	550	934	2"	6.7 x 20.0	0934 E
FGU 700	700	1.325	2"	6.7 x 27.0	1325 E
FGU 1059	1.059	1.800	2.1/2"	7.87 x 38.4	1800 E
FGU 1281	1.281	2.176	3"	7.87 x 38.4	2176 E
FGU 1589	1.589	2.700	3"	8.85 x 39.64	2700 E
FGU 1706	1.706	2.900	4"	8.85 x 39.64	2900 E

*Element included, drain and differential gauge excluded

Correction factor for operating pressure changes							
Inlet air pressure psi	43	72	100	130	160	190	218
Factor	0.55	0.80	1.00	1.13	1.25	1,35	1,43

Notes: for special requirements please contact our technical department

Full carbon oil removal filters

FCU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- working pressure: 100 psig
- Inlet air temperature: 68°F
- CRN Approved

Max working conditions:
please refer to datasheet



Model	Code	Flow - Rate		Connection	Dimension	Element Model
		scfm	m³/h			
FCU 45		45	78	1"	4.9 x 11.8	0078 E
FCU 71		71	120	1"	4.9 x 11.8	0120 E
FCU 99		99	168	1.1/2"	4.9 x 15	0168 E
FCU 124		124	210	1.1/2"	4.9 x 15	0210 E

*Element included, drain and differential gauge excluded

ATS depth oil removal filters are consist of an activated carbon tube and a part of dust removal cartridge. That can be absorb tiny oil vapour, cause the residual oil less 0,003 ppm at finally.
Applications as: plating, laser cutting, medicine, precision electron.

Carbon tower

FTU SERIES

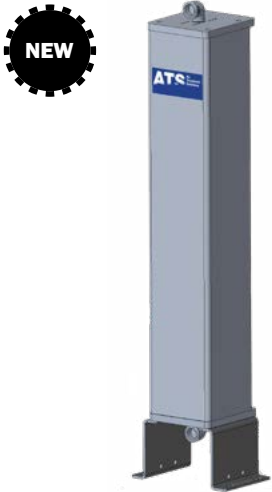
- Standard reference conditions ISO 7183:**
 - ambient temperature: 77°F
 - working pressure: 100 psig
 - Inlet air temperature: 68°F
- Max working conditions:**
 please refer to datasheet

Residual oil <0,003 mg / m3

Note: With filter FGU type Mintegrated

Model	Flow - Rate		Connection	Dimension
	scfm	m³/h		
			NPT	A x B+D [in]
FTU 35	35	60	3/4"	9,2 x 24,8
FTU 71	71	120	3/4"	9,2 x 40,5
FTU 94	94	160	3/4"	9,2 x 56,2
FTU 142	142	240	1-1/2"	18,5 x 40,5
FTU 210	210	360	1-1/2"	18,5 x 56,2
FTU 423	423	720	2"	15,7 x 59,8
FTU 635	635	1080	2"	23,6 x 59,8
FTU 847	847	1440	2-1/2"	31,4 x 59,8

*Element included, drain and differential gauge excluded



High pressure filters

FHU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 100°F
- working pressure: 580 psig
- Inlet air temperature: 68°F

Max working conditions:

please refer to datasheet



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$P = 3\mu$ (class 3 ISO8573-1)

$M = 1\mu$ solid / 0,1 mg/m³ oil (class 2 ISO8573-1)

$H = 0,01\mu$ solid / 0,01 mg/m³ oil (class 1 ISO8573-1)

$C = 0,003\mu$ mg/m³ oil (class 1 ISO8573-1)

Model	Flow - Rate		Connection	Dimension	Element Model
	scfm	m ³ /h			
FHU 35	35	60	1/2"	41.7 x 6.9	0060 E
FHU 64	64	108	1/2"	41.7 x 6.9	0108 E
FHU 88	88	150	3/4"	41.7 x 6.9	0150 E
FHU 124	124	210	3/4"	41.7 x 6.9	0210 E
FHU 177	177	300	3/4"	41.7 x 6.9	0300 E
FHU 179	179	330	1"	41.7 x 6.9	0330 E
FHU 247	247	420	1"	41.7 x 6.9	0420 E

*Element included, manual drain included

Correction factor for operating pressure changes						
Inlet air pressure psi	290	362	435	507	580	725
Factor	0,51	0,63	0,78	0,88	1	1,24

CYCLONE SEPARATORS SGU SERIES

The compressed air contains harmful solid, liquid and vaporous contaminants that can damage pneumatic equipment, control and instruments. The removal of these contaminants is necessary to ensure equipment maintenance and keep the production operations efficient.



Compressed air is an essential energy source used in all industrial fields because it guarantees a high level of security and flexibility.

In order to offer comparative advantages, the compressed air must be cleaned of its impurities.

In compressed air, there are a lot of polluting agents such as: lube oil from the compressors, corrosive gas present in the atmosphere and due to pollution, water vapour, solid particles due to the decay of mechanical parts and distribution lines; solid particles present in the atmosphere and pumped by the

compressor. Inside the compressor, these substances become acidic thanks to the high temperatures, creating a lot of problems to all pneumatic equipment. The oil that entering in the pipeline, loses its lubricant features, and damages the equipment.

Cyclone separators

SGU SERIES

Standard reference conditions ISO 7183:

- ambient temperature: 77°F
- working pressure: 100 psig
- Inlet air temperature: 68°F
- CRN Approved

Max working conditions:

please refer to datasheet



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Model	Flow - Rate		Connection	Dimension
	scfm	m³/h		
			NPT	D x H [in]
SGU 25	25	42	1/2"	3.74 x 8.07
SGU 46	45	78	3/4"	3.74 x 8.07
SGU 100	99	168	3/4"	3.74 x 10.06
SGU 129	129	220	1"	4.92 x 11.8
SGU 180	180	306	1.1/2"	4.92 x 11.8
SGU 371	370	630	1.1/2"	4.92 x 15.0
SGU 530	529	900	2"	6.7 x 27.0
SGU 745	745	1.266	2"	6.7 x 27.0
SGU 1059	1.059	1.800	2.1/2"	7.87 x 38.4
SGU 1648	1.648	2.800	3"	7.87 x 38.4
SGU 1648	1.648	2.800	4" FLANGE	7.87 x 38.4

Element included, drain excluded

On request carbon steel separators up to 6500 m³/h

Correction factor for operating pressure changes							
Inlet air pressure psi	43	72	100	130	160	190	218
Factor	0.55	0.80	1.00	1.13	1.25	1.35	1.43

Features and functionality

Separator body:

- The threaded part, in a protected position, of the head and the filter body ensure the easy replacement of the filter element
- the wide section of the flow channels ensures a limited loss of load
- separator body in aluminum, chromo phosphate and externally powder painted

- the body is easily unscrewable thanks to the hexagonal termination

New cartridge separator:

- the cyclone outline increases the efficiency of the models SGU Models
- the new structure offers the possibility to enter the cyclone cartridge for inspection and maintenance

ACCESSORIES

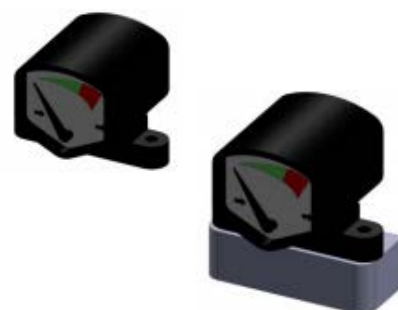
DIFFERENTIAL PRESSURE GAUGE
MANUAL DRAIN
AUTO DRAIN
FLOATING DRAIN
TIMED DRAIN
THERMODYNAMIC DRAIN
GREEN DRAIN



ACCESSORIES

Differential pressure gauge

Model	Code	Combination	Max Pressure	Max Temperature
psig				
D Gauge 0	ADG.00000	Available on all filters model FGO00034 ... FGO02810	232	194



Manual drain

Model	Code	Combination	Max Pressure	Connections
psig				
M Drain	AMD.00000	Available on all filters model FGO00034 ... FGO02810	232	In 3/8" G male



Auto Drain

Model	Code	Combination	Max Pressure	Connections
psig				
A Drain 0	AAD.00000	Available on all filters model FGO00034 ... FGO02810	232	M14
A Drain 1	AAD.00001	Available on all filters model FGO00034 ... FGO02810	232	M14



Filter wall mounting bracket

Model	Code	Filter connections
WMB 0	WMB.00000	1/2" - 3/4"
WMB 1	WMB.00001	1"
WMB 2	WMB.00002	2"



ACCESSORIES



Floating Drain

Model	Code	Max Pressure bar	Connections NPT	Power supply
AFD Drain 0	AFD.00000	16	1/2"	---
AFD Drain 1	AFD.00001	16	1/2"	---

Benefits and applications:

- small overall dimensions
- easy installation
- available with all FGU models
- available with all cyclone water separators SGU models
- suitable for every type of tank

Timed Drain

Model	Code	Max Pressure bar	Connections NPT	Power supply
T Drain 0	ATD.00000	16	1/2"	230 / 1 / 50-60
T Drain 0	ATD.00000.50	16	1/2"	24 / 1 / 50-60
T Drain 1	ATD.00000.80	80	1/2"	230 / 1 / 50-60



Benefits and applications:

- small overall dimensions
- equipped with stainless steel strainer and shut-off valve
- easy installation
- adjustable pause and working time
- available with all FGO models
- available with all cyclone water separators SGO models
- suitable for every type of tank

Green Drain

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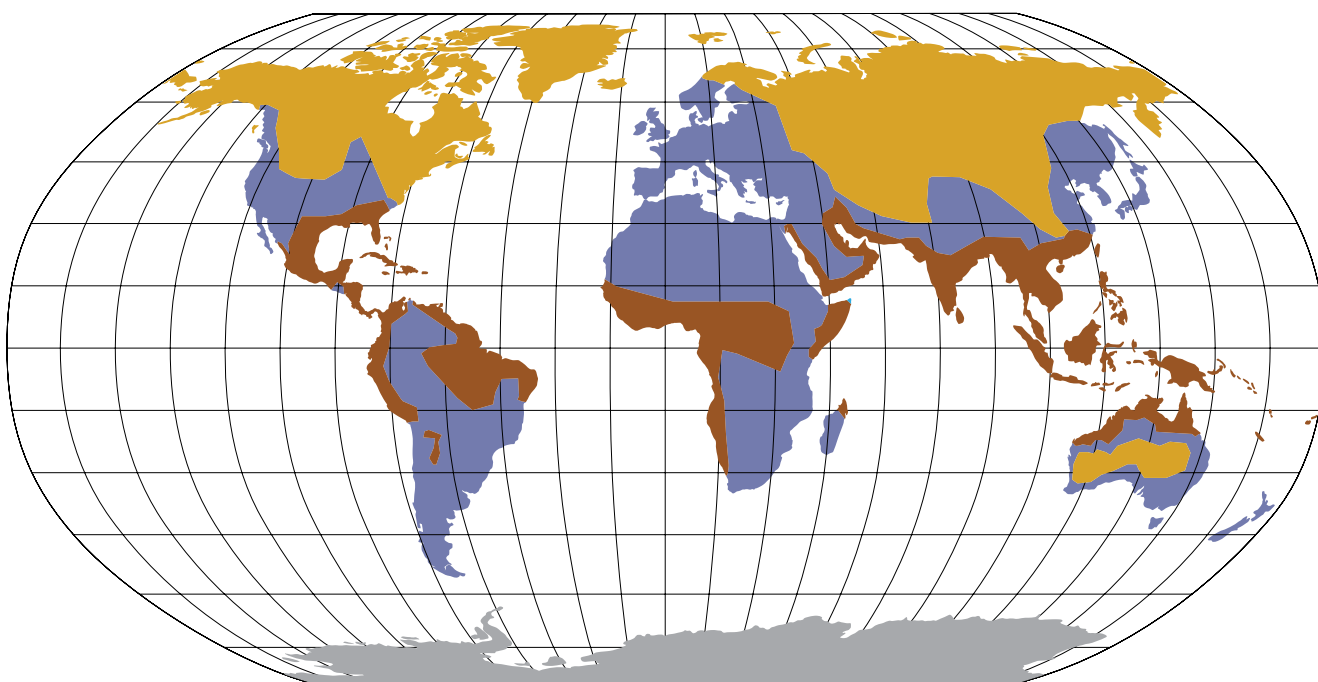
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Model	Code	Max Pressure	Connection	Power Supply
G Drain 0	AGD.00000.00.01	232	3/8"	115 / 1 / 60 - 230 / 1 / 60
G Drain 0	AGD.00000	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 0 Plus	AGD.0000P	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 1	AGD.00001	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 2	AGD.00002	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 3	AGD.00003	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 4	AGD.00004	232	1/2"	115 / 1 / 60 - 230 / 1 / 60
G Drain 5	AGD.00005	232	3/4"	115 / 1 / 60 - 230 / 1 / 60



UL / CSA Approved

Green Loss Drain is equipped with an integrated storage tank, inside which is placed a level sensor controlled by an intelligent electronic circuit based on logic to 8-bit microprocessor. All functions of drain are visualized on panel, provided by a test -key for manual drain.



	Green Drain						
	GREEN 0	GREEN 0 PLUS	GREEN 1	GREEN 2	GREEN 3	GREEN 4	GREEN 5
Capacity Compressor m³/min	3,6	7,6	9	18	36	190	360
	3	6,3	7,5	15	30	160	300
	1,8	3,8	4,5	9	18	96	180
Capacity Dryer m³/min	7	15	18	36	72	380	720
	6	13	15	30	60	320	600
	3,5	7,5	9	18	36	190	360
Capacity Filter m³/min	36	76	90	180	360	1900	3600
	30	63	75	150	300	1600	3000
	18	38	45	90	180	960	1800

Notes: for special requirements please contact our technical department

ECU SERIES AFTER-COOLER

This range of air cooled - after cooler uses a high-efficiency aluminium cooler rather than to the classic coil copper pipes normally used by other manufactured. The aluminium cooler combined with the electrical fan ensures a reduction on the inlet temperature with a Delta T of 41 F from ambient temperature.

Pressure drop are irrelevant and the condensate formed is discharged through the high-efficiency condenser separator connected to the outlet of the aluminium cooler.



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Data refer to the following nominal conditions:

- Ambient temperature: 100°F
- Inlet air pressure: 100 psig

Max working condition:

please refer to datasheet

Available options:

- Non-standard voltages: ECU 78-628 available with V 115/1/60.
- ECU 940-3700 available with V 230/1/50-60 or V 400/3/50-60.
- ECU 940-3700 available with V 460/3/60.
- Connections: ECU 78-2800 available with NPT connections.
- All models are available also without separator, motor or frame
- ECU available with pneumatic motor

Model	Flow - Rate		Connection	Dimension	Weight		Power-Supply
	scfm	m ³ /h			Kg	lbs	
ECU 46	46	78	3/4"	15.4 x 11.8 x 23.6	9	20	115 / 1 / 60 - 230 / 1 / 60
ECU 99	99	168	3/4"	18.5 x 11.8 x 27.6	12	26	115 / 1 / 60 - 230 / 1 / 60
ECU 180	180	306	1"	21.5 x 15.8 x 31.5	15	33	115 / 1 / 60 - 230 / 1 / 60
ECU 265	265	450	1.1/2"	26.8 x 19.7 x 39.4	24	53	115 / 1 / 60 - 230 / 1 / 60
ECU 370	370	628	1.1/2"	26.8 x 19.7 x 39.4	24	53	115 / 1 / 60 - 230 / 1 / 60
ECU 533	533	940	2"	33.9 x 19.7 x 57.1	38	84	460 / 3 / 60
ECU 745	745	1266	2.1/2"	39.8 x 27.6 x 69.0	60	132	460 / 3 / 60
ECU 1059	1.059	1800	2.1/2"	39.8 x 27.6 x 69.0	60	132	460 / 3 / 60
ECU 1648	1.648	2800	3"	50.4 x 35.5 x 76.8	120	265	460 / 3 / 60
ECU 1825	1.825	3100	4" FLANGE	61.1 x 35.5 x 82.7	160	353	460 / 3 / 60
ECU 2178	2.178	3700	4" FLANGE	63.6 x 35.5 x 82.7	180	397	460 / 3 / 60

ECU including SGU separator with auto drain

NOTES

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