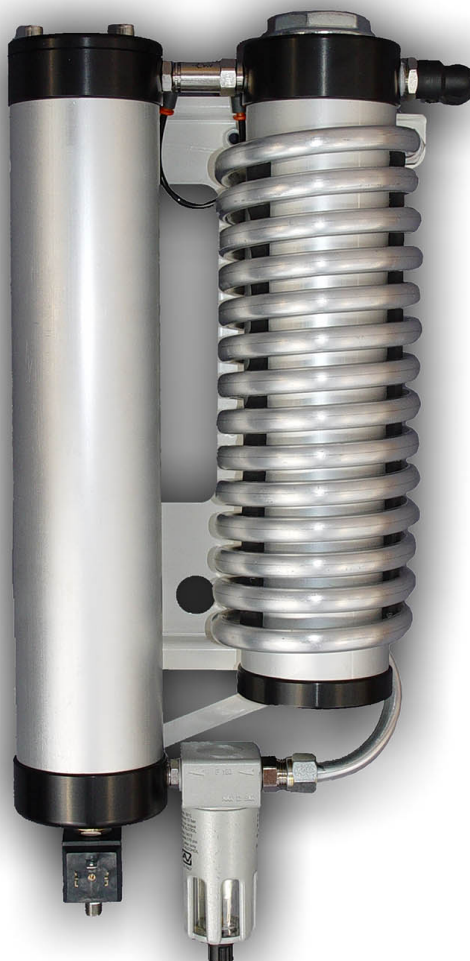


Adsorptie 400



Operator's and Maintenance Manual

INDEX

1 BASIC INFORMATION pag. 03

1.01	Symbol Explanation	pag. 03
1.02	Precautions	pag. 03
1.03	Presentation and Description	pag. 03
1.04	Components	pag. 04
1.05	Technical Details Adsorptie 400	pag. 04

2 SAFETY REGULATIONS pag. 04

2.01	Safety regulations for the operator and for the proper use of Adsorptie 400	pag. 04
2.02	Safety essentials	pag. 05

3 WARRANTY AND SERVICE pag. 05

3.01	Warranty of Adsorptie 400	pag. 05
3.02	Service of Adsorptie 400	pag. 05

4 INSTALLATION pag. 06

4.01	Installation	pag. 06
4.02	Placement on the compressor	pag. 06
4.03	Electric line connection	pag. 06

5 MAINTENANCE AND ASSISTANCE pag. 06

5.01	Maintenance operations	pag. 06
5.02	Troubleshooting table	pag. 06

6 Spare Parts pag. 7

	Exploded View Technical Drawing Adsorptie 400	pag. 07
--	---	---------

1.01 SYMBOL EXPLANATION :



In order to draw your attention to important issues both for the safety as well as the smooth operation of the dryer, a warning symbol has been used in this manual. This symbol is placed next to each of the topics that every operator must be familiar with.

1.02 PRECAUTIONS :

The adsorption dryer of FHT Perslucht BV is constructed in a workmanlike manner and in accordance with the guidelines of safety standards. FHT Perslucht BV further states that the DRYER has been subjected to quality tests under pressure, certifying the conformity of the product.



Before using the DRYER please read carefully the following information:

1. Carefully read the instructions for the proper functioning of the product.
2. Do not allow the air escaping from the compressor to be directed at people or animals..
3. Do not operate the machine in a humid place or with poor air exchange.
4. Verify that the compressor is located in a stable place.
5. The maximum pressure of the compressor is clearly indicated on it.
6. When using the compressor, place it in a cool place away from heat sources.
7. The compressor can reach high temperatures during operation.
8. Do not let children handle the device even when turned off.
9. Do not use/compress gas other than air or with oxygen concentrations greater than 21%.

1.03 PRESENTATION AND DESCRIPTION:

FHT Perslucht BV Adsorptie 400, is made to dry the air before it is stored inside the tank. This chemical-physical process of heterogenous adsorption, has the task of removing moisture and dew that is formed by compressing air, resulting in dry air ready for every type of use.

Furthermore, the Adsorptie 400 is equipped with an external coil for cooling the compressed air, thereby further improving its quality.

FHT Perslucht BV Adsorptie 400 automatically regenerates the dessicant material, purging the residual humidity, through a solenoid valve located in the part below the filter cartridge..

The air initially passes through the cooling coil, connected to a separator which removes the largest part of moisture. After this first step, the air is forced through the filter cartridge, which eliminates any residual humidity still present, and then finally, moves into a small tank before being stored in the tank of the compressor. At the time of shutdown, after reaching the maximum pressure, dry air in the small tank is flowed slowly and in a contrary manner into the filter cartridge, cleaning the desiccant material from impurities, and at the same time regenerating it.

When all the pressure is released, the last discharge of the first separator also opens, thus draining the system completely.

Your Adsorptie 400 does not require lubrication or maintenance, and need not be switched on or off, as it comes into operation only when you turn on the compressor.

In case of improper use of the dryer, no responsibility can be attributed to FHT Perslucht BV



DISPOSAL OF CONDENSATION AND DESSICANT MATERIAL MUST BE IN COMPLIANCE WITH THE NORMS AND REGULATIONS IN THE COUNTRY OF INSTALLATION.

1.04 COMPONENTS:

The DRYER is composed of:

1. Cooling coil inlet air
2. First stage of moisture separation
3. Tank with absorbent cartridge
4. Non-return valve dry air
5. Storage tank for regeneration of the desiccant material
6. Automatic condensate drain solenoid valve



1.05 TECHNICAL DETAILS Adsorptie 400 :

Description	Unit	Adsorptie 400
Regeneration		Process without heat
Application		Air
Nominal capacity	L/min	400
Working pressure	Bar	8 (Max 10)
Regen. air. consum.		0
Max temp. air in	°C	45
Working temp.	°C	-5 +45
Fitting in/out		3/8" - 3/8"
Power supply	Volt / Hz	220/50 - 60 or 110/50
Power cons.	Watt	17
Silicalgel charge	Kg	1,15
Electrical protection		IP55
Total weight	Kg	7

2

SAFETY REGULATIONS

2.01 SAFETY REGULATIONS FOR THE OPERATOR AND FOR THE PROPER USE OF Adsorptie 400:



The operator of Adsorptie 400 must have technical knowledge on the relevant safety regulations and be familiar with the operation of the machine perfectly. In the case of delegation of work, the operator must inform the next operator of all of the operations required for the proper use of the machine.

The compressor draws air from the surrounding environment (the operator must make sure it is devoid of fumes and / or harmful gases) and passing through a suction filter begins the cycle of compression/filtering up to the tank. Moreover, it is necessary to install an 8-bar safety valve with a flow rate of not less than 400 l/min on the system under pressure after the DRYER.

2.02 SAFETY ESSENTIALS:

Before using the Adsorptie 400 please read carefully the following information:

- Intake air should not be stale or contaminated, the compressor should not be placed in areas where there is dust, danger of explosion, corrosion or fire.
- Make sure that at the time of service or when you want to replace spare parts on the compressor it is not pressurized and the power plug is disconnected from the power line..
- Replace filter air cleaning parts only with original products from FHT Perslucht BV.
- When the compressor/dryer is not in use, turn off the power. Never tug on the cable but rather pull the plug to disconnect it from the outlet. Make sure that the cable does not pass over sharp edges or bend at a sharp angle (in this case use an extension).
- Periodically check the general conditions, especially near the joints, and if small defects are present proceed to the replacement of defective parts.
- Periodically check connections for leaks.
- Repair and replace any damaged part only with original spare parts FHT Perslucht BV.
- Do not modify the machine except with express written authorization from FHT Perslucht BV.
- When starting the machine, make sure people are not in contact with it.
- The operator's and maintenance manual must be available at all times. Put it in an easily accessible place near the machine and protect it from damage.
- All maintenance and repair tasks on the machine, must be performed by qualified personnel.
- Never exceed the maximum working pressure of 10 bar.

3**WARRANTY AND SERVICE**

3.01 WARRANTY OF Adsorptie 400 :

FHT Perslucht BV warrants the **Adsorptie 400** for a period of twenty four months from the date indicated on the label on the DRYER..

During the time of production and testing a label is put on the machine showing that it is in conformity with the standards of the European Union showing the CE marking. The warranty is voided if this label is by any reason removed or altered in any way.

For the warranty to be valid, it is necessary that the has complied with the provisions of the contract and that the Adsorptie 400 has been used as specified and has not been altered or modified without the agreement and confirmation of FHT Perslucht BV.

The warranty is not applicable when:

- The machine has not been used properly (as indicated in this manual)
- Non-guaranteed consumable materials and materials of periodic maintenance are used, particularly if used improperly.
- Non original FHT Perslucht BV spare parts and replacements are used.
- Gases other than air are used.

3.02 SERVICE OF Adsorptie 400:

To order spare parts please contact or visit our dealers. In case of difficulty in finding a spare part, contact directly FHT Perslucht BV. We are available for any queries or further information and we will put you in contact with skillful technical staff to help you. If you need service or assistance, please contact out dealers in your area.

4

INSTALLATION

4.01 INSTALLATION:



In order to have a good air quality, it is very important to place the Adsorptie 400 in a cool and dry place, protected from the elements.
The minimum and maximum operating temperatures can be found on the table with the technical details, in section 1.05 above.
We do not recommend placement in an outdoor environment.

4.02 PLACEMENT ON THE COMPRESSOR:

The Adsorptie 400 can be used **ONLY** with compressors OIL-FREE.



The tubes connecting the air inlet and outlet must not transmit vibrations to the Adsorptie 400. Therefore it must be installed on the compressor or any other place using flexible hoses. Be sure that the hoses can carry a minimum load of 12 bar. Furthermore, it is necessary to install an 8-bar safety valve with a flow rate of not less than 400 l/min on the system.

4.03 ELECTRIC LINE CONNECTION:

Make sure the ground is properly connected to the plug and the electrical system and check that the voltage is correct.

5

MAINTENANCE AND ASSISTANCE

5.01 MAINTENANCE OPERATION:

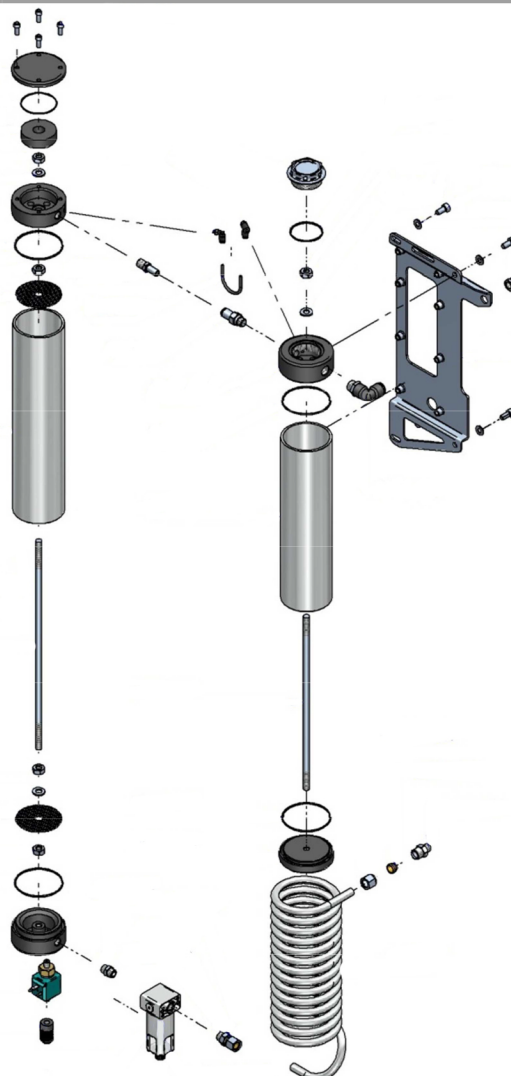
The Adsorptie 400 does not require special maintenance. Check weekly to see if there is moisture in the intermediate separator. If so, contact a technician. Every two years replace the desiccant in the cartridge.

5.02 TROUBLESHOOTING TABLE:

PROBLEM	CAUSE	POSSIBLE SOLUTION
The Adsorptie 400 is not working	<ul style="list-style-type: none"> •Electric current missing •Bad fuse •Electric current too low •Compressor failure 	<ul style="list-style-type: none"> •Check electric line •Replace bad fuse •Check compressor
Outgoing air damp	<ul style="list-style-type: none"> •Air intake too high •High temperature at air intake •Flow control valve defective •Desiccant material exhausted or saturated •Solenoid valve defective •Loss of pressure on the regeneration tank •Non-return valve defective 	<ul style="list-style-type: none"> •Check the pumping unit •Check room temperature •Replace dryer cartridge •Calibrate flow regulator or replace it •Replace solenoid valve •Check connections •Replace non-return valve
No condensate drain	<ul style="list-style-type: none"> •Problem with the solenoid valve •Drain silencer clogged •Flow regulator defective •Flow regulator not calibrated 	<ul style="list-style-type: none"> •Replace solenoid valve •Clean the drain •Calibrate flow regulator

SPARE PARTS Adsorptie 400 Dryer

AC032-001 Rev.01
Date 04/05/2012



CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
	Filter		Reduction		Screw
	Sintered filter		Solenoid valve		Bracket
	Ogive for aluminum tube 12mm		Flange		Silenced filter
	Nut for tube 12 mm aluminum		Flange		Desiccant
	Not return valve		Flange		O-ring
	Rilsan tube		Flange		O-ring
	Closure plug		Flange		O-ring
	Nipple		Filter		Screw
	Reduction		Grid		Screw
	Pipe fitting "L"		Dryer body		Nut
	Flow Regulator		Dryer body		Washer
	Pipe fitting "L"		Aluminum tube		Washer
	Pipe fitting for tube 12 mm		Screw		