



MGF OILLESS COMPRESSORS AIR DRYERS

➤ MGF air dryer operating

The first step to be able to provide a proper technical service on MGF compressor dryer system is to properly know its operating system.

Complete drying system is composed by a set of components, if a failure happens the correct procedure to follow is to check the complete drying set.

Please check the drawing at page 14 on MGF Technical Handbook: components from position number 3 up to position 11 build the dryer set.

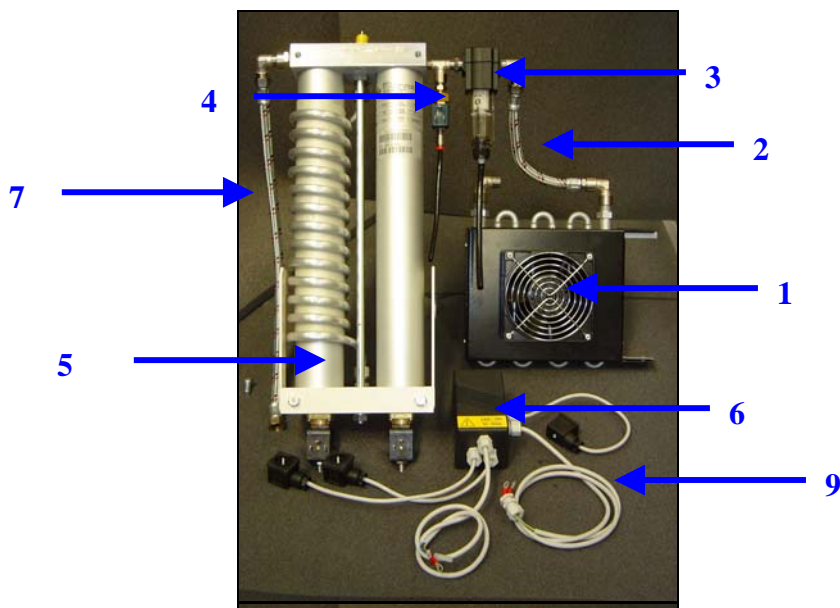
1. **Heat exchanger (pos. 5):** placed before the dryer it is equipped with an additional cooling fan for all the versions. Heat exchanger is necessary to guarantee the correct inlet air temperature to the dryer (inlet temperature has to be below 45°C). **In case of dryer failure** please check the proper heat exchanger working: cooling fan has to always run when the compressor is switched on, temperature at the dryer entrance always has to be below 40°C (to check it is enough to place a temperature feeler on the pipe placed in position 6).
2. **Radiator Filter (pos.8):** this filter, placed between the heat exchanger and the radiator, makes a first condensate separation. Water discharge is automatic: each time the compressor stops running and pressure along the components (except for the tank of course) is discharged by the solenoid valve placed in position 23, this filter automatically discharge residual water. **In case of dryer failure** please check that the Radiator filter properly discharge residual water in the glass, this glass never has to be full of water.
3. **Solenoid valve (pos.23):** check its proper working, because as above explained, solenoid valve failure does not allow the correct water discharge in the radiator filter.
4. **Dryer (pos.10):** MGF dryer is composed by 2 columns, these two columns work alternately and are ruled by a timer placed in the plastic box on the same dryer (pos. 3 on the picture at page 13 on the MGF instruction manual). Check the proper alternate running of the two columns: two solenoid valves are placed under the dryer (pos. 5 on the picture in the end of the MGF instruction manual), one column per time discharges air through the solenoid valve (it's easy to feel it placing a finger on the solenoid valve exit). **In case of dryer failure** please check the correct working of the timer: if you can't feel the air discharge from the solenoid valve and if you don't hear the air flow noise when the timer reverses operating column, it means that timer has to be replaced.

NOTE: in case of high room temperature (over 30°C) and in case of long time compressor running, air temperature inside the compressor becomes higher: heat exchanger always reduces it under 45°C, but when air temperature enter the dryer very close to the maximum allowed level (45°C), dryer efficiency is lower because when dried air reaches the tank it still has temperature around 30°C. Inside the tank this air temperature reduces and this may generate residual condensate.

MGF technical office is always at your disposal for any further needs.



➤ **MGF air dryers components and available kits**



MGF offer complete kits to replace or add dryers to your MGF compressor. Different kits are available according to the different MGF oilless compressor model:

- Code TA-ES-001-K1: Dryer kit complete for 30/7 version
- Code TA-ES-001-K2: Dryer kit complete for CS 30/7 version
- Code TA-ES-001-K3: Dryer kit complete for SKY 30/7 version
- Code TA-ES-002-K1: Dryer kit complete for 30/15 and 40/15 versions
- Code TA-ES-002-K2: Dryer kit complete for 50/15 and 50/20 versions
- Code TA-ES-002-K3: Dryer kit complete for 100/30, 100/40 and SKY 100 versions
- Code TA-ES-002-K4: Dryer kit complete for CS 30/15 version
- Code TA-ES-002-K5: Dryer kit complete for SKY 30/15 AND SKY 40/15 versions
- Code TA-ES-002-K6: Dryer kit complete for SKY 50/15 and SKY 50/20 versions

All the kits include:

1. Heat exchanger
2. Connection hose between the heat exchanger and the filter
3. Water filter
4. Solenoid valve
5. Dryer
6. Electronic control board
7. Connection hose from the dryer to the air receiver
8. Fittings
9. Electric cables

IMPORTANT

If you need to add a dryer kit to your MGF compressor a technician support is required. In case of SKY version MGF suggest to deliver the compressor back to the manufacturer to add drying system.