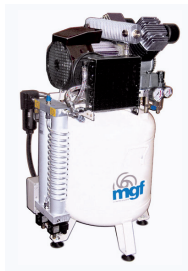




# ***INSTALLATION AND OPERATING INSTRUCTIONS FOR MGF COMPRESSORS***



ENGLISH



**CERTIFICATO DI CONFORMITA  
CON LE DIRETTIVE CEE**  
**EC DECLARATION OF CONFORMITY  
WITH EC DIRECTIVES**  
**EC ÜBEREINSTIMMUNGSERKLÄRUNG  
MIT EC RICHTLINIEN**

**DECLARACION DE CONFORMIDAD  
CON DIRECTIVAS DE LA CEE**

**DECLARATION DE CONFORMITE CEE  
AVEC LES DIRECTIVES DE LA CEE**

**98/37 CEE**

NOI - WE - WIR - NOSOTROS - NOUS

**M G F srl**

Via A. Volta, 79 - 20090 CUSAGO (MI) ITALIA

DICHIARIAMO SOTTO LA NOSTRA RESPONSABILITÀ CHE LA FABBRICAZIONE E FORNITURA DEI PRODOTTI

DECLARE UNDER OUR RESPONSABILITY FOR MANUFACTURE AND SUPPLY THE PRODUCTS

ERKLÄREN DAß IM RAHMEN UNSERER VOLLEN VERANTWORTUNG FÜR DIE HERSTELLUNG UND DEN VERTRIEB  
DIESES ERZEUGNISSES

DECLARAMOS QUE, BAJO NUESTRA RESPONSABILIDAD EXCLUSIVA POR LA FABRICACION Y PROVISION, EL  
NUESTRO PRODUCTO

DECLARONS QUE, SOUS NOTRE SEULE RESPONSABILITE POUR LE FABRICATION ET LA FOURNITURE DES  
PRODUITS

**ELETTROCOMPRESSORI**

A CUI LA PRESENTE DICHIARAZIONE SI RIFERISCE, SONO CONFORMI ALLE SEGUENTI DIRETTIVE CEE

AUF DIE SICH DIESE ERKLÄRUNG BEZIEHT, EINE ÜBEREINSTIMMUNG MIT DEN NACHSTEHENDEN  
WICHTIGSTEN NORMEN UND ANDEREN NORMENBEZOGENEN DOKUMENTEN

TO WHICH THIS DECLARATION RELATES, ARE IN CONFORMITY WITH FOLLOWING DIRECTIVES CEE

AUX QUELS CETTE DECLARATION EST LIEE, SONT CONFORMES AUX NORMES MAJEURES SUIVANTES ET  
AUTRES DOCUMENTS NORMATIFS

AL QUE SE REFIERE ESTA DECLARACION, SATISFACE LAS SIGUIENTES DIRECTRICES PRINCIPALES Y OTRAS  
NORMATIVAS

**98/37 CEE for machines**  
**93/68 CEE e 73/23 low tension**  
**89/336 CEE**  
**87/404 per serbatoi**

EMESSO A CUSAGO IL 31.1.02  
ISSUED AT CUSAGO ON 31.1.02  
AUSGESTELLT IN CUSAGO AM 31.1.02  
EMITADA A CUSAGO LE 31.1.02  
PUBLIE A CUSAGO LE 31.102

GABRIELE FIANI  
Managing Director

# **INSTALLATION AND OPERATING INSTRUCTIONS FOR MGF COMPRESSORS**

**Standard S and SCE versions – Genesi – Silenced CS versions – Silenced SKY versions**

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For further information contact your dealer or MGF technical service at the address [tech@mgfcompressors.it](mailto:tech@mgfcompressors.it). We also inform you that it is at MGF customers disposal a huge technical documentation about MGF compressors visiting our web pages at the address [www.mgfcompressors.it](http://www.mgfcompressors.it)



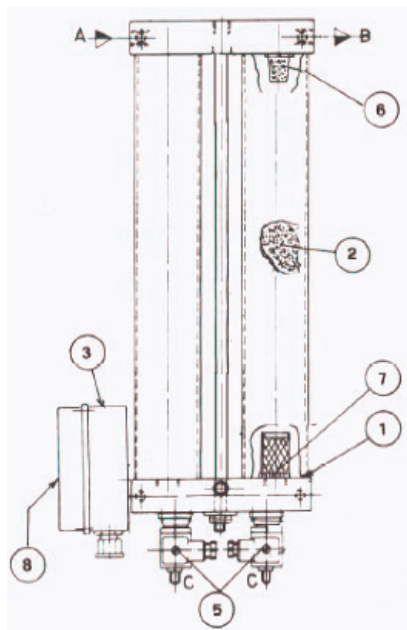
## 6. Adsorbtion dryer

SCE versions are equipped with a drying system composed by the radiator, the additional cooling fan (except 1 HP not silenced versions ) and a pre-filter for the best compressed air treating before air entrance in the dryer. Dryer works automatically, no manual intervention is required.

Absorption charge replacement is composed by alumina, alumina life time in standard compressor use conditions is on average 3 years.

For further information please refer to the enclosed handbook.

- 4 Solenoid valve body
- 5 Solenoid valve coil
- 6 Sintered bronze filter
- 7 Stainless steel filter
- 8 Lighting switch



### DESCRIPTION

- 1 Columns O-ring kit
- 2 Adsorbtion charge replacement
- 3 Electric timer

## ASSEMBLY

### 7. Where to install the compressor

Room where compressor has to be installed should be large, well ventilated and protected from dust and intense cold; a dusty environment will cause damages and difficulties in operation.



**If dust goes inside, it may reach the air filter, causing rapid clogging and part will be deposited over the components thereby preventing heat exchange.**

It is therefore evident that the cleanliness of the installation location is extremely important for the proper operation of the machine, as this will avoid excessive operation and maintenance costs.

To facilitate maintenance operations and create favourable air circulation compressor must have a good amount of free space surrounding it.

The room should be equipped with openings towards the outside placed in proximity of the floor and the ceiling, which will allow the natural circulation of the air. If this is not possible, fans or extractors must be installed.



**Room temperature should not exceed 30° C: warm temperature causes problems in the correct functioning of the drying system.**

It is not necessary to provide for special foundations or bases.

The machine may be simply placed on a level floor.

Compressors fitted on fixed standing tanks should not be secured to the ground.

MGF S.r.l. recommends installing 4 vibration-damping supports.

## 8. Dimensions

For dimensions and weight information please check document 1 in the Appendix A placed in the end of this manual

## 9. Technical data

For dimensions and weight information please check document 1 in the Appendix A placed in the end of this manual

### Climatic conditions for Operation:

- Temperature: +10°C to +35°C
- Relativ Atmospheric Humidity: up to 70%

## 10. Electrical connection

The electrical supply line must stand the load indicated on the motor rating. Earthing must always be used for installer safety.



Before connecting the compressor to control panel, an high sensitivity switch should be installed on the wall. Never connect the earthing wire to the neutral pole.

For electrical connections drawings information please check document 3 in the Appendix B placed in the end of this manual

## 11. Compressor running

Connect the electric line by plug and the compressor to the air line connecting it to the outlet placed on the filter (position number 19 - see exploded view). Turn the switch of the pressure switch (18) in position "1".

Running of the compressor is fully automatic and controlled by the pressure switch, which stops it when pressure in the tank (14) reaches a maximum value (approximately 8 bar), allowing compressor to start again when it descends under a fixed pressure value (~5 bar).

Read the receiver pressure value on pressure gauge (21).

When compressor receiver is under pressure, operator may regulate operating pressure acting on the pressure regulator situated on the filter (19): to fix pressure required is necessary to rotate the hand-grip regulator in clockwise direction to increase pressure, in counter clockwise direction to reduce it and read the value on its pressure gauge (20). When delivery air pressure required is reached, push on the handgrip in order to block it.

### IMPORTANT



**If during pressure regulation the hand-grip doesn't move, do not force it! It's enough to pull it upside**

## USE

### 12. Maintenance

#### ATTENTION!



Before performing any maintenance on the compressor make sure that the power supply is switched off. disconnect the plug after having turned in "0" position the switch of the pressure switch (pos. 18 in the exploded view). Make also sure that the air tank (14) is released of any pressure check the pressure gauge (21).

#### 12.1 Periodical checks



- Control condensate in the air tank (14). Release it at least once a week by opening the drain cock (27) placed under the tank.



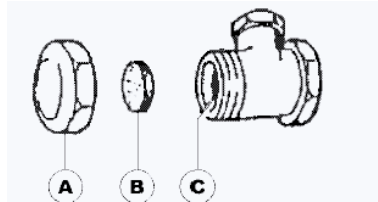
- Cleaning of the intake air filters (30) placed at the top of the cylinders (except for 24/5 S- 24/10 S versions). Open the black plastic box and blow every month with compressed air the cartridge and replace it, if necessary
- Clean of the pre-filters mounted on air drier every month or replace it if necessary.
- Substitute air reducer filter cartridge (19) approximately every 2/3 years.

## 13. In case of bad or not running

### 1) Air leak from the elettrovalve (23)



It is caused by an imperfect capacity of one or two non-return valves (12). Replace them or operate as follow (see enclosed picture)



- a. Empty the tank (1)
- b. Unscrew the hexagonal head A
- c. Clean carefully disk Band seat C
- d. Reassemble everything

### 2) Do the start-ups have too high frequency?

Check that there are not air losses in the machine . If everything seems to be fine , the cause could be that the compressor is not suitable for the required use. Call the manufacturer.

### 3) Does the compressor stop after start-up?

Interruption of the electric current; check the pressure switch (18), then check the thermal protection that may have caused the compressor to stop (31): in this case reset pushing the black button ( except for 24/5 S and 24/10 S versions ) placed at the top of the thermal protection box (31) for the 1 HP version, or placed at the bottom of the same box for the 2 HP version.



**If thermal switch stops compressor too often continuous use may damage the motor: it means the compressor is not properly used: contact the manufacturer.**

**4) Does the compressor overheats and does not fill?**

Check the valves and washers. Replace them if damaged or faulty. Contact manufacturer for further instructions.

**5) Air loss from safety valve (16).**

Check it and replace if it is necessary. Check also the pressure switch (18) and replace it if necessary.

**6) Air loss from air drier safety valve.**

Check it and replace if it is necessary. Check also the air flowing in the two electric valves.

## 14. Spare part list

Spare part list			
POS	CODICE	DESCRIPTION	VERSION
1	GC-100-OF	Motor-Compressor - 0,75 kW – 1 Hp	30/7 S, 30/7 SCE
	GC-200-OF	Motor-Compressor - 1,5 kW – 2 Hp	30/15, 50/15, 100/30
	GC-075-OF	Motor-Compressor - 0,56 kW – 0,75 Hp	24/5 S
	GC-150-OF	Motor-Compressor - 1,12 kW – 1,5 Hp	24/10 S
	GC-250-OF	Motor-Compressor – 1,8 kW – 2,5 Hp	100/40, 50/20
2	TU-RA-001	Flex-tube MF $\frac{3}{8}$ " 410 mm	30/7 S
	TU-RA-007	Flex-tube MF $\frac{3}{8}$ " 480 mm	30/15 S, 50/15 S, 50/15 SCE
	TU-RA-002	Flex-tube MF $\frac{3}{8}$ " 720 mm	30/7 SCE, 30/15 SCE, 100/30 S/SCE
	TU-RA-003	Flex-tube FF $\frac{3}{8}$ " 600 mm	24/5 S, 24/10 S
3	RA-AL-001	Pipe fitting L MM $\frac{3}{8}$ "	30/7 SCE, 30/15 SCE, 100/30 S/SCE
4	RA-NP-006	Nipple FF $\frac{3}{8}$ " - $\frac{1}{4}$ "	30/7 SCE, 30/15 SCE, 100/30 S/SCE
5	TA-SM-001	heat exchanger	SCE VERSIONS
	TA-VR-001	Cooling fan 4E230B	50/15 SCE
6	TU-RA-005	Flex-tube MF $\frac{3}{8}$ " 190 mm	30/7 SCE, 30/15 SCE, 100/30 S/SCE
	TU-RA-002	Flex-tube MF $\frac{3}{8}$ " 720 mm	50/15 SCE
7	RA-AL-002	Pipe fitting L FM $\frac{3}{8}$ "	SCE VERSIONS
8	TA-FL-002	Radiator Filter $\frac{3}{8}$ "	SCE VERSIONS
9	RA-NP-006	Nipple reducer MM $\frac{1}{4}$ " - $\frac{3}{8}$ "	SCE VERSIONS
10	TA-ES-001	Air drier	SCE VERSIONS
11	TU-RA-003	Flex-tube FF $\frac{3}{8}$ " 600 mm	SCE VERSIONS
12	VA-UN-001	Non return valve $\frac{3}{8}$ "	All Versions
13	RA-NP-004	Nipple $\frac{1}{2}$ "	All Versions
14	SE-030-SM-W	tank: 30 Lt orizzontal	30/7, 30/15
	SE-040-SM-W	tank: 40 Lt orizzontal	40/15
	SE-050-VT-W	tank: 50 Lt vertical	50/15, 50/20
	SE-024-SM-W	tank: 24 Lt	24/5 S, 24/10 S
	SE-100-OR-W	tank: 100 Lt	100/30
15	RA-AY-001	Pipe fitting Y $\frac{1}{4}$ "	All Versions
16	VA-SI-002	safety valve $\frac{1}{4}$ "	All Versions
17	RA-NP-001	Nipple MM $\frac{1}{4}$ "	All Versions
18	ME-PS-001	Pressure switch 3 ways	All Versions
19	TA-FL-001	Pressure reducer $\frac{1}{4}$ "	All Versions
20	RA-MM-001	Pressure gauge $\frac{1}{8}$ " D.40	All Versions
21	RA-MM-002	Pressure gauge $\frac{1}{4}$ " D.50	All Versions
22	RA-AT-001+ RA-RD-002+ RA-RD-003	T assembly MFM $\frac{3}{8}$ " $\frac{1}{8}$ " $\frac{1}{4}$ "	SCE VERSIONS
23	VA-EL-001	Electrovalve 2 ways $\frac{1}{8}$ "	All Versions except SCE
24	RA-DR-004	Pipe fitting $\frac{1}{8}$ "	SCE VERSIONS
25	TU-RL-001	Rilsan tube 4x6 ( 100 m )	SCE VERSIONS
26	RA-DR-009	Pipe fitting M 5x6	SCE VERSIONS
27	RA-SC-001	Water relief $\frac{3}{8}$ "	30/7, 30/15, 50/15, 100/30
	RA-SC-002	Water relief $\frac{1}{4}$ "	24/5, 24/10
	RA-TA-002	Cylindric tap 1 $\frac{1}{2}$ "	30/7, 30/15, 50/15
	RA-TA-001	Cylindric tap 1"	24/5 S, 24/10 S
	RA-TA-003	Cylindric Tap 2"	100/30
29	TR-AV-001	Vibrostop	All Versions

30	TA-FL-013	Aspiration Filter	30/7, 30/15,50/15,100/30
31	ME-TH-001	Overload protection 6 A	30/7, 30/7 SCE, SKY 50/20
	ME-TH-002	Overload protection 10 A	30/15, 50/15, 100/30
	ME-TH-003	Overload protection 13 A	50/20, 100/40
32	VA-EL-001-CON	Electrovalve connector	all versions except SCE
33	TA-VR-001	Cooling Fan 4E230B	Models SCE and SKY 30/5, 30/7, 30/10, 30/15, 30/20
34	RA-TA-004	Cylindric tap „ ”	All version
35	ME-TM-002	Thermostat R20 60°C Reset 20°C	SKY and CS version
36	ME-SD-002	Electric control box dryer	SCE versions
37	VA-EL-002	Electrovalve connector 3 ways 13 bar	SCE versions
38	TR-PU-001	Round ribbed tap D25	24/5 S and 24/10 S
	TR-PV-001	Feet feeding sucker	All versions except CS, 24/5 and 24/10 S
39	CA-PA-001-LS	Left Inspection Panel	CS all versions
40	CA-PA-001-B	Bottom Panel	CS all versions
41	CA-PA-001-F	Front panel	CS all versions
42	CA-PA-001-P	Back Panel	CS all versions
43	CA-PA-001-LD	Panel right	CS all versions
44	CA-PA-001-S	Top Panel	CS all versions
45	TA-VR-001	Fan mod. 4E230B	CS SCE all version, SKY 30/5, 30/7, 30/10, 30/15
	TA-VR-002	Fan mod. 5E230B	SKY 50/20, 100/40
46	RA-MM-005	Pressure gauge	CS all versions
47	ME-DS-011	Termic circuit breaker luminous 6A	CS 30/7 S AND CS 30/7 SCE
	ME-DS-012	Termic circuit breaker luminous 10A	CS 30/15 S AND CS 30/15 SCE
48	RA-VS-001	Ball valve MF 1/4	CS all versions
49	RA-DR-001	Pipe fitting d 8 X „ ”	CS all versions
50	TA-VR-001	Fan mod. 4E230B	CS SCE
	TA-SM-001	Radiator	SCE versions
51	TR-RT-005	Ruote diam. 50, M8x20	CS all versions
52	ST-GU-001-SKY	Cover top	SKY all versions
53	ST-GU-002-SKY	Cover bottom	SKY all versions
54	ME-TH-001	Thermic 6 A	SKY 30/5, 30/7 SCE, 30/10
	ME-TH-002	Thermic 10 A	SKY 30/15, 50/15, 100/30
	ME-TH-003	Thermic 13 A	SKY 50/20, 100/40
	TA - AL - 001	Allumina Kit for Dryer	All versions SCE