



**COMPRESSORE SILENZIOSO AUTOMATICO**  
**AUTOMATIC SILENT COMPRESSOR**  
**COMPRESSEUR SILENCIEUX AUTOMATIQUE**  
**AUTOMATISCHE LEISELAUFKOMPRESSOR**  
**COMPRESSORE SILENCIOSO AUTOMATICO**



# **PC120-4C**



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**Centro de asistencia autorizado**

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# 1 General information

## 1.1 IMPORTANCE AND USE OF THE MANUAL

This manual is an integral part of the compressor and must always accompany it, even in the event of sale. The compressor owner and/or user must know the operating instructions and recommendations before using the compressor. If the operator does not fully understand the language of this manual, the retailer must supply a correct and detailed translation into his or her native language.

**THE MANUFACTURER SHALL NOT BE HELD LIABLE FOR ANY DAMAGE TO PERSONS OR OBJECTS DUE TO AN IMPROPER OR NOT-PERMITTED USE OF THE COMPRESSOR.**

## 1.2 CONTENT

Packing contains the following: :- the compressor  
- instruction manual

## 1.3 STORAGE

The packed compressors have to be kept in a dry, covered and sheltered place at a temperature between -10°C and +40°C.

## 1.4 WEIGHTS AND DIMENSIONS

**Gross weights and packing dimensions of each type of compressor:**

<b>Model</b>	-
<b>Weight Kg.</b>	<b>20</b>
<b>Size cm.</b>	<b>23x44x39</b>

## 1.5 PACKING DISPOSAL

After having removed the compressor from the packing, check that no parts have been damaged during transport.

The packing material has to be disposed of in compliance with the regulation in force in the country where the compressor is being erected or recycled or reused.

## 1.6 LIFTING

The compressors have to be handled and positioned with care using, if necessary, fork-lift trucks or transpallets.

## 1.7 SAFETY

Do not use the compressor for purposes other than those for which it has been designed.

To be kept in a covered place and protected from rain and humidity.

When using the compressor, keep it out of reach of children, never leave it unattended and not direct air stream towards persons.

When a flammable liquid is sprayed, there may be danger of fire or explosion, especially in closes rooms: ventilate adequately.

Do not repair the compressor while it is connected to the electric circuit or to the tank under pressure.

### **WARNING!**

***The safety valve is calibrated and sealed by the manufacturer.***

***DO NOT ATTEMPT TO TAMPER WITH IT AND CHANGE THE SETTING.***

***While working the motor / air hose unit reaches high temperature.***

***If working near this unit do not touch (burn risk).***

Failure to observe these recommendations may cause serious damage to the compressor and/or to the persons.

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# **2** Operation

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## **2.1 MACHINE SET UP**

Install the compressor on a flat surface, in a suitably sized room, well ventilated and not wet, where the temperature is not likely to rise above 35°C. If there is not enough air ventilation, install a suitably sized exhaustor or fan.

The power supply voltage must be the same indicated on the data label: 230V/50Hz (115V/60Hz) and the socket must be 2 pole+ground type.

## **2.2 OPERATING INSTRUCTIONS**

Always use your compressor on a flat surface.

The start switch is situated on the cover of the pressure switch.

Turn the switch to position "0" (Fig.1).

Insert the plug into the socket and start the compressor turning the switch to position "1".

The compressor working process is automatic.

The pressure switch stops the compressor when the pressure in the tank reaches the maximum value allowed (7 bar=100psi standard) and starts it again when the pressure drop to the minimum value (5 bar=71psi standard).

Adjust the outlet air pressure operating on the reducer-filter (Fig.2)

Pressure is shown on the gauge placed on one side of the regulator.

### ***Pressure adjustment (fig. 3):***

#### **1. adjustment of max. pressure (cut out)**

Max pressure can be adjusted through the two screws "A" and "B".

Rotate the screws "A" and "B" clockwise in order to increase pressure.

#### **2. adjustment of differential pressure (cut in).**

Differential pressure can be adjusted through the screw "C".

Rotate the screw "C" clockwise to reduce differential pressure.

### **WARNING!**

***Pressure regulation must be carried out by skilled personnel only.***

If the pressure switch does not work

(**overpressure**), the safety valve will automatically operate and open when the pressure exceeds the max. setted value.

 **WARNING!**

**Compressor must be connected to a power supply socket protected by a suitable magneto-thermic switch.**



The tabs show the absorption data for each type of compressor:

Motor type		
230 V 50 Hz 3.1 A	230 V 60 Hz 4.2 A	115 V 60 Hz 8.5A

The compressor power supply cable or its eventual extensions must have an adequate wire section, proportioned to its length.

The following table shows the wires section data for each type of compressor in relation to the length:

To 3 mt.		From 3 to 20 mt.	
230 V 50/60 Hz 1 mm <sup>2</sup>	115 V 60 Hz 1,5 mm <sup>2</sup>	230 V 50/60 Hz 1,5 mm <sup>2</sup>	115 V 60 Hz 2 mm <sup>2</sup>

### 2.3 FILLING UP

Tank filling time from 0 to 7 bar ( test temperature 20°C)

- 230V/50Hz: 26 sec
- 115V/60Hz: 23 sec

### 2.4 CHECK OF FILLING TIME

Check the compressor as follows:

1. Empty the compressor air tank
2. Close the compressor outlet on the tank and check that the drain cap is closed
3. Start the compressor and check the time elapsing between starting and automatic switching off
4. Check that there are no leaks on connections.
5. check max. pressure= 7 bar/100 Psi

## **3** Troubleshooting

### **WARNING**

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- Before any operation on the compressor, disconnect the plug from the socket.
- Empty air tank of air before dismantling any part of compressor unit's pressure system.
- Following operations must be done by a specialist.

#### **3.1 The compressor does not start**

- a) No power from mains. Check fuses and socket.
- b) Breakage or loose joints in electrical connections. Check with tester for continuity.
- c) Pressure in air tank too high for activation of pressure switch. The pressure switch makes circuit only when pressure has dropped to preset start pressure.
- d) Leaky non-return valve. Take off the flexible pressure pipe to see if air leaks out from the valve. If so, unscrew the valve cap (Fig.4 item 1), clean the rubber disk (item 2) and his place with a dry cloth and assembly the whole with care . If the leakage persists, the whole valve must be replaced.
- e) Condenser defective. Replace it.
- f) The thermal relay has switched off the compressor due to overheating. When cooled, the compressor will automatically turn on at the suitable temperature.

#### **3.2 The compressor does not reach the maximum pressure**

- a) Check any air leak (See point 3.6).
- b) Check the pressure switch efficiency and if necessary adjust it (See point 2.2 Pressure adjustment).
- c) The non-return-valve is clogged so creating a flow restriction. Clean or replace the valve.

#### **3.3 The compressor works, but pressure does not increase in tank (or increase too slowly)**

- a) Air filter clogged. Clean or replace.
- b) Check any air leak (See point 6).

#### **3.4 The compressor works but does not load**

- The defect can be due to a valve or a gasket break. Replace the damaged part immediately.



**3.5 The compressor stops while working**

- The motor has an automatic resetting thermal protection, that stops the compressor when the temperature is too high. The compressor will start again automatically after 15/20 minutes.

- 

**3.6 Air leaks**

- Can be due to bad seal of any connection, check all connections wetting with suds

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**3.7 Leak from the valve placed under the pressure switch**

- Damaged valve, replace it.
- The defect can be due to an unperfect valve seal (See point 3.1d).

**3.8 The compressor starts when no air is being tapped**

- Air leak (See point 3.6).

**3.9 The compressor starts and stops more frequently than usual**

- a) Large amount of condensate in air tank. Remove condensate.
- b) Air leak (See point 3.6).

**3.10 The compressor does not switch on when pressure is under the minimum level and/or does not switch off at max pressure**

- Defective pressure switch. Replace.

**3.11 The compressor gets very hot**

- a) Air leak (See point 3.6).
- b) Clogged intake filter. Clean or replace.
- c) Too high outside temperature. Do not close the unit in a cupboard unless adequately ventilated.
- d) Over-running.  
Ensure the compressor is the correct model for your work load.

## **4** *Special informations*

### **4.1 COMPRESSOR DEMOLITION**

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*During the compressor demolition all possible safety regulations must be observed in order to avoid any damage to people or things.*

All the metal parts can be recycled; rubber and plastic parts have to be disposed of in the compliance with the laws in force in the country where the compressor is installed.

### **4.2 SPARES**

*Defective parts must be replaced only by authorized personnel; all possible safety regulations must be observed in order to avoid any damage to people or things.*

#### **WARNING**

**Failure to observe the safety regulations may cause serious damage to people or things.**

**The manufacturer shall not be held liable for damage to people or things caused by improper or not permitted use of the compressor.**

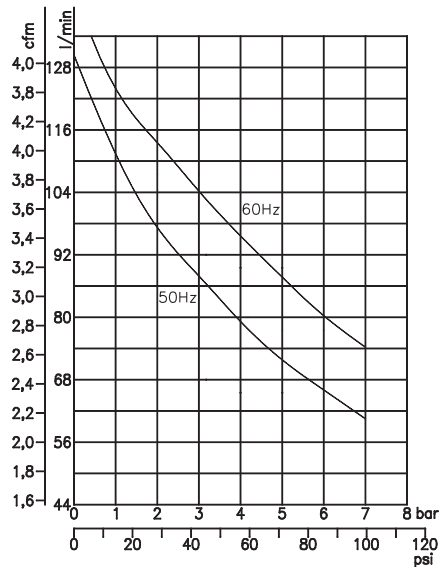
### **4.3 WARRANTY**

- The compressor is guaranteed for 12 months from the date of purchase.
- It regards only the free replacement of parts recognised as defective by the manufacturer apart from the electric parts and worn parts.
- The guarantee automatically ceases in case of tampering and bad usage.
- The warranty does not include transport and labour costs.

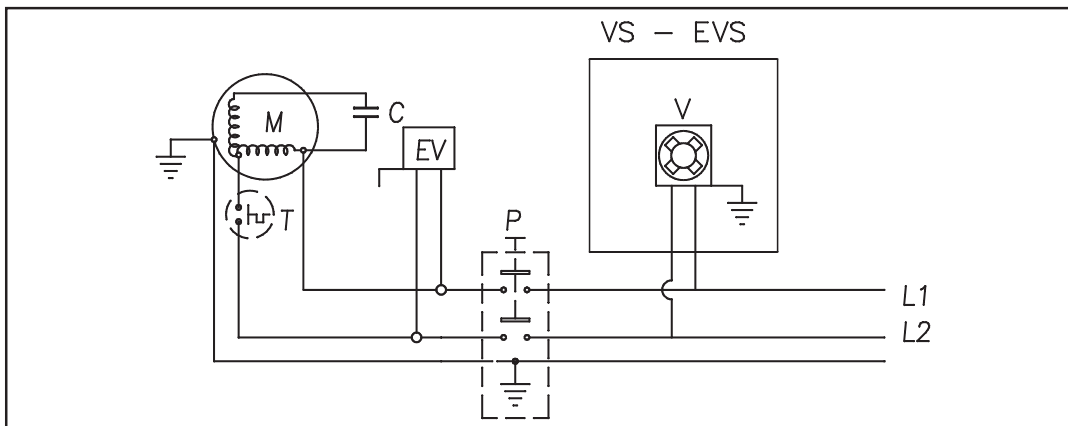


Modello	Volt Hz 1ph ±10%	KW - A	Lt/min. C.F.M.	Bar Psi	Lt. Gal.	dB(A)1m dB(A)40 "
PC120-4C	230 50	0.69 - 3.1	120 - 4.3	7 - 101	3.5 - 0.83	58
	230 60	0.92 - 4.2	145 - 5.2	7 - 101	3.5 - 0.83	58
	115 60	0.9 - 8.5	145 - 5.2	7 - 101	3.5 - 0.83	58

Curva pressione/portata / Pressure-Flow rate curve



Schema elettrico / Electrical diagram



<b>L1-L2</b>	Linea di alimentazione	Power supply
<b>M</b>	Motore	Motor
<b>P</b>	Pressostato	Pressure switch
<b>T</b>	Protettore termico	Thermal protector
<b>EV</b>	Elettrovalvola di rilascio pressione	Unloading electrovalve
<b>C</b>	Condensatore	Capacitor
<b>V</b>	Elettroventola (solo modelli VS- EVS)	Electrical fan (only models VS - EVS)

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Figure / Drawing / Figures / Abbildungen / Dibujo

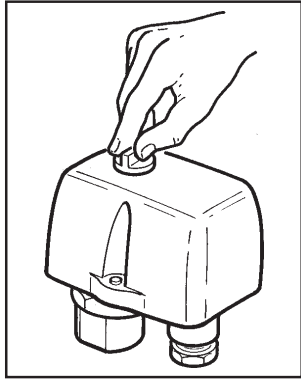


Fig.1

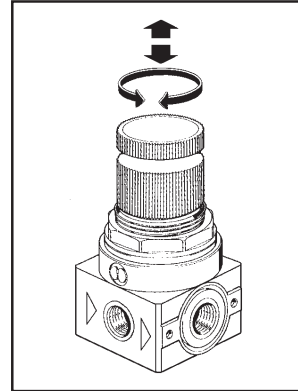


Fig.2

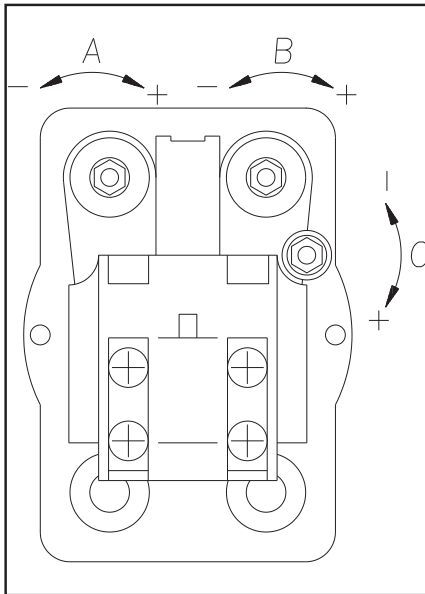


Fig.3

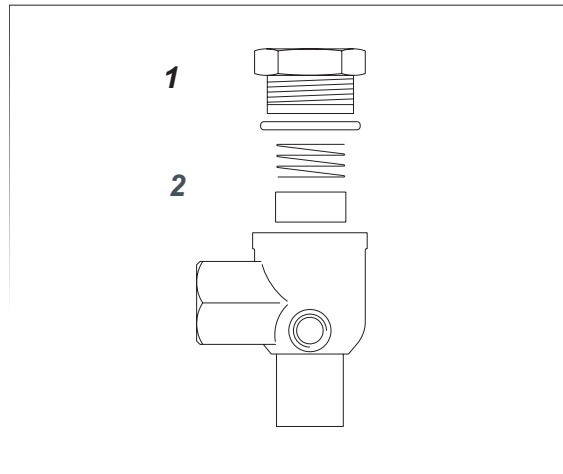
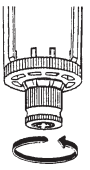

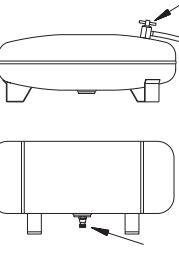
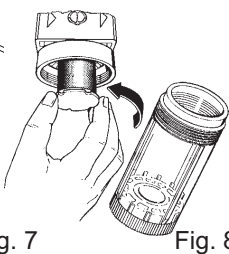






Fig.4

   	   	<p>ogni giorno every day</p>	<p>una volta al mese once a month</p>	<p>una volta all'anno once a year</p>
<p>Scaricare l'acqua accumulata nel riduttore/filtro uscita aria procedendo come in fig.6 : (operazione da eseguire con il serbatoio in pressione)</p>	<p>Drain the water collected in the air outlet filter proceeding as Fig. 6: (the operations are to be done with the tank under pressure)</p>	<p>*</p>		
<p>Scaricare l' acqua di condensa che si forma nel serbatoio dell' aria. Per fare questo occorre mettere in pressione il serbatoio, portare il compressore in un luogo dove l' uscita dell' acqua non danneggi il pavimento, e aprire l' apposito rubinetto (Fig. 7).</p>	<p>Remove the condensate that has collected in the air tank. To empty the tank, put it under pressure, take the compressor to a place where the water will not damage the floor, tip the compressor slightly forward and open the tap (Fig. 7).</p>	<p>*</p>		
<p>Controllare l'efficienza del compressore: eventuale allentamento di raccordi, usura dei tubi di pressione, serraggio delle viti, efficienza della parte elettrica, etc.</p>	<p>Once a month check the compressor efficiency: possible connectors slackening, pressure hose wear, screws tightening, electric circuit efficiency, etc</p>		<p>*</p>	
<p>Controllare il filtro di aspirazione aria. Nel caso fosse intasato sostituirlo.</p>	<p>Every three months check the air intake filter. Replace it if is necessary.</p>		<p>Ogni 3 mesi Every 3 months</p>	
<p>Pulire il compressore con un panno morbido. La polvere e la sporcizia impediscono il raffreddamento</p>	<p>Clean the compressor with a soft cloth. Dust and dirty prevent the compressor from cooling</p>		<p>*</p>	
<p>Smontare e pulire soffiando con aria compressa la cartuccia coalescente contenuta nel filtro (Fig. 8). Questa operazione deve essere eseguita con il serbatoio completamente scarico da pressione.</p>	<p>Disassemble the coalescing cartridge contained in the air outlet filter (Fig. 8). This operation must be done with tank completely out of pression</p>		<p>Ogni 6 mesi Every 6 months</p>	
<p>Controllare il riduttore/filtro ed i suoi elementi per l'ottimizzazione dell'efficienza</p>	<p>Check the filter reducer and its parts to optimize efficiency</p>			<p>*</p>
<p>Controllare la valvola di sicurezza (fig.9) tirando dolcemente l'anello con pressione nel serbatoio.</p>	<p>Check the safety valve (fig.9) pulling the ring gently when there is pressure in the tank</p>			<p>*</p>