

IN

CE

Hot air blower

SAC100



Dear customer,
Thank you for choosing this Manara hot air blower.

In your best interest, please follow the instructions provided in this manual and have routine maintenance performed by qualified personnel, to obtain the best performance and longest service life from the machine.

Failure to observe the instructions provided in this manual will render the guarantee void.

Hot air blower identification details:

Model: SAC100

Factory serial number: _____

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1. INTRODUCTION

The high degree of functionality and perfection obtained with the SAC series hot air blower, the automation and degree of safety against accidental breakage of the inner body, the flame, power cut and overheating detection features, allow safe operation without particular manual intervention.

Nevertheless, in compliance with applicable regulations in the place it is installed and to perform normal operation tests, the blower should be operated by trained and qualified staff.

The aim of this manual is to help the assigned staff perform their duties.

Carefully reading of this manual, particularly during the start up phase, guarantees perfect performance of the preliminary operations that form the basis of a long system service life.

2. SIX-MONTHLY CHECK ON INNER SURFACES

At least ONCE EVERY SIX MONTHS, the user should perform a thorough inspection of the blower's inner body.

This visual inspection should involve both the burner side and the fume side of the blower, in all inspectable and visible positions.

The performance of these periodic inspections must be recorded in dedicated reports signed by the person in charge of maintenance. These reports should be made available to Manara s.r.l. during any work on the system.

In the event of accidental breakage of the equipment, it is strictly prohibited to use the blower until Manara s.r.l., in its capacity as the manufacturer of the equipment, has verified the extent of the problem and evaluated the action to be undertaken in each individual case.

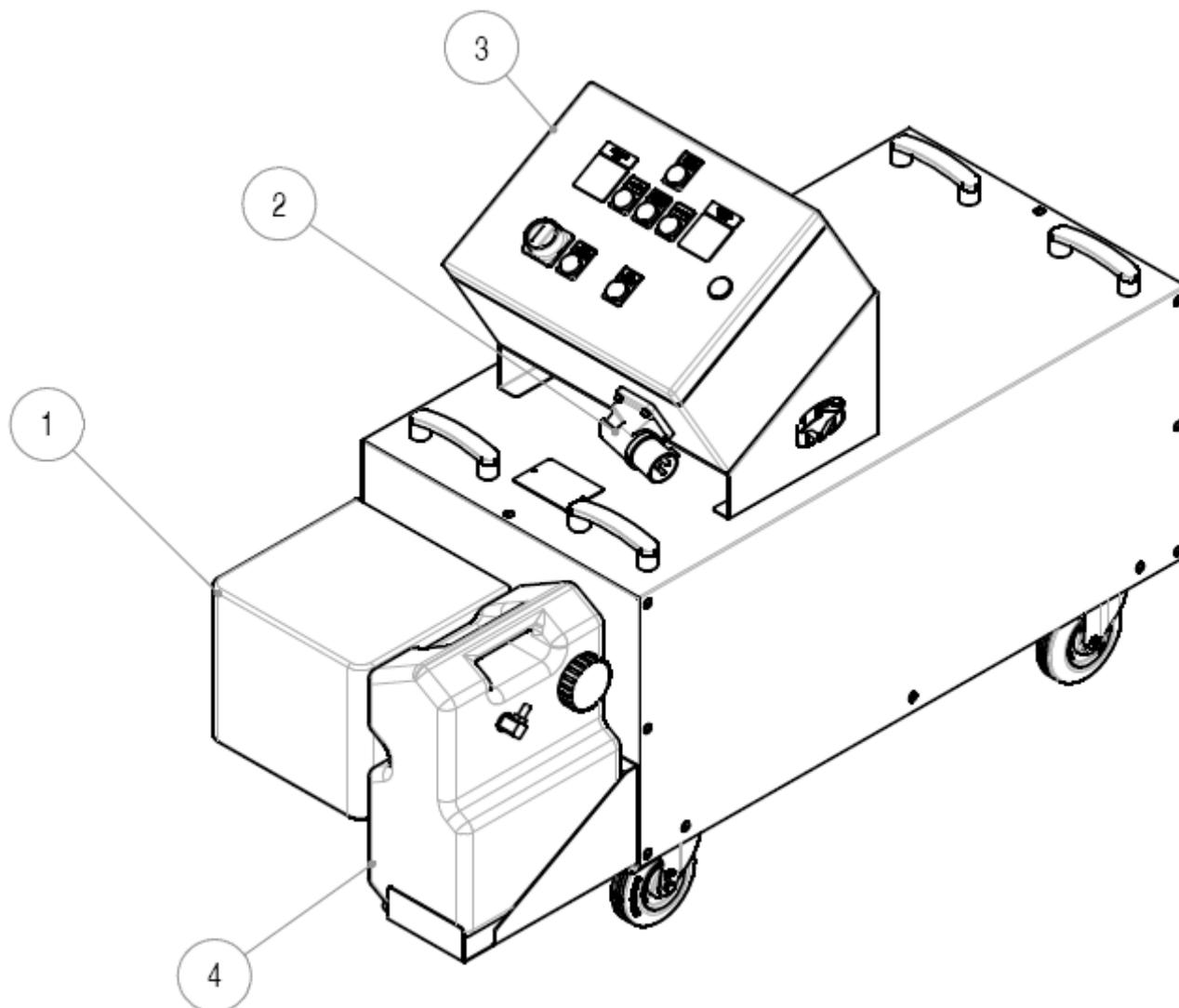
3. COMPOSITION OF THE HANDBOOK

The descriptions and illustrations contained in this publication are non-binding and may not faithfully reproduce the type, dimensions and accessories of the specific blower it accompanies. They are intended to give a rough indication and describe the main operation features and safety regulations to be followed.

The user, operator and maintenance technician are obliged to familiarise themselves with the content of this manual.

4. DESCRIPTION OF COMPONENTS

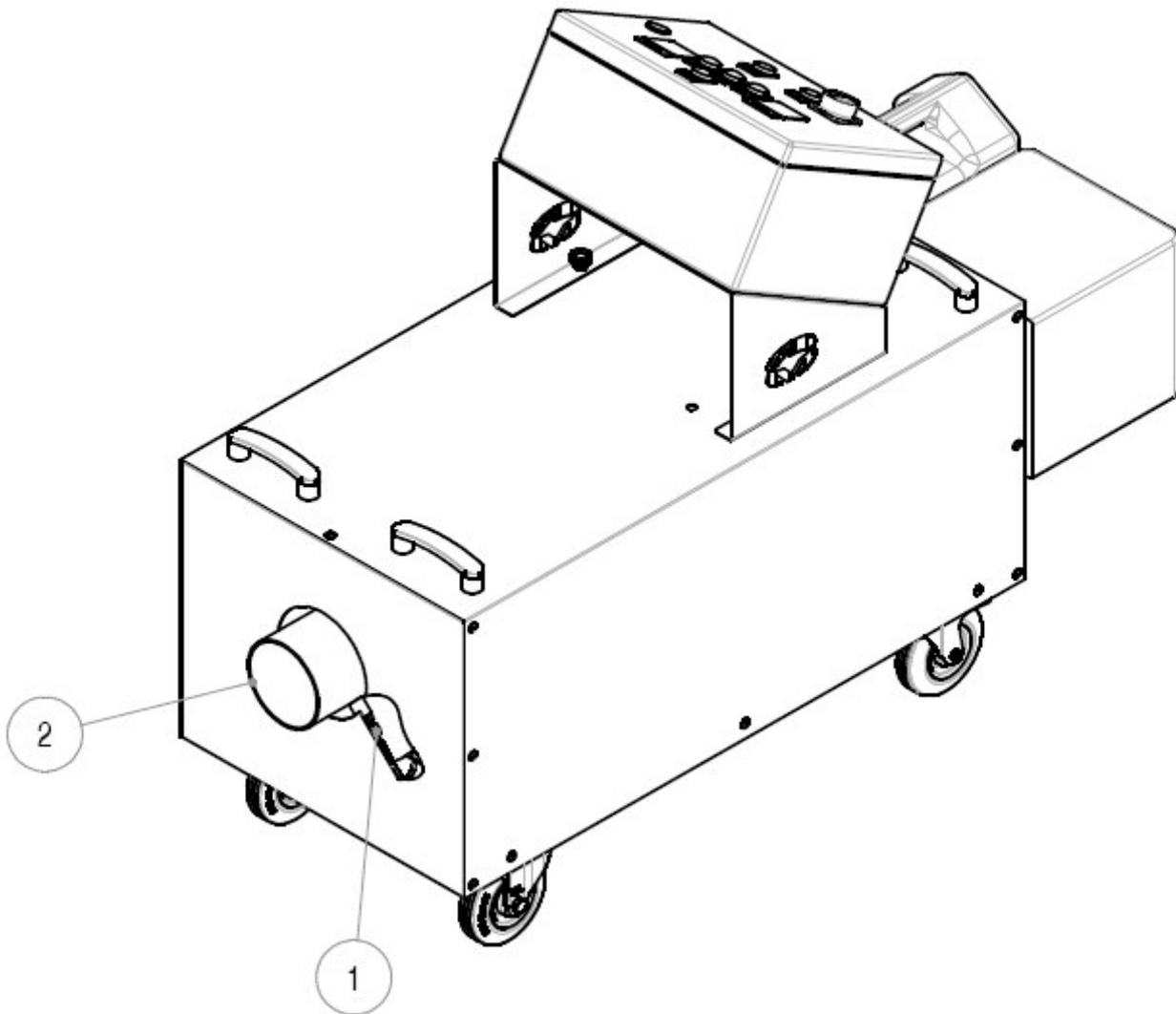
Fig. A



Legend Fig. A

1. Burner
2. Power supply plug
3. Control panel
4. Diesel tank

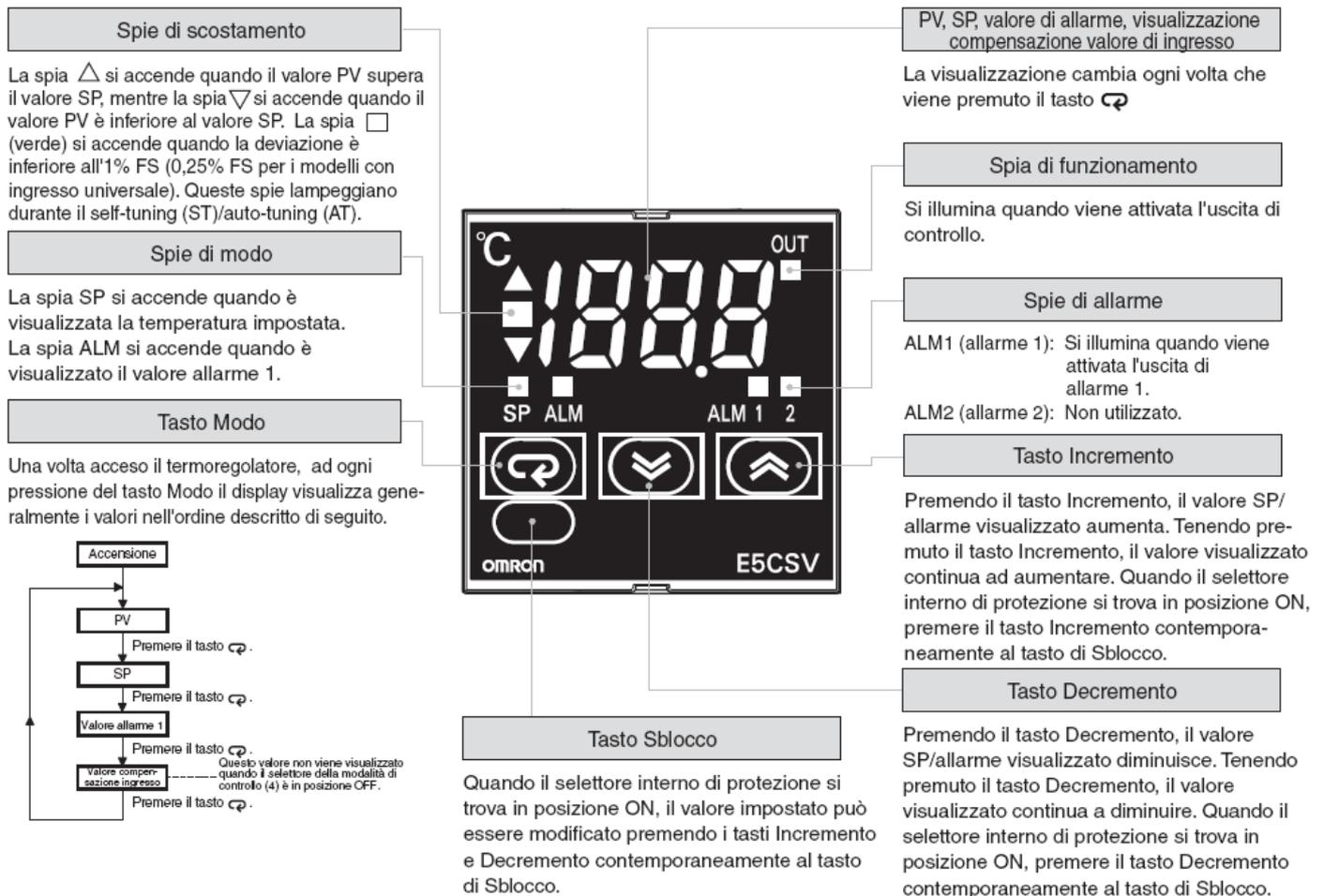
Fig. B



Legend Fig. B

- 1. Fume outlet
- 2. Thermoresistance fume side PT100

4.1 TEMPERATURE THERMOREGULATORS



Setting the thermoregulators:

Fume side thermoregulator

The first Set Point SP is the temperature value after which the burner sets the second flame working in order to preheat the sheath.

The second Set Point ALM is the maximum temperature alarm threshold, after which the burner shuts down for safety reasons.

Sheath side thermoregulator

The first Set Point SP is the temperature value after which the burner starts modulation, by switching off the second flame.

The second Set Point ALM is the maximum sheath temperature threshold, after which the burner shuts down. When the temperature drops a couple of degrees, the burner will start up again. Burner modulation is therefore achieved between the first SET Point value SP and the second Set Point value ALM.

5. INSTALLING THE BLOWER

The hot air blower, which is supplied as a single unit without any disconnected parts, is delivered to the place of use completely preassembled and ready for installation in the dedicated place.

It must be connected in the following points:

- Electric line to the control panel.
- Flue connection
- Fuel

5.1 ELECTRIC LINE TO THE CONTROL PANEL

The single-phase line (live + neutral + earth) must be connected using an extension lead with an industrial male – female connection directly to the electric panel.

Electrical connection is subject to compliance with law 46/90.

6. STARTING UP THE BLOWER FOR THE FIRST TIME

A description of the operations to be performed when starting the blower for the first time is provided below. These operations should be performed under the supervision of qualified personnel authorised by Manara s.r.l., in order to guarantee compliance with the manufacturer's essential safety requisites.

The first time the system is switched on and for the subsequent five days, check the seal of all gaskets and tighten all the nuts in a uniform manner. Failure to perform these checks will result in early wear of the gaskets and seal organs not covered by the guarantee.

Proceed as follows when starting the blower for the first time:

6.1 INSPECTION

Before start-up, make sure that all the connections are tightened uniformly and completely and that all electric and hydraulic connections have been performed according to the state of the art.

6.2 ELECTRIC PANEL

On the front of the electric panel , set the main switch to "1" and perform the commands performed in point 4.1.

6.3 BURNER

Carefully consult the burner's instruction manual on how to adjust combustion and always have this operation performed by the supplier's assistance service.

6.4 THERMOREGULATORS

The thermoregulators interrupt or modulate the burner according to the temperatures set. For adjustment see point 4.1

7. START-UP

Having followed the previous points carefully, press the green “BURNER ON” pushbutton, The burner will start up and will run until the temperature set on the thermoregulators on the electric panel is reached. Follow the instructions given in point 4.1 to adjust Set Point temperatures.

8. ROUTINE CHECKS AND MAINTENANCE

The hot air blower must be run by competent personnel who must perform the following routine checks to obtain optimum equipment operation at all times:

8.1 WEEKLY CHECKS

- Check on fume-side thermoregulator efficacy by temporarily setting a low temperature value (see point 4.1), so as to trip the burner cut-off alarm.

8.2 MONTHLY CHECKS

- Completely drain the fuel tank to remove any residue that has formed on the bottom.

8.3 ANNUAL CHECKS AND MAINTENANCE

- Dismantling the front and rear cover.
- Close the hatches, ensuring that the gaskets are in good condition and correctly positioned.

8.4 BURNER

The simpler checks and maintenance operations are indicated in the relative instruction manual. For fine-tuning and routine servicing, please contact your area representative.

9. TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	RECOMMENDED SOLUTION
The burner does not start up	The safety thermostat has tripped (indicated by a visual alarm)	Restore by resetting the alarm
The burner does not switch on	The fuel is not delivered to the nozzle	Check the piping
	The photoelectric cell does not give the all-clear for the cycle to start	Clean the photoelectric cell
		Check the contacts
		Replace if necessary

10. DAILY SWITCH ON

- Set the main switch to “1”
- Press the START – STOP CYCLE button and follow instructions in point 4.1

11. STOPPING THE BLOWER

- Set the main switch to “0”

12. DURING USE

- The green START – STOP CYCLE pushbutton must always be lit in both operation and standby status.

An even minimal shortage of voltage to the panel is enough to trip the safety command relays. In this case, release the safety devices even if they have not been tripped by a hazard, and press START – STOP CYCLE.

13. END OF THE MACHINE’S SERVICE LIFE

When it is necessary to put the blower out of service for whatever reason, follow the rules below to guarantee safety and safeguard the environment.

- make sure the machine is completely cool and that there is no fluid inside.
- make sure that the electricity power cable to the electric panel is disconnected.
- make sure the pipes are disconnected.

Pursuant to applicable legal provisions, inform the Competent Authority when the machine reaches the end of its service life and is disposed of.

14. DISPOSAL

To safeguard the environment, dispose of the blower as envisaged by applicable regulations in the place of installation.

Make sure that:

- any plastic or non-metal components are disposed of separately.
- residues of liquid fuels, especially diesel or combustion oil must be disposed of separately, as envisaged on the safety datasheet, which must be delivered to the user by the fuel supplier.



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The data contained in this manual is provided as a rough guide and is not binding for the manufacturer, which may modify its models at any time in the interests of ongoing improvement and constant upgrading.