INSTRUCTION MANUAL

FOR USE

AND MAINTENANCE

FILTER UNI 2.0

CE

CONTENTS

Par	Description
0	**Analytical index of the operating and maintenance manual**

INTRODUCTION

Par	Description
1	**Scope of the operating and maintenance manual**

This instruction manual is an integral part of the machine and has the purpose of providing all the necessary information for the following purposes:

- Raise the awareness of operators as regards safety matters;
- Safe handling of the machine when packaged and unpackaged;
- Correct installation of the machine;
- Thorough knowledge of the machine's operations and limits;
- Correct use in total safety;
- Correct and safe maintenance;
- Dismantling of the machine in total safety, in compliance with the regulations in force on the health and safety of workers and the environment.

The people in charge of the company's departments in which this machine will be installed must, according to the regulations in force, carefully read the content of this Operating Manual and ensure that operators and maintenance staff operating and working on the machine read the relevant parts.

The time dedicated to this will be fully rewarded by the correct and safe operation of the machine.

This document is based on the assumption that the systems in which the machine is to be installed are in compliance with the health and safety at work regulations in force.

The instructions, drawings and documentation contained in this Manual are of a technical confidential nature and are property of the manufacturer; they may not be reproduced in any way, in part of fully.

If this manual is amended by the manufacturer, the Customer has the responsibility of ensuring that only the updated versions are available in the points of use.

INTRODUCTION

Par	Description
2	**Storage of the instruction manual**

The instruction manual must be kept safely and must be handed over to new owners in case of sale throughout the lifecycle of the machine.
To help preserve the manual in good condition it must be handled with care and with clean hands, and it must not be placed on dirty surfaces.
It is forbidden to remove, tear out or arbitrarily modify any parts of the manual.
The manual must be stored in an environment away from humidity and heat, in a position near the machines to which it refers.
Upon the User's request the Manufacturer shall supply other copies of the machine's instruction manual.

INTRODUCTION

Par	Description
3	**Updating of the Instruction Manual**

The manufacturer reserves the right to modify the project and improve the machine without informing customers and without updating the manual already delivered to the User.

If modifications are made to a machine installed at the customer's premises, in agreement with the manufacturer, and which entail the amendment of one or more chapters of the manual, the manufacturer shall send the amended chapters to the holders of the Instruction Manual and its new overall revision.

According to the instructions that will accompany the updated documentation, the User shall replace the old chapters in the copies held with the new ones, as well as the first page and table of contents with the new revision level.

The manufacturer shall be responsible for the descriptions in Italian; translations cannot be thoroughly checked therefore if there is a difference the Italian version must be considered correct; if this should occur please contact our sales office that shall make the necessary amendments.

INTRODUCTION

Par	Description
4	**Glossary and pictograms**

This paragraph lists some terms which are not commonly used or with a meaning different from the common one. The meaning of the abbreviations and pictograms used is described below. The abbreviations and pictograms are used to indicate operator qualifications and state of the machine; they provide, in a quick and univocal manner, the information necessary for the correct and safe use of the machine.

GLOSSARY (Annex I point. 1.1.1 Dir. 2006/42/EC)

HAZARD
A potential source of injury or damage to health;

DANGER ZONE
Any zone within and/or around machinery in which a person is subject to a risk to his health or safety;

EXPOSED PERSON
Any person wholly or partially in a danger zone;

OPERATOR
The person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving machinery;

RISK
A combination of the probability and the degree of an injury or damage to health that can arise in a hazardous situation;

GUARD
A part of the machinery used specifically to provide protection by means of a physical barrier;

PROTECTIVE DEVICE
A device (other than a guard) which reduces the risk, either alone or in conjunction with a guard;

INTENDED USE
The use of machinery in accordance with the information provided in the instructions for use;

REASONABLY FORESEEABLE MISUSE
The use of the machinery in a way not intended in the instructions for use, but which may result from readily predictable human behaviour.

OTHER DEFINITIONS

MAN-MACHINERY INTERACTION
Any situation in which the operator interacts with machinery in any of the operating phases during the lifecycle of the machinery.

OPERATOR QUALIFICATIONS
Minimum level of skill that an operator must have to carry out the described operation.

NUMBER OF OPERATORS

The suitable number of operators, able to carry out the operation described in an optimal way, as established by a careful manufacturer analysis, whereby a different number of operators might not make it possible to obtain the expected result or might endanger the safety of the personnel involved.

STATE OF THE MACHINE

The state of the machine includes operating modes, for example automatic running mode, jog command, stop, etc., the condition of the safety devices on the machines such as protection devices provided (or not provided), pressed emergency button, type of isolation from energy sources, etc.

RESIDUAL RISK

Risks that persist despite the adoption of the protective measures included in the design of the machine and despite the additional protective devices and measures adopted.

SAFETY DEVICE

Device:

- That carries out a safety function;
- which, when faulty and/or broken, endangers the safety of people.

(e.g. lifting equipment; fixed, mobile, adjustable protective device, etc., electric, electronic, optical, pneumatic, hydraulic device interlocking a protection device, etc.).

PICTOGRAMS

The descriptions that follow this pictogram contain:
very important information/instructions, in particular as regards safety.
Failure to respect them may lead to:

- danger for the safety of the operators;
- loss of contractual guarantee;
- waiver of the manufacturer's liabilities.

PICTOGRAMS CONCERNING OPERATOR QUALIFICATIONS

Symbol	Description
	**Unskilled worker:** operator without specific skills that can only carry out simple tasks following the instructions of qualified technicians.
	**Driver of lifting and handling means:** operator qualified to use machines and material handling and lifting equipment (strictly following the manufacturer's instructions), according to the laws in force in the country of use of the machine.
	**Mechanical service man:** a qualified technician that can manage the machine in normal conditions, operate in jog mode with the protection devices disabled and work on its mechanical parts to make the necessary adjustments, repairs and maintenance. **Usually he is not qualified to work on live electrical systems.**
	**Electrical service man:** a qualified technician that can use the machine in normal conditions, operate in jog mode with the protection devices disabled and work on electrical parts to make the necessary adjustments, repairs and maintenance. **He can work on live cabinets and junction boxes.**
	**Manufacturer's technician:** qualified technician provided by the manufacturer to carry out complex operations in particular situations, or in any case as agreed with the user. According to the situation the technician will have mechanical and/or electrical and/or electronic and/or software skills.

Table 0 - 4.1

PICTOGRAMS CONCERNING THE STATE OF THE MACHINE

Pictograms inside a square/rectangle provide INFORMATION.

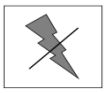
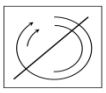
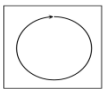
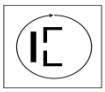
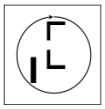
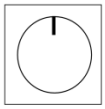
Symbol	Description
	**Machine off:** with hydraulic or electric power supply disconnected.
	**Machine on:** with hydraulic or electric power supply connected and in safe stop condition with open mobile protective devices (specifying which); JOG disabled; fixed protection devices closed.
	**Machine on:** with hydraulic or electric power supply connected and in safe stop condition with emergency mushroom button pressed or other control with the same function activated, positioned near the intervention area (specifying the mushroom button or the device to be used).
	**Machine moving:** in automatic mode, with mobile protection devices closed, the relevant interlocking devices activated, and the fixed protection devices closed.
	**Machine moving:** in JOG mode, with mobile protection devices closed, the relevant interlocking devices activated, and the fixed protection devices closed.
	**Machine moving:** in JOG mode, with one or more mobile protection devices, that can be disabled, open (specifying which) with the relevant interlocking devices activated and fixed protection devices closed.
	**Machine on:** in stand-by and waiting for functional consent to start (e.g. presence of product), mobile protection devices closed with safety device closed, and fixed protection devices closed.

Table 0 - 4.2

SAFETY SIGNS

- **The pictograms inside a triangle indicate DANGER;**
- **The pictograms inside a circle mean PROHIBITION/OBLIGATION.**

Symbol	Description
	Dangerous electrical voltage
	Danger of crushing of upper limbs
	Danger of entanglement
	Danger of being dragged by machine parts
	General hazard
	Danger of entanglement in transmission belt
	Hot surfaces; danger of burning
	Danger of being dragged by impellers or rotating parts
	No access to unauthorised people
	Do not remove safety devices
	Do not manually clean, oil, grease, repair of adjust moving parts
	Do not carry out any work without disconnecting the power
	Protective gloves must be worn
	Safety footwear must be worn
	Safety helmets must be worn

Table 0 - 4.3

GENERAL INFORMATION

Par	Description
1	**Manufacturer's identification data**

MANUFACTURER

Aerservice S.r.l.

REGISTERED OFFICE – ADMINISTRATIVE OFFICE

Via Marconi, 1 Z.I. – 35020 – Legnaro – (PD) – Italy

AFTER SALES/SPARE PARTS SERVICE

Tel. +39 049 641 200

Fax. +39 049 825 2310

E-mail: postvendita@aerservice.it

CALL CENTER

Tel. +39 049 641 200

CONTACTS

Tel. +39 049 641 200

Fax. +39 049 825 2310

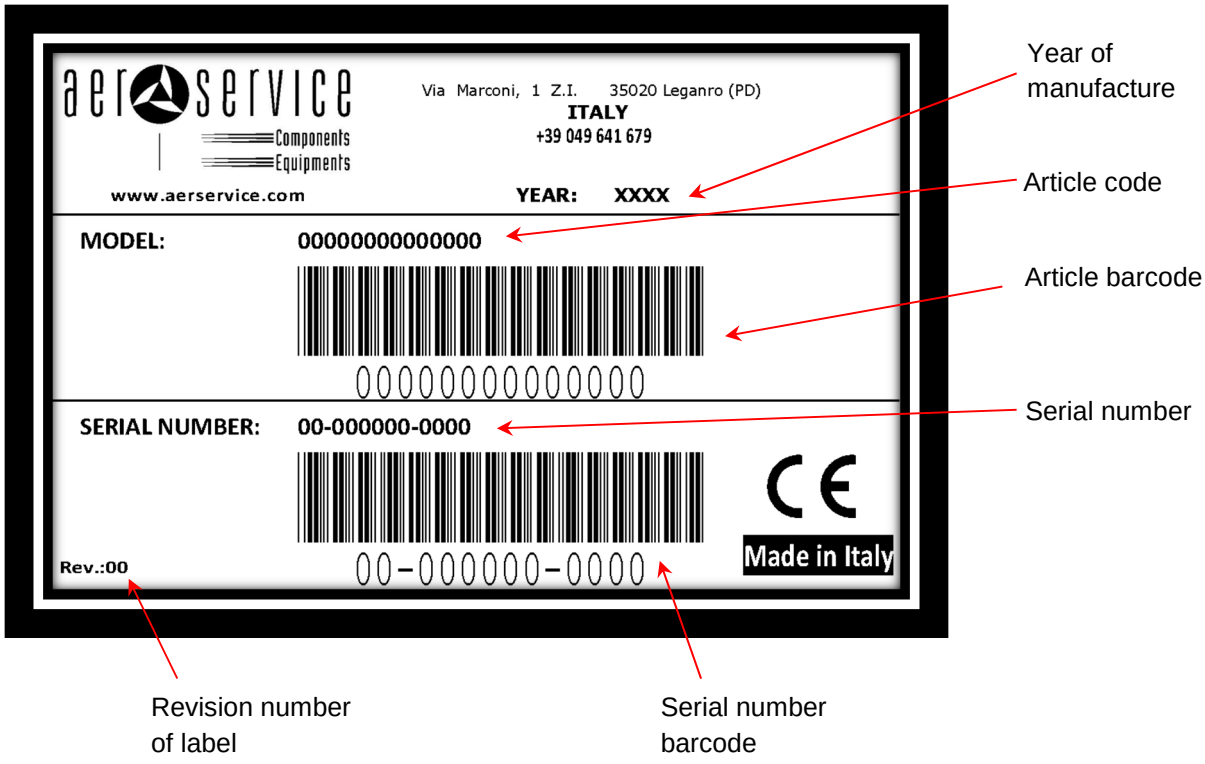
E-mail:

- info@aerequipments.it

GENERAL INFORMATION

Par	Description
2	**Machine identification and data plates (if they are present)**

Each machine is fitted with a CE plate with indelible identification data. All communications with the manufacturer or technical assistance centres must refer to the said data.



The position of the plate on the machine may vary.

GENERAL INFORMATION

Par	Description
3	**Declarations**

The machine is manufactured in conformity with relevant EC Directives, applicable when the machine is put on the market.

ANNEX IV Directive 2006/42/EC

The machine does not belong to the category of machines mentioned in Annex IV to directive 2006/42/EC

EC DECLARATION OF CONFORMITY

(Annex IIA DIR. 2006/42/CE)

THE MANUFACTURER

Aerservice S.r.l.
Company

Via Marconi, 1 Z.I. | 35020 | Padua
Address | Postcode | Province

Legnaro | Italy
City | Country

DECLARES THAT THE MACHINE

Trolley-mounted air cleaner for the extraction of welding fumes | FILTER UNI 2.0
Description | Model

_ _ - _ _ _ _ _ _ - _ _ _ _ | _ _ _ _
Serial number | Year of manufacture

FILTER UNI 2.0
Commercial name

Extraction and treatment of welding fumes for oil and fat-free light duty processes
Intended use

IS IN COMPLIANCE WITH THE FOLLOWING DIRECTIVES

Directive 2006/42/EC of the European Parliament and Council of 17 may 2006 on machinery and amending directive 95/16/EC.

Directive 2004/10/8/EC of the European Parliament and Council of 15 December 2004 on the approximation of the laws of the member States relating to electromagnetic compatibility.

Directive 2006/95/EC of the European Parliament and Council of 12 December 2006 on the approximation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

Reference to harmonised standards:

EN 349:1993+A1:2008, EN 614-1:2006+A1:2009, EN 614-2:2000+A1:2008, EN 626-1:1994+A1:2008, EN 626-2:1996+A1:2008, EN 842:1996+A1:2008, EN 894-1:1997+A1:2008, EN 894-2:1997+A1:2008, EN 894-3:2000+A1:2008, EN 953:1997+A1:2009, EN 1005-2:2003+A1:2008,
EN 1037:1995+A1:2008, EN 1037:1995+A1:2008, EN 1093-1:2008, EN 1093-4:1996+A1:2008, EN 13478:2001+A1:2008, EN ISO 13849-1:2008,
EN ISO 13849-2:2008, EN ISO 13850:2008, EN ISO 13857:2008, EN ISO 14121-1:2007, EN ISO 14159:2008

AND DECLARES THAT THE TECHNICAL FILE

Has been compiled by the manufacturer and is kept at:

Aerservice S.r.l. in Via Marconi,1 Z.I. – 35020 – Legnaro – PD – Italy

Place and date of document

Legnaro, _ _ / _ _ / _ _ _ _

D.C.: DC N-001/00001

The manufacturer

Legal representative

GENERAL INFORMATION

Par	Description
4	**Guarantee activation form (with repairs by authorised centres)**

BUYER'S DETAILS:

COMPANY NAME ▼

BUSINESS/PROFESSION/DEPARTMENT ▼

USER DATA (Surname and Name) ▼

PLACE OF INSTALLATION ADDRESS ▼

POSTCODE ▼ CITY ▼

Telephone ▼ Fax ▼

e-mail ▼

Data di acquisto ▼

Model ▼

Serial number ▼ accessory/ies ▼

Section to be filled in and returned in a sealed envelope to:

Aerservice S.r.l.
Via Marconi, 1 Z.I.
35020 Legnaro (PD) Italy

Please enclose also a copy of the purchase document (delivery note, invoice, receipt) showing the date of purchase.
Or send a fax to +39 049 825 2310 .

In accordance with article 10 of Law 675/96 data provided in this form shall be recorded on protected electronic supports and shall be treated using computerised systems; data must be provided in order to enter into and execute the contractual relationship established by the Guarantee. Data may be used by Aerservice and by specialised companies operating in Italy and abroad on behalf of Aerservice S.r.l., for customer communications.

Pursuant to article 13 of Law 675/96, you may, at any time and free of charge, check the data held and obtain the rectification or erasure of the data; you also have the right to object in full or in part to the use of the data for the purposes described above, by writing to Aerservice S.r.l. – via Marconi 1 – 35020 Legnaro (PD), Italy , for the attention of the Data Controller.

Check this box if you do not consent to the use of the data provided for purposes other than the management of the Guarantee ☐

By providing Aerservice S.r.l. with personal data you have the right to a further six months GUARANTEE following on from the twelve month normally guaranteed

Customer's Signature_____

12 MONTH GUARANTEE ACTIVATION REQUEST FORM

This GUARANTEE gives the right to telephone assistance and to interventions by qualified Aerservice personnel to restore the equipment following problems caused by manufacturing faults; this guarantee is valid for 12 months from the date of purchase.
The guarantee does not cover any damage to the outer enclosures or faults caused by natural events (lightening, flooding, etc), intent, improper use or use of incompatible consumables.

The Guarantee does not cover consumable parts such as filters, flexible hose, lamps, etc.
Any assistance carried out by unauthorised personnel shall invalidate the guarantee,

By providing Aerservice S.r.l. with personal data you have the right to a further six months GUARANTEE following on from the twelve month normally guaranteed

To benefit from the Guarantee please fill in the upper section of this card and send it in a sealed envelope, within 10 days from the date of purchase of the equipment, to the following address: Aerservice S.r.l - Via Marconi, 1 Z.I. - 35020 Legnaro (PD) Italy.

Please attach a copy of the purchase document, or send all documents via fax to +39 049 825 2310 , or to the website www.aerservice.it.
Keep this section of the card together with the original purchase document to certify your right to the Guarantee.

For telephone support or technical assistance please call: +39 049 641 200

GENERAL INFORMATION ON THE MACHINE

Par	Description
1	**General description of the machine**

The portable unit is the ideal solution for the extraction and filtration of welding fumes from variable position work stations with discontinuous welding operations. The gases and fumes given off during welding are captured to prevent them from spreading throughout the workplace; the air containing the contaminants is thoroughly filtered and recycled back to the workplace. This unit is designed for the suction and treatment of dry fumes produced by work processes such as spot or discontinuous welding wire or electrode welding, hence involving the emission of low concentrations of pollutants containing gas or suspended welding slag.
National and international regulations allow the use of these devices in replacement of conventional air cleaners with an articulated arm in special conditions such as occasional or discontinuous use (e.g. 20 hours out of a 40 hour working week) or in conditions in which the work processes are dynamic to the point at which a fixed capture system is ineffective. In addition, the filtration unit also purifies the air in the surrounding environment, thus not only treating the area contaminated by the work process but simultaneously creating air exchange in the workplace and further decreasing the level of pollutants present.
To comply with regulations and to obtain high quality filtration with consequent safety for the operator, it is essential to perform correct maintenance/ periodic replacement of the filters, which, in our units, provide high capacity for accumulation of contaminants and very low costs for the filtration sections.

MACHINE CHARACTERISTICS

The portable unit is fitted with a high efficiency suction fan in a negative pressure sound-insulated compartment which acts as flow calming plenum to reduce the turbulent flow of the treated air before it goes out through the special output grilles.
The excellent manoeuvrability and highly ergonomic use of this unit ensure it can be utilised in several different work stations, while the flexible arm is able to operate over a working radius of 3 m.
The machine is supplied as standard with an electrical control panel, IP65 protection, made up of:

- ON/OFF switch;
- magneto-thermal protection (for electric motor);
- differential pressure switch with simultaneous temperature control;
- machine power supply signal (white light);
- machine on signal (green light);
- clogged filter signal (red light).

According to the version, the filtration section is made up as follows:

FILTRATION LEVEL	**FILTER UNI 2.0**
1	METAL PREFILTER
2	CORRUGATED FILTER
3	RIGID POCKET BAG FILTER

Filter Uni 2.0 supports 2 or 3 m length arms; these can be of the following types:

IBF ARMOFLEX

The internal supporting structure is realized with reinforced steel billet pipes and 6061 aluminum alloy components after CNC worked for T6 in physical state, then anodized to ensure durability despite continuous exposure to fumes.
The flexible covering pipe is an multilayered PVC to guarantee the protection from eventual sparks and a high temperature resistance (max 40°C).
The extraction hood has a square profile for a maximum efficiency of extraction, complete of manual damper for the airflow calibration, anti-intrusion grille and bridge handle.

IBS ARMOTECH

The internal supporting structure is realized with reinforced steel billet pipes and 6061 aluminum alloy components after CNC worked for T6 in physical state, then anodized to ensure durability despite continuous exposure to fumes.
The rigid pipe in aluminum allows a high lightness.
The suction hood has a square profile to provide a maximum efficiency of extraction, complete of a manual damper for an airflow calibration, safety anti-intrusion grate and handle.
The wall mounted version are provided with a steel painted bracket for fixing and connection pipe for fume expulsion.

GENERAL INFORMATION ON THE MACHINE

Par	Description
2	**Technical data of the FILTER UNI 2.0 unit**

Unit data		FILTER UNI 2.0 230 V-1
Suction arm	N°	1
Supply voltage	V	230
Mains frequency	Hz	50
Installed power	kW	1.1
Absorbed current	A	4.85
Maximum extractor fan flow rate	m^3/h	2500
Extractor fan negative pressure	Pa	1400
IP Protection class		55
ISO insulation class		F
Machine air flow rate	m^3/h	1500
Machine negative pressure	Pa	630
Filtration efficiency According to EN 779	%	G2 25%
	%	G4 70%
	%	H12 99,5%
Optional carbon filter	Kg	10
Sound pressure level	db(A)	73

GENERAL INFORMATION ON THE MACHINE

Par	Description
3	**Description of machine components**

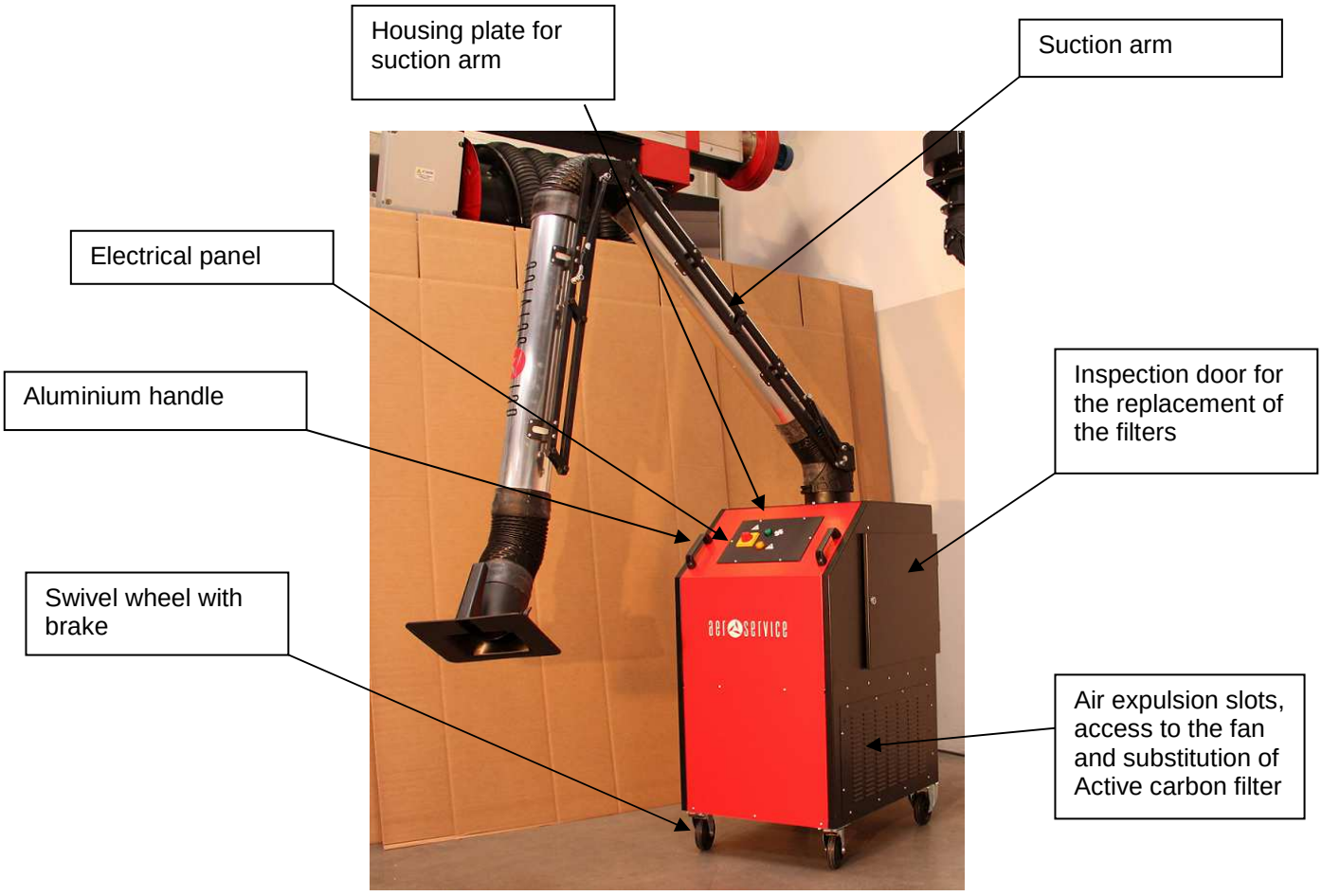


Photo 2 - 3.1

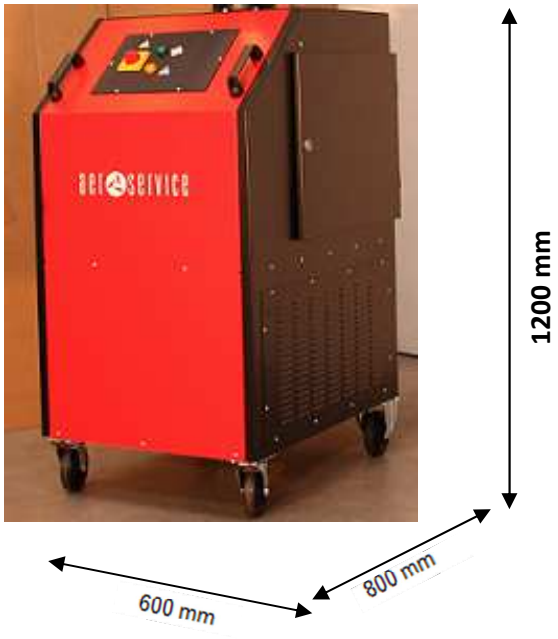


Photo 2 - 3.2

INITIAL START-UP

Par	Description
1	**Electrical connections**

All versions of the portable air cleaner come with a 5 m power supply cable.

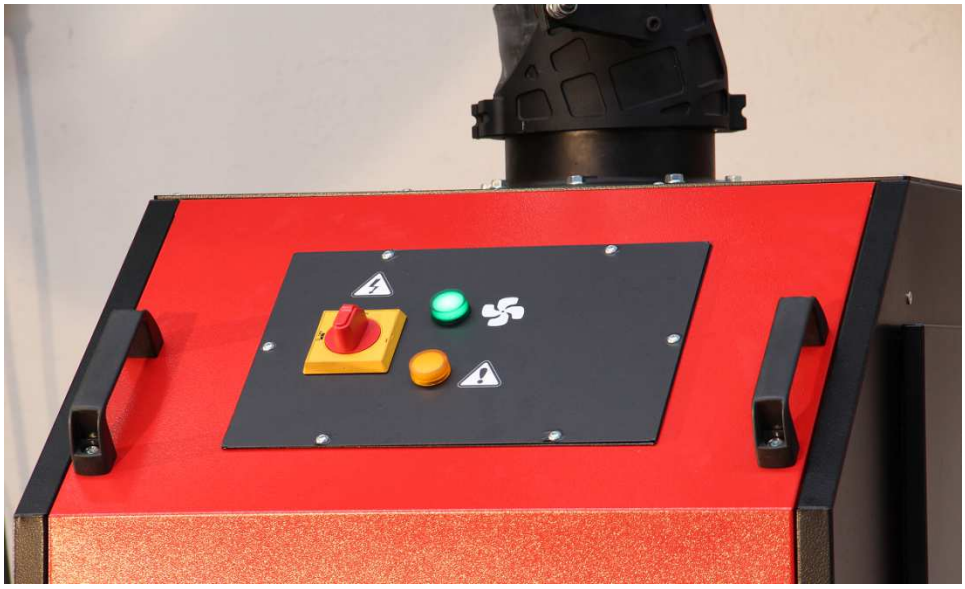
The cable comes with a wired plug (Photo 3 - 1.1).

250 V Plug~ French and German standard

Photo 3 - 1.1

INITIAL START-UP

Par	Description
2	**Control panel and electrical panel on the machine**



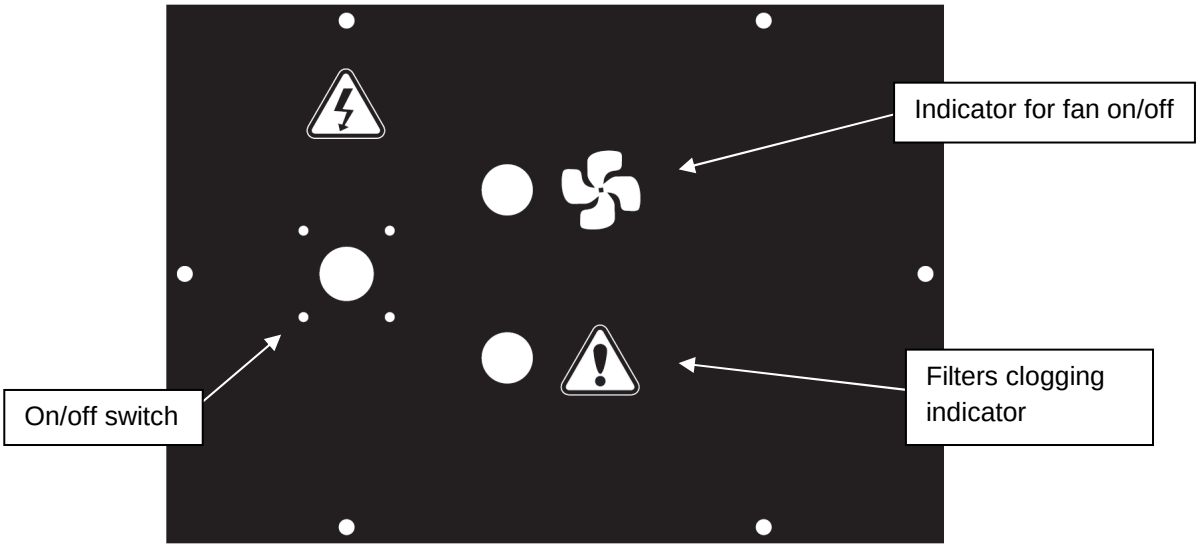
The machine is equipped with an electrical panel which acts as control panel and as container for the protection devices of the electric motor.

The control panel is on the front of the machine near the handle. The control panel is covered by a painted plate with the adhesive strip as shown below.

The position of the panel makes it easy to switch the machine on and off and to keep all the machine functions under control by means of the indicator lights on the panel.

The handle protects the panel against accidental knocks which could damage the equipment thus making it impossible to control the machine.

The label above the panel helps the operator use the equipment and check its correct operation.



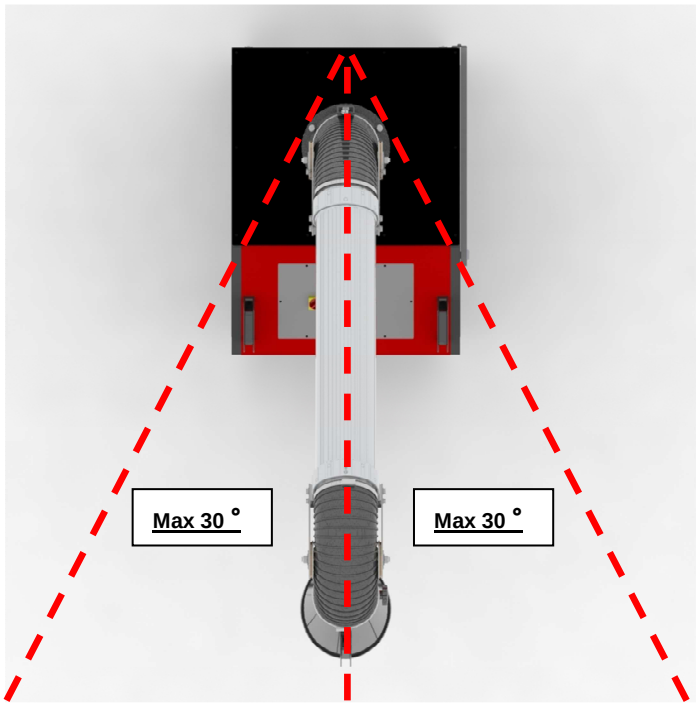
INITIAL START-UP

Par	Description
3	**Use of the suction arm**

The machine is fitted with one suction arm which must be assembled separately using the screws supplied in the package. The arm's flange must be fixed to the plate, with pre-drilled holes, on the air cleaner.

The suction arm can rotate 360° about the central axis during the rotation phase.

Arm closing and/or opening operations must be carried out only from the front of the machine with the operator facing the control panel.



The use of the suction arm outside the recommended range may cause the machine to tip over. In fact, when movements are carried out along the longest side of the machine the force exercised is such as to move the barycentre and act as a lever lifting and/or tipping over the air cleaner in the direction of the operator moving the arm.

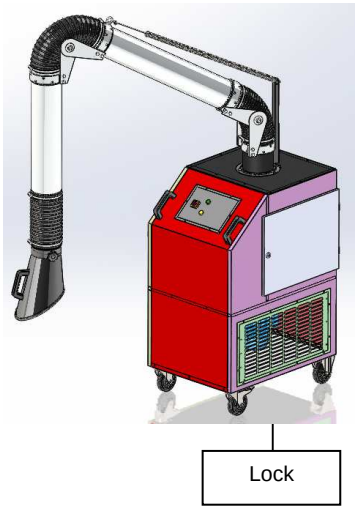
MACHINE MAINTENANCE

Par	Description
1	**Replacing the filters**

The filter lifecycle and interval for the replacement of clogged filters may vary according to the type of use.

There are many variables to be taken into account, such as:

- material to be welded (every material and alloy produces different fumes/microparticulate);
- type of welding (each welding method behaves differently, mig, tig, electrode, etc.);
- elements in contact with the equipment (for example oil, fat, paint, etc. make the fumes generated more “aggressive”).



When a filter is clogged it is signalled by a special indicator light on the control board; The light refers to a differential pressure switch housed inside the electrical panel.

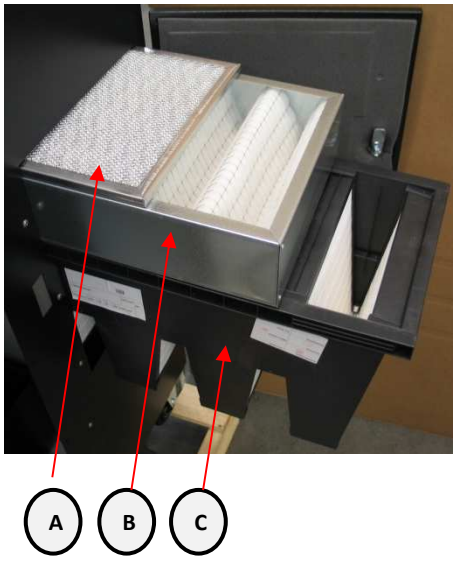
To replace the filters it is necessary to use the special triangular key (Photo 4 - 1.1) which is supplied with the machine; the key opens the lock of the filter inspection door.

The door gives access to the filtration section; the filters can be simply removed by pulling them outwards one at a time.

Photo 4 - 1.1

It is important to take into account that it may be difficult to extract the filtration section due to the gaskets along the perimeter of the filters. The gaskets (which are pressurised) hermetically seal the entire filtration section and guarantee that all the particulate extracted is filtered by the whole section.

The filters must be extracted starting from the lower one which has a frame to hold on to and pull; the other filters will then come out more easily as they will no longer be pressurised.



It is recommended to replace all the filters in the machine at least once a year for maximum suction and filtration efficiency.

MACHINE MAINTENANCE

Par	Description
2	**Detail of the filters in the air cleaner with rigid pocket bag HEPA filtration system**

FIRST FILTRATION STAGE

A

Metal filter cell

Filter code: ACCRICFILTUNI3

It is recommended to clean this filter at least once a week for maximum efficiency of the machine.

Dimension	mm	490x592
Filtering medium		Aluminium fibre
Regenerability		Yes (washable)
Flame retardancy		non-flammable

Disposal

Metal filters are made with inert materials which, if they are not contaminated with toxic-noxious substances deriving from their use, can be disposed of as solid urban waste.

SECOND FILTRATION STAGE

B

Corrugated filter cell

Filter code: ACCRICFILTUNI4

It is recommended to clean this filter at least one time every two weeks for maximum efficiency of the machine.

Dimension	mm	490x592
Filtering medium		Polyester fibre
Regenerability		Yes (shaking)
Flame retardancy		DIN 53438 F1

Disposal

Corrugated filters are made with inert materials which, if they are not contaminated with toxic-noxious substances deriving from their use, can be disposed of as solid urban waste.

THIRD FILTRATION STAGE

C

Glass microfibre rigid pocket bag HEPA filter

Filter code: ACCRICFILTUNI2

It is recommended to clean this filter at least once a month for maximum efficiency of the machine.

Dimension	mm	490x592
Filtering medium		Glass fibre H13
Regenerability		No
Flame retardancy		M1

Disposal

Pocket bag filters use materials that can be completely incinerated/disposed of without the release of any toxic gas.

MACHINE MAINTENANCE

Par	Description
3	**Detail of carbon filter, for Filter Uni H**

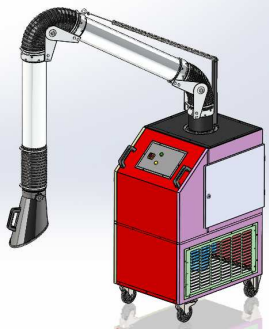
FOURTH FILTRATION STAGE (OPTIONAL)

Carbon filter

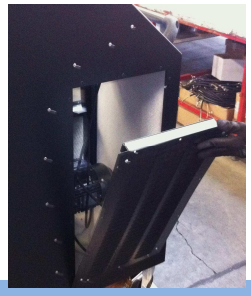
Filter code: ACCFUNI0000010

Dimension	**mm**	**292x648**
Carbon type		Vegetal, in cylinders
Regenerability		No
Disposal		

It is recommended to clean this filter at least once a year for maximum efficiency of the machine.



For the replacement of carbon filters, unscrew the side vents on the sides, on which are threaded, as shown above. You have to pull out the old filter from the grill then insert the new one.



The activated carbon are materials, made predominantly of carbon in the form of microcrystals of graphite, treated so as to obtain a porous structure with a large internal surface area. Thanks to these characteristics they have high capacity adsorbent and are able to absorb, during the contact phase, many types of substances, attracting the molecules in their inner surface. The absorbent capacity of the filter is given by the types of pollutants and from their combination.

Carbon filters are made with inert materials which, if they are not contaminated with toxic-noxious substances deriving from their use, can be disposed of as solid urban waste.

* The fourth filtration stage is only with the Active Carbon Kit, when not present, as in the standard version, there is a polyester microfiber panel in order to reduce noise emission.

MACHINE MAINTENANCE

Par	Description
4	**Malfunctions**

FAULT TYPE	CAUSE	ACTION
STARTING PROBLEMS	Low voltage supply	Check the motor dataplate and the mains power supply
	No power supply	Check the connection of the plug and/or socket
FAILURE TO START	No power supply	Check the connection of the plug and/or socket
	Motor burn out	Replace extractor fan
FILTER CLOGGED INDICATOR LIGHT ON	Filters are clogged beyond the limit set	Clean filters with compressed air
		Replace filters
		Replace pressure switch device
THE POWER ABSORBED IS GREATER THAN THE ONE INDICATED ON THE IDENTIFICATION LABEL AND/OR MOTOR PLATE	The motor rotates below its normal rotation speed	Check power supply. Check for faults in the motor windings and if necessary replace it.
EXCESSIVE VIBRATIONS	Unbalanced rotating parts	Check balancing of rotating parts
	Loose or unsuitable antivibration devices	Check the tightness of the antivibration and their good condition
REDUCED SUCTION	Clogged filters	Check the condition of the filters and the signal on the electrical panel; if necessary replace with a new set of filters.
	Air leaks	Check the casing for strange openings or air passages. If possible try to seal everything with silicone.
	Unbalanced impeller	Check the condition of the impeller and check for damaged parts or dirt on the blades. Remove the fan unit and thoroughly clean the impeller.

MACHINE MAINTENANCE

Par	Description
5	**Maintenance programme**

ROUTINE CHECKS

	TYPE OF CHECK OR MAINTENANCE	METHOD	FREQUENCY	DATE OF CHECK AND NAME OF MAINTENANCE OPERATOR				
				1	2	3	4	5
1	GENERAL CHECK OF THE CONDITION OF THE AIR CLEANER	VISUAL	DAILY					
2	CLEANING	MANUAL	See note A					
3	CHECK OF THE CONDITION OF THE SEALS	VISUAL	150 HOURS					
4	CHECK OF TIGHTNESS OF NUTS AND BOLTS	MANUAL	150 HOURS					
5	CHECK OF FILTER CLOGGING	VISUAL OR MANUAL	600 HOURS See note B					
6	CHECK OF EXTRACTOR FAN	MANUAL	See note C					
7	REPLACEMENT OF BEARINGS	MANUAL	40000 HOURS See note D					

NOTE A

The cleaning intervals vary according to the type of fluid conveyed and its concentration and also according to the type of work environment in which it is used. The end user must therefore define a cleaning interval suitable to always keep the machine perfectly clean; the accumulation of material on the fixed parts must not be more than 5 mm thick.

NOTE B

A special device fitted on all equipment signals the need to replace the filters. It is however recommended to check whether the filters are clogged for maximum suction and machine efficiency; for this reason the cleaning interval described in the filter paragraph should be respected and the entire filter set should be replaced at least once a year. The filters deteriorate even if they are not used very often.

NOTE C

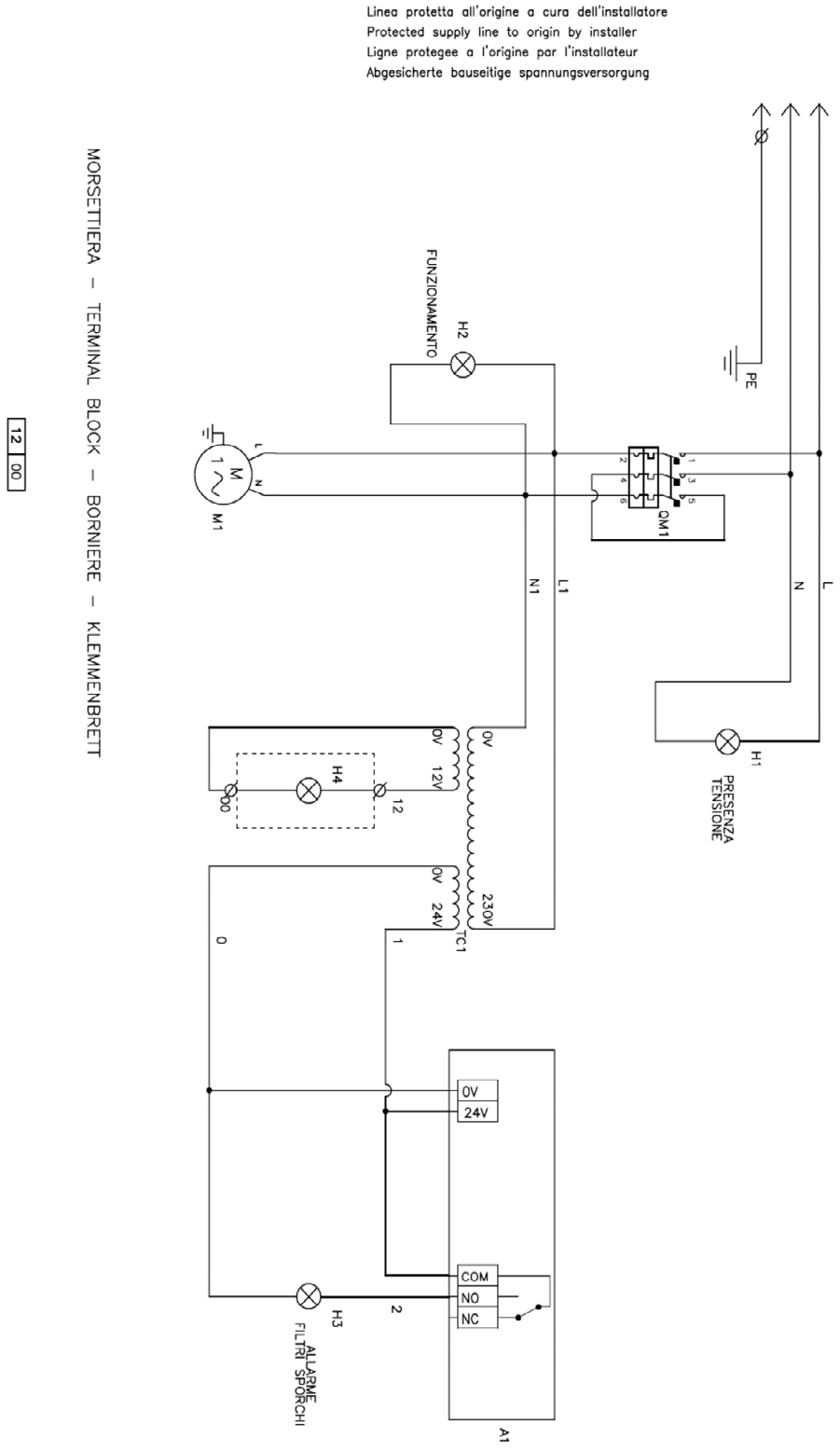
The fan extractor must be monitored at intervals established by the user to check that it is good working order, to check for faults or damage to the impeller and to check that the electric motor is in good condition.

NOTE D

This is the lifecycle defined for the bearings, however due to external factors such as increased vibrations for a certain period of time the replacement of the bearings may have to be carried out at shorter intervals. At the end of their lifecycle, the bearings should be replaced even if apparently they seem in good condition.

MACHINE MAINTENANCE

Par	Description
6	**Wiring diagram for single-phase power supply**



OPERATOR'S NOTES

Par	Description
1	**Details of maintenance operations**

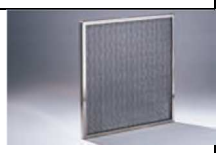
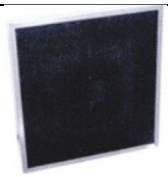
The following table must be filled in by a qualified technician authorised by Aerservice S.r.l..

It is of fundamental importance to keep these notes updated in order to keep track of the problems and maintenance carried out; in this way future problems can be solved in a shorter time with cost savings.

DATE	COMPANY NAME	CONTACT PERSON	OPERATION CARRIED OUT
			First start-up

SPARE FILTERS

Par	Description
1	**Filter's codes**

Code	Description	Picture
ACCRICFILTUNI2	RIGID POCKET FILTER F18 490x592x292 H12 99,5 % 1≥P>0,3 µm FOR UNI 2.0	
ACCRICFILTUNI3	ALUMINIUM MESH FILTER F15 ARA 490x592x12 G2 25 % 10≥P µm	
ACCRICFILTUNI4	F12 POLYESTER CORRUGATED FILTER 490x592x98 EU4-G4 70% 10≥P>3 µm	
ACCRICFILT0780	POLYESTER PANEL CHASSIS IN GALVANIZED, 2 PIECES	
ACCFUNI0000010	CARBON FILTER PLANT A CYLINDER FOR EXTRUDED UNI FILTER 2 pcs 292x648x40 10 Kg IN TOTAL	

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