

Operations Manual
Controlled Air Design - Raleigh, NC
(800) 635 0298

www.controlledairdesign.com

Parts and Filters: (919) 607 6765
sales@controlledairdesign.com



JETCLEAN DF



CONTROLLED
AIR DESIGN
controlledairdesign.com



ANTIPOLLUTION SYSTEMS



1. DESCRIPTION OF USER INSTRUCTION MANUAL	55
1.1. INTRODUCTION	55
1.2. INFORMATION ABOUT THE USOF THE MANUAL	55
2. MACHINE IDENTIFICATION	56
2.1. MODEL IDENTIFICATION DATA	56
2.2. EC IDENTIFICATION PLATES	56
2.3. EC DECLARATION OF CONFORMITY	57
3. GENERAL PRELIMINARY INFORMATION	58
3.1. DIRECTIVES	58
3.2. GENERAL SAFETY INSTRUCTIONS	58
3.3. RESIDUAL RISKS	58
3.4. PERSONAL PROTECTIVE DEVICSE	59
3.5. NOISE LEVELS	59
3.6. VIBRATION LEVELS	59
3.7. OBLIGATIONS	59
3.8. PROHIBITIONS	59
3.9. INTENDED USE/ UNINTENDED USE	60
3.10. SAFETY SIGNS USED ON THE MACHINE	61
3.11. WARRANTY	61
4. MACHINE DESCRIPTION	62
4.1. MAIN COMPONENTS	62
4.2. OPERATIONAL DESCRIPTION	64
4.3. TECHNICAL SPECIFICATIONS	66
4.4. OVERALL DIMENSIONS	67
4.5. SAFETY DEVICES	69
5. TRANSPORTATION AND INSTALLATION	69
5.1. TRANSPORTATION	69
5.2. INSTALLATION	69
5.3. CONNECTIONS	71
5.4. ADJUSTMENTS	71
6. MACHINE CONTROLS AND USE	72
6.1. CONTROL DEVICES	72
7. MAINTENANCE	72
7.1. ROUTINE MAINTENANCE	72
7.2. EXTRAORDINARY MAINTENANCE	73
8. TROUBLESHOOTING	74
9. SCRAPPING AND DECOMMISSIONING	74
10. ELECTRICAL PANEL	75
11. SPARE PARTS	75
11.1. HOW TO REQUEST SPARE PARTS	75
11.2. SPARE PARTS LIST	77

1. DESCRIPTION OF USER INSTRUCTION MANUAL

1.1. INTRODUCTION

The machine in question has been made in compliance with EU directives on the free movement of industrial products in EEC countries, it is then supplied with all documentation required by these directives.

1.2. INFORMATION ABOUT THE USOF THE MANUAL

The maintenance and user manual contains all information for installation, operation, maintenance and cleaning of the machine. It is to be used by operators in charge of managing the machine during all stages of its service life.



WARNING!

It is important to keep it in a readily accessible location, close to the machine and known to all users, so it can be found quickly in any situation.

The manual forms an integral part of the machine for safety purposes.

Therefore,

- It must be kept complete (in all its parts) if it gets lost or damaged, it is necessary to order a replacement.
- the machine must be tracked up to its destruction (even in the event of moving, sale, hiring, etc.);
- It must be kept updated and include any changes made to the machine.



WARNING!

Carefully read all documentation before performing any operation.

OPERATOR	MANUAL CHAPTERS THAT MUST BE STUDIED
INSTALLER	<ul style="list-style-type: none"> • Description of User Instruction Manual • Machine identification • General preliminary information • Description of the machine • Transportation and installation • Scrapping and decommissioning
OPERATOR	<ul style="list-style-type: none"> • Description of user Instruction Manual • Machine identification • General preliminary information • Machine controls and use
MAINTENANCE ENGINEER	<ul style="list-style-type: none"> • Description of user Instruction Manual • Machine identification • General preliminary information • Maintenance • Spare parts

2. MACHINE IDENTIFICATION




2.1. MODEL IDENTIFICATION DATA

MACHINE	<i>FILTER</i>
MODEL	<i>JETCLEAN DF</i>
EDITION	<i>01.12</i>

This manual contains confidential information and designs owned by **CORAL S.p.A**
 Reproduction of the manual without written permission by **CORAL S.p.A.** is forbidden.

2.2. EC IDENTIFICATION PLATES

The machine is equipped with an EC identification plate, containing specific data. Transmitting to the Manufacturer the data engraved which has the exact identification of the machine in question.

		CORAL S.p.A. - Corso Europa 597 10088 VOLPIANO - TORINO - ITALY Tel. +39.011.9822000 Fax +39.011.9822033 e-mail: coral@coral.eu			 Made in Italy
TIPO	<input type="text"/>	N°.	<input type="text"/>		
S/N	<input type="text"/>	Ord. Prod.	<input type="text"/>		
MAX m ³ /h	<input type="text"/>	kW	<input type="text"/>	dB(A)	<input type="text"/>
MIN m ³ /h	<input type="text"/>	V / Ph - Hz	<input type="text"/>		
H Stat. Pa	<input type="text"/>	Rpm	<input type="text"/>	IP	<input type="text"/>
MAX bar	<input type="text"/>	Rpm max	<input type="text"/>	kgf	<input type="text"/>

FIELD	DESCRIPTION
TYPE	Machine description
No.	Machine serial number
S/N	Serial number
PROD ORD.	Production order No.
MAX m³/h	Rated capacity
MIN m³/h	Capacity in operating conditions
kW	Engine power
dB(A)	Decibel sound levels
V/Ph - Hz	Electrical Volt/Phase - Frequency
H Stat Pa	Static pressure
Rpm	Engine revolutions per minute
Max. Rpm	Maximum revolutions per minute of the fan
IP	Electrical protection degree
MAX bar	Maximum pneumatic circuit pressure
Kgf	Machine weight

2.3. EC DECLARATION OF CONFORMITY



Macchina / Matériel / Maschine / Maquina / Machines / Maskinen

DATE

Dichiarazione di conformità CE

(Riferimento Direttiva Macchine 2006/42/CE)

La **CORAL S.p.a.** Corso Europa 597 Volpiano - Torino (Italia) dichiara con la presente che la macchina è conforme alla normativa contenuta nella direttiva del consiglio 2006/42/CE integrata dalle inerenti successive direttive del consiglio CEE. Alcune disposizioni e normative di riferimento: • **UNI EN ISO 12100-2:2005** Sicurezza del macchinario. • **EN 60204-1** Impianto elettrico delle macchine • **2004/108/CE** Compatibilità elettromagnetica

Certificat de conformité aux normes CE

(Repondant aux Directives Machines 2006/42/CE)

La Société **CORAL S.p.a.** Corso Europa 597 Volpiano - Torino (Italia) déclare par la présente que le matériel est conforme à la norme contenue dans la directive du conseil 2006/42/CE intégrée dans les directives suivantes et inérent au conseil CEE. Certaines dispositions et normes se réfèrent: • **UNI EN 12100-2:2005** Sécurité des machines • **EN 60204-1** Installation électrique sur les produits • **2004/108/CE** Conformité Electromagnetique

CE Declaration of conformity

(Referring to Machines Directions 2006/42/CE)

CORAL S.p.a. Corso Europa 597 Volpiano - Torino (Italia) declares with this letter that the machine is in compliance with rule contained in the direction of CEE council 2006/42/CE integrated by the inherent following directions of the CEE council. Directions and rules of reference: • **UNI EN 12100-2** Machinery safety • **EN 60204-1** Machines electric • **2004/108/CE** Electromagnetic standards compliance.

CE – Konformitätserklärung

(EG - Richtlinie Maschinen 2006/42/CE)

Die Fa. **CORAL S.p.a.** Corso Europa 597 Volpiano - Torino (Italien) erklärt hiermit, daß die Bauart der wie folgt allen einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen (EG - Richtlinie Maschinen 2006/42/CE und nachfolgende EG - Richtlinien) Einige angewendete harmonisierte Normen: • **UNI EN 12100-2:2005** Sicherheit von Maschinen • **EN 60204-1** Elektrische Ausrüstung für Industriemaschinen • **2004/108/CE** Elektromagnetische Vereinbarkeit.

Declaración de conformidad CE

(Referencia Directiva Maquinas 2006/42/CE)

La **CORAL S.p.a.** Corso Europa 597 Volpiano - Torino (Italia) declara con la presente que la maquina es en conformidad a la norma CEE contenida en la directiva del consejo 2006/42/CE integrada a las sucesivas directivas del consejo CEE. Algunas disposiciones y reglas de referencia: • **UNI EN 12100-2:2005** Seguridad de las maquinas • **EN 60204-1** Instalacion electrica de las maquinas • **2004/108/CE** Compatibilidad Electromagnetica.

CE Conformiteitsverklaring

(Verwijzing naar de machinerichtlijnen 2006/42/CE)

CORAL S.p.a. Corso Europa 597 Volpiano - Turijn (Italië) verklaard middels deze brief dat machines genoemd: is in overeenstemming met de ingegrepen CEE richtlijnen volgens de voorschriften van de CEE raad 2006/42/CE geïntegreerd bij de navolgende omschrijvingen van de CEE raad. Specificatie en richtlijnen betreft onderstaande normen en regels: • **UNI EN 12100-2:2005** Beveiliging machines • **EN 60204-1** Elektrische machines • **2004/108/CE**

CE - Deklaration efter det vedtagne

(Refererende til maskindirektiver 2006/42/CE)

CORAL S.p.a. Corso Europa 597 Volpiano - Torino (Italy) erklærer med dette brev at maskinen er mærket: I overensstemmelse med CEE maskindirektivet fra EU-rådet 2006/42/CE integreret ved følgende direktiver fra EU-Rådet. Direktioner og regler i henhold til:

• **UNI EN 12100-2** Maskinens sikkerhed • **EN 60204-1** Maskinens elektricitet • **2004/108/CE**

Managing Director
Claudio CORAL

Technical Director
Roberto TAGLIAVINI

3. GENERAL PRELIMINARY INFORMATION

3.1. DIRECTIVES

In the design and construction of the machine the following directives were held as reference:

DIRECTIVES	
2006/42/CE	Machinery Directive
2004/108/CE	Electromagnetic Compatibility Directive
2006/95/CE	Low Voltage Directive (LVD)

3.2. GENERAL SAFETY INSTRUCTIONS

The instructions and safety instructions referred to in this manual take into account that, in the workplace, the requirements of the document "Testo Unico D.lgs. 81/08" (regarding workplace safety) must be known and applied. These contain important information relating to:

- safety of persons engaged in operation and maintenance;
- safety and efficiency of the machine.

3.3. RESIDUAL RISKS

The machine is delivered with all safety systems needed for the operator to work in conditions of maximum safety, but risks remain from which the operators must be protected, especially during the maintenance, installation and cleaning stages.



Operators, for their part, must use personal protective equipment suited to the risk to be addressed. The most used are: gloves and masks, goggles, safety footwear etc. ...

GENERAL RESIDUAL RISKS		
	Residual risk	Description
1	VOLTAGE PRESENCE DANGER	There would be a risk of electric shock in the event in which the operator performs maintenance or replacement operations of the switch and leaves the under voltage plug inserted.
2	MOVING PARTS DANGER	In the event in which the operator performs maintenance operations by inserting his/her hands into the fan suction area, having not disconnected the plug from the mains and locked the switch, external individuals could potentially start the machine and cause serious injury.
3	EXPLOSION RISK	In the event in which, despite the prohibition clearly set out in paragraph "3.9. INTENDED USE/ UNINTENDED USE", the machine is used to extract elements that by nature or by reaction are flammable, or pose an explosion risk.
4	OVERTURNING RISK	During operation, the area around the machine is to be considered as having a risk of overturning. Keep a safe distance. Refer to the figure in paragraph "5.2. INSTALLATION".

3.4. PERSONAL PROTECTIVE DEVICES

The workers must wear work clothes and if necessary personal protective equipment (gloves, goggles, masks, etc..) according to the laws and safety regulations applicable in your country.

The signs below are examples of personal protective equipment installed on the machine.

SYMBOL	OBLIGATION
	Use protective gloves.
	Use safety footwear.

3.5. NOISE LEVELS

The machine is designed to reduce the level of sound power to the source.

Check the requirements of the legislation in force in the country of installation and, if required, use:

- Personal protective equipment,
- any soundproofing screens.

	JETCLEAN DF1		JETCLEAN DF2	
SOUND LEVEL	71 dB(A)	72 dB(A)	74 dB(A)	74,5 dB(A)
SOUND LEVEL WITH PLENUM	64 dB(A)	65 dB(A)	70 dB(A)	70 dB(A)

3.6. VIBRATION LEVELS

The machine does not send vibrations to the ground that may compromise the stability or accuracy of any devices located near the system.

3.7. OBLIGATIONS

- Do not use the machine improperly, that is, do not use the machine in any manner other than that indicated in the paragraph entitled “**3.9. INTENDED USE/ UNINTENDED USE**”.
- Perform maintenance operations with the machine turned off.
- Only qualified personnel can operate the machine.

In particular operators must:

- observe the rules and instructions provided by the employer, the manager and the person in charge of collective or individual protection.
- use the machinery, equipment, tools etc. correctly;
- use the protective devices provided correctly;
- promptly inform the employer, or person in charge of any deficiency in the safety devices;
- long hair must be tied back, do not wear scarves or any other piece of clothing that might get caught or dragged into the moving parts of the machine.

3.8. PROHIBITIONS

In particular, operators must not:

- remove or modify the safety, signalling or control devices without authorisation;
- carry out operations or actions which are outside their field of expertise and which might compromise their own safety or that of other operators;
- process with products different to those listed;
- change the electrical connections to exclude the safety devices;
- smoke while the filter is in operation.

3.9. INTENDED USE/ UNINTENDED USE

The **JETCLEAN DF filter** is designed for:

OPERATION	TREATED AIR TYPE		WORK ENVIRONMENT
	PERMITTED	NOT PERMITTED	
FILTRATION of:	<ul style="list-style-type: none"> welding fumes dry powders metallic powders 	<ul style="list-style-type: none"> flammable or explosive vapours potentially explosive metallic powders powders which are by nature or by reaction can be explosive 	Products during processing in the mechanical industry

The machine has been designed to:

- satisfy the requirements mentioned in the sales contract;
- be used according to the directions and limits of use specified in this manual.

The machine has been designed and built to work safely if:

- it is used within these limits;
- the procedures in the user manual are performed;
- routine maintenance is performed on time and as indicated in the manual;
- extraordinary maintenance is performed promptly when needed;
- the safety devices are not removed or bypassed.



WARNING!

It is considered "MISUSE" if the machine is used to obtain production values different from those described herein.

Any other use of the machine must be previously authorized by **CORAL S.p.A**

In the absence of such written permission the manufacturer disclaims any liability with regard to possible damage to property or persons and deems any kind of warranty regarding the line and the equipment supplied as void.


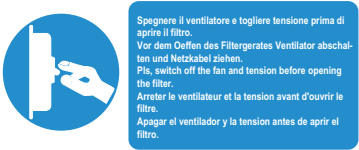



WARNING!

During welding operations the use of flammable spray, abrasive wheels or other tools that cause sparks or naked flames, can cause ignition of the filter fabric.

3.10. SAFETY SIGNS USED ON THE MACHINE

Safety stickers and labels are affixed to the machine, as shown in the table below and illustrated in the following image:

POS.	SIGN	DESCRIPTION
A	 <p>IN FASE DI ALLACCIAMENTO SI CONSIGLIA DI CONTROLLARE:</p> <ul style="list-style-type: none"> - Che il collegamento sulla morsettiera del motore corrisponda alla tensione di linea. - Che l'assorbimento del motore non superi il valore di targa, nel caso contrario parzializzare le bocche del ventilatore. - Che la rotazione delle ventole avvenga nel senso della freccia. - Che il motore sia protetto da salvamotore adeguato alla potenza del motore. <p>AU MOMENT DU BRANCHEMENT, IL EST RECOMMANDE DE S'ASSURER:</p> <ul style="list-style-type: none"> - Que la connexion sur la boîte à bornes du moteur corresponde à la tension du réseau. - Que l'absorption du moteur ne dépasse pas la valeur indiquée sur la plaque: dans le cas contraire partialiser les orifices du ventilateur. - Que les ailettes tournent dans le sens de la flèche. - Que le moteur soit protégé par un disjoncteur approprié à la puissance du moteur. 	Installation warning
B	 <p>Spegnere il ventilatore e togliere tensione prima di aprire il filtro. Vor dem Öffnen des Filtergerätes Ventilator abschalten und Netzabzug ziehen. Pis, switch off the fan and tension before opening the filter. Arrêter le ventilateur et la tension avant d'ouvrir le filtre. Apagar el ventilador y la tensión antes de abrir el filtro.</p>	Obligation warning
C	 <p>PERICOLO TENSIONE</p>	Voltage presence danger

3.11. WARRANTY

The warranty **is subject** to the following general conditions

- the packaging must be opened and installation must be performed by authorized and/or approved technicians by the Manufacturer;
- the first start up and positive testing** of the installed machine must be done in the presence and under the technical guidance of the Manufacturer or his/her authorized representative, the test report must be completed.
- the machine must be used within the limits stated** in the contract and reported in the technical and/or commercial documentation.
- maintenance must be performed in the time and manner provided by the manual, using **CORAL S.p.A.** original spare parts and entrusting the work to qualified personnel.

The warranty becomes **void** in the event of:

- the safety standards not being respected;
- removal of or tampering with** the control and safety devices (guards, photocells, sensors, switches, etc.);
- changes to safety conditions** established by the Manufacturer;
- misuse of the machine;
- use of the machine by **untrained and/or unauthorized personnel** or failure of the various operators to comply with responsibilities indicated in the manual;
- changes or repairs** made by the user without the written authorisation of the Manufacturer;
- partial or total failure to comply with instructions;
- defective energy supply (electricity, compressed air, etc.);
- lack of maintenance;
- use of non-original spare parts.
- exceptional events such as floods, fires (if not caused by the machines).

The warranty **does not include**:

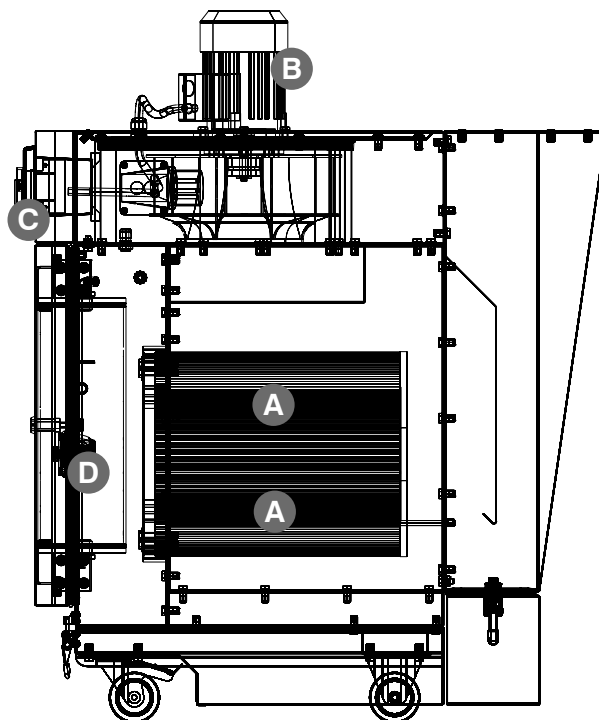
- Consumable material such as: oil, filter cartridges, lubricating grease.
- parts damaged by misuse or improper use, wrong operator intervention, unauthorized repair or tampering by the customer or by third parties, or use of parts not supplied by **CORAL S.p.A.**

4. MACHINE DESCRIPTION

4.1. MAIN COMPONENTS

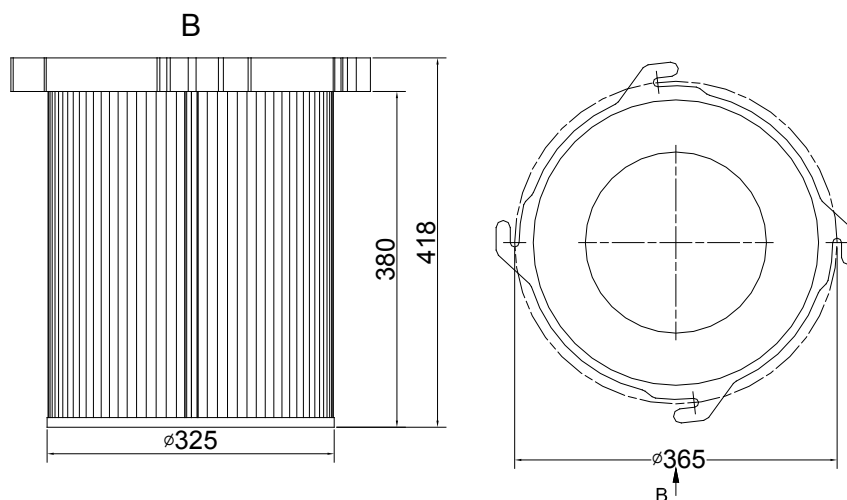
The machine is made up of the following components:

POS.	ELEMENT
A	CARTRIDGE FILTER
B	FAN
C	COUNTER AND SWITCH
D	PNEUMATIC PLANT CLEANING



4.1.1. CARTRIDGE FILTER

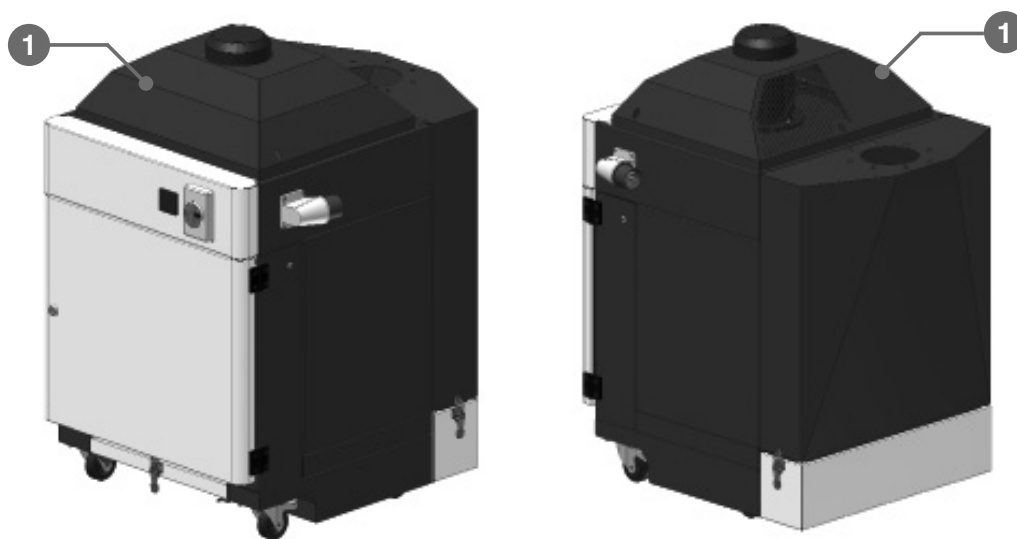
The fabric filter is non-woven polyester, which is made by a spun bonded process. This manufacturing method allows no variation of air permeability, allowing better filtration efficiency and high stability.



DESCRIPTION	
SIZES	Ø325 L=400 mm
NO. OF FOLDS/ SURFACE	175/ 8 m ²
WEIGHT	270 g/m ²
MAX OPERATING TEMPERATURE	130°C
BIA CLASSIFICATION	M (USGC)

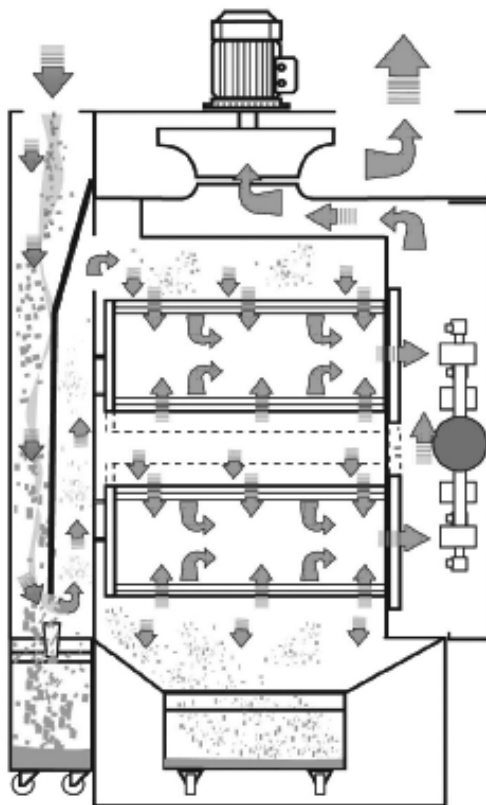
4.1.2. SOUNDPROOF PLENUM (OPTIONAL)

The ejected soundproof plenum (1) can be supplied optionally with the **JETCLEAN DF machine**. It is installed to muffle the noise tested from the engine and from the by the turbulent air movement.



4.2. OPERATIONAL DESCRIPTION

The **JETCLEAN DF** filter is made with a panelled structure in painted steel sheet provided with a suction connector for the self-supporting arms UNIVERSAL NO-SMOKE or EVOLUTION NO-SMOKE or COBRA (optional).



The polluted air is sucked through the air intake by the vacuum created inside the casing by the centrifugal fan.

STEP	ACTION
A	The air passes through the vertical pre-chamber in which the first mechanical separation of the particles takes place by decantation.
B	The heavy particles sink to the bottom of the wheeled container.
C	The remaining particles are filtered by the cartridge filter.
D	The finer filter dust settles in the second container.
E	The air filtered in this way passes through the fan and is expelled through a grid located on the upper wall of the plenum.



WARNING!
The unit is designed for use in vacuum.

4.2.1. DESCRIPTION OF THE PNEUMATIC CLEANING SYSTEM



The washing takes place via a highly effective direct system, consisting of a circular section tank, with incorporated solenoid valves.

The high efficiency is determined by the fact that the solenoid valves obtain the air directly from the tank, which injects it directly into the cartridge. The high shock wave, as a consequence, separates the powder, by discarding it to the container.



WARNING!

The system uses and filtered compressed but not lubricated air, in the pressure field of 2-6 bar.



WARNING!

To set the TIMER, see paragraph “5.4.2. ADJUSTMENT OF THE TIMER FOR CARTRIDGE CLEANING”. Check the dimension of the solenoid valves at paragraph “4.3. TECHNICAL SPECIFICATIONS”.

4.3. TECHNICAL SPECIFICATIONS

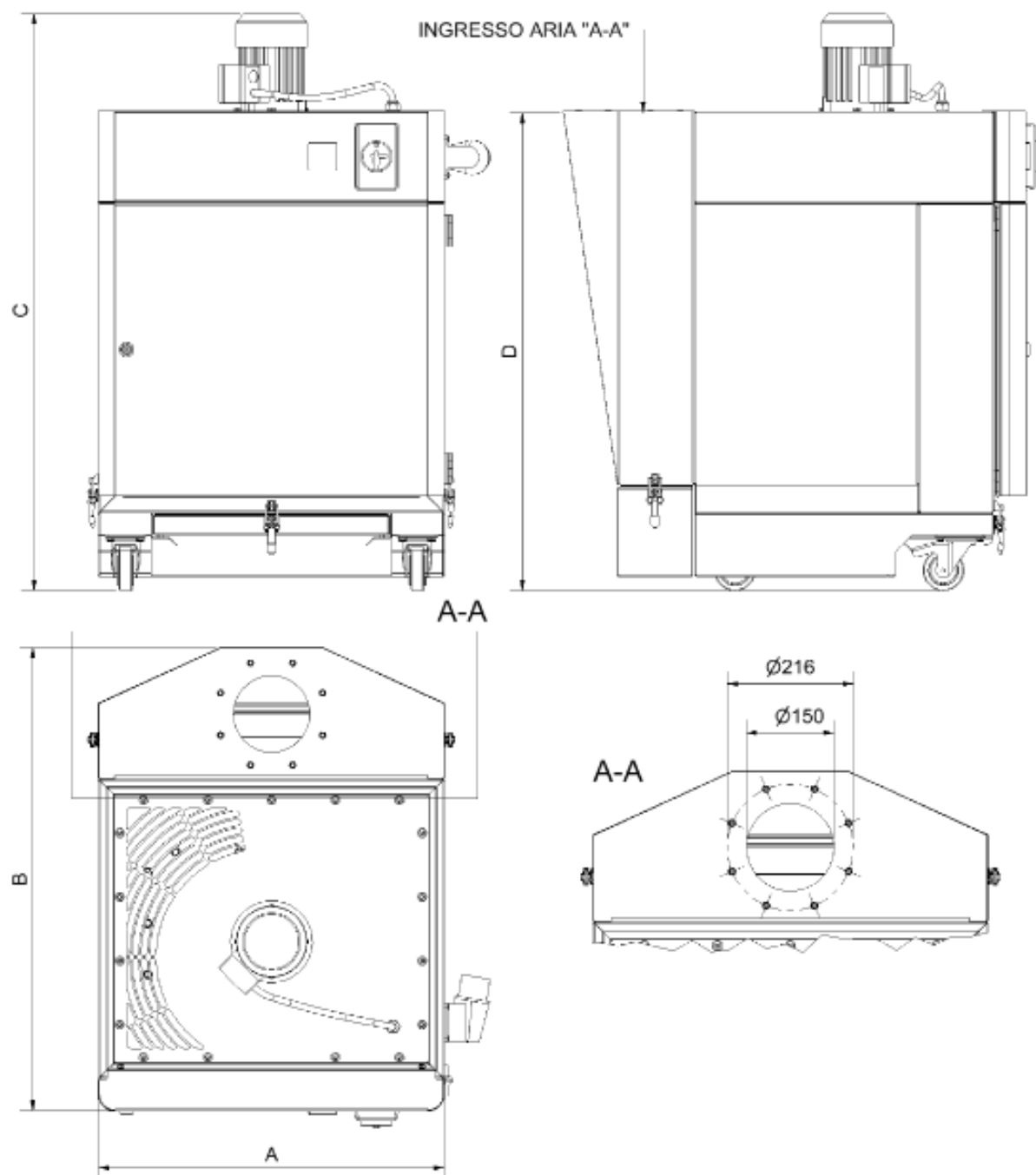
	JETCLEAN DF1		JETCLEAN DF2	
MACHINE SERIAL NUMBER				
POWER	0,55 kW	0,75 kW	1,1 kW	2,2 kW
SUPPLY VOLTAGE	230/400 V	230/400 V	230/400 V	230/400 V
FREQUENCY	50 Hz	50 Hz	50 Hz	50 Hz
ABSORPTION	0,9A	1,1A	2,3A	3,7A
NO. OF REVOLUTIONS	2920	2920	2920	2920
FAN TYPE	PRM220	PRM220	PRM250	PRM250
RATED CAPACITY	1400 m³/h	1450 m³/h	1880 m³/h	2300 m³/h
FLOW WITH 1 ARM D.150 m³/h	1000 m³/h	1100 m³/h	1550 m³/h	1600 m³/h
FLOW WITH 2 ARMS D.150 m³/h	/	/	/	2300 m³/h
CARTRIDGE FILTER DIMENSIONS	D.325 L=400	D.325 L=400	D.325 L=400	D.325 L=400
NO. OF FILTERS	1	1	2	2
FILTER TYPE	CARTRIDGE	CARTRIDGE	CARTRIDGE	CARTRIDGE
FILTER FABRIC TYPE	100% POLYESTER	100% POLYESTER	100% POLYESTER	100% POLYESTER
BIA CLASSIFICATION	M (USGC)	M (USGC)	M (USGC)	M (USGC)
FILTERING SURFACE	8 m²	8 m²	16 m²	16 m²
FILTRATION EFFICIENCY	99,9%	99,9%	99,9%	99,9%
STORAGE CAPACITY FRONT DRUM	9 Lt.	9 Lt.	12 Lt.	12 Lt.
STORAGE CAPACITY BACK DRUM	15 Lt.	15 Lt.	28 Lt.	28 Lt.
WEIGHT	115 Kg	120 Kg	155 Kg	170 Kg

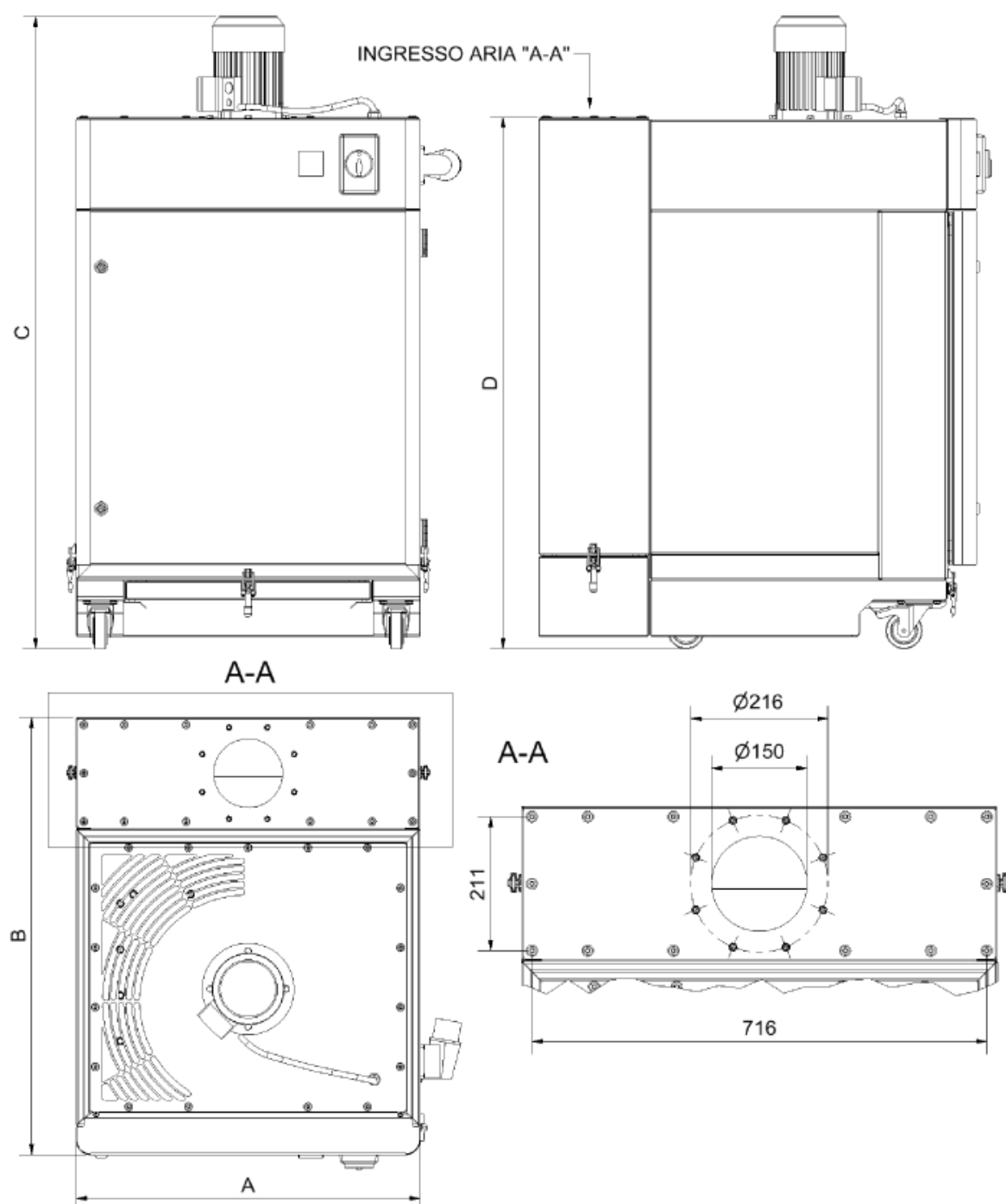
**WARNING!**

a high separation of the filter and a release of less than 0.1% for powders with a particle size between 0.2 and 2 microns with a passage speed of 0.056 m/s is ensured. BIA classification corresponds to M (USGC).

		JETCLEAN DF1	JETCLEAN DF2
TANK		Ø 5" n.1 outputs	Ø 5" n.2 outputs
SOLENOID VALVE	MODEL	VEP (3/4")	VEP (3/4")
	ELECTRICITY SUPPLY	24/220V AC/DC 50/60 Hz	24/220V AC/DC 50/60 Hz
	No.	1	2

4.4. OVERALL DIMENSIONS





OVERALL DIMENSIONS					INLET
	A	B	C	D	
JETCLEAN DF1	675	905	1129	938	1 x D.150
JETCLEAN DF2	750	955	1380	1158	1 x D.150
JETCLEAN DF2	750	955	1420	1158	2 x D.150 vers. from 2.2 kW

4.5. SAFETY DEVICES

The machine is equipped at origin with all the protective systems needed to work safely. Listed below are the systems adopted by **CORAL S.p.A.**:

POS.	ELEMENT	DESCRIPTION
A	CRANKCASE	The crankcase covers all the moving parts of the machine, in order to prevent dangerous situations for the operator.
B	MAIN "ON-OFF" SWITCH	If set to "ON" the current goes to the machine, if set to "OFF" the current is stopped.



WARNING!

The removal of the crankcase or safety systems typically causes the warranty to become void the full assumption of responsibility by the user.

5. TRANSPORTATION AND INSTALLATION

5.1. TRANSPORTATION

The **JETCLEAN DF** filter is transported to the customer:

- assembled,
- packaged,
- palletized

Upon delivery of the machine:

STEP	ACTION
1	Remove material from packaging.
2	Visually check that there was no damage during transportation and check the completeness of the delivery. Otherwise tell your dealer as soon as possible and no later than 10 days after delivery.



WARNING!

Prior to any handling, disconnect the machine from the mains supply and from the connections with utilities.



WARNING!

It is mandatory to electrically ground the filter by connecting the points of contact with an adequately sized copper wire (a section of 2.5 mm² is recommended), secured to the manufactured product, taking care to maintain continuity.

5.2. INSTALLATION

The **JETCLEAN DF** filter for the design characteristics:

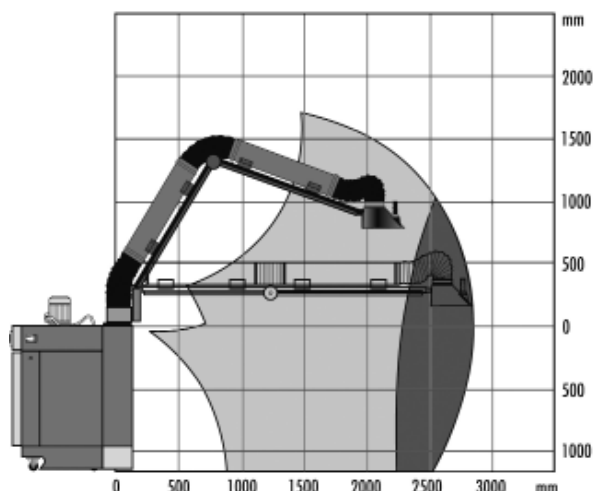
- is designed onboard the machine installed in the immediate vicinity of the utilities;
- It is connected by a rigid or flexible channelling to the connection system, which is equipped with the machine tools.

For **installation**, follow the procedure below:

STEP	ACTION
1	Connect the machine to the mains only after verifying the correct voltage and frequency indicated on the engine nameplate.
2	Check the correct fan rotation indicated by the arrow on the engine crankcase.
3	Fit the suction arm by referring to the procedure in the manual.
4	Connect the pneumatic cleaning system to the compressed air system.

**WARNING!**

We recommend considering that indicated in the figure below as a maximum range of the machine. The dark working area represents the area of possible overturning.

**WARNING!**

On the top part, the filter is equipped with a grid, for the leaking of the filtered air. Therefore, at the extern installation, it is advisable to protect the filter with a canopy, to save it from infiltrations of rainwater.

5.2.1. ARM FITTING

To fit the arm, follow the procedure below:

STEP	ACTION
1	Screw the fifth wheel to the arm by means of the inserts placed on the connecting plate.



5.3. CONNECTIONS

For the electrical connection, follow this procedure:

STEP	ACTION
1	Check: <ul style="list-style-type: none"> the voltage and frequency of the mains. The correct data for use of the machine are shown on the nameplate on the electrical engine or in the technical data table in the manual.
2	The JETCLEAN DF machine is equipped with a five-pole plug, to power the 220 volt pneumatic cleaning system. Make sure that the electricity power supply system is equipped with a neutral and a with an earth connection.
3	Insert the five-pole plug.
4	For a short time, start and stop the machine to check the correct rotation direction, indicated by the arrow on the engine.

5.4. ADJUSTMENTS

5.4.1. FLOW ADJUSTMENT

To **adjust the flow of the unit**, follow this procedure:

STEP	ACTION
1	Acting on the butterfly gate (optional) mounted on the ducting using the appropriate the knob.

5.4.2. ADJUSTMENT OF THE TIMER FOR CARTRIDGE CLEANING

Per la **regolazione del timer per la pulizia delle cartucce**, procedere:

PASSO	AZIONE
1	Press the regulator (1) to adjust the opening time in milliseconds of the valve.
2	Press the regulator (2) for adjusting the break time between one shot and the next one, from a minimum of 0,5 min to a maximum of 45 min.



WARNING!

The timer is equipped with a **TEST** push button, to verify proper operation of the pneumatic plant cleaning.



5.4.3. FACTORY PARAMETERS SET

- | | |
|---|-----------------------------|
| 1 | Regulator (1) set to 300 m. |
| 2 | Regulator (2) set to 5 min. |



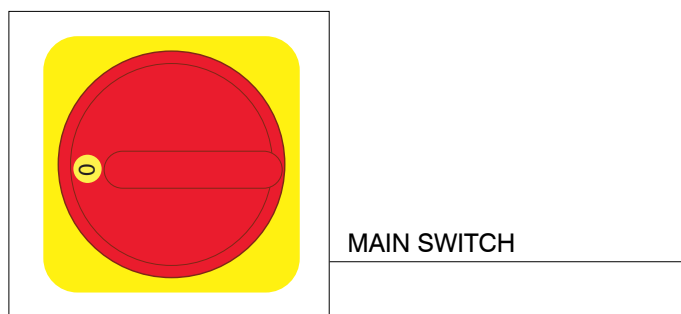
WARNING!

The parameters must be varied, based on the type and quantity of the aspirated pollutant, which depends on the experience of the user.

6. MACHINE CONTROLS AND USE

6.1. CONTROL DEVICES

The machine is equipped with a main “ON - OFF” switch. Setting the switch to “ON” will start the filter.



7. MAINTENANCE



WARNING!

Do not perform any maintenance operations when the machine is in operation or connected to an electricity source. We therefore recommended during these phases to:

- disconnect the plug,
- lock the controls to avoid accidental start-ups.



WARNING!

We recommended not using flammable liquids when cleaning the filters.

7.1. ROUTINE MAINTENANCE

To ensure correct machine operation, it is necessary to carry out periodical and preventive control and maintenance operations according to the table and to adhere to the indicated maintenance schedule. Failure to observe this warning shall exempt the Manufacturer from all liability to the effects of the warranty.

7.1.1. ROUTINE MAINTENANCE OPERATION TABLES

A hour counter is connected to the electrical circuit to display the number of work hours of the equipment with the need to provide the maintenance of the equipment.

OPERATION	24 hours	250 hours	500 hours	1000 hours	1500 hours	2000 hours	5000 hours
Check the state of the electrical and pneumatic supply cables.				♦		♦	♦
Check the state of the cartridges through the appropriate inspection door.		♦	♦		♦		
Unload the contents of the wheeled collection container.	♦						



WARNING!

The operations listed above must be carried out by qualified personnel.

7.1.2. CLEANING



WARNING!

The incorrect cleaning or replacement of filtering media carries the risk of leakage to the outside environment and of pollutant work.

7.2. EXTRAORDINARY MAINTENANCE

Operations not included among those listed as “routine maintenance” are considered extraordinary maintenance.



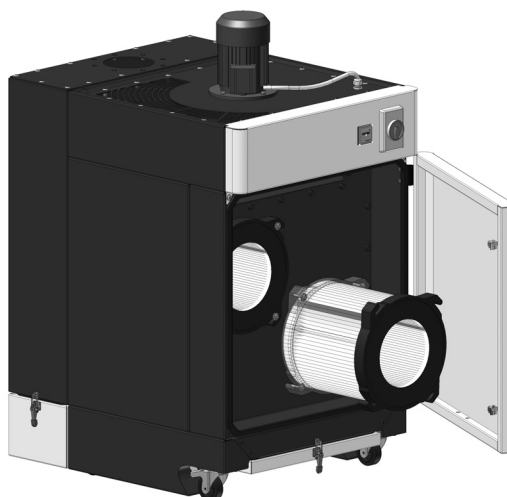
WARNING!

The extraordinary maintenance operations and repair of the machine are reserved for qualified, trained and authorized personnel of the Manufacturer or Authorized Service Centre.

7.2.1. CARTRIDGE REPLACEMENT

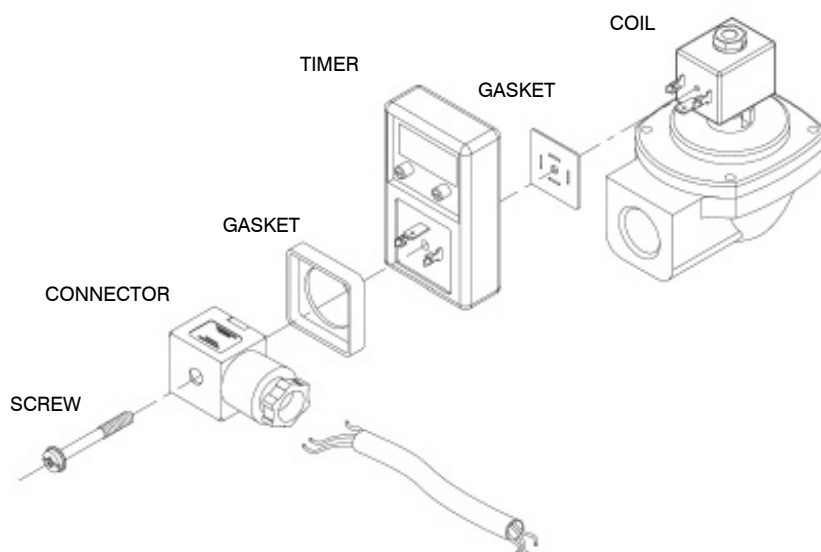
To **replace the cartridge**, follow this procedure:

STEP	ACTION
1	Undo the M8 fixing screws.
2	Remove the cartridge by turning it anticlockwise and proceed with the replacement.



7.2.2. REPLACEMENT OF THE PNEUMATIC CLEANING COMPONENTS (TIMER)

The order of the removal of the components is shown in figure.



8. TROUBLESHOOTING

DEFECT	CAUSE	POSSIBLE SOLUTIONS
The air emitted is not sufficiently purified	Inefficient action of the filters.	Check the state of cleanliness and replace if necessary.
Decrease the intake air flow	Filters not cleaned.	<ul style="list-style-type: none"> • Check the operation of the timer, electric and pneumatic systems. • Intervene at the pause times of the solenoid valves. • Replace the filtering parts if necessary.
The fan vibrates	The rotor is not balanced.	Remove and clean the rotor.
The fan turns but suction is insufficient	the rotation direction is incorrect	Invert the two phases connected to the engine.
Start failure	Incorrect connection.	Check the electrical connections.

9. SCRAPPING AND DECOMMISSIONING

The machine has no particular decommissioning problems. Appropriate precautions should be taken to prevent it from being restarted by an unauthorized person.

For legal and tax issues (if any reports, complaints, etc ...), follow the current laws of the country where it is used.

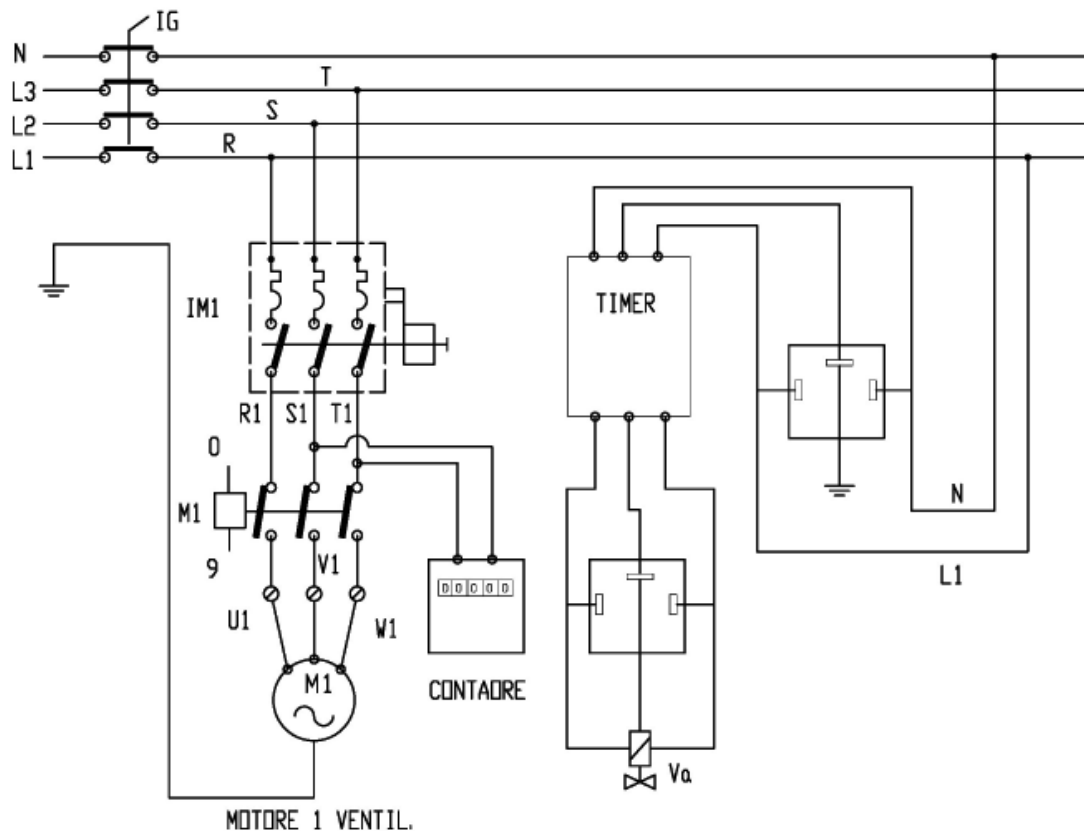


WARNING!

Do not dump used filters, send them to specialist disposal companies in accordance with local regulations.

10. ELECTRICAL PANEL

A hour counter is connected to the electrical circuit to display the number of work hours of the equipment with the need to provide the maintenance of the equipment.



Timer and coil of the compressed air cleaning system are connected to the circuit (look scheme under section “7.2.2. REPLACEMENT OF THE PNEUMATIC CLEANING COMPONENTS (TIMER)”).

11. SPARE PARTS

11.1. HOW TO REQUEST SPARE PARTS

If you need to order spare parts, proceed as follows:

1. Photocopy the form on the below page;
2. Fill in the suggested spaces.
3. Contact your local distributor or service office and **CORAL S.p.A.** spare parts sending a copy of the completed form in its entirety, to the e-mail address or the fax number indicated.

In response, you will be sent as soon as possible, a complete offer of prize, delivery and sales conditions.



TECHNICAL AND SPARE PARTS OFFICE
CORAL S.p.A. Corso Europa, 597
10088 Volpiano (TORINO) - ITALY
Ph. +39 011 9822000 r.a. Fax +39 011 9822033-044
e-mail: coral@coral.eu <http://www.coral.eu>
P.I. 02695840013

Spare parts request form

Goods delivery address

Invoice delivery address

Applicant name

Telephone number

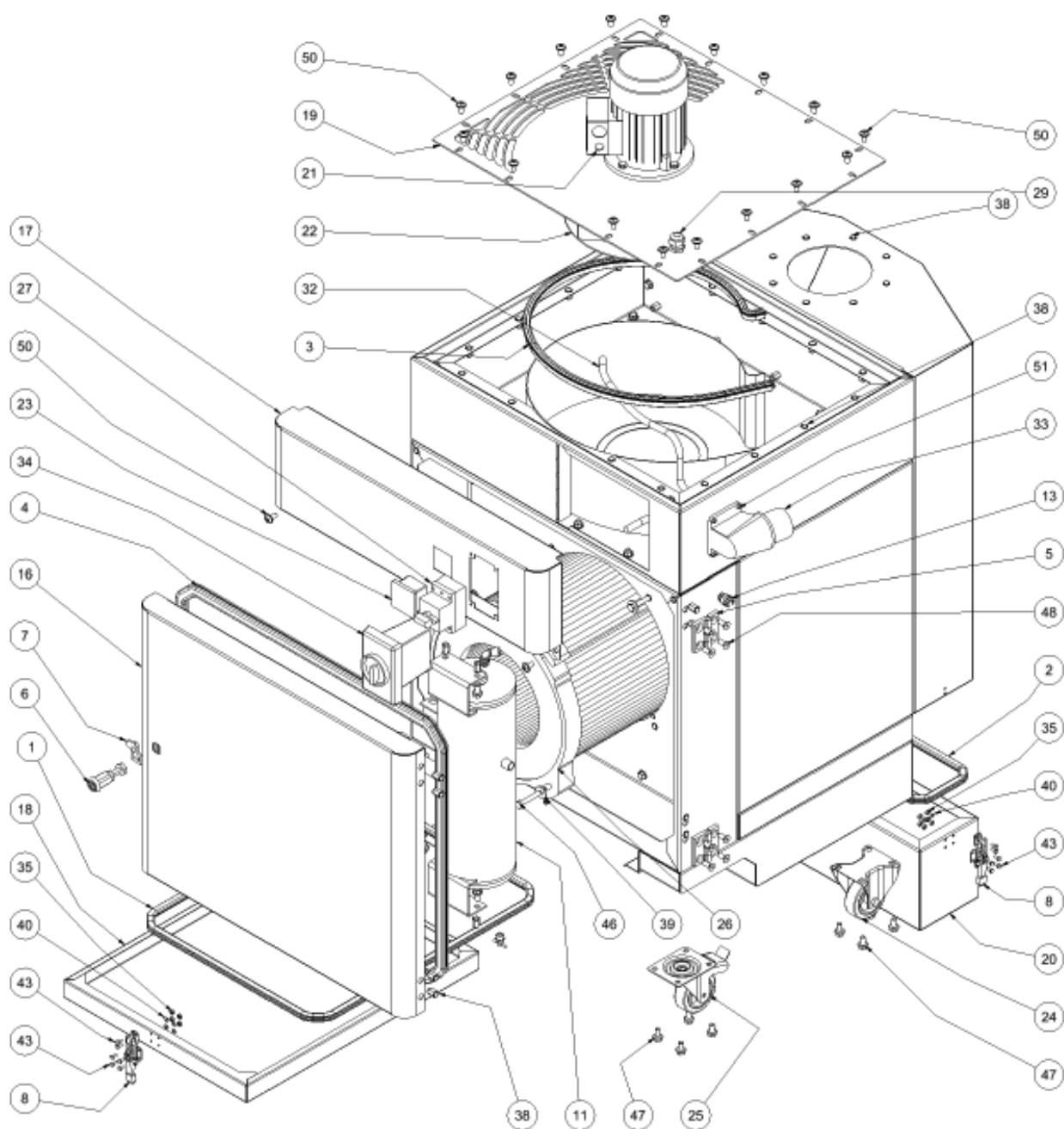
Shipment by:

Fax number

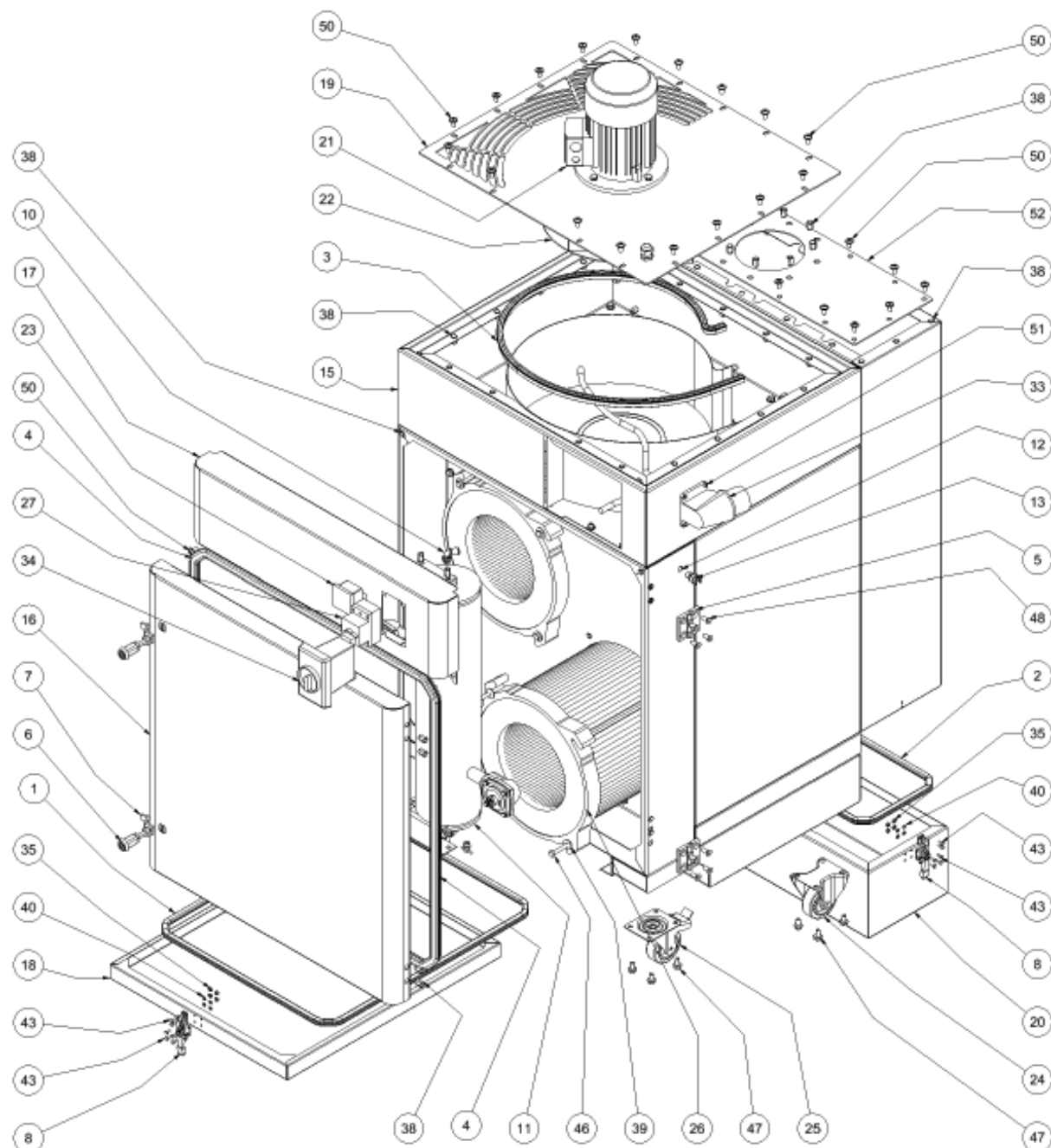
Date _____

11.2. SPARE PARTS LIST

JETCLEAN DF1



JETCLEAN DF2



POS.	DESCRIPTION	QTY	UNIT OF MEASUREMENT
1	COMPRESSED GASKET 6.5 mm	2	m
2	COMPRESSED GASKET 6.5 mm	2,5	m
3	GASKET	2	m
4	GASKET UNIFAST209-0204	3	m
5	HINGE -BLACK-ZINC-218-9204	2	No.
6	CLOSING-COMPRESSION-P5 mm – CHROME-PLATED	1 - 2	No.
7	LEVER FOR CLOSING-COMPRESSION-33 mm	1 - 2	No.
8	TIE ROD END-160/T2	3	No.
9	JUNCTION DIR. 1/4" D8-KQ2H08	1	No.
10	OUTSIDE RUBBER JUNCTION ATTACHMENT 1/4" - DT8	1	No.
11	AIR COMP TANK. 5"-1U-DF1-C/TIMER	1	No.
12	SOCKET 1/4"-OT NI	1	No.
13	JUNCTION W/1/4" NUT M-OT NI-AIR712	1	No.
14	FAN LOCKING WASHER	1	No.
15	DF BODY UNIT/HOPPER	1	No.
16	DF OPENING DOOR	1	No.
17	DF INSTRUMENT DOOR FRONT PANEL	1	No.
18	DF FRONT BOX	1	No.
19	ENGINE UNIT PLATE	1	No.
20	DF REAR BOX	1	No.
21	ELECTRIC MOTOR	1	No.
22	FAN	1	No.
23	COUNTER 5+1-LEGRAND 380V 50Hz	1	No.
24	WHEEL Ø 80 FIXED BLACK RUBBER	2	No.
25	WHEEL Ø 80 UPPER GIR. W/BRAKE BLACK RUBBER	2	No.
26	CART. D325/4PS2-H400-USGC/M-G270-175	1 - 2	No.
27	METRIC SWITCH	1	No.
28	CABLEHOLDER M16 X 1.5 PLASTIC IP68	1	m
29	CABLEHOLDER M20 X 1.5 PLASTIC IP68	1	No.
30	POLYAMIDE RING NUT M16	1	No.
31	POLYAMIDE RING NUT M20	1	No.
32	ELECT. CABLE NON-INFLAMMABLE 5FX1MMQ	1	m
33	PLUG TRI+N+T-V380-16A-IP44-GW60409	1	No.
34	SWITCH BOX 3ZV1923-2R	1	No.
52	PLATE DF2 COUPLING ATTACHMENT Ø 150	1	No.



2012



CORAL S.p.A.

