



INSTALLATION AND USER MANUAL

KVMC25



INTRODUCTION AND PURPOSE OF THE MANUAL

In standard EN ISO 12100:2010 the term “instructions for use “or“ instruction manual “means the sum of the means of communication, such as text, words, signs, symbols, diagrams or signals used separately or in combination to transfer instructions to the user.

The instructions for use are directed to professional users and / or non-professional users and are considered an integral part of the delivery of the machine.

With the Machinery Directive and the Liability Directive for a defective product instructions for use have assumed a critical importance for safety, they are no longer solely aimed at meeting the needs of the customer in terms of the proper use of the machine for production purposes but of fundamental importance for safety, and take a great importance in defining the limits of liability of the manufacturer.

The instructions for use shall take into account all the aspects related with the product and its use and that may involve health and safety issues such as: the life stages of the means of labor (packing, storage, installation, repair and demolition), the intended use and reasonably foreseeable use of the machine, the user's characteristics and residual risks present in the product.

In order to achieve the goals of safety and in the more general to meet the requirements of clarity and readability of the documents containing the instructions for use has followed the provisions of EN ISO 12100:2010.

The Manual of heat recovery units Wavin Chemidro has therefore been prepared in accordance with the above specifications.

CONTENT OF INSTRUCTION

The Machinery Directive (Annex I, section 1.7.4.2) requires that each instruction manual must contain, where applicable, at least the following information:

- a) *The name and full address of the manufacturer or his authorized representative;*
- b) *The designation of the machine, as shown on the machine itself, except for the serial number;*
- c) *The EC declaration of conformity or a document that shows the content of the EC declaration of conformity, the data on the machine, but not necessarily the serial number and the signature;*
- d) *A general description of the machine;*
- e) *The drawings, diagrams, descriptions and explanations necessary for the use, maintenance and repair of the machinery and for checking its correct functioning;*
- f) *A description of the working position that can be occupied by operators;*
- g) *A description of the intended use of the machine;*
- h) *Warnings concerning ways in which the machinery should not be used and that could, based on experience, appear dangers;*
- i) *The instructions for assembly, installation and connection instructions, including drawings, diagrams and the means of attachment and the designation of the frame or installation on which the machinery is to be mounted;*
- j) *The instructions for installation and assembly for reducing noise and vibrations produced ;*
- k) *The instructions for setup and use of the machine and, if necessary, instructions for the training of operators;*
- l) *Information about the residual risks that remain despite arrangements have been made protection systems integrated into the design of the machine and despite of the protections and complementary protective measures adopted;*
- m) *The instructions on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided;*
- n) *The essential characteristics of tools which may be fitted to the machinery;*
- o) *The conditions under which the machinery meets the requirement of stability during use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns;*
- p) *The instructions for safe operation of transport, handling and storage , giving the mass of the machine and its various parts where they are regularly to be transported separately;*
- q) *The operating method to be followed in case of accident or breakdown; may occur if a block, the operating method to be to allow you to unlock your machine in a safe condition L 157/ 48 EN Official Journal of the European Union 9.6.2006;*
- r) *A description of the adjustment and maintenance to be performed by the user and the preventive maintenance measures to be followed;*
- s) *The instructions to safely adjust and maintenance, including protective measures that should be taken during these operations;*
- t) *The specifications of the spare parts to be used, when these affect the health and safety of operators;*
- u) *Information concerning airborne noise emissions.*

**This machine is built in compliance with the EC Directives on safety
The following generic copy of the EC declaration of conformity**

Manufactured by Brofer Srl



COMPANY WITH QUALITY SYSTEM CERTIFIED TO ISO 9001:2000 BY TUV

DECLARATION OF CONFORMITY

The Brofer S.r.l. declares that the heat recovery units RDCD25 Serie:

It complies with Directive 2006/42/EC on the same applicable and relevant harmonized standards.

The person authorized to compile the technical file is the Legal Representative Mr. Brotto Gianluca available in BROFER located at the address below.

In particular, the analysis of the risk of the machine described, complies with the harmonized EN ISO 12100-1/2 and the following harmonized standards:

- EN ISO 13849-1:2008 Safety of machinery - General principles for design
- EN 547-1:1996 + A1: 2008 Safety of machinery - Determination openings
- EN 547-2:1996 + A1: 2008 Safety of machinery - Determination openings
- EN 60204-1:2006 Safety of machinery - Electrical equipment general rules
- EN ISO 13849-2:2008 Safety of machinery - safety related systems , validation
- EN ISO 13850:2008 Safety of machinery - Emergency stop
- EN ISO 13857:2008 Safety of machinery - Safety distances
- EN ISO 3747:2000 Acoustics - Determination of sound power levels
- EN ISO 4871:2009 Acoustics - Declaration and verification of noise emission values
- EN ISO 5136:2003 Acoustics - Determination of sound power injected into a duct

DECLARATION OF INCORPORATION

(Annex 2, paragraph B 2006/42 / EC)

The BROFER S.r.l. also states that the machine to which this declaration should not be placed in service before being incorporated into a machine, or system, in conformity with Directive 2006/42 / EC.

Resana,

Brofer S.r.l
Legal rapp.te
Mr. Brotto Gianluca

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GENERAL INDEX

0.	GENERAL INFORMATION	pag 16
1.	GENERAL SAFETY	17
2.	LIFTING INSTRUCTIONS	17
3.	INSTALLATION INSTRUCTION	17
4.	INSTRUCTIONS FOR USE	18
5.	SAFETY INSTRUCTIONS FOR MAINTENANCE	18
6.	STORAGE	18
7.	PROVISION	18
8.	SCRAPPING	18
9.	IDENTIFICATION OF THE MACHINE	18
10.	ELECTRICAL CONNECTIONS	19
11.	HYDRAULIC CONNECTIONS	19
12.	AERAULIC CONNECTIONS	19
13.	CHECK CURRENT CONSUMPTION	19
14.	OPERATION AND USE	20
15.	ROUTINE MAINTENANCE	20

O. GENERAL INFORMATION

The heat recovery units series KVMC25 must be installed and operated in accordance with the requirements contained in this manual.

The strict observance of these simple and basic instructions is a prerequisite for:

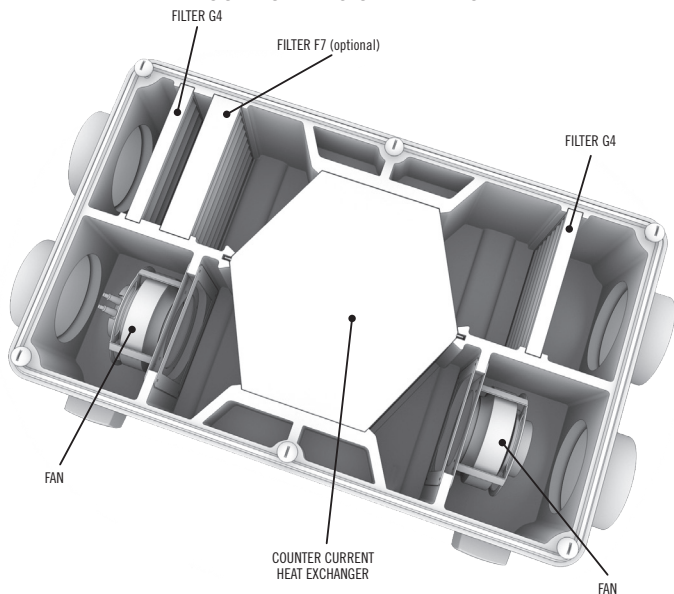
Eliminate or reduce downtime due to faults or unforeseen anomalies;

Increasing the life of the components and the entire unit;

Decrease the costs of maintenance.

MACHINE DOES NOT SUITABLE FOR WORK ENVIRONMENT IN WITH EXPLOSIVE ATMOSPHERE AND IN ENVIRONMENTS WITH HIGHLY CORROSIVE AGENTS.

COMPONENTS OF THE MACHINE



GENERAL TECHNICAL DATA TABLE

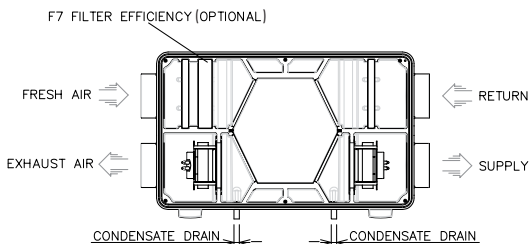
	RDCD25
Nominal air flow MC/H	160

FANS (DATA FOR EACH FAN)	
Installed power (W)	27
Round (1/MIN)	3770
Current (A)	0,27
Rated voltage (V)	230
Frequency (HZ)	50
Speed (nr)	1

FILTERS	
Efficiency Standard	G4
Efficiency Optional	F7

REGULATOR	RE
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RDB



1. GENERAL SAFETY

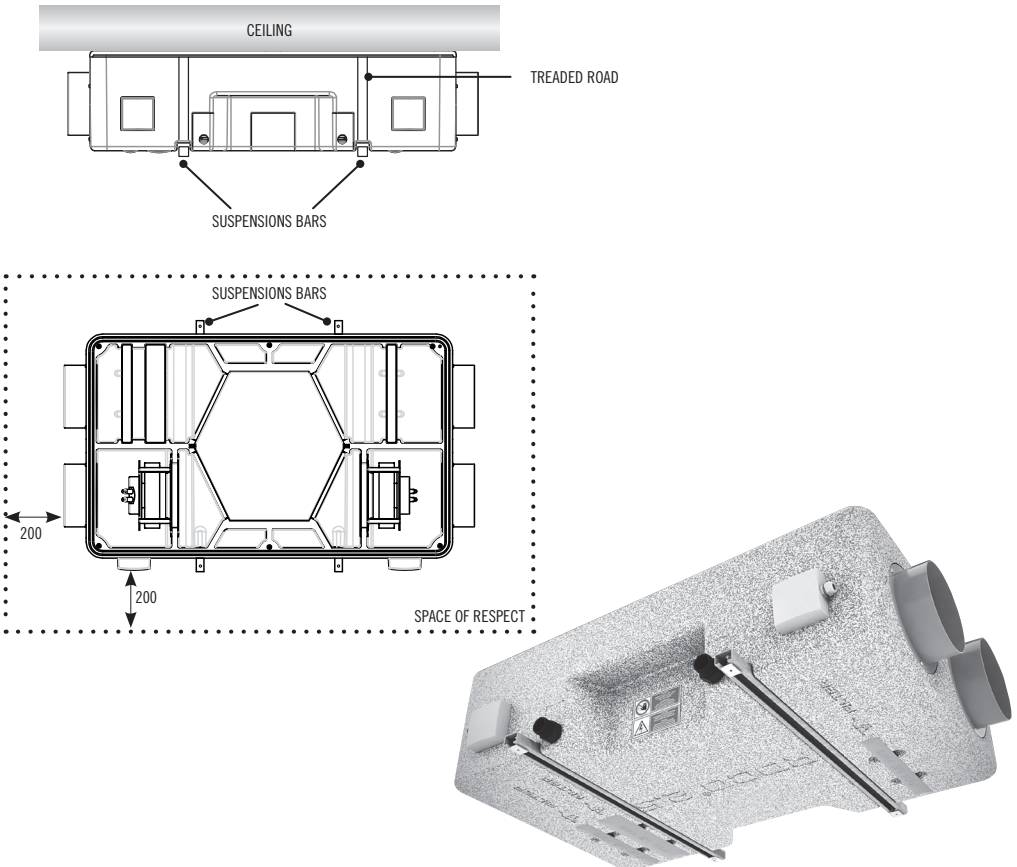
The manufacturer considers the safety and proper operation of the product only if the electrical system and the power of the place of installation complies with current regulations and if the product is installed and used according to the rules described below.

2. LIFTING INSTRUCTIONS

The load during both the charging and discharging, should always be lifted from the base of the product by means of a crane or forklift with adequate capacity to support the weight, do not turn it or place on the sides and submit to strong shock. The product is supplied with a suitable protective packaging that provides only shelter from dust and scratches the surface, it is advisable to protect it from the elements. Take all precautions required by safety regulations to avoid possible damage to persons or property.

3. INSTALLATION INSTRUCTIONS

The installation of the machine, as well as the appropriate electrical connections to ducts and fittings must be performed by skilled technicians in the industry. The machine also requires a space environment free of obstacles and enabling the smooth opening of the doors of inspection as well as enough space for the extraction of the filters and the electrical wiring of the fans. The following is possible modes of fixing of the heat recovery unit. We emphasize that the anchor points and the dimensioning of the brackets must be made from time to time in respect of the plant situation and dimensioning of the static and dynamic system.



4. INSTRUCTION FOR USE

Before operating the machine, make sure that the electrical connections are correctly wired and the condensate drain is specially connected, check to make sure no foreign objects have been left inside the machine and that any electrical cords are fixed adequately. Do not open the inspection doors with moving parts or introduce hands with the machine running, as indicated by appropriate pictograms.

5. SAFETY INSTRUCTIONS FOR MAINTENANCE

Before performing any maintenance make sure that the machine is disconnected from the power supply. The product is made in order to facilitate maintenance operations that allow it to be carried out by qualified personnel. Where were carried out repairs or extraordinary maintenance, please contact the technical assistance that will have them done by authorized personnel or give consent to be able to be performed by other qualified personnel. For any other problem, doubt or anomaly before proceeding with operations that can be harmful to the machine or incorrect, contact the service office which will provide all the necessary information to be able to solve, if possible, the case.

6. STORAGE

Permitted storage of the machine for a long time as long as the place is dry, protected from the sun and at a temperature between 0 and 40 ° C, protected from rain and humidity, maybe suggest to keep the packaging intact and support the machine on pallets or shelves.

7. PROVISIONS


You cannot set aside the machine.

8. SCRAPPING

If you decide not to use this product it is recommended to disconnect the power supply, disassemble and dispose of all the various components of the item out of landfill in order to comply with the regulations in force in order to respect the environment.

9. IDENTIFICATION OF THE MACHINE

Each unit is equipped with a identification plate that contains important data on the machine.

	
VENTALOGIC	
UNITÀ TIPO UNIT TYPE	<input type="text"/>
NUMERO SERIE SERIES NUMBER	<input type="text"/>
CODICE VENTILATORE FAN CODE	<input type="text"/>
POTENZA INSTALLATA POWER IN PUT (Kw)	<input type="text"/>
CORRENTE ASSORBITA OPERATING CURRENT (A)	<input type="text"/>
ALIMENTAZIONE POWER SUPPLY (V-F/PH - HZ)	<input type="text"/>

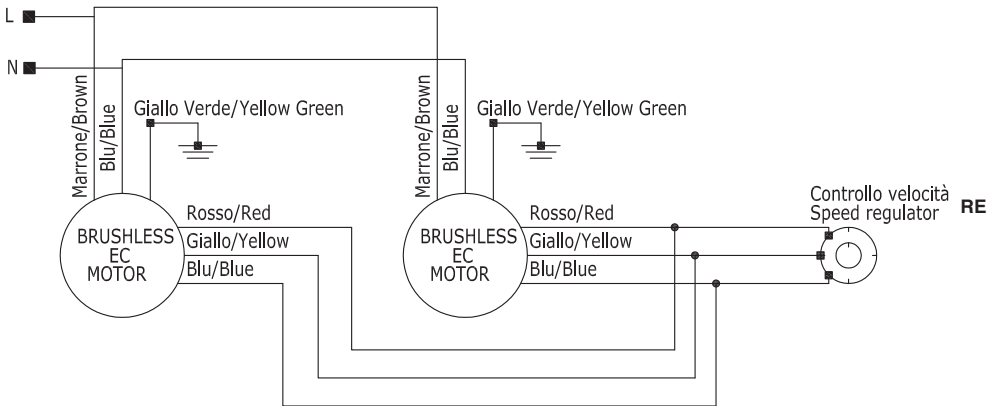
It is necessary for any relationship with the technical assistance, always quote the type and / or serial number shown on this plate

10. ELECTRICAL CONNECTIONS

The identification plate indicates the type of power supply, the motor current installed and the maximum current consumption of the fans. The fans of this series are standard single-phase, three-speed. The electrical connections must be performed by qualified personnel in compliance with current regulations.

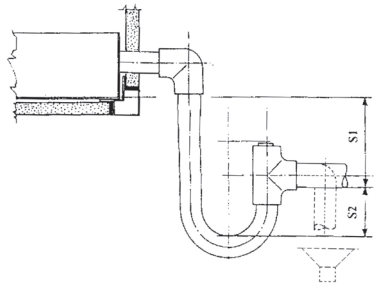
FOR ANY FAN PROVIDED THE SPECIAL ELECTRICAL WIRING. CLARIFICATION OR FOR ANY DOUBT FOR ELECTRICAL CONNECTION, BEFORE THE WRONG WAY, OR CONTACT THE INSTALLER OR DIRECTLY THE TECHNICAL ASSISTANCE. THE MANUFACTURER NOT BE DETERMINED DIRECTLY RESPONSIBLE IF THE WIRING WILL BE DONE INCORRECTLY CAUSING DAMAGE OR MALFUNCTION OF THE MACHINE.

CONNECTION DIAGRAM BELOW.



11. HYDRAULIC CONNECTIONS

The drain must be connected by means of a suitable siphon, ensuring that it is free and the rubber has not impediments and obstructions.



12. AERAILIC CONNECTIONS

The duct connections should be made through circular ducts with the same diameters as those provided on the machine. The technical sizing of the ducts will still be carried out as function of the plant and of the pressure of the heat recovery unit. The machine is not equipped with anti-vibration joints internal joints on the attack so we recommend preparing these ducts in order to avoid any vibration.

13. VERIFICATION OF CURRENT CONSUMPTION

At full speed, check that the current consumption complies with the limits of the plate expressed in the case of abnormal consumption turn off the fan and contact our support department.

WARNINGS:

- **ALL WIRING AND ELECTRICAL COMPONENTS USED FOR THE INSTALLATION MUST COMPLY WITH THE REGULATIONS IN FORCE;**
- **THE POWER LINE MUST BE MADE IN ACCORDANCE WITH THE REGULATIONS IN FORCE;**
- **WIRING MUST BE DONE BY QUALIFIED TECHNICIANS ELECTRICIANS;**
- **THE CURRENT CONSUMPTION MUST COMPLY AS SET OUT IN THE DATA PLATE**

14. OPERATION AND USE

Before operating the machine, make sure that the discharges are free, that the air duct systems is free and, if present, appropriately dampers tuned.

15. ROUTINE MAINTENANCE

To enable smooth and steady performance of the machine and then a longer period of time it is advisable to carry out some simple routine maintenance. The frequency of interventions depends on the place and the quality of the air that is treated by the machine.

DISCONNECT THE POWER SUPPLY BEFORE ACCESSING ANY INSPECTION INSIDE THE MACHINE.

FANS

Check every 2500 hours (approximately) of the cleaning operation of the fans and the presence of foreign bodies.

FILTERS

Check every 20 days (approximately) the quality of the filter media removing the filter from their guides. Being regenerable filters (depending on the state of filter cleaning), if the conditions allow it is possible to clean the dust from the filter with a simple jet of air blown in the opposite direction to the air flow or otherwise be necessary to proceed with the replacement of the filter exhausted with other new ones with the same dimensions.

Also recommend the periodic inspection and cleaning of the heat exchanger always with an air jet to remove any impurities or deposited with the help of bactericidal products approved by health authorities.



VENTALOGIC

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