

VENTILO-CONVECTEURS FAN COIL UNITS VENTILOCONVETTORE VENTILO-CONVECTORES VENTILATORKONVEKTOREN

MARKING CE

This product marked $\mathbf{C}\mathbf{\epsilon}$ conforms to the essential requirements of the Directives:

- Low voltage no. 2006/95/EC.
- Electromagnetic Compatibility no. 2004/108/EC.





This appliance is not designed to be used by people (including children) whose physical, sensory or mental capacities are impaired, or who lack experience or knowledge, unless they are supervised or have received instructions on how to use the appliance by a person who is responsible for their safety. Children must be supervised to ensure that they do not play with the appliance or its accessories.

CONTENTS

1	-	General
2	-	Installation
3	-	Connections
4	-	Starting
5	-	Maintenance instructions
6	-	Internal wiring diagram

1 - GENERAL

1.1 - FOREWORD

- The equipment must be installed, started-up and maintained by authorised and gualified personnel, in accordance with local rules and professional standards.
- · Non-compliance with these rules, or the undertaking of product modification without prior approval by TECHNIBEL, will lead to suspension of the guarantee.

1.2 - GENERAL SUPPLY CONDITIONS

- · Generally speaking, the material is transported at the consignee's risk.
- The consignee must immediately provide the carrier with written reserves if he finds any damage caused during transport.
- · Do not place objects on the unit.

1.3 - STORAGE

The fan coil unit should remain in its original packaging prior to installation: minimum storage temperature: -20° C.

1.4 - VOLTAGE

· Before any operation, check that the voltage and frequency on the appliance rating plate correspond with those of the mains supply.

1.5 - CHECKS BEFORE INSTALLATION

- The evacuation of condensates is carried out by gravity.
- To ensure the removal of condensate by gravity, the appliance must be assembled horizontally or slightly tilted towards the outlet side (see paragraph 3.3).
- The fan speed switches can only be connected to a single appliance.
- · All the motors supplied have been tested in the factory. Incorrect connection at the place of assembly may damage the motor.
- · For the installation and operation of accessories, refer to the technical documentation furnished with the accessories and the TWN technical manual.

1.6 - DESCRIPTION OF APPLIANCES

See Technical Instructions.

1.7 - USE OF EQUIPMENT

. This equipment is intented for the air-conditioning of premises and to provide comfort for the personnel.

1.8 - PRECAUTIONS

Hydraulic circuit:

- Minimum water inlet temperature: 5°C.
- Maximum water inlet temperature:
 - main battery: 60°C,
 - additional battery: 90°C.

Note: For reasons relating to comfort (homogeneity of the air temperature in the room), not exceeding a water inlet temperature of 55°C in the main batter is recommended.

- Maximum operating pressure: 10 bar.
- Ambient air:
 - Minimum air recirculation temperature: 5°C,
 - Maximum air recirculation temperature: 32°C.

Important: During installation shut-down, in case of connection to an outside air vent or in case of ambient temperature near 0°C, there is a risk that the hoses may freeze. Envisage draining the hydraulic circuit.

1.9 - MODELS

- 21 models (broken down into 7 models horizontal and vertical units with housing or built-in units without housing):
 - 2-tube or 4-tube versions (with additional battery),
 - 2-tube Cooling + 2 wires (with electric heater element), except model 11.

2 - INSTALLATION

2.1 - PRELIMINARY CHECKS

- As accessories are not factory-installed, we recommended to mount them on before the unit is installed. Refer to the corresponding technical manuals.
- The standard hydraulic connection is located on the left-hand side (facing the unit, vertical installation).

The connection may be changed on site. To make the necessary modifications, proceed as follows:

- remove the front panel on **TWN-CV** models, or the condensate main tray on **TWN-CH** and **TWN-NC** models (a), 4 screws;
- remove the control panel (**b**), if so equipped. Carefully identify and disconnect the wires. Remove the cable clamp (**c**);
- remove the upper rear trim (d), 2 screws;
- extract the exchanger (e) by removing the 4 mounting screws (2 on each side). Handle the exchanger carefully so as not to damage it or hurt yourself;
- remove the motor wiring; remove the grommet (f);
- extract the condensate drainage tube (vertical models). Fit the tube on the opposite side (do not forget to reverse the position of the plugs located at each end of the tray). Replace the grommet (f);
- pass the motor cable through the grommet (f) and connect;
- remove the pre-cut holes on the side of the unit. Turn the exchanger and install. Replace the screws on each side of the unit (2 x 2 screws);
- replace the upper trim at the back of the unit (d);
- install the control panel on the side opposite its original location and reconnect the wiring as per the identification established earlier;
- replace the cable clamp and secure the cable;
- replace the front panel (TWN-CV) or the condensate tray (TWN-CH and TWN-NC models) (a);
- plug all unused holes (former connection openings) with self adhesive foam.

2.2 - CHOOSING THE LOCATION

• Select the location for the unit on the basis of the following criteria:

- The device is intended for installation in sheltered premises (IPX 0). Do not install in rooms with very high humidity or exposed to projections of water or in areas containing a flammable atmosphere.
- Avoid installing the appliance behind curtains or furniture which could impede the circulation of air.
- Do not install next to electric connections.
- For appliances equipped with an electric heater, do not install it near flammable materials.
- The air intake and blowing grilles must be free from any obstacle so that blowing can occur correctly in the whole room.
- Leave adequate space to perform servicing operations (see paragraph 2.2.2).
- The wall on which the unit is to be installed must be sufficiently thick so as to avoid resonance and excessive noise. The wall must also be able to support the unit's weight (see paragraph 2.5).
- Respect its maximum hydraulic service pressure: 10 bar.
- For units without housings, the installation must include all necessary protective devices to prevent all contact with the dangerous parts of the unit.

3

- Provide for the passage of tubes, electrical wiring and condensate drainage.



2.2.1 - UNITS WITH CASING (THREE POSSIBILITIES)

- Vertical, wall-mounted installation, air intake underneath (CV).
- Vertical, floor-mounted installation, air intake at front (CH).
- Horizontal installation, air intake at front ($\ensuremath{\textbf{CH}}\xspace).$
- TWN-CH models may be installed horizontally or vertically.

2.2.2 - UNITS WITHOUT CASING (TWO POSSIBILITIES)

- Vertical installation, air intake underneath (NC).
- Horizontal installation, air intake at front (NC).
 - TWN-NC models may be installed horizontally or vertically.



NOTE:

For false ceiling applications, the installation's maximum heights must be respected in order to avoid problems related to stratification.

Such problems are best controlled by placing the air intake at floor level.

Heights are calculated for High Speed operation.

2.3 - CASING INSTALLATION

- For models with casing, remove the trim by unscrewing the 4 mounting screws located under the two access doors.
- For units having their air intake at the front, also remove the 2 screws located at the air intake.
- CAUTION: For appliances with body panels (casing) installed without the built-in control panel, access to the inside of the unit must be prevented by screwing down the access doors.





2.4 - INSTALLATION

- · Secure the units to either a wall or ceiling using appropriate mounting fixtures.
- The distances between the 4 existing lights (A) are indicted below.



2.5 - WEIGHT OF FAN COIL UNITS (in kg)

Models	Sizes							
	02	03	04	05	06	08	11	
NC	15	19	23	24	32	33	39	
CV	21	25	31	32	42	43	51	
СН	21	27	33	34	44	45	53	

3 - CONNECTIONS

3.1 - HYDRAULIC CONNECTION

- The units come with the hydraulic connections located on the left-hand side.
- Connections may be changed on site. Refer to paragraph 2.1 for instructions.
- $\boldsymbol{\cdot}$ The water inlet is always at the lowest point on the exchanger.
- To connect the additional battery (4-tube version), refer to Technical Instructions 10 12 172.

3.1.1 - HOLE LOCATION



3.1.2 - INSULATION OF PIPES

- The insulation concerns the water return and inlet pipes.
- · Use polyethylene sheathing at least 9 mm thick.
- After connection and leak inspection, insulate the unit's valves, tubes and connections.

NOTE: This operation must be done carefully to avoid any risk of condensation

3.1.3 - PURGING THE FAN COIL UNIT'S WATER CIRCUIT

- This is done by unscrewing a drain plug located on the exchanger collecting receptacle.
- · Access: on the side of the unit.
- Tools: standard tip screwdriver or tubular hexagon box wrench.

CAUTION: Be careful not to tighten the purge excessively as the screw head may break.



GB

3.2 - ELECTRICAL CONNECTION

3.2.1 - GENERAL

- · Connections are made on the terminal strip located on the side of the unit.
- The electrical connection conduits must be fixed.
- Use the orifices provided for cable lead-throughs.
- Make sure that the wires are correctly connected to the terminal board. Incorrect connection can cause operating problems as well as overheating which can cause fires.
- Class 1 appliance.
- The electrical installation must be carried out in compliance with the standards and regulations in force (especially NF C 15-100 \approx CEI 364).

3.2.2 - POWER SUPPLY

- 230 V / 1 + Earth / 50 Hz power supply from a power supply and protection device (not included) in accordance with the standards and regulations in force. The unit must be protected by a two-pole circuit breaker (not supplied).
- The voltage variation tolerance is \pm 10 % during operation.
- Maximum fuse protection: 6 A.
- Terminal unit current load:

	Sizes							
	02	03	04	05	06	08	11	
Current (*) A	0.24	0.25	0.44	0.44	0.80	1.12	1.52	(*) Excluding accessories
Size	1.5 mm ²							

• Note: Power to the electric heating kit, if any, must be supplied separately (refer to the kit's installation instructions).

3.2.3 - REMOTE CONTROLS (ACCESSORIES)

• 5 types:

- RAB 30 code 70250076 with manual change / over (cooling / heating switching) for "2-pipe" or "4-pipe" or "2-pipe" Cooling + electric heater element units.
- RCC 10 code 70250051 with automatic change / over (cooling / heating switching) for "2-pipe" units.
- RCC 20 code 70250052 with automatic change / over (cooling / heating switching) for "2-pipe" Cooling + electric heater element or 4-tube units.



- K70P090Z and K70P091Z with automatic change-over for "2 or 4-pipe" units or "2-pipe" Cooling + electric heater element units.





A - Assembly / Installation

- See the main characteristics in the Technical Instructions corresponding to the TWN (No. 10 12 172).
- Consult the "Installation instructions" supplied with the control.
- The unit is connected using 0.75mm² cable (minimum) (1.5mm² max.).
- The cables used must comply with the insulation requirements for the voltage used (230 V). This information relates above all to the sensor input of the automatic control connected to the 230 V supply.
- The temperature adjustment range can be limited using the mechanical limit stops located on the control knob of **RAB** and **RCC** control units.
- · Wall mounting.
- Secure the unit at a height of approximately 1.5 m from the floor in a location representative of normal convection currents, while avoiding:
 - wall which are poorly insulated or liable to vibrate,
 - the proximity of parasitic heat sources (sunshine, heating appliances, lamps, fireplaces, televisions, etc.),
 - currents of air from doors or windows,
 - sheltered locations such as shelves or behind curtains,
 - near electrical outlets.
- For the K70P090Z and K70P091Z control, refer to the corresponding technical instructions.
- For manual control **70250076**, check and modify as required the ventilation selection jumper connection SR depending on the appliance (see below).
- For "RCC" type controls (70250051 and 70250052), check and modify as required the settings on DIP switches 1 to 8 (located inside the control) depending on the application (refer to the indications below and the controller's technical manuals).

B - Connections with manual remote control RAB 30 - code 70250076

- For "2-pipe" or "4-pipe" (or "2-pipe" Cooling + electric heater element) TWN.
- · Manual selection of the operating mode (heating or cooling).
- · Control by action on the 230 V "On/Off" valve and/or on ventilation.









C - Connections with automatic remote control RCC 10 - code 70250051

- For the "2-pipe" TWN version without electric heating element.
- Automatic switching of the operating mode, by sensor or external contact.
- Note: If the control is to operate only in cooling mode, shunt terminals M and B2 (otherwise the unit will remain in heating mode).
- Control by action on the 230 V "On/Off" valve and/or on ventilation.
- Permanent or slaved ventilation.
- Mode change possible (Eco or Stand-by) by external contact.
- For all technical information concerning the operation of this controller, consult Technical Instructions No. 10 12 151.



D - Connections with automatic remote control RCC 20 - code 70250052

- For the "2-pipe" TWN Cooling + electric heating element or 4-tube version (with jumper between M and B2).
- Automatic switching of the operating mode.
- · Control by action on the 230 V "On/Off" valves.
- · Permanent or slaved ventilation.
- · Mode change possible (Eco or Stand-by) by external contact.
- For all technical information concerning the operation of this controller, consult Technical Instructions No. 10 12 152.





E - Connections with automatic remote controls code K70P090Z or code K70P091Z

- For the "2-pipe" TWN Cooling + electric heating or 2 and "4-pipe".
- Control by actuating the 230 V "on/off" valves and/or the ventilation control.
- For all technical information concerning the operation of these controls, consult the corresponding Technical Instructions.



F - Sensors accessories

Important:

- The sensor inputs (B1-M and B2-M) of "RCC" controls being connected to the 230 V, use cable which satisfies the corresponding insulation requirements.
- Maximum connection length: 10 m with 1.5 mm².
- To avoid electromagnetic disturbance, do not route sensor connection next to power cables.
- Temperature sensor (bare) for RCC remote controls code 70250053
 - Type CTN 3 k Ω at 25°C.
 - IP 65 cl. II.
 - 2 uses possible:
 - Change-over sensor (heating / cooling switch) for TWN 2-pipe heating and cooling:

Use a retaining clip to secure this sensor to part of the piping representative of the water temperature in the system.

Use thermoconductive paste and cover the insulation assembly (not supplied) to ensure that the true temperature is recorded.

- Air temperature sensor:

The RCC type thermostats operate according to the ambient air temperature measured internally or according to the temperature indicated by the external sensor (switching takes place automatically as soon as the external sensor is connected).

Control connection as per the diagrams above.

Caution:

- If an air recirculation sensor is installed in the unit, the fan must operate on a permanent basis (valve is mandatory).
- Air temperature sensor in box for RCC remote controls code 70250054
 - Type CTN 3 kΩ at 25°C.
 - IP 30 cl. II.
 - Air temperature sensor:

The RCC type thermostats operate according to the ambient air temperature measured internally or according to the temperature indicated by the external sensor (switching takes place automatically as soon as the external sensor is connected).

Control connection as per the diagrams above.

Air / water temperature sensor for K70P090Z and K70P091Z - code K70P093Z

- Type CTN 10 k Ω at 25°C.
- Range -25°C to 100°C.

Humidity sensor for K70P091Z control only - code K70P094Z

- Resistance type.
- Range 20 to 90 % RH.

G - Special features of RCC remote controls - codes 70250051 and 70250052

• Change-over (heating / cooling switch):

- Instead of the temperature sensor, a potential-free external contact (not supplied) can be connected, the closing of which causes the thermostat to switch to cooling mode and the opening causes it to switch to heating mode.
- The same contact can control up to ten controls by connecting the sensor inputs (B2-M) of the various thermostats in parallel.
- Caution:
 - The 230 V power supply of the thermostats connected in this manner must come from the same source. <u>The polarities must be strictly respected</u>.
 - Maximum total connection length: 80m with 1.5 mm².
 - As the sensor inputs are connected to 230 V, use a contact and cable which satisfy the corresponding insulation requirements.
 - To avoid electromagnetic disturbance, do not route this connection next to power cables.

Mode switch (Eco / Stand-by):

- The same external contact (not supplied) can control up to ten commands by connecting the corresponding inputs in parallel. (D1 - GND).
- Caution:
 - The 230 V power supply of the controls connected in this manner must come from the same source.
 - The polarities must be strictly respected.
 - Maximum total connection length: 80 m with 1.5 mm².



3.2.4 - BUILT-IN CONTROLS

- 4 types:
 - K 70 P 034 Z: speed selector, On Off.
 - K 70 P 035 Z: control on ventilation, heating only. For "2-pipe" units.
 - K 70 P 036 Z: control on the ventilation, manual change-over (heating / cooling). For "2-pipe" units.
 - **K70P090Z** or **K70P091Z**: electronic control on 1 valve, on 2 valves or on 1 valve cooling + electric heating. For 2-pipe, 2-pipe cooling + 2 wires, "4-pipe" units (requires integration kit **K70P092Z**).
- Refer to the corresponding manuals.

3.2.5 - OTHER ACCESSORIES

Refer to the corresponding manuals.





10

3.3 - CONDENSATES

- · Both horizontal and vertical units come equipped with a condensate drainage connection.
- On all vertical models, the auxiliary condensate tray (accessory) can be placed underneath the hydraulic connections to recover condensate water which may form on valves and piping.
- · In all cases, the condensate drainage installation must respect certain criteria:
 - provide at least a 3 % slope from the fan coil unit,
 - install a trap to avoid unpleasant odors,
 - do not immerse the end of the drainage tube,
 - do not bend the drainage tube.
- As the units are not fitted with a condensate pump, they must be installed accordingly.
- If a centralized evacuation for several units is used, the system must be fitted with an air vent to avoid pressurization of the condensate tube and back flow of condensate toward the units. The diameter of the condensate line must be calculated with relation to the total output of condensate.



IMPORTANT

Before doing any work on the installation, make sure it is switched off and put out of bounds.

4.1 - PRELIMINARY CHECKS

4.1.1 - MAKE SURE

- That the unit is well fixed.
- That the power cables are well fixed to their connection terminals. Loose terminals can cause heat build-up on the terminal board.
- · That the electric cables are properly insulated from any pieces of sheet or metal parts which could damage them.
- That the unit is connected to earth.
- · That no tools or any other objects have been left in the unit.
- That the filter is correctly fitted.
- · The coil box is clean.
- That the condensate discharge outlet is correctly connected.
- The condensate drain pan is clean.
- · Using a bottle, pour water into the condensate recovery tray to ensure that drainage is carried out properly.
- The water connections are positioned correctly and tightened (ensure that the valve kit connections are properly tightened).
- That the casing is properly reinstalled (for appliances with body panels) and that the access doors are locked if the builtin control is not installed.

4.1.2 - SWITCH ON THE UNIT

- Using the isolation and protection device.
- · Start the appliance by using the control box.
- Make sure that the fan functions correctly at the three fan speeds, without abnormal mechanical noise (two speeds only for ducted units).

4.1.3 - FILL THE HYDRAULIC CIRCUIT WITH WATER

- If a control valve is assembled, make sure that it is in open position before filling the exchanger.
- · Check that all the connections are watertight.
- Proceed with draining the appliances.

4.2 - PURGING THE FAN COIL UNIT

- The air outlet plug and drain plug are located at the level of the water connections (see drawing opposite).
- NOTE:
 - Never unscrew these plugs by more than 3 mm or three turns.
 - Air release: top point of the coil box.
 - Drain: low point of the coil box.





5 - MAINTENANCE INSTRUCTIONS

GENERAL MAINTENANCE

All equipment must be properly maintained in order to provide optimum performance over time. Faulty maintenance can result in the cancellation of the product guaranty. Depending on the products, maintenance operations consist in the cleaning of filters (air, water), internal and external exchangers, casings, and the cleaning and protection of condensate tanks. Treating odours and the disinfection of room surfaces and volumes also contributes to the cleanliness of the air breathed by users.

- · Cleaning:
 - Never use solvents or powerful chemical products.
 - Do not use excessively hot water to clean the unit (risk of burns).
- Check the condition of the appliance regularly and clean the coil as well as the condensate drain pan.

Both sides of the coil must be cleaned, by using a vacuum cleaner with a rubber end piece and by taking care not to damage the surfaces of the coil.

Periods between maintenance operations depend on local conditions and must be defined according to case.

- · Check that the condensate tank and line are clean and that the line is unobstructed.
- Check the cleanliness of the electric box and that the wires are well connected in their terminals.
- · The motor bearings are self-lubricating and therefore must not be greased.
- The filters are reusable and must be cleaned regularly with warm water (once a month). Corrosive cleaning agents are not to be used to clean filters.

It is recommended that the filter be replaced with a new filter once a year. A clogged filter decreases the appliance's efficiency increases motor noise and the windings could even break due to overheating.

• To extract the filter, proceed as shown in the drawing opposite.



SYMBOLS OF COMPONENTS

C Capacitor

M Motor

COLOURS OF THE WIRES

- B Blue
- N Black
- R Red
- W White





GB



REMARQUE : Ce symbole et ce système de recyclage s'appliquent uniquement aux pays de l'UE. Ils ne s'appliquent pas aux pays des autres régions du monde.

F

GB

I

Ε

D



GB

NOTE: This symbol mark and recycle system are applied only to EU countries and not applied to the countries in the other area of the world.

NOTA : Questo simbolo e il sistema di riciclaggio sono validi soltanto per i paesi dell'Unione Europea e non sono validi per i paesi nel resto del mondo.

E NOTA : Este símbolo y el sistema de reciclaje solamente son para países de la UE y no son aplicables a países de otras áreas del mundo.

D

F

HINWEIS : Dieses Symbol und Recycle-System gelten nur für Länder der Europäischen Union, nicht für andere Länder der Welt.

F Votre produit est conçu et fabriqué avec des matériels et des composants de qualité supérieure qui peuvent être recyclés et réutilisés.

En fin de vie, il doit être éliminé séparément des ordures ménagères.

Nous vous prions donc de confier cet équipement à votre centre local de collecte/recyclage.

Dans l'Union Européenne, il existe des systèmes sélectifs de collecte pour les produits électriques et électroniques usagés. Aidez-nous à conserver l'environnement dans lequel nous vivons !

Les appareils contiennent fréquemment des matières qui, si elles sont traitées ou éliminées de manière inapropriées, peuvent s'avérer potentiellement dangereuses pour la santé humaine et pour l'environnement.

Cependant, ces matières sont nécessaires au bon fonctionnement de votre appareil ou de votre machine. Pour cette raison, il vous est demandé de ne pas vous débarrasser de votre appareil ou machine usagé avec vos ordures ménagères.

Your product is designed and manufactured with high quality materials and components which can be recycled and reused. At end of livetime, it should be eliminated separately from your household waste.

Please dispose of this equipment at your local community waste collection/recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help us to conserve the environment we live in!

Some equipments contain substances that are considered dangerous to the environment and human health if they are disposed of carelessly.

These substances, however, are required for your apparatus or machine to work properly. For this reason, it is requested that it not be disposed of with other household waste at the end of its service life.

Il vostro prodotto è stato costruito da materiali e componenti di alta qualità, che sono riutilizzabili o riciclabili.

Alla fine della sua vita utile deve essere smaltito separatamente dai rifiuti domestici.

Vi preghiamo di smaltire questo apparecchio in un centro di raccolta differenziata locale.

Nell'Unione Europea esistono sistemi di raccolta differenziata per prodotti elettrici ed elettronici.

Aiutateci a conservare l'ambiente in cui viviamo!

Gli apparecchi contengono spesso dei materiali che, se trattati od eliminati in modo non adeguato, possono dimostrarsi potenzialmente pericolosi per la salute umana e per l'ambiente.

Tuttavia, questi materiali sono necessari per il corretto funzionamento del vostro apparecchio o della vostra macchina. Per questo motivo, si richiede di non eliminare il proprio apparecchio o macchina usata assieme ai rifiuti domestici comuni.

E Los productos están diseñados y fabricados con materiales y componentes de alta calidad, que pueden ser reciclados y reutilizados.

Al final de su ciclo de vida, no se debe desechar con el resto de residuos domésticos. Por favor, deposite su viejo "aparato" en el punto de recogida de residuos o contacte con su administración local.

En la Unión Europea existen sistemas de recogida específicos para residuos de aparatos eléctricos y electrónicos.

Por favor, ayúdenos a conservar el medio ambiente!

Los aparatos a menudo contienen materiales que, si son tratados o eliminados de forma inadecuada, pueden convertirse en potencialmente peligrosos para la salud humana y para el medio ambiente.

No obstante, estos materiales son necesarios para el buen funcionamiento de su máquina. Por esta razón, le rogamos encarecidamente que al final de la vida útil de su aparato, no lo tire junto con la basura doméstica, sino que lo recicle adecuadamente.

D Ihr Produkt wurde entworfen und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wiederverwendet werden können.

Am Ende ihrer Nutzungsdauer muss er getrennt vom Hausmüll eliminier werden sollen.

Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre.

In der Europäischen Union gibt es unterschiedliche Sammelsysteme für Elektrik- und Elektronikgeräte.

Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

Die Geräte enthalten häufig Bestandteile aus bestimmten Werkstoffen, die bei einer nicht ordnungsgemäßen Behandlung oder Entsorgung eine Belastung für die menschliche Gesundheit und Umwelt darstellen.

Diese Werkstoffe sind jedoch für die korrekte Funktionsweise Ihres Gerätes oder Maschine notwendig. Daher bitten wir Sie, Ihr(e) ausgediente(s) Gerät/Maschine nicht in den Hausmüll zu geben.



Par souci d'amélioration constante, nos produits peuvent être modifiés sans préavis. Due to our policy of continuous development, our products are liable to modification without notice. Per garantire un costante miglioramento dei nostri prodotti, ci riserviarno di modificarli senza preaviso. En el interés de mejoras constantes, nuestros productos pueden modificares es in aviso prévio. Unsere Produkte werden laufend verbessert und können ohne Vorankündigung abgeändert werden.



R.D. 28 Reyrieux BP 131 01601 Trévoux CEDEX France Tél. 04 74 00 92 92 - Fax 04 74 00 42 00 *Tel. 33 4 74 00 92 92 - Fax 33 4 74 00 42 00* R.C.S. Bourg-en-Bresse B 759 200 728