



# USER AND MAINTENANCE MANUAL

## AHT HOT PAD

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**Date:** 09/05/2016

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## PRESENTATION OF THE MANUAL

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### NOTE

***ON RECEIPT OF THE HOT PAD, BEFORE ANY OPERATION, CAREFULLY READ THE MANUAL OF USE AND MAINTENANCE.***

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This manual contains instructions for installation, connection, operation and maintenance related to **HOT PAD**. The manual consists of several sections, each of which addresses a number of topics divided in chapters and paragraphs.

The general index lists all the topics of the entire manual. Page numbering is progressive and each page shows the number of the same.

This manual is intended for the user responsible for the installation, connection, use, maintenance of **HOT PAD** and it is related to its technical life after its production and sale.

In the event that it is given to third parties for any reason (sale, loan for use, or any other reason), the product must be delivered complete of all its documentation.

**Before starting any operation on any unit you must have at least read the entire manual and then studied the topic relating to the operations intended doing.**

This manual contains proprietary information and cannot be even partially provided to third parties for any purpose and in any form without the prior written consent of the manufacturer.

The manufacturer declares that the information contained in this document is consistent with the technical specifications and product safety which the manual refers.

Certified copy of this manual is deposited in the technical file of **HOT PAD**, kept by the manufacturer.

The manufacturer does not accept any documentation that has not been produced, released or distributed by itself or by its authorized representative.

# **Section 1**

**Warranty**

**General safety standards**

**General description**

**Technical data**

**Intended and not intended use**

**Residual risks**

## WARRANTY

The warranty regulations, listed in full in the purchase contract, have value only if **HOT PAD** is used following the intended conditions of use.

To the exclusion of the ordinary and extraordinary maintenance described in section . **MAINTENANCE** and performed with the procedures indicated , any repair or change made to the heated floor by the user or by unauthorized companies will void the warranty.

The warranty does not extend to damage caused by incompetent or negligent use of the product, or by poor or omitted maintenance.

### The products we sell are warranted with regard to the product under the following conditions:

- 1 The warranty is valid for a period of **24** months.
- 2 The Manufacturing company commits to replace at its discretion malfunctioning or incorrect manufactured parts , only after a careful quality control and detection of poor construction.
- 3 Transport and shipment are always charged to the buyer
- 4 During the warranty period products that are replaced become property of the manufacturer.
- 5 Only the original purchaser can benefit of this warranty who must have complied with the indications of normal maintenance contained in the manual. Our responsibility on the warranty expires when: the original owner disposes or hands over the property of the product, or changes are made to the same .
- 6 The warranty does not cover damage caused by excessive stress such as the use of the product after the finding of an anomaly, the use of unsuitable operating methods as well as the failure to follow the operating and maintenance instructions.
- 7 The manufacturer assumes no responsibility for any problems which may arise during the reselling or the use abroad due to provisions in force in the country where the product was sold.
- 8 The defective product part should be sent to the Manufacturing company for replacement; Otherwise the replaced part will be charged to the purchaser.

**Notice:** if it should appear necessary to use the warranty, please state the following:

1	Typology
2	Date of purchase (the presentation of the purchase document)
3	Detailed description of the problem

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## NOTE

***FAILURE TO OBSERVE THE INTERVENTION AND USE PROCEDURES OF HOT PAD DESCRIBED IN THIS DOCUMENTATION ( MANUAL FOR USE AND MAINTENANCE), RESULT IN THE EXPIRY OF WARRANTY TERMS.***

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## GENERAL SAFETY STANDARDS

### Warning

This chapter describes the basic safety rules to be observed during any operation involving HOT PAD. The intervention procedures, described in the following chapters must be carried out respecting both the manner of performance indicated, and the general safety rules of this chapter.

The safety rules and procedures of use and maintenance of these manuals are an addition to the general safety standards and standards of safety at work which should be respected in any case.

Different nations can have different safety regulations. It should be noted, therefore, that in all cases where the rules of the manuals are in conflict or reductive compared to industry or nation's standards where the product is used, industry and nation's standards will have priority value on those manuals.

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## NOTE

***THE MANUFACTURER CANNOT BE HELD RESPONSIBLE IN ANY WAY FOR ACCIDENTS OR DAMAGES RESULTING FROM AN INAPPROPRIATE USE OF PLYTERM, AS WELL AS THE PARTIAL INOBSERVANCE OF THE SAFETY RULES AND PROCEDURES DESCRIBED IN THE MANUAL INTERVENTION.***

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The non-observance of the operating rules and methods of intervention, installation, connection, use and maintenance of HOT PAD contained in this manual will void the warranty.

### Safety standards

During the connection and the subsequent use, incorrect functioning conditions may occur which are not foreseen in the manual.

These situations, totally abnormal, can sometimes be caused by environmental factors or by unforeseen fortuitous failures by the manufacturer.

In case there is any unforeseen abnormality during the using phase of the product, it is recommended to follow the following procedure:

- Disconnect the system from the home wiring.
- Immediately contact Technical Support.

In case there is an unforeseen abnormality after powering **HOT PAD**, please follow the following procedure:

- Disconnect the system from the home wiring.
- Immediately contact Technical Support.

The manual must be kept by the user and by the staff who are responsible for management, maintenance and use of the heating floor **HOT PAD**.

In case of deterioration or loss, a certified copy may be requested by the customer to the manufacturer, we suggest you keep a backup copy in a place where it cannot be damaged or lost.

## CAUTION

**AS IT WOULD BE IMPOSSIBLE TO DESCRIBE ALL OPERATIONS WHICH SHOULDN'T OR CANNOT BE CARRIED OUT, CONSIDER THAT ALL OPERATIONS (OTHER THAN NORMAL USE) THAT ARE NOT EXPRESSLY DESCRIBED IN THE MANUAL PROVIDED WITH HOT PAD, ARE TO BE CONSIDERED NOT FEASIBLE.**

## DESCRIPTION

**Hot Pad: the warming panel with Style!**

**Hot Pad modular panels could cover every indoor surface. Proper for new as well as historical buildings, they are available in various dimension, finishes and power. The patented joint system guarantees the highest safety standards Could be integrated with temperature control systems, manual or smart, through app interface available on IOS/Android systems**

## TECHNICAL DATA

HOT PAD	HOT PAD VIP					HOT PAD MEDIUM					HOT PAD BIG					HOT PAD EXTRA				
Dimensions ( mm )	1260 X 520					1560 X 520					2060 X 520					2460 X 520				
Thickness ( mm )	28					28					28					28				
Space occupied ( sqm )	0,65					0,75					1,07					1,27				
Grid voltage ( VC )	220-240					220-240					220-240					220-240				
Surface caloric yield per module ( W / sqm )	50	100	150	180	300	50	100	150	180	300	50	100	150	180	300	50	100	150	180	300
Absorption module ( W )	30	60	90	108	180	37,5	75	112,5	135	225	50	100	150	180	300	60	120	180	216	360
Power consumption ( W / h )	30	60	90	108	180	37,5	75	112,5	135	225	50	100	150	180	300	60	120	180	216	360
Maximum intensity module ( A )	0,13	0,26	0,39	0,47	0,78	0,16	0,33	0,49	0,59	0,98	0,22	0,43	0,65	0,78	1,30	0,26	0,52	0,78	0,94	1,57
Connectors	MC 3					MC 3					MC 3					MC 3				

Weight single module HOT PAD VIP: 8 Kg.

## NOTE

**THE DATA RELATE TO THE PRODUCT IN STANDARD CONFIGURATION. TECHNICAL DATA SHOWN ARE APPROXIMATE. THE MANUFACTURER RESERVES THE RIGHT TO MODIFY THEM APPROPRIATELY WITHOUT NOTICE.**

### Identification plates

Each module tested is fitted with a plate with the identification of the product and the main technical data on weights and supplies .



The identification plate also carries the CE mark.

## INTENDED USE AND NOT INTENDED USE OF PRODUCT

### Intended use

Use **HOT PAD** exclusively as an electrically heated flooring, in homes equipped with an electrical system. The various modules can be combined through a patented hook system

Everything that is not feasible, as well as the total or partial inobservance of the procedures described in the manuals, can cause not only the malfunction of **HOT PAD**, but may determine serious damage and loss.

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### NOTE

**THE MANUFACTURER CANNOT BE HELD UNDER ANY CIRCUMSTANCE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR NOT INTENDED USES OF THE HEATED FLOORING. ANY NOT INTENDED USE OF THE PRODUCT WILL ALSO VOID THE WARRANTY TERMS.**

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### Not intended uses

There are no other feasible uses than those described in the paragraph **INTENDED USE**.

It is also absolutely forbidden:

- The use of **HOT PAD** with supply lines not pertinent or not dedicated for the purpose required.
- combining **HOT PAD** with non-compatible modules.
- Exceed the load limit permitted on a module (see **SPECIFICATIONS**).

Reuse of any unit after disabling the product raises the manufacturer from any liability arising from the use of the unit.

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### NOTE

**THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR NOT INTENDED USES OF AHT.**

**ANY NOT INTENDED USE IMPLIES ALSO THE VOID OF THE WARRANTY .**

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## Residual risks

In the design stage the manufacturer **AHT International Group Sagl** has carried out a thorough analysis of risks on the product concerned. From this analysis unavoidable risks have emerged which cannot be eliminated for their nature. These risks were examined individually and in this manual have been emphasized the directions on how to avoid them. It is therefore important that any user who should install, connect, operate and maintain the product has previously read the manual.

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### NOTE

**THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES DUE TO NOT INTENDED USES OF HOT PAD AS A RESULT OF NEGLIGENCE ON PART OF A USER.**

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As a result of the risk analysis, residual risks have emerged and have been highlighted in this manual of use and maintenance and an explanation was provided on how to avoid them.

In particular :

- In the paragraph **Safety regulations**, the proper procedures to follow in case of **HOT PAD** anomalies are indicated
- In section 2 the correct procedure of installation and connection of **HOT PAD** to the electrical line are indicated.

The correct location of the product has been specified in **Areas of use**

- It is absolutely prohibited to bring any changes on **HOT PAD**. Any damage to people, animals or things resulting from the use of the incorrectly modified product by an operator not authorized by the manufacturer, raises **AHT International Group Sagl** from any responsibility.
- Keep this manual and its attachments, necessary for proper and safe use of **HOT PAD**.
- In case the upper surface of a module presents sharp corners or sharp edges , these are surely due to an error in the production phase. Contact the manufacturer **AHT International Group Sagl** and follow their instructions.

In the operations of installation, maintenance and dismantling of the product it is necessary to provide the use of Personal Protective Equipment (PPE) such as:

#### - Clothing:

Who carries out the installation, connection, maintenance and dismantling of **HOT PAD** must compulsorily wear a clothing that must comply with the essential requirements of safety.

You must wear accident prevention shoes with non-slip soles; other types of footwear are not permitted.

#### - Gloves:

In the installation phase, connection, maintenance and dismantling of **HOT PAD** you must also use gloves of Class I <sup>in</sup>.

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## **DANGER**

***IT IS IMPERATIVE TO RESPECT THE LOAD LIMIT OF EACH MODULE INDICATED IN THE PARAGRAPH "TECHNICAL DATA"***

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In case of accidents, such as a strong shock of a mass against a part of **HOT PAD**, it is necessary, before starting to use it, to carry out verifications of integrity. If you're having:

- Cracks on the surface
- Presence of dangerous roughness
- Deformations of the module surface

Contact the technical assistance of AHT International Group Sgl for assistance.

# **Section 2**

**Handling**

**Laying**

**Connection and use**

## WARNING

All the products are tested and developed by the manufacturer prior to shipment and delivery to the end user.

AHT HOT PAD is DESIGNED, made and tested to meet all the specific regulations (see the declaration of conformity and performance), when connected in accordance with professional rules.

If the installation, connection and / or maintenance are not being conducted in accordance with professional rules, malfunctions may arise during use, also security problems of the product can be caused. An improper installation, connection or maintenance will invalidate the warranty.

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## CAUTION

*THE PRODUCT CAN BE PUT INTO OPERATION ONLY AFTER BEING LAYED AND CONNECTED PROPERLY BY AUTHORIZED PERSONNEL AND THAT THE USER HAS PREVIOUSLY READ THE MANUAL.*

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## CAUTION

*PERSONNEL IN CHARGE OF THE INSTALLATION, WILL REALEASE A STATEMENT THAT CONFIRMS THE ACCURACY OF THE WORK DONE.*

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Before connecting **HOT PAD** to the electrical system and put into operation, completely remove any protections from dust or moisture and all packaging material.

## PRELIMINARY CHECKS

### Checking for damage

Check that the various parts of the product do not show any physical damage due to bumps, tears or abrasions.

Check in particular:

- that there are no marks or bumps, indicative of impact occurred during transport;
- That connectors and cables are not damaged.
- That the hooks that allow you to link together the **HOT PAD** modules are not damaged

### Damage reporting procedure

If any damage is discovered, stop the installation and connection procedure and report the nature of the damage found to the customer support office of the manufacturer.

## HANDLING

### Manual handling

The weight of each module is given in this manual and on the plate. Each module can be moved manually, provided that they meet the requirements under the Decree. 81/08 on the maximum weight lifted in the workplace. Below is the table with the precise information:

	Men		Women	
age	Occasional	Frequent	Occasional	Frequen
16-18	19	14	12	9
18 - 20	23	17	14	10
20 - 35	25	19	15	11
35-50	21	16	13	10
more than 50	16	12	10	7
<b>Pregnant women</b>				
<i>First 6 months of pregnancy</i>			10	5
<i>As of 7 months</i>			0	0

*Approximate values for the maximum weight (in kg), frequent or occasional maintenance.*

You can proceed handling the modules in block, with the aid of a trolley . It's sufficient to :

- position, one at a time, the modules to be moved on an appropriate trolley for the effort requested by the operation.
- move the trolley to the desired position using the wheels.
- Unload modules one at a time.

### Handling with lifting system (pallets)

#### Safety standards

During the lifting and handling operations of a pallet with **HOT PAD**, no person who is not involved in ongoing operations should halt or transit in the working area.

All personnel involved in the handling should wear protective clothing according to standards, in particular gloves, helmet and safety shoes.

During lifting operations people must remain at a safe distance and in no case must be under the unit raised.

To correct any defect of the sling or balance, or for any operation that should require the approach of a person, lay on the ground the load and repeat correctly the sling and lifting.

These people have to operate in the area easily visible to the lifting operator and must only have the function to signal to the operator, remaining distant from handling area, and in no case must intervene manually on any object suspended to guide or orient it in any way.

Before starting operations liberate the area from all foreign objects and clean the floor thoroughly so that water, grease or other do not make it slippery or insecure.

Check out the measurements of the lifting height that will be used and make sure to have enough movements space necessary, considering the length of the ropes, the height of the unit to be lifted and the position in which it needs to be placed.

Check in particular that there are no electrical lines in voltage that may interfere with handling.

## Preliminary checks

Before starting the movement of the pallet, check:

- that there are no unfixed parts that can fall during lifting.
- that there are no objects resting or attached to it.

**The pallet weight is indicated on the label affixed to it.**

## LAYING

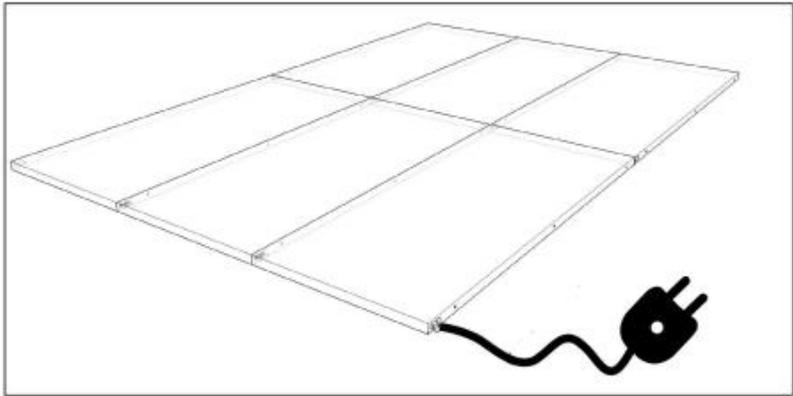
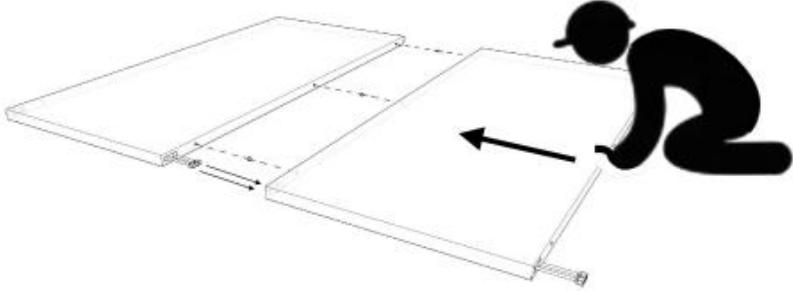
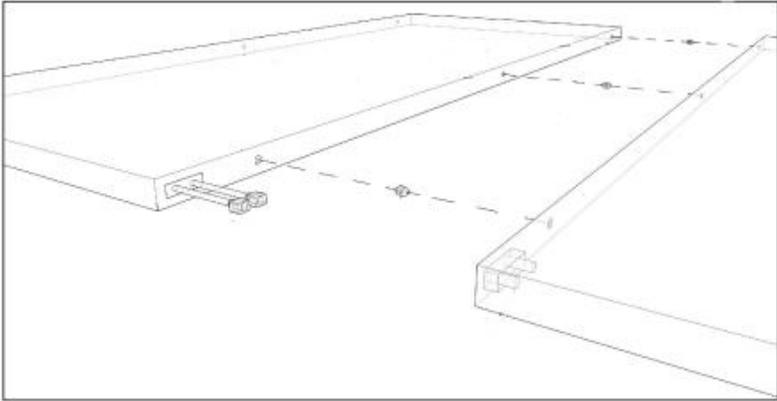
### Laying zone

It is good to keep in mind a few aspects before proceeding with the installation of **HOT PAD**, in particular you need to check a few factors:

- The **HOT PAD** position must be chosen so that it cannot be hit by jets of steam, water and corrosive liquids.
- Environmental temperature must be between the values of + 40 ° C and -10 ° C.
- The storage temperature of the environment between the values of + 60 ° C and -20 ° C.
- altitude: 40 ° C Environmental: 60m below sea level up to 1800m above sea level. With 30 ° C Environmental also from 1800m to 4000m above sea level.
- Conditions of humidity of between 0% and 90%.

It can only be used exclusively indoors.

Instructions & Connection



# **Sezione 3**

## **Maintenance and Deactivation**

## MAINTENANCE

### Safety

The maintenance operations must be performed by personnel who have previously read the manual. Any type of intervention, different from simple cleaning, must always be carried out with **HOT PAD** disconnected from the power supply. While performing these operations follow meticulously the instructions given in this manual.

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## DANGER

***DISCONNECT HOT PAD FROM THE POWER SUPPLY BEFORE ANY MAINTENANCE.***

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For any intervention of maintenance, disassembly, reassembly and replacement of components, in addition to the information contained in this manual, general safety rules must be respected and possibly the general safety rules in force in working places, where such operations are carried out.

### Periodic maintenance

Periodically you must clean **HOT PAD** carefully from possible accumulation of dust or dirt that may have formed on the upper outer surface. If necessary, use a compressor to blow out the dust. It is also possible to use a moist cloth provided that no aggressive chemicals are used.

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## CAUTION

***DO NOT USE PRODUCTS AND / OR METHODS FOR CLEANING PLYTERM OTHER THAN THESE JUST MENTIONED . EN-TECH SRL DOES NOT ASSUME ANY RESPONSIBILITY ARISING FROM THE NEGLIGENCE OR FAILURE OF FOLLOWING INSTRUCTIONS GIVEN FOR CLEANING THE PRODUCT.***

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## CAUTION

***FOR ORDINARY CLEANING OPERATIONS OF THE SURFACE OF PLYTERM IT IS NOT NECESSARY TO DISCONNECT IT FROM THE POWER SUPPLY,.***

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### Extraordinary maintenance

special maintenance is required in case of failures or breakages, and unpredictable accidents or from an inappropriate use of HOT PAD.

The situations which from time to time can happen are completely unpredictable, and therefore it is not possible to describe appropriate intervention procedures.

If necessary contact the technical service to receive appropriate instructions to the situation.

All interventions, mechanical or electrical, ordinary or extraordinary, must in any case be carried out by authorized personnel.

## DISABLING

### Deactivation of the product

HOT PAD is built according to the criteria of strength, durability and flexibility that allow the use for many years. Upon reaching the end of its technical and operational life , it should be disabled and put in conditions as not to be used any longer for the purposes for which at the time it was designed and built , making though possible the reuse of raw materials of which it is made.

The same deactivation procedures should be observed in all the following cases:

- Disabling the product and storage in stock.
- Definitive dismantling of the product and subsequent disposal.

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## NOTE

*THE MANUFACTURER ASSUMES NO RESPONSIBILITY FOR DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE REUSE OF SINGLE PARTS OF PLYTERM FOR FUNCTIONS OR MOUNTING CONFIGURATIONS DIFFERENT THAN ORIGINAL.*

*THE MANUFACTURER DISCLAIMS ANY RECOGNITION, EXPLICIT OR IMPLIED, OF FITNESS FOR SPECIFIC PURPOSES OF THE PRODUCT PARTS REUSED AFTER ITS FINAL DEACTIVATION IN VIEW OF ITS DEMOLITION.*

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### Disposal

The construction materials of **HOT PAD** do not require special disposal procedures. In case of disposal, please refer to local regulations for the disposal of electrical and electronic equipment.

The possibility to reuse some parts of the product is subject to the user's own responsibility.

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## NOTE

*THE MANUFACTURER HAS NO RESPONSIBILITY FOR DAMAGES CAUSED TO HOT PAD, IF IT IS NOT USED IN ITS FULL ORIGINAL VERSION AND FOR THE PURPOSE AND METHODS OF USE INDICATED IN THIS MANUAL.*

*THE MANUFACTURER IS NOT RESPONSILBE FOR ANY DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE PRODUCT PARTS RECOVERY USED AFTER ITS DISPOSAL.*

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