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FOREWORD

We thank You for choosing this product and we are sure it will give You great satisfaction. Before installing and starting up the equipment, in order to have e complete knowledge of its qualities and its potentials, and for a correct and safe use, please read this manual carefully.

Keep the instructions handbook for further reference.

DESCRIPTION

Thermojoy is a modular low-temperature heater with far infrared emitted by an electric resistance, to be used indoor, in living-rooms, bedrooms, offices or shops.

SUPPLY

The standard equipment is composed of :

- Heating Panel
- Bracket for wall with plugs
- Feeder cable
- User's guide

Optional accessories:

- Connecting cable for modules
- Remote Control
- Chrono-thermostat

HOW TO KEEP BEFORE USE

- Do not store Thermojoy in a humid environment,
- Do not immerse in water
- Avoid thermal shocks
- Avoid shocks
- Do not charge weights on the package
- Do not pile more than 5 packages over one another

UNPACKING

Upon receiving Your product, please check that the package is not damaged. In such cases do not use the equipment and contact the retailer or the assistance service.

Avoid to release the packaging materials to the environment, collect them for disposal according to the existing laws of Your municipality.



Warning: keep the packaging materials away from children. Plastic bags and other packaging materials can cause choking!

GENERAL SAFETY STANDARDS



Before connecting Thermojoy to the power supply network, check that there is no sign of damages on the equipment, especially on the electric cables and on the plug. No sign of humidity must be seen. Do not handle the electrical parts with wet hands.



Connect Thermojoy only to electrical installations made according to the rules of the trade and to the existing laws, equipped with a master switch and protected by a residual current device with sensibility 0,03A. Supply Voltage 220V monophase 50 Hz.



Each Thermojoy module has a power equal to 300W; in case of a multiple connection of arrays to the same plug (MAX 4) , pay attention not to exceed the maximum allowable power of the plug. In addition check not to exceed the maximum total power of the master switch, taking into consideration also the other electric devices connected to the electrical system.



Thermojoy must be installed on stable vertical walls, by means of dedicated fixing devices, supplied in the package. We shall not be liable for mountings made with other fittings.



Except some specific models, Thermojoy cannot be installed in bathrooms, saunas, basements, swimming-pools or rooms with a high relative humidity (RH >90%) It must not come into contact with liquids or rain. Thermojoy has been designed for indoor air-heating of dry rooms, living rooms, bedrooms, offices, shops: any other use is not allowed.



For installations in bathrooms, only use the specific version (IP43). The installation in bathrooms is possible when not to close to washbasins, bathtubs and showers in order to avoid direct water spray. Do not unplug the power cord from the plug on the appliance, but always first from the power outlet!



Thermojoy IS NOT A TOWEL WARMER! DO NOT COVER the heating part and do not let any object get close to it (some objects, if heated beyond ambient temperature can be damaged) and leave free space before and immediately close to it to allow a better heating radiation.



The temperature of panel can reach 90°C ! We suggest to don't touch the heating surface while running. In case babies are present, we suggest to reduce the working temperature of all the Thermojoys, reachable for the babies themselves.



In case of damaged or faulty equipment, or even if only suspected to be, turn the equipment main switch off, then take off the plug of Thermojoy, turn the main switch on again, call for assistance and make the device unserviceable. Keep it away from the reach of children.



Do not open Thermojoy: for any repair and/or inner check ask only for specialized technicians also after warranty period.

INSTALLATION

- How to fix the bracket to the wall

The package contains the hooking bracket to be fixed to the wall. Use the bracket as a template to mark the position of the holes on the wall with a pencil. Drill the holes as in a picture A and B and screw the bracket to the wall using the provided wall plugs.

To hang the heating panel in vertical position (pict. A) fix the entire wall bracket as shown in picture A-2.

To position the panel horizontally (pict. B-1), use the entire bracket only as a template to mark the holes (pict. B-1), then break the bracket (pict. B-3 and B-4) and fix its two ends using the provided wall plugs like shown in pictures B-5 and B-6.

When installing strips of more heating panels, please respect the correct distances from the floor and between panels, as in pictures A-2 or B-1.

Thermojoy can be hung rotated with the little display at the bottom or at the right according to pict. D.

- How to hang the panel

Hang the heating panel to the wall by inserting the metal crosses fixed on the back of the panel itself into the grooves of the wall brackets. Let the crosses slide down until the grooves bottom (see pict. C).

- Electric connection

Connect the module to the plug 220V monophasic 50 Hz with the supplied cable. It is forbidden to use cables different from the supplied ones, extension cables or to tamper the cables.

The power lead must not be laying in contact with hot surfaces and cutting edges.

In case of connection of various modules, use the supplied cables to connect two nearby modules according to pict. E



Warning: each Thermojoy module absorbs a maximum power of 300 W; to connect more arrays to the same plug, pay attention not to exceed the maximum allowable power of the plug.

The maximum admitted amount of modules for the shared connection is 4. (pict. D)

INSTRUCTIONS BEFORE USE



Pay attention to the emplacement of the panel: since the surface temperature can reach 90°C always check that nearby there are no heat damageable materials, substances which can be dangerous if heated, or objects laying on the panel and not allowing the heating radiation, causing an overheating of the equipment.

USE OF THERMOJOY

START LEVER SWITCH in position ON ("I"): observe the leds of the panel immediately after power on.

4 green blinks: Thermojoy is already running and will heat until reaching the pre-set temperature level.

4 yellow blinks: Thermojoy is in stand-by and it is necessary to activate it using the remote control (button "ON").

By positioning the switch on "O" the power feeding to the module will be cut off.

IR REMOTE CONTROL (pict. F)

Equipped with CR 2025 battery.

Remove the battery protection (if there is one) from the remote control to make it operable.

Reception of the remote control signal by the controller on the side of the panel will be confirmed by **the blink of the yellow led** on the control each time a button is pushed.

ENABLING of the panel and heat production: after connecting the panel to the electrical system and turning the lever switch on, please direct the remote control towards the panel (or the panels' array) and switch "ON".

This way, all the panels which receive the IR start signal will begin to heat. The switching on of the panel will be signalized by the **green** LED blinks on the side of the panel (4 blinks)

DISABLING : push the button "OFF" on the remote control to disable the panel. On the display 4 **yellow** blinks will confirm the switching off of the resistance while the panel remains in stand-by. All the panels which receive the IR disable signal will stop to heat.

Warning: In case of presence of an array of panels, only the ones which receive the IR signal from the remote control will change settings, so please avoid the presence of obstacles along the trajectory between remote control and receiver.

POWER ADJUSTMENT

Push the + and - buttons of the remote control to adjust the surface temperature of Thermojoy and to customize it to the personal needs (pict. F)

We provided it with 3 levels of temperature, which can be set pushing subsequently the button – to move from the higher to the lower level or, on the contrary, the button + to go to a higher level.

After the modification by means of the remote control, the set level of power is confirmed, with the green led on the side of the panel:

One slow blink means **MIN** level

Two slow blinks mean **MED** level

Three slow blinks mean **MAX** level

POWER MANUAL ADJUSTMENT

(not available for models IP43)

It is possible to adjust comfort and energy consumption also by means of the adjustment knob on the panel. By rotating the knob (pict. G) we can continuously reduce the surface temperature of a single panel. Therefore, in an array of various Thermojoys we can adjust the temperature of a single panel, for instance to maintain less hot the lower one, in contact with a baby, or to optimize the vertical stratification, or to partialize the power in mid-season period).

Adjustments done by means of remote control and knob will add to each other.

SWITCHING ON THE LED LIGHTING

Only for models equipped with LED strips: by means of the remote control (pict. F) it is possible, for the pre-set models to switch the LED lighting on or off with the dedicated button.

CONTROL OF THERMOJOY WITH CHRONO-THERMOSTAT

(not supplied with the equipment)

Thermojoy can be suitably adjusted by means of a chrono-thermostat.

Chrono-thermostat connected in series to the power distribution



Warning! Choose and use a chrono-thermostat suitable for the electric absorption of the linked panels (each panel can absorb MAX 1,5 A).

Connect according to pict. H

Chrono-thermostat wireless

It is possible to use an optional device, transmitting the signals of switching-on and switching-off through radio signals.

Install the chrono-thermostat as shown in the related handbook.

CLEANING



Before any cleaning operation, insulate the device from electric power removing the power plug.

Do not use solvents or abrasives. Do not use alcohol.

Use a damp cloth, not dripping, better if microfiber, with mild soap.

MAINTENANCE



The equipment needs no periodical maintenance, apart from the normal home cleaning for aesthetic purposes of all exposed parts showing some dirt. It needs no extraordinary maintenance except in case of accidental damages (see the Chapter devoted to failures).

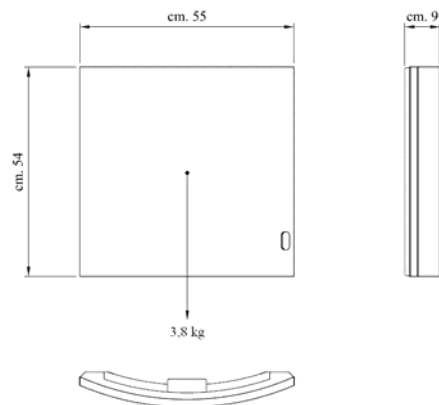
FAILURES AND ASSISTANCE

In case of damaged or faulty equipment, or even if only suspected to be, turn the equipment main switch off, then take off the plug of Thermojoy, turn the main switch on again, call for assistance and make the device unserviceable. Particularly, keep off the reach of children. Each repair and/or check must be done only by specialized technicians also after warranty period.

Encountered problems	Solution
The module does not heat	Check the proper functioning of the thermostat, if present; check that the switch of Thermojoy is on, that all plugs of the panel chain are inserted, the main switch of the equipment is in „on“ position and follow the enabling instructions (remote control)
The module heats poorly	Rotate clockwise the adjustment knob and/or increase the adjustment with the remote control
Strange odours can be smelt Strange noises can be heard Glints can be seen	Follow the mandatory instructions regarding a damaged devise at the beginning of this chapter
Other problems, not previously explained	Contact the Technical Assistance Service
Even following troubleshooting instructions, the problem remains unsolved	Contact the Technical Assistance Service

TECHNICAL DATA

- Sizes: cm 55 x 54 x 9
- Weight kg 3,8
- Supply Voltage 220/240 V 50 Hz
- Maximum Power Watt 300
- Class of Insulation I
- Protection Class IP 43 IP 42
- Working Temperature – 20°C / + 40°C
- Storage Temperature -20°C / + 50°C
- Environment Relative Humidity 90%
- Compliant with the Electromagnetic Compatibility Directive 2004/108/CE



RECOMMENDATIONS FOR TREATING THE AIR AND FOR ENERGY SAVING

- With an outside temperature of zero degrees, it takes just 5 minutes to change the air in the house without the risk of cooling the walls;
- Each room must have its own chrono-thermostat;
- The chrono-thermostat must have a weekly setting with at least three settable temperature levels, sensitivity of one-tenth of a degree, interval between intervention and reset of six-tenths of a degree and must allow at least hour by hour management and better half-hour by half-hour;
- Avoid setting a difference of more than 3 degrees between the minimum and maximum temperature settings (by way of example, see the following dispersive cycle);
- Dehumidify the air, if possible.

ASSISTANCE

For Assistance Service please contact Your retailer or directly:

AERFRIGOR s.r.l.

Via I Maggio, 8

20068 Peschiera Borromeo (Milano) – ITALY

Tel. ++39-02.5470578 - 02.5470745

Fax ++39-02.55301551

VAT 10064090151 – Fiscal Code 01995730163

e-mail assistance@thermojoy.com

DISPOSAL

Before disposing of the equipment, remove the power lead so that it becomes unserviceable. We suggest to disassemble it in order to divide the components according to the kind of waste; it is composed of four kinds of materials: metal, plastic, electric components, electric cables, rock wool.

In case it should be delivered as not separated, apply to the specialized certified centres for scrapping of electric domestic equipment.

LIMITED WARRANTY

Aerfrigor warrants that the product, normally used, will be free from defects in material and workmanship for the below described duration.

The duration of the limited warranty will therefore last 2 years in Europe, unless otherwise required by local law.

The limited warranty will apply from the date of the purchase as reported on the receipt of purchase.

In case of defects the product must be sent suitably with suitable packaging to our facilities (or to the Assistance Centre). Costs and risks related to the transport will be charged to the customer. A warranty work gives no extension or renewal for its expiry date.

Warranty is excluded in case of:

- Damages due to tampering, carelessness, lack of expertise or improper installation of the product.
- Installation, use or maintenance not complying with instructions and requirements of the Producer
- Repairs made by non-specialized personnel
- Damages due to natural events (lightning, floods etc.)
- If established that the product has been illegally misappropriated to the prejudice of Aerfrigor

In no case shall the manufacturer be liable for any damage to properties, persons, animals, costs for substitute goods or services, business interruption, lost sales or revenues, direct, indirect, accidental or property damage, anyhow resulting from the use of the product or from its installation.

DECLARATION OF CONFORMITY

According to the Directive on Equipment, Annex II

We: **AERFRIGOR srl**

Via Primo Maggio,8 - 20068 – Peschiera Borromeo (MI) - ITALIA

Hereby declare that the device model "**Thermojoy**", designed for indoor heating, produced in our facilities in Peschiera Borromeo, complies with the requirements of the following European Directives and Reference Standards for this typology of equipment

2004/104/EU Directive on Electromagnetic Compatibility

UNI EN 60335-1

UNI EN 60335-2-30

Approved by:


Ing. Roberto Crivellaro

Position:

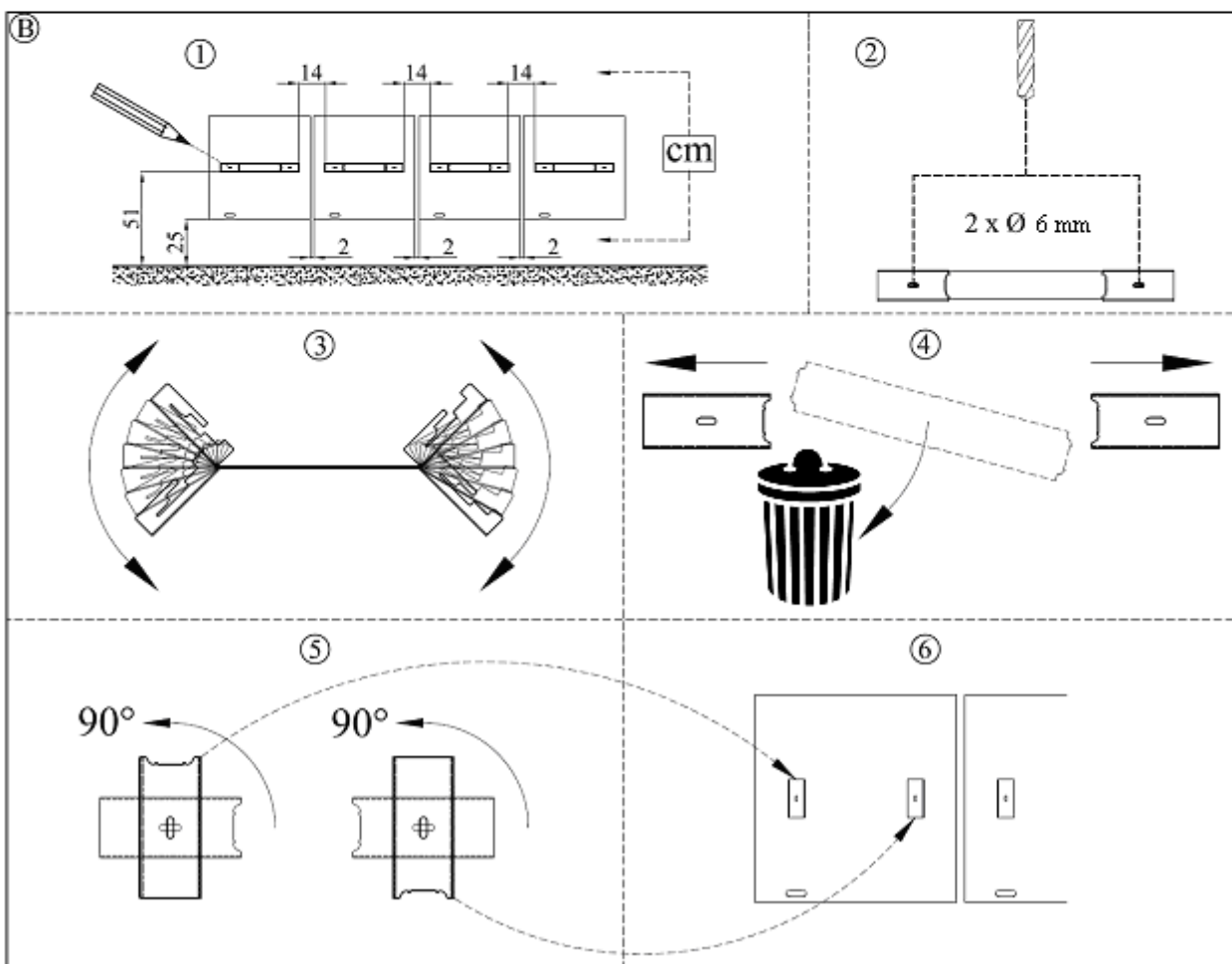
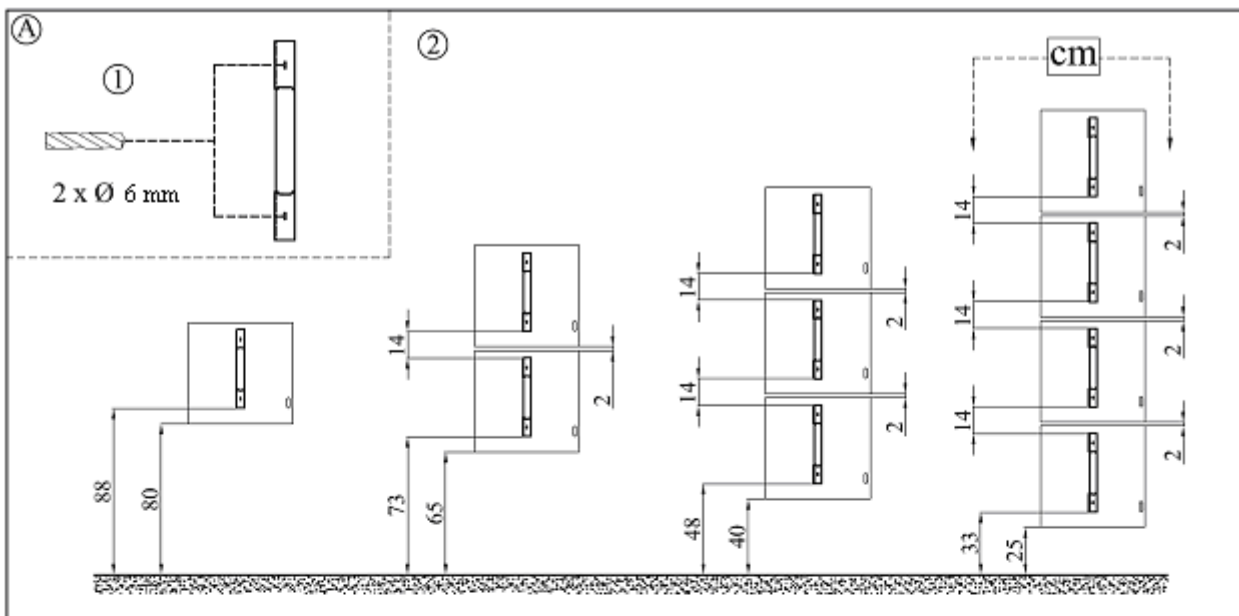
Chief Executive

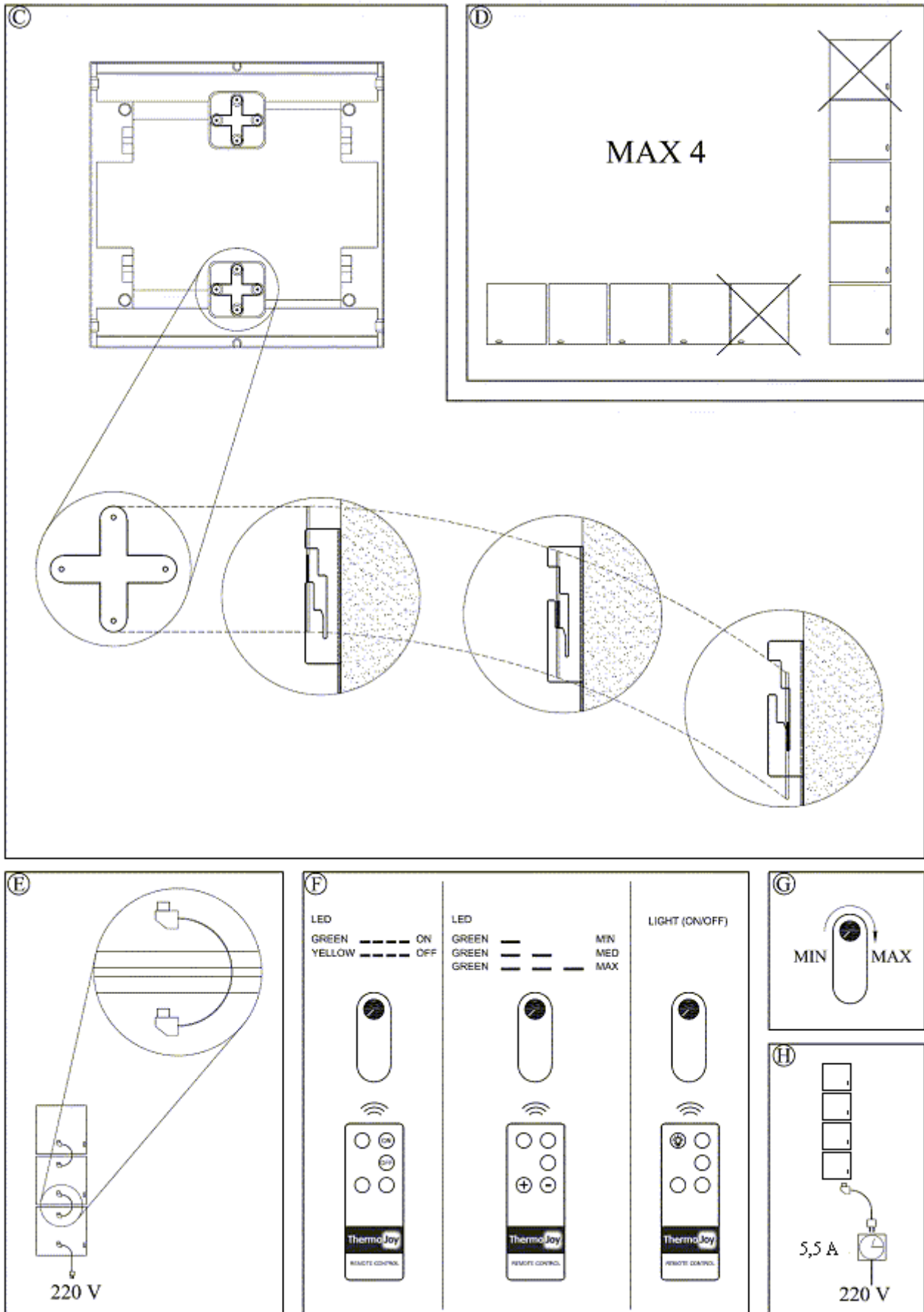
Peschiera Borromeo, on 07/09/2011

AERFRIGOR srl

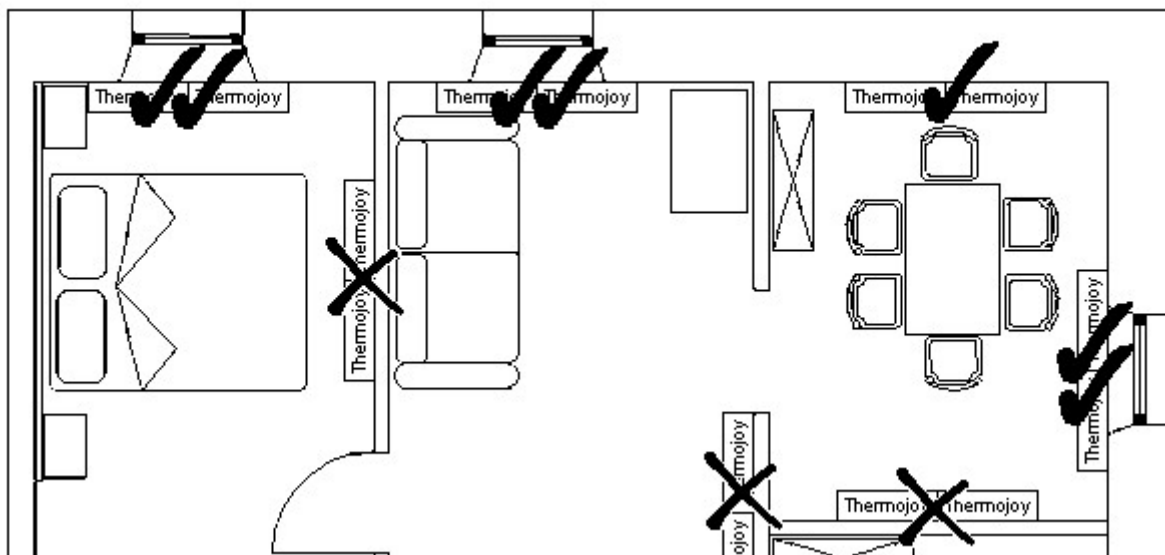


DIAGRAMS

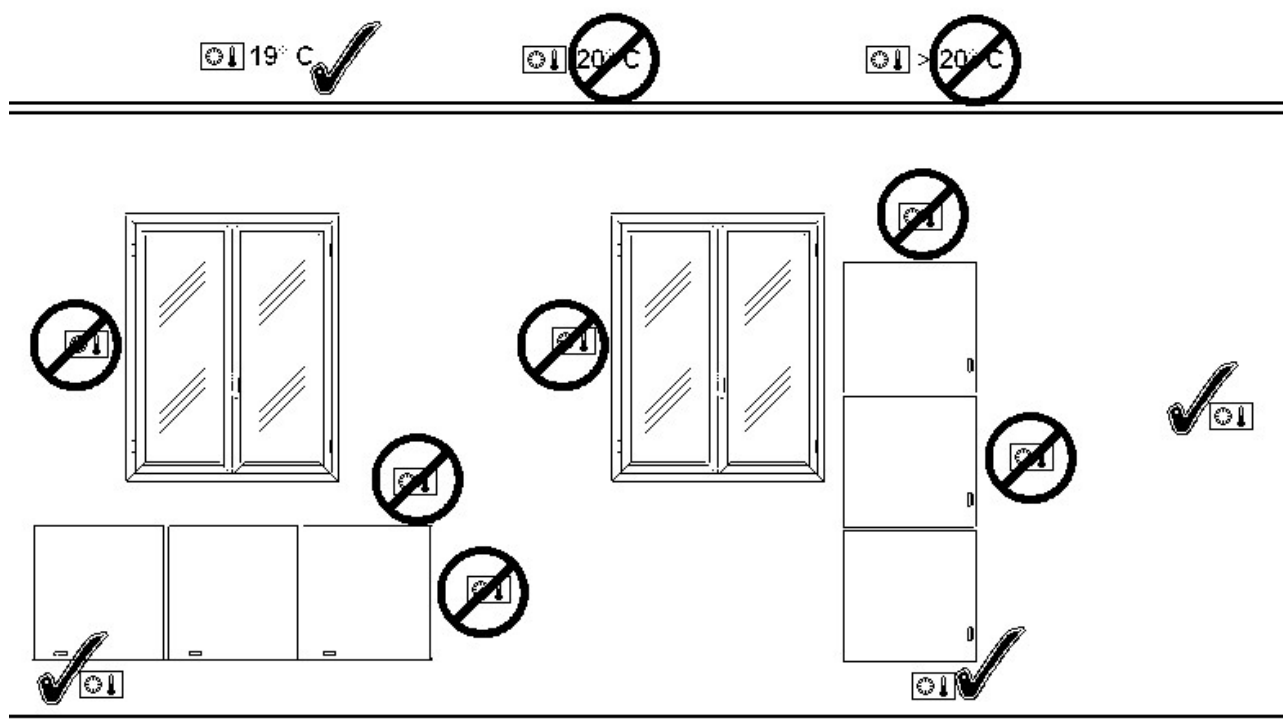




Pict. I – Panels placement in the rooms



Pict. J – Setting and location of the thermostat



Pict. K – Setting for infants (suggested)	Pict. L – Maximum efficiency (more heat down)	Pict. M – Seasonal set up (maximum comfort)
