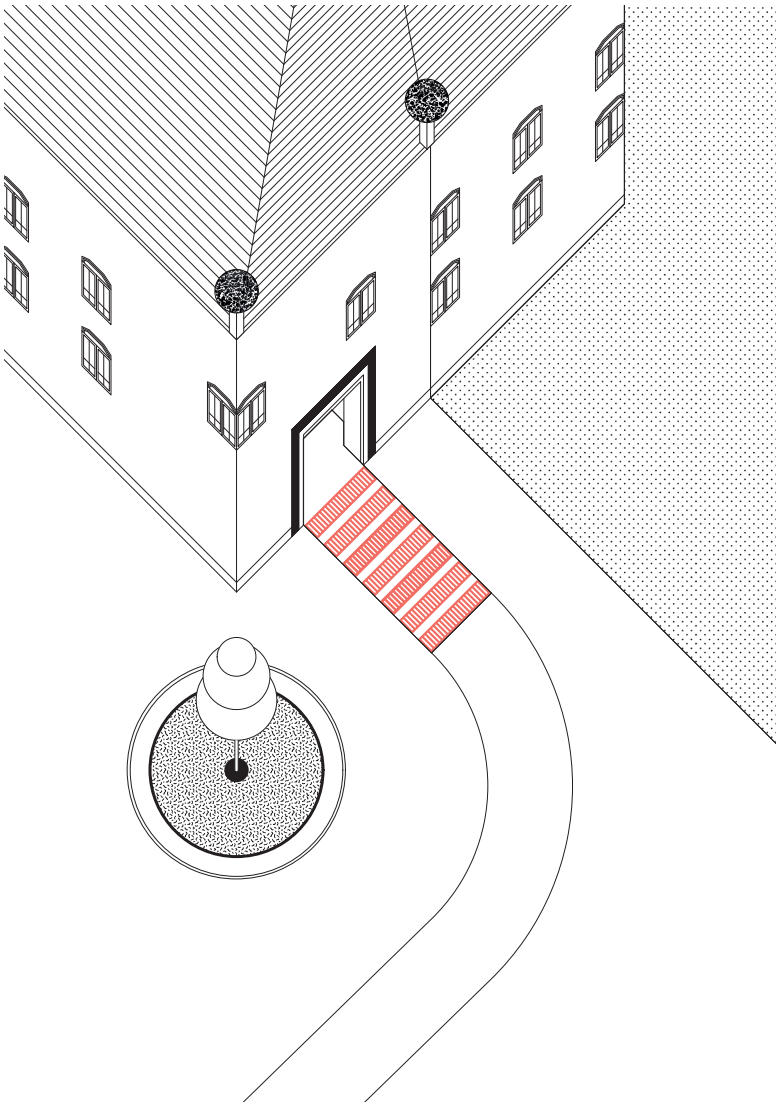
MORE PAD HVR

RADIANT INTEGRATION ELECTRICAL SYSTEMS
LOW VOLTAGE



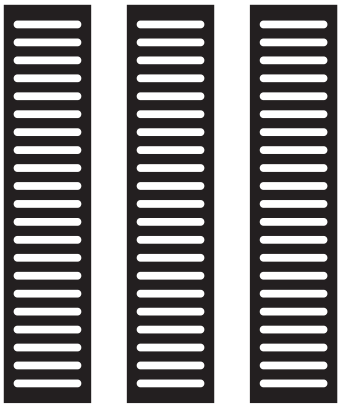
TECHNICAL DATA SHEET
ST3863M_01 MORE PAD HVR

RBM MORE the wellbeing

RADIANT INTEGRATION ELECTRICAL SYSTEMS LOW VOLTAGE

- **Maximum temperature self-adjusted to 45°C.**
- **Suitable for heating outdoor surfaces with a frost risk to increase the degree of safety for the transit of people and vehicles.**
- **Suitable for radiant heating of walls and/or ceilings of small rooms, also for discontinuous use.**
- **Suitable for heating and defrosting mirrors.**
- **Suitable for the construction of flush-to-wall radiators, with any type of final finish.**
- **Maintenance-free.**
- **Self-adjusting system with automatic modulation of the thermal and electrical load when the maximum surface temperature is reached without external temperature control systems.**

WHAT IS MORE PAD HVR?



It is a radiant heating system based on the use of a very thin (1.9 mm) mat made with a modulating and self-adjusting semiconductor technopolymer, which heats up when electric current passes through it. The reaction triggered is a molecular vibration of the nanoparticles that generates progressive heating of the semiconducting polymer.

As the temperature of the mat increases, the nanoparticles contained in the polymer compound, move away from each other resulting in a progressive decrease in electrical continuity; the closer the temperature approaches the maximum threshold reached by the polymer, the lower the electrical absorption through the mat.

This characteristic, called PTC (Positive Temperature Coefficient), uses the heating of the material to limit the current flowing through it (and therefore electrical consumption) by gradually increasing the resistance of the semiconductor as the temperature rises.

Therefore, for the same end effect (temperature of the heating element), using this semiconductor technology significantly cuts down on overall power consumption compared to a similar heater with electrical conductors operating through heating resistors, thanks to the natural, automatic modulation and self-adjustment of the end temperature, without any thermostatic control and limiting element.

DESCRIPTION

MORE PAD HVr version powered directly from the 230V AC mains, with a self-adjusted end temperature of approx. 45°C.
Unlike the indoor version, the MORE PAD HVr is incorporated in a protective film whose task is to generate double electrical insulation compared to the copper conductor embedded in the polymer along the two sides of the mat.

USE OUTSIDE THE BUILDING

The possibility of supplying individually wired branches, up to 20 m in length, allows the application for the following contexts, such as heating of outdoor surfaces with risk of frost and/or light snow, such as driveways, outdoor stairs, vehicle ramps or carriageways, terraces or flat roofs, etc.

USE INSIDE THE BUILDING

The MORE PAD HVr can also be used inside the flat to heat portions of walls and ceilings to be used, for example, as a punctual addition to a room and/or instead of the classic towel radiator.

MORE PAD HVRcan be covered with normal mirroring or the same finish in marble, tiles, plasterboard or simple skimming, with a gripping net, so as to guarantee the necessary mechanical protection for the underlying mat.
This application can also take place inside the bathroom, in zone 3, therefore, 60 cm from the shower or bathtub area.

PRODUCTION RANGE

	Series	Description
	3863M.00.02 (30 m) 3863M.00.10 (10 m)	Width 260 mm Supplied in 30 m or 10 m rolls

ACCESSORIES

	Series	Description
	3859	**Protective, thermally conductive sheet, to be laid over the PAD HVr mat** when the floor installation involves aggressive cements and adhesives and/or when the laying centre distance exceeds 150 mm in order to favour the uniformity of the surface temperature and/or if there are sands and agglomerates that could affect and damage the surface silicone layer. Width 700 mm - Supplied in rolls, length 20 m.
	3860.00.02	**Crimp terminal to connect the part of the mat to the electrical distribution cables.** Suitable for electrical cable with a maximum cross-section of 2.5 mm2. Pack of 200 or 20 terminals.
	3861.00.02	**Highly adhesive and self-amalgamating double-sided butyl tape for dielectric sealing of the areas affected by crimping between terminal, electrical cable and technopolymer.** 20 m roll, width 30 mm, thickness 0.8 mm.
	3862.00.02	**Crimping clamp with flat jaws.** Specification for crimp terminals code 3860.00.02.

CONSTRUCTION FEATURES

Black semiconductor body	PE-filled polyethylene
Conductor element	Copper braid
Transparent outer protection	Polyethylene terephthalate PET
Protective safety layer	Aluminium

TECHNICAL FEATURES

Electrical power supply	230V AC
Initial electrical power input	50 W/m
Reduction of absorption at the end of modulation when maintaining maximum temperature	-30%
Maximum reachable temperature	~ 45 °C
Specific weight of the material	1,100 g/m^2
Copper braid width	6 mm
Thermal expansion	not appreciable
Max. feeding length of a single branch	20 m
Electrical Class and Degree of Protection (PAD wired system + terminal + insulation tape)	IP X7
Certification for reaction to fire UNI EN 13501-1:2019	E; Efl
Other certifications	Electromagnetic compatibility Low Voltage Directive

RBM spa reserves the right to improve and change the products described and relevant technical data at any moment and without prior notice. The information and images contained in this document are intended for information purposes only, are not binding and in any case do not exempt the user from strictly following the regulations in force and good practice standards.

RBM MORE
Milan
Via Solferino, 15
20121 Milan (MI) Italy
T. +39 0249631136

Brescia
Via Industriale, 12/14
25075 Nave (BS) Italy
T. + 39 0300984315

info@rbmmore.com
rbmmore.com

RBM S.p.A.
Via S. Giuseppe, 1
25075 Nave (BS) Italy
VAT NO. 00551250988