



MORE FTA-e

LOW-THICKNESS ELECTRIC **RADIANT FLOOR HEATING SYSTEM.**



The revolutionary electric radiant underfloor heating system for non-ordinary rooms.

MORE FTA-e

it is the innovative, electrically powered, low-thickness, low-inertia, high-efficiency, prefabricated and modular underfloor heating system, ideal for creating fixed or temporary platforms to be placed on the existing floor.





MORE FTA-e

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40°C SURFACE TEMPERATURE



Why MORE FTA-e?

MORE FTA-e is a revolutionary radiant panel without screed, featuring an extremely small footprint that makes it possible for you to implement finished systems in less than 33 cm thickness, including flooring. Fast installation and immediate walkability are the special features of MORE FTA-e. The panel is also supplied already assembled, further reducing installation time. A fundamental feature of the MORE FTA-e panel is the presence of thermal insulation under the semiconductor technopolymer, which limits heat dispersion. Thanks to its shape and high mechanical resistance, the panel allows the floor to be laid directly on top of it, guaranteeing complete reversibility and total return to the original state of the site. Thanks to the IPX7 protection rating (protection against temporary immersion up to a depth of 1 metre for 30 minutes), the MORE FTA-e system is able to operate in adverse conditions without compromising its performance. This water resistance provides additional security in contexts prone to humidity or precipitation.

The FTA-e system is composed of a pre-heated eps 300 panel complete with housing for the heating electric cable, with integrated 1/10 aluminium heat receiver and double-conductor heating cable with total shielding and 230V AC power supply.



PRE-SHAPED **INSULATING PANEL**



DOUBLE CONDUCTOR HEATING CABLE



ALUMINIUM HEATING COST ALLOCATOR



LVT OR LAMINATE SURFACE FINISH

STRATIGRAPHY

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What is MORE FTA-e?

The MORE FTA-e electric radiant heating system is an innovative, high-efficiency, low-thickness winter radiant heating system that can be installed on the floor and energised by modulating resistive cables. The absorbed power is self-regulating depending on the room, ensuring high efficiency and low energy consumption. It can be dry-installed against existing flooring and can be completed with floating surface finishes.

It is particularly suitable for the temporary heating of large, non-ordinary buildings, where heating of the entire volume is not required, or for heating emergency structures or closed but uninsulated outdoor environments.

Versatility of application

The MORE FTA-e radiant heating system was developed to deal with contexts where the rigidity of the indoor winter microclimate needs to be mitigated:

- in non-residential environments, generally very poorly insulated, in which the user temporarily stays in 'outdoor' clothing (dehors)
- in unheated rooms used on an occasional basis (places of worship)
- in poorly heated rooms where only limited areas (workstations) need to be treated
- Temporary heating of portions of places of worship
- Heating of outdoor perimeters
- Heating of emergency facilities
- Heating of museum routes
- · Heating of workstations in unheated buildings

Advantages

ADVANTAGES

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Energy savings	Reduced energy and operating under the same environmental of the heat load supplied to the
Architectural integration	No environmental impact, aesth with dismantling and restoration
Regulation speed	Very fast regulation times due to output capacity
Comfort	40°C surface temperature
Ease of installation	Reduced installation time, no in environments
Efficiency	Higher heating capacity than co
Safety	Electric heating system with IPX
No maintenance	No maintenance activity
Preservation	Absence of hot air stratification and the deposit of soot and dus
Noise-free	No noise emission
Healthy air	Reduced energy and operating under the same environmental operation of the heated surface
Electromagnetic compatibility	Multi-thermal zone thermoregu temperature and radiant surface for load limitation at the meter

CONTROL SYSTEMS

Integrated adjustment	Temperature control system wit radiant surface temperature wit
Remote control	Remote management of function

g costs compared to other systems operating conditions, thanks to the continuous modulation e floor	
hetic compatibility and complete reversibility on to the state of the site	Discove ou
to the absence of thermal inertia and high heat	
nvasiveness and continuity in the use of the	
omparable underfloor heating systems	
X7 "temporary immersion" protection rating	
n phenomena responsible for energy losses st on walls, paintings and works of art	
g costs compared to other systems operating conditions, with the possibility of even partial e	
ulation system with limit control of room ce as well as start-up cascade management	
	-

th chrono- thermostatic control of room and th independent safety temperature limitation

ons from smartphones and tablets via internet

How does it work?

MORE FTA-e is a radiant-type electric floor heating system, consisting of a modular insulation and heat exchange system, integrated with a low-voltage, resistive-type electric heating system with high specific power. The MORE FTA-e system is complete with a specific thermoregulation device that allows modulation of the heat load according to floor and room temperature.



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Features techniques

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MORE FTA-e is an indoor and outdoor electric radiant heating system for non-ordinary rooms.



Modular insulating panel for dry installation of the FTA-e electric radiant system with aluminium heat distribution layer and tracks for heating element housing.

- 25 mm thickness recommended for interior installations (e.g. footboards in houses of worship)
- 33 mm thickness recommended for outdoor installations (Dehors)

FTA-e SYSTEM

Minimum platform size Max deliverable power Electrical circuit power supply Electrical protection Max. thermal resistance cladding Max. cladding thickness

EPS INSULATING PANEL

Insulating material (according to UNI-EN 13163)	
Compressive strength (at 10% crushing)	
Thermal conductivity A	
Reaction to fire EN 13501-1;2019	
Panel size	
Insulating thickness	
Heating cable laying spacing	
Heat-conducting material	
Aluminium thickness	
HEATING CABLE	
Electrical power supply	
Power absorbed	
Cold cable	
Hot cable (double conductor)	
Earth braid	
Shielding	
Conductor insulation	
Outer sheath insulation	
Hot cable outer diameter	
Cold cable outer diameter	
Curvature diameter	
Live operating temperature	
Permissible temperature without power supply	
Minimum installation temperature	
Tensile strength	
Resistance to deformation	
Electrical protection class	
Hot ophia longth [m]	r M

Hot cable length [m]	Rated power [W]
27	830
34	1020
40	1250
45	1350
50	1440
55	1700
63	1860
70	2060
78	2340
85	2420
95	2930

1,5 x 1,2	m
375	W/m ²
230	V AC
IP X7	
0,055	m ² K/W
8	mm

EPS 300	
σ10≤300 CS (10)	kPa
0,033	W/mK
class E	Kg/m ²
1200 x 800	mm
25 / 33	mm
80	mm
aluminium	mm
0,10	mm

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230	VAC
30	W/m
3 x 1,5	mm2
Hot cable (double conductor)	m
Ni-Cr / Cu	
tin-plated copper	
aluminium	
FEP	
PVC anti UV	
7	mm
8,5	mm
min 50	mm
max 60	°C
max 90	°C
-5	°C
450	Ν
1500	Ν
ID Y7	

F	Resistance [Ohm]
6	3,7
5	51,9
4	-2,3
3	9,2
3	36,7
3	31,1
2	28,4
2	25,7
2	2,3
2	21,9
18	8,1

Features techniques

CTR-e CHRONO THERMOSTAT

Electrical power supply	230	V AC
Absorption	0,3	W
Double-pole live contact	16	А
Dimensions (WxDxH)	86 x 86 x 17	mm
Remote connection	Wi-Fi	
Ambient temperature range	535	°C
Floor temperature range from remote probe	599	°C
Adjustable reset differential	da1a9	°C
Precision	± 0,5	°C
Weekly settable time programmes	6 events/day	
Internal and external sensor	NTC 10k at 25°C	
External sensor cable length	3	m
Electrical protection class	IP 20	

TR-e THERMOSTAT

Electrical power supply	24240	V AC
Absorption	1,5	W
Regulation contact	NO 16	А
Alarm contact	NO 2	А
Dimension	2 DIN modules	
Temperature range	-25130	°C
Temperature readout correction	-99	°C
Adjustable reset differential	1 to 30	°C
Internal and external sensor	NTC 10k a 25°C	
External sensor cable length	2,5	m
Electrical protection class	IP 20	

REG-e TEMPERATURE CONTROLLER

Electrical power supply
absorption
Temperature range
precision
n.1 Probe input
n.1 SSR output
n.1 output for SPDT alarm
Double-pole live contact
Size (WxDxH) 3 DIN modules
Assembly
Operating temperature range
Electrical protection class
Matched sensor
Probe reading range
Sensor accuracy
Sensor cable length
External sensor size

240	0 V AC	
2	VA	
0500	°C	
± 0,3	°C	
10 mV/°C		
12 VDC 15 mA		
48V 2A		
16	А	
95 x 53 x 60	mm	
DIN rail		
-1050	°C	
IP 20		
4/30VDC 5mA		
0150	°C	
1	%	
1,5	m	
Ø6 x 45	mm	



SSR1 STATIC RELAY

Electrical power supply	240	VAC
	240	VAC
Absorption	3	VA
Switchable load - n.1 output contact	240V / 22A	
	010	V DC
Input signal with automatic acquisition	TRIAC	V DC
	3 mA	
TRIAC	40A 800V	
High temperature protection	Intervention 80	°C
Cooling fan	Fan 5V 0,15A	
Dissipation by switched load	1,3 W/A	
Size (WxDxH) 6 DIN modules	105 x 60 x 90	mm
Assembly	DIN rail	
Electrical protection class	IP 20	
Switchable load - 1 output contact		
	48÷440	V DC
	High temperature protection A	
	SSR 3÷24	V DC
Cooling fan	Dissipation by switched load	
Dimensions (WxDxH)	2 x 40A 800V	
Assembly	Intervention80	°C
Electrical protection class	NO	
Dissipazione per carico commutato	1,3 W/A	
Dimensione (LxPxH)	80 x 125 x 200	mm
Montaggio	Back panel	
Classe di protezione elettrica	IP 20	

TRH-e MICRO THERMOSTAT

Contact	

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Dimensions (WxDxH) Tripping temperature

Reset differential

Maximum temperature

Wiring cable

Electrical protection class

Further technical information, specific installation and operating instructions, as well as information on programming the control equipment, can be found in the data sheets of the individual components making up the **FTA-e** system.

Discover	
our	
projects	
/	

250V / 7A NC	
18,5 x 7 x 3,5	mm
65	°C
-30±15	°C
150	°C
2 x 0,5	mm2
length 70	mm
IP 45	

Installation

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The system requires no masonry work and, for this reason, can be used to cover valuable or historically valuable floors without damaging them. MORE FTA-e is designed to provide thermal comfort in a flexible and practical way in various contexts, from residences to commercial spaces or temporary events.

Technical data sheet



Enter the qrcode to consult the data sheet



Scan the qrcode to consult the installation manual



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