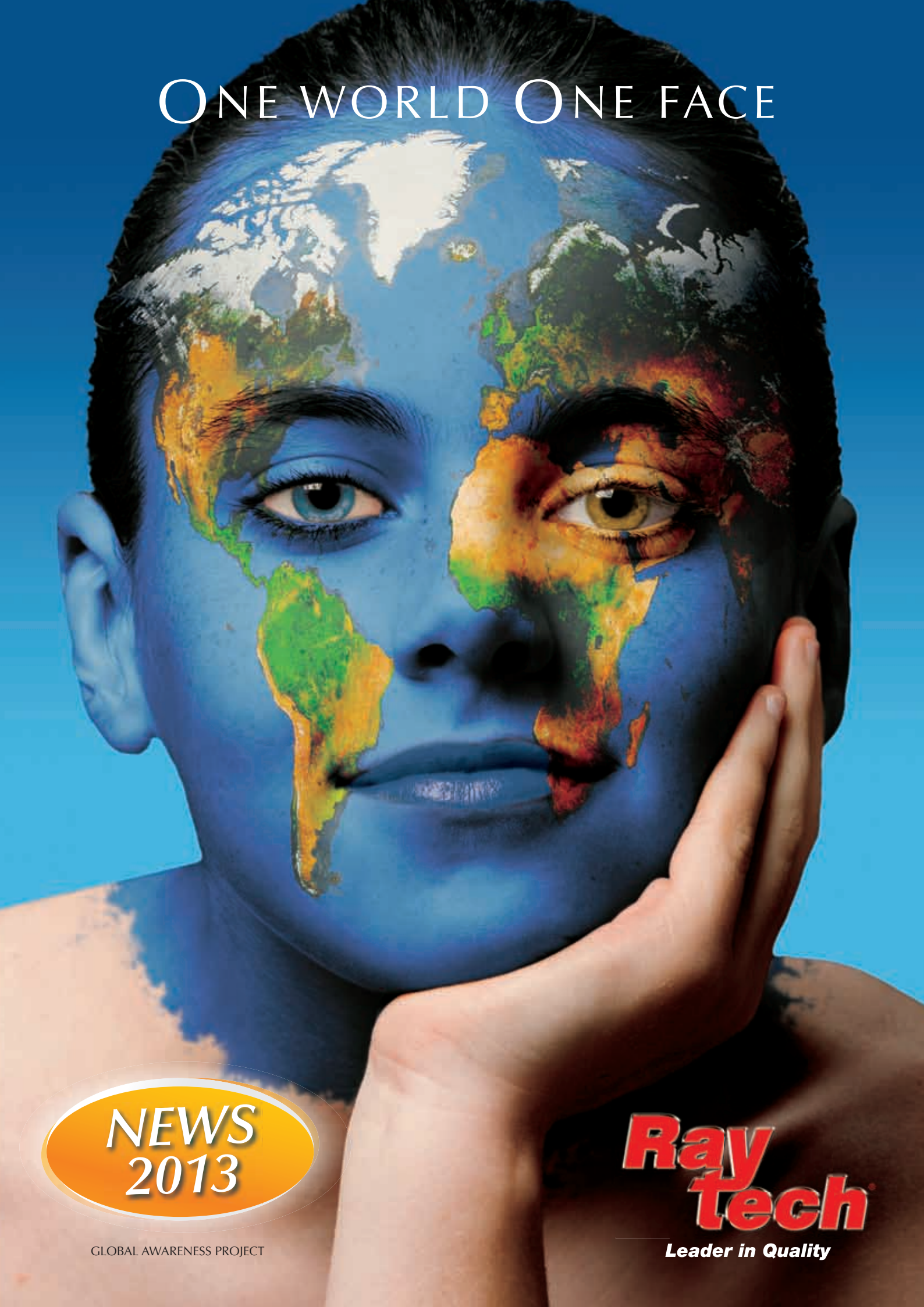


ONE WORLD ONE FACE



NEWS  
2013

GLOBAL AWARENESS PROJECT

**Ray  
Tech**

Leader in Quality

The propelling drive that has projected Raytech for years onto the international stage today leads to flanking the Electro-technical Products Division with a new highly specialized division, oriented towards all of the many areas that characterize daily life, from industrial application to those in building construction and trade (plumbing, construction, prototyping, medical etc.) and to the more strictly domestic and leisure applications (model making, jewellery, toys, camping and "camping" etc.).








Raytech Research has in fact developed a series of products with extremely easy and flexible application, which are non-toxic, high performance, without expiry date and quick and safe to install, such as rubbers of varying elastic and mechanical characteristics, in liquid or paste form, high-performance soft gel sealants, adhesives ...

The Electrical Division, for its part, proposes increasingly comprehensive ranges and articles, ever more innovative, always aimed at meeting the needs of the installer.

The company philosophy remains unchanged, it is, as it has always been, focused on technical and commercial assistance, availability of stock in the warehouse, speed in shipping and its particular strength: a vast sales network.

Raytech is ISO 9001:2008 certified.



	Bicomponent gel in re-enterable and reusable single bottle	<b>2</b>
	The most high performance technological joint in the world insulated with magic power gel	<b>5</b>
	Quick joints in straight and derived type gel for multicore cables 0.6/1 Kv	<b>10</b>
	Quick joints in derived type gel for multicore cables 0.6/1 kV	<b>12</b>
	Constant power anti-freeze kit complete with thermostat and plug	<b>14</b>
<b>Easy Floor</b>	Heating mat for floors made of tile, marble, etc.	<b>16</b>
	Ceiling heating panels	<b>17</b>
<b>THERMO MINI MIX</b>	Precut heat-shrinking sheaths kit	<b>21</b>
	Self-adhering heating sheets for solar panels.	<b>22</b>
<b>GALACTIC LINE</b>	Galactic Solutions for a world of applications	<b>24</b>

# MAGIC POWER GEL



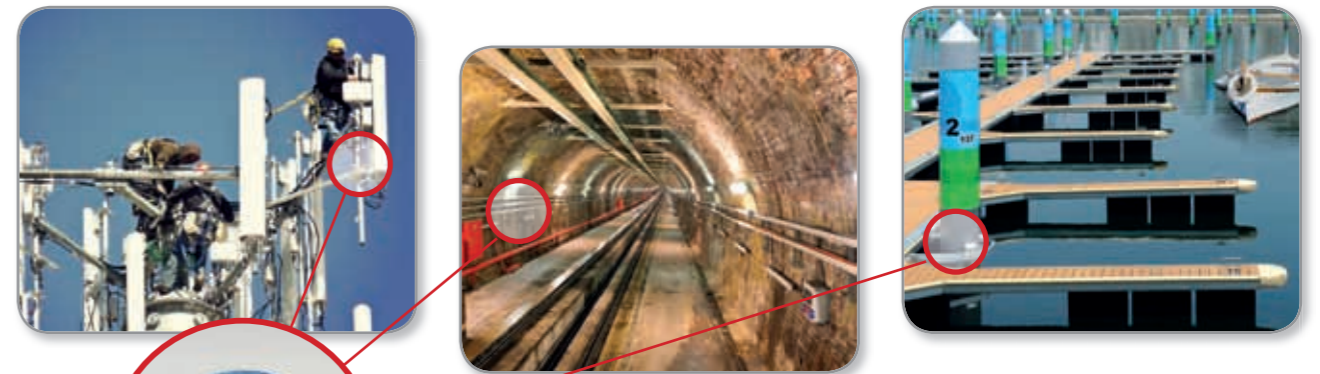
The unique bi-component gel in a single bottle, with superior dielectric, sealing and thermal characteristics, **RE-ENTERABLE** and **RE-USABLE!**



Ray  
Tech

# MAGIC POWER GEL

Without waste, for any type of power, signaling and telecom connection, **even in the worst possible conditions.**



### Characteristics

- Very sticky
- Strong self amalgamating characteristics
- In a single, bi-component bottle, very compact and practical
- Re-usable as well as re-enterable, even after long working periods
- It doesn't give any waste
- Non toxic and safe
- Dielectric strength: >23 kV/mm
- Fast cross linking (approx 15 min at 25°C) with no exothermic reaction
- Volume resistivity: > 2 10<sup>15</sup> Ωcm
- The product cross links also at low temperature
- Working temperature: <-60°C to +200°C
- Overload temperature for short periods: up to 250°C
- No shelf life
- High dielectric and thermal characteristics
- Fungal and UV stabilised
- Degree of protection in suitable casings: IP68



Product Code	Colour	Package Type	Total quantity
Magic Power Gel	●	1 mono bottle bicomponent - 1 small basin - 1 mixing spoon	1000 ml
Magic Power Gel 500	●	1 mono bottle bicomponent - 1 small basin - 1 mixing spoon	500 ml
Magic Power Gel 250	●	1 mono bottle bicomponent	250 ml

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Tech



**INSULATING AND SEALING GEL**



**RE-ENTERABLE**



**RE-USABLE**



**Thanks to the unique formula, no other gel can offer the following advantages:**

**STICKY CHARACTERISTICS**

- Exceptional sealing properties in any condition
- Better resistance to pressure
- Effective and stable adhesion during time
- Effective even in vertical or ceiling applications

**SELF AMALGAMATING CHARACTERISTICS**

- Once cross linked it perfectly adheres on itself to get an homogeneous and compact mass
- It can be therefore applied in multiple layers

**IN A SINGLE BI-COMPONENT BOTTLE**

- Highly useful
- The most compact packaging
- Less space occupied in the toolbox
- Both components in the same packaging

**RE-USABLE**

- Thanks to the described characteristics Magic Power gel, once cross linked, can be removed from the box to operate on the connections, then re-applied even after long working or exposition periods
- Re-applied, it perfectly amalgamates on the product left in the box to get a compact mass
- Re-applied, it turns back to the same, high sealing characteristics of the new
- There is no limit to the amount of times the product can be re-used

**NO WASTE**

- Due to the nature of the product waste is eliminated; even residual product can be saved and used for the next application
- Also any left over product maintains it's high performance characteristics

# MAGIC POWER JOINT



**The most high performance technological joint in the world!**  
**Insulated with Magic Power Gel, the innovative insulating gel that is pourable, and self-agglomerating. RE-ENTERABLE and INSPECTIONABLE.**



**RE-ENTERABLE**

**REMOVABLE**

**INSPECTIONABLE**



**For 0.6/1 kv extruded cable, for installations even in harsh conditions and high depths! Non-toxic and expiration-free.**



# MAGIC POWER JOINT

## MAGIC POWER JOINT

Straight or derived gel with insulation made of cast, non-toxic quick cross linking gel, extremely adherent and tight sealing.

RE-ENTERABLE

REMOVABLE

INSPECTIONABLE

## Straight joint with cast gel insulation, for extruded cable 0.6/1 kV

• For copper conductors

Product Code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )				Dimension LxD (mm)
	1 x	2 x	3 x	4 x	
Magic Power Joint L10	2,5-50	1,5-10	1,5-10	1,5-10 *	180x50
Magic Power Joint L25	16-150	4-25	4-25	2,5-25	215x55
Magic Power Joint L35	16-185	16-35	16-35	16-35	232x70
Magic Power Joint L50	50-300	16-50	16-50	16-50	266x72
Magic Power Joint L95	120-400	25-95	25-95	25-95	330x75
Magic Power Joint L120	240-500	70-120	70-120	50-120	365x95
Magic Power Joint L240	400-1000	120-300	120-240	120-240	510x120
Magic Power Joint L300	630-2000	240-400	240-300	240-300	760x180



Magic Power Joint 10 is suggested for cable diameters smaller than 16 mm.

• For aluminium conductors or for use of share bolt connectors

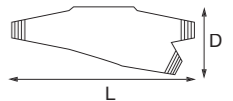
Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )				Dimension LxD (mm)
	1 x	2 x	3 x	4 x	
Magic Power Joint L50	16-150	16-25	16-25	16-25	266x72
Magic Power Joint L120	185-400	25-95	25-95	25-95	365x95
Magic Power Joint L240	400-630	95-185	95-185	95-185	510x120
Magic Power Joint L300	630-2000	185-300	185-300	185-300	760x180

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tech

## Derived joint with cast gel insulation, for extruded cable 0.6/1 kV

• For copper conductors (\*also aluminium)

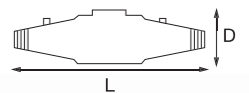
Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )								Dimension LxD (mm)
	1x		2x		3x		4x		
	Through	Branch	Through	Branch	Through	Branch	Through	Branch	
Magic Power Joint Y 6	4-50	4-50	4-10	4-10	2,5-6	2,5-6	2,5-6	2,5-6	180x90
Magic Power Joint Y25	50-150	50-150	10-25	10-25	6-25	6-16	6-25	6-10	220x105
Magic Power Joint Y95	120-400	95-240	25-95	16-50	25-95	16-50	25-95	10-50	315x115
Magic Power Joint Y240*	240-630	240-630	95-240	50-240	95-240	50-240	95-240	50-240	600x285



## Straight joint with cast gel insulation, for extruded screened cable 0.6/1 kV

• For copper conductors

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )				Dimension LxD (mm)
	1 x	2 x	3 x	4 x	
Magic Power Joint L10-S	2,5-50	1,5-10	1,5-6	1,5-6	180x50
Magic Power Joint L25-S	16-120	4-25	4-16	2,5-16	215x55
Magic Power Joint L35-S	16-185	16-35	16-25	16-25	232x70
Magic Power Joint L50-S	50-240	16-50	16-50	16-50	266x72
Magic Power Joint L120-S	240-500	70-120	70-120	50-95	365x95
Magic Power Joint L240-S	400-1000	120-300	120-185	120-185	510x120
Magic Power Joint L300-S	630-2000	240-400	240-300	240-300	760x180



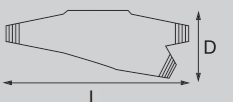
• For aluminium conductors or for use of share bolt connectors

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )				Dimension LxD (mm)
	1 x	2 x	3 x	4 x	
Magic Power Joint L50-S	16-150	16-25	16-25	16-25	266x72
Magic Power Joint L120-S	185-400	25-95	25-95	25-95	365x95
Magic Power Joint L240-S	400-630	95-185	95-185	95-185	510x120
Magic Power Joint L300-S	630-2000	185-300	185-300	185-300	760x180

## Derived joint with cast gel insulation, for extruded screened cable 0.6/1 kV

• For copper conductors (\*also aluminium)

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )								Dimension LxD (mm)
	1x		2x		3x		4x		
	Through	Branch	Through	Branch	Through	Branch	Through	Branch	
Magic Power Joint Y 6-S	4-35	4-35	4-10	4-10	2,5-6	2,5-6	2,5-6	2,5-6	180x90
Magic Power Joint Y25-S	35-120	35-120	10-25	10-25	6-16	6-16	6-16	6-10	220x105
Magic Power Joint Y95-S	95-300	70-150	25-95	16-50	16-70	16-35	16-50	10-35	315x115
Magic Power Joint Y240-S*	240-630	150-630	95-240	50-240	70-240	35-240	50-240	35-240	600x285



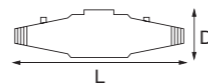
Ray  
tech



## Straight joint with cast gel insulation for extruded 0.6/1 kV ribbon- wire- or plate-reinforced cable

### • For copper conductors

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )			Dimension LxD (mm)
	2x	3x	4x	
Magic Power Joint L10-ARM	1,5-10	1,5-6	1,5-6	180x50
Magic Power Joint L25-ARM	4-25	4-16	2,5-16	215x55
Magic Power Joint L35-ARM	16-35	16-25	16-25	232x70
Magic Power Joint L50-ARM	16-50	16-50	16-50	266x72
Magic Power Joint L120-ARM	70-120	70-120	50-95	365x95
Magic Power Joint L240-ARM	120-300	120-185	120-185	510x120
Magic Power Joint L300-ARM	240-400	240-300	240-300	760x180



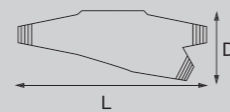
### • For aluminium conductors or for use of share bolt connectors

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )			Dimension LxD (mm)
	2x	3x	4x	
Magic Power Joint L50-ARM	16-25	16-25	16-25	266x72
Magic Power Joint L120-ARM	25-95	25-95	25-95	365x95
Magic Power Joint L240-ARM	95-185	95-185	95-185	510x120
Magic Power Joint L300-ARM	185-300	185-300	185-300	760x180

## Derived joint with cast gel insulation for extruded 0.6/1 kV ribbon-, wire- or plate-reinforced cable

### • Wire armoured cable • For copper conductors (\*also aluminium)

Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )						Dimension LxD (mm)
	2x		3x		4x		
	Pass.	Der.	Pass.	Der.	Pass.	Der.	
Magic Power Joint Y6-ARM-F	4-10	4-10	2,5-6	2,5-6	2,5-6	2,5-6	180x90
Magic Power Joint Y25-ARM-F	10-25	10-25	6-16	6-16	6-16	6-10	220x105
Magic Power Joint Y95-ARM-F	25-70	16-50	25-70	16-35	25-50	10-35	315x115
Magic Power Joint Y240-ARM-F*	70-240	50-240	70-240	35-240	50-240	35-240	600x285



### • Tape or wire armoured cable • For copper conductors (\*also aluminium)

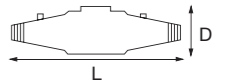
Product code	Cable formation and conductor cross section (n° x mm <sup>2</sup> )						Dimension LxD (mm)
	2x		3x		4x		
	Pass.	Der.	Pass.	Der.	Pass.	Der.	
Magic Power Joint Y6-ARM	4-10	4-10	2,5-6	2,5-6	2,5-6	2,5-6	180x90
Magic Power Joint Y25-ARM	10-25	10-25	6-16	6-16	6-16	6-10	220x105
Magic Power Joint Y95-ARM	25-70	16-50	25-70	16-35	25-50	10-35	315x115
Magic Power Joint Y240-ARM*	70-240	50-240	70-240	35-240	50-240	35-240	600x285



## Accessories for telecom cables and for signalling and control

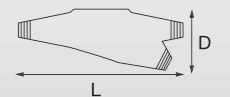
## Straight joint with cast gel insulation, for multicore extruded cable 0.6/1 kV for signalling and control

Product code	Con. cross section (mm <sup>2</sup> )	Cable formation (n° conductor)										Dimension LxD (mm)					
		5x	7x	10x	12x	16x	19x	24x	40x	75x	100x		250x	500x			
Magic Power Joint SL11	1,5 2,5	•	•	•	•	•											180x50
Magic Power Joint SL12	1,5 2,5			•	•	•	•	•									215x55
Magic Power Joint SL13	1,5 2,5					•	•	•	•								266x72
Magic Power Joint SL14	1,5 2,5							•	•	•							330x75
Magic Power Joint SL15	1,5 2,5									•	•	•					365x95
Magic Power Joint SL16	1,5 2,5										•	•	•				510x120
Magic Power Joint SL17	1,5 2,5											•	•	•			760x180



## Derived joint with cast gel insulation, for multicore extruded cable 0.6/1 kV for signalling and control

Product code	Con. cross section (mm <sup>2</sup> )	Cable formation (n° conductor)										Dimension LxD (mm)					
		5x	7x	10x	12x	16x	19x	24x	40x	75x	100x		250x	500x			
Magic Power Joint SY1	1,5 2,5	•	•	•	•	•	•										180x90
Magic Power Joint SY2	1,5 2,5					•	•	•									220x105
Magic Power Joint SY3	1,5 2,5							•	•	•	•						315x115
Magic Power Joint SY4	1,5 2,5									•	•	•	•	•			600x285



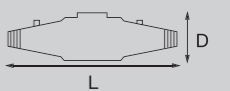
## Straight joint with cast gel insulation, for telephone cable

### • Unscreened cable

Product code	Cable formation and conductor cross section (pair nr. x mm <sup>2</sup> )	Dimension LxD (mm)
Magic Power Joint T16	1-16 x 0,5-0,6	180x50
Magic Power Joint T25	16-25 x 0,5-0,6	215x55
Magic Power Joint T35	25-35 x 0,5-0,6	266x72
Magic Power Joint T40	35-40 x 0,5-0,6	330x75
Magic Power Joint T64	40-64 x 0,5-0,6	365x95
Magic Power Joint T500	60-500 x 0,5-0,6	510x120
Magic Power Joint T1000	450-1000 x 0,5-0,6	760x180

### • Screened cable

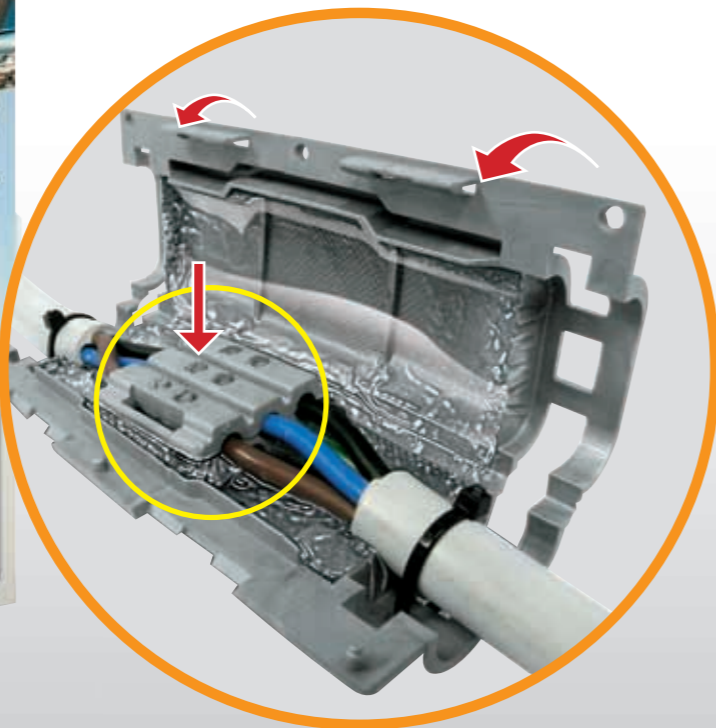
Product code	Cable formation and conductor cross section (pair nr. x mm <sup>2</sup> )	Dimension LxD (mm)
Magic Power Joint TS16	1-16 x 0,5-0,6	180x50
Magic Power Joint TS25	16-25 x 0,5-0,6	215x55
Magic Power Joint TS35	25-35 x 0,5-0,6	266x72
Magic Power Joint TS40	35-40 x 0,5-0,6	330x75
Magic Power Joint TS64	40-64 x 0,5-0,6	365x95
Magic Power Joint TS500	60-500 x 0,5-0,6	510x120
Magic Power Joint TS1000	450-1000 x 0,5-0,6	760x180





# Raytech PROFESSIONAL KING JOINT

The new range of rapid straight and branch gel joints for multicore cables 0.6 / 1 kV up to 5 cores



- For multicore cables of up to 5 cores
- For straight and branch connections also on armoured cables
- Complete with screw connectors
- Suitable also for crimped connectors
- Equipped with 5 section spacer for proper centering of the 5 core connection
- Re-accessible and with no shelf life
- Non toxic and safe
- Flame retardant
- For all types of application, including submersible

## Straight and derived joints

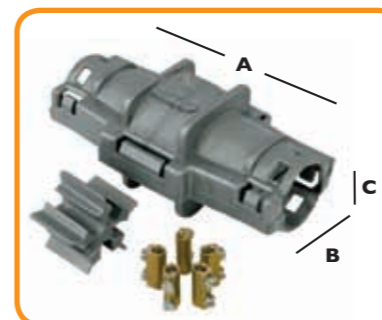
### Characteristics

The primary insulation, consisting of a cross-linked polymer gel and extremely strong plastic insulating housing, make the Class 2, in accordance with the definitions contained in CEI Regulation 64-8. The joint, tested in accordance with the most important international specifications with repeated bending and twisting cycles and immersion in water, was found to comply with the mechanical, electrical and sealing requirements necessary for accessories for plastic cables. The joint and its components have no self life, are chemically inert and therefore completely safe; the conductor connections are re-accessible even after long operating periods. Packaged with self-extinguishing material, it is flame retardant. Suitable for cables with a temperature of +90°C.

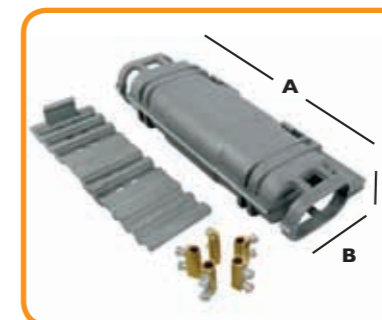
### Approvals

- Electrical Performance: EN 50393 and CEI 20-33 (Note: with testing under water head and water between the cable cores)
- Flame retardant: IEC 60332-1 and HD 405-1 (as applicable)
- IP68: with Sky Plast

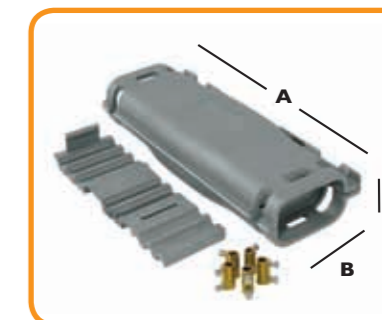
KING JOINT 0



KING JOINT 1



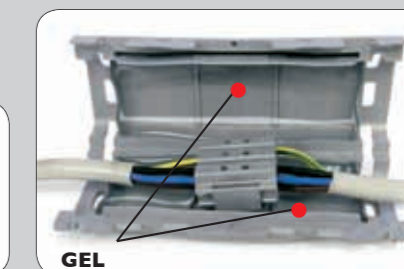
KING JOINT 2



Product code	Straight connections Cable formation and conductor cross section (n° x mm²)		Branch connections Cable formation and conductor cross section (n° x mm²)		Maximum cable diameter (mm)	Dimensions AxBxC (mm)
	Main cable	Branch cable	Main cable	Branch cable		
KING JOINT 0	2x1,5 a 6 3x1,5 a 6 4x1,5 a 6 5x1,5 a 6	-	-	-	20,5	105x55x55
KING JOINT 1 KING JOINT 1 - ARM	2x1,5 a 6 3x1,5 a 6 4x1,5 a 6 5x1,5 a 6	2x4 3x4 4x4 5x4	2x2,5 3x2,5 4x2,5 5x2,5		20,5	150x56x30
KING JOINT 2 KING JOINT 2 - ARM	Crimp Connectors 2x4 a 25 3x4 a 25 4x4 a 25 5x4 a 25	Screw Connectors 2x4 a 16 3x4 a 16 4x4 a 16 5x4 a 16	2x10 3x10 4x10 5x10	2x6 3x6 4x6 5x6	30	220x85x46

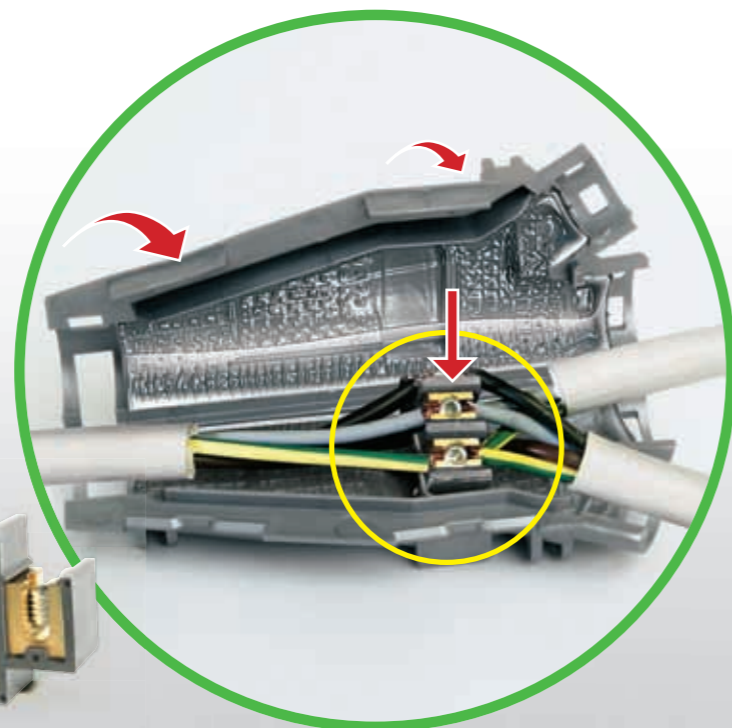
- The kits include connectors suitable for straight and branch screw connections.
- Joints - ARM type, complete of armour continuity device, are suitable for connections of steel or tape armoured cables.

### Installation sequence





The new range of rapid straight and branch gel joints for multicore cables 0.6 / 1 kV up to 5 cores



- For multicore cables of up to 5 cores
- For branch connections, of also reinforced type, without interrupting the through cable
- Complete with screw connectors
- Equipped with 5 section spacer for proper centerig of the 5 core connection
- Re-accessible and with no shelf life
- Non toxic and safe
- Flame retardant
- For all types of application, including submersible

## Derived joints

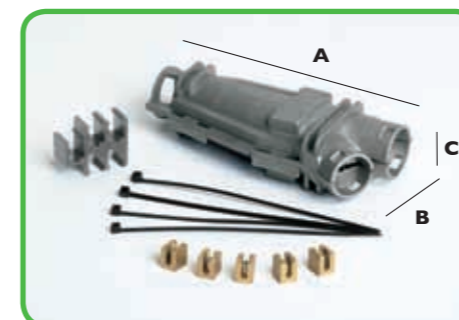
### Characteristics

The primary insulation, consisting of a cross-linked polymer gel and extremely strong plastic insulating housing, make the Class 2, in accordance with the definitions contained in CEI Regulation 64-8. The joint, tested in accordance with the most important international specifications with repeated bending and twisting cycles and immersion in water, was found to comply with the mechanical, electrical and sealing requirements necessary for accessories for plastic cables. The joint and its components have no self life, are chemically inert and therefore completely safe; the conductor connections are re-accessible even after long operating periods. Packaged with self-extinguishing material, it is flame retardant. Suitable for cables with a temperature of +90°C.

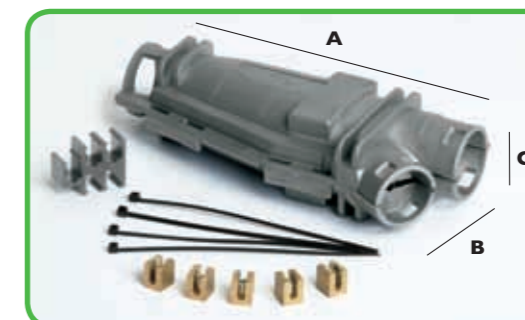
### Approvals

- Electrical Performance: EN 50393 and CEI 20-33 (Note: with testing under water head and water between the cable cores)
- Flame retardant: IEC 60332-1 and HD 405-1 (as applicable)
- IP68: with Sky Plast

### KING JOINT Y 6



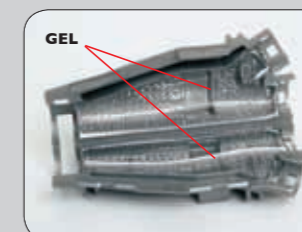
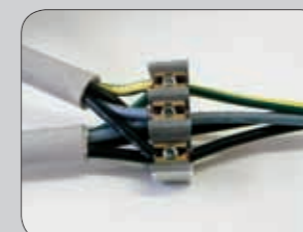
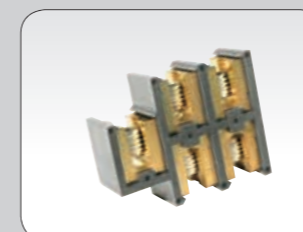
### KING JOINT Y 16



Product code	Branch connections Cable formation and conductor cross section (n° x mm²)		Maximum cable diameter (mm)		Dimensions Ax B x C (mm)
	Main cable	Branch cable	Main cable	Branch cable	
KING JOINT Y 6	2 x 1,5 a 6	2 x 1,5 a 4	22,5	18,5	138 x 60 x 37
KING JOINT Y 6 ARM	3 x 1,5 a 6	3 x 1,5 a 4			
	4 x 1,5 a 6	4 x 1,5 a 4			
	5 x 1,5 a 6	5 x 1,5 a 4			
KING JOINT Y 16	2 x 4 a 16	2 x 1,5 a 4	26,0	18,5	194 x 74 x 43
KING JOINT Y 16 ARM	3 x 4 a 16	3 x 1,5 a 4			
	4 x 4 a 16	4 x 1,5 a 4			
	5 x 4 a 16	5 x 1,5 a 4			

- The kits include connectors suitable for straight and branch screw connections.
- Joints - ARM type, complete of armour continuity device, are suitable for connections of steel or tape armoured cables.

### Installation sequence





# ANTI-FREEZE MAINTENANCE FOR PIPES

To keep pipes, tanks, basins, valves and taps, metres, etc. from freezing.

## STOPICE



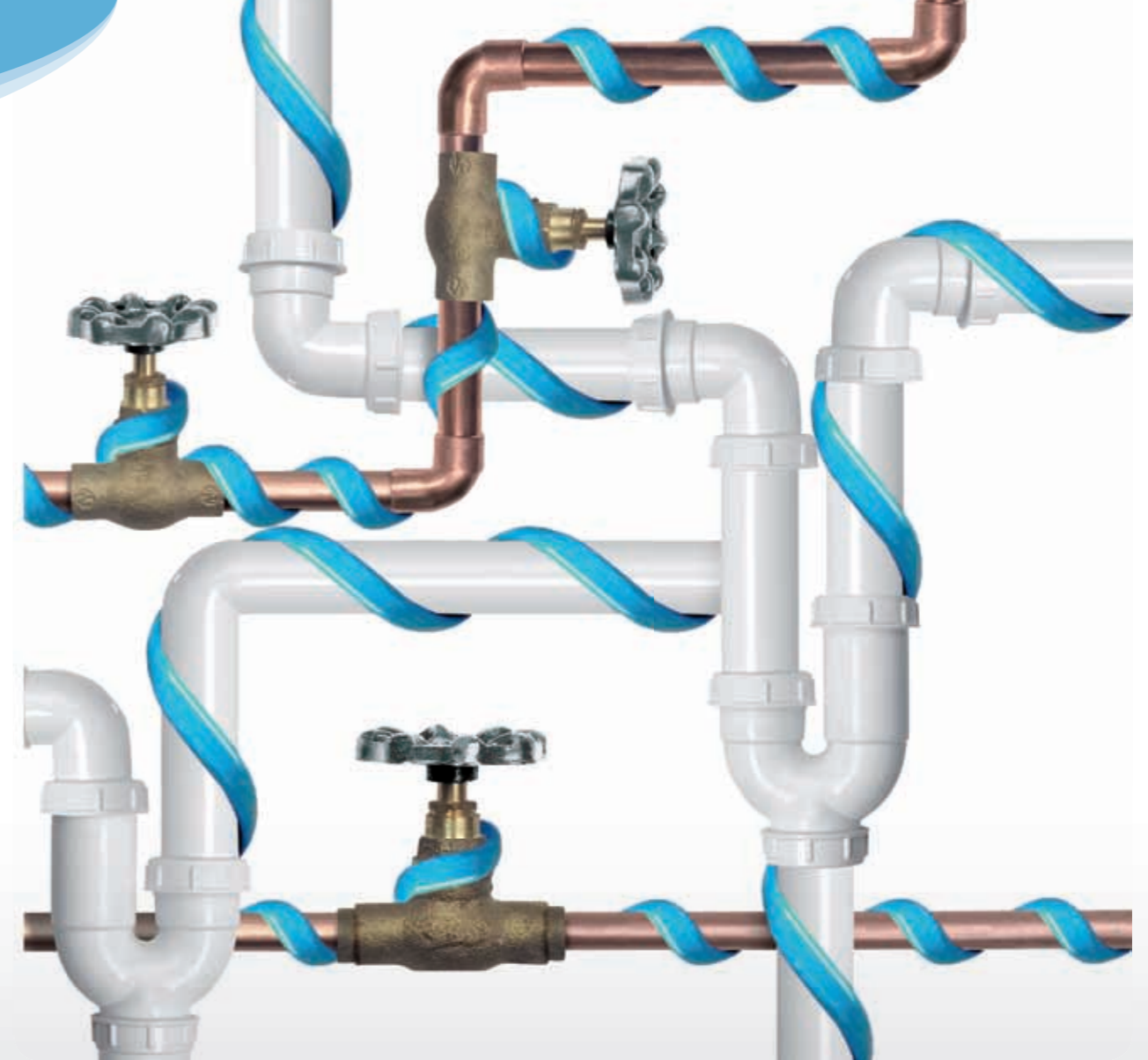
Constant power anti-freeze kit complete with thermostat and plug.

Raytech Stop Ice is an innovative pre-assembled kit consisting of a constant wattage heating cable of 12 W/m, complete with contact thermostat (installed on the end of the heating cable) and power cable with plug.

Stop-Ice is particularly suitable for frost protection, and prevention of possible damages caused by low temperatures on pipes, valves, faucets, water meters, troughs, bowls and small tanks.

### Benefits

- Easy and quick to install
- No need for any external temperature control system, thanks to its built-in thermostat
- Low energy consumption



Product code	Power (W/kit)	Specific power (W/m)	Length (m)
Stop Ice 2/12	24	12	2
Stop Ice 5/12	60	12	5
Stop Ice 10/12	120	12	10
Stop Ice 18/12	216	12	18

### Technical features

- Power: 12 W/m
- Power supply: 230 V ~ 50/60 Hz
- Cable dimensions: ~ 5 x 7 mm
- Min. installation temperature: + 5°C
- Max. working temperature: + 70°C
- Cold cable (power supply): length 1,5 metres 3x0,75 mm<sup>2</sup> with plug
- Heating cable type: 2 conductors, screened cable
- Insulation: XLPE
- External sheath: PVC
- Min. bending radius: 3,5 D
- Temperature check: integrated bimetal thermostat  
ON + 3°C  
OFF + 10°C
- Protection degree: IP X7
- Marking: CE



Integrated Bimetal Thermostat



Completa di spina e cavo di alimentazione (1,5 m - 3x0,75 mm<sup>2</sup>)



# COMFORT HOUSE

## PRIMARY, SECONDARY OR FLOORING COMFORT HEATING SYSTEMS

### Easy Floor

for the intelligent tracking of tile, marble, etc. floors.

The Easy Floor mat is laid directly on a layer of thermal insulation that coats the floor finished with concrete, and then buried in self-levelling concrete and covered with tiles. The flooring tracing mats are supplied in standard widths of 50 cm, power 150 W/m<sup>2</sup>.

Product code	Width (m)	Length (m)	Power (W)
Easy Floor 2	0,5	2	150
Easy Floor 3	0,5	3	225
Easy Floor 4	0,5	4	300
Easy Floor 2-ST	0,5	2	150
Easy Floor 3-ST	0,5	3	225
Easy Floor 4-ST	0,5	4	300

**Nota:** -ST type kits are supplied without a RID room timed thermostat  
Other sizes available upon request



- The kit is composed of:
- heating mat complete with cold tail
  - RID microprocessor intelligent room timed thermostat complete with sensor
  - corrugated pipe for positioning



Ray  
tech

# warm up

CEILING HEATING PANELS

Heat where you want it, when you want it



The ideal solution for all low thermal comfort environments



Ray  
tech

## CEILING HEATING PANELS

WARM-UP ceiling heating panels by Raytech can be installed invisibly and built into the ceiling of any home, office, showroom, workshop, greenhouse, camper vans etc., maximising space and freeing up wall space. Their positioning does not require any invasive procedures on the walls of the room, and their electrical connection is extremely simple.

They can be installed, possibly placing them at the points where maximum thermal efficiency is required, with any mounting system: hung with chains, flush mounted, or recessed in false ceilings, always easily and quickly. The type of heating, based on infrared radiation, which makes it similar to solar radiation, is safe and unhamful, quick, efficient and extremely comfortable.



### Technical characteristics:

- Class 2, degree of protection IP44
- Colour: White, Paintable
- Power required for primary heating, to obtain about 20°C room temperature: about 60 W/m<sup>2</sup>  
(1 Warm Up 1 panel every 4 m<sup>2</sup>)

Item description	Power (W)	Dimensions
Warm Up 1	240 W	590x590x40 mm
Warm Up 2	500 W	1190x590x40 mm

### VERANDAS



### PREFABRICATED BUILDINGS



### GREENHOUSES



### EXHIBITION SPACES



## Why choose the Warm-Up System?

- It is installed without requiring any invasive procedures to be carried out on the structures of the house.
- It is easily uninstalled for re-use in another context.
- Its radiated heat is safe, with no air movement, and does not dirty the walls and room.
- It is used as for primary heating and for secondary heating as an integrative system, and optimises and reduces heating costs thanks to the RID-WL thermostat.

## What Are the Benefits to the System compared to others?

- Heating is immediate, in just a few minutes.
- It leaves room walls free because it is installed on the ceiling, flush mounted or recessed in false ceilings.
- It does not pollute, as it does not use gas or hydrocarbons.
- It optimises heating and reduces costs.
- Unlike other types of heating systems, it does not require maintenance!
- It uses the energy produced by photovoltaic systems, reducing heating costs.
- It can be coloured, and is therefore easily camouflaged or used as a decorative element.

### GAZEBOS

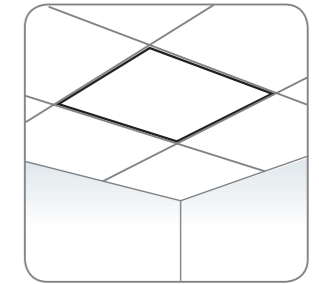
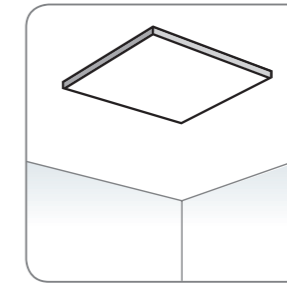
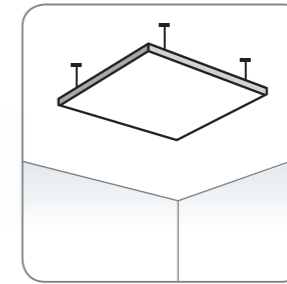
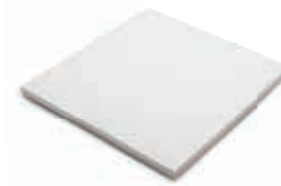


### HEATING PANELS

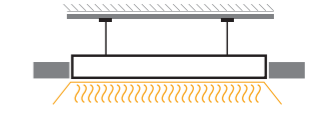
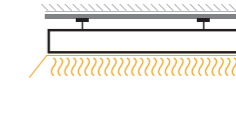
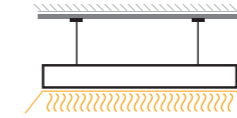
### SUSPENDED

### FIXED

### ENCASED



Controlled by a timed thermostat or a power regulator; they reduce consumption to a minimum



### STORES AND OFFICES



**INVISIBLE**  
and ideally integrated  
also as decorative  
elements.

### WAREHOUSES - GARAGES



## The RID-WL wireless timed thermostat

Raytech has established the innovative WIRELESS RID-WL TIMED ROOM THERMOSTAT for maximum efficiency and speed and ease of installation. This system combines well-known reliability and control of environmental parameters of the system RID with a wireless connection.

The RID-WL, which operates in radio frequency, allows non-invasive installation in any environment, both for new installations and those related to renovations, or to reinforce an existing primary system.

The RID-WL is coupled with its own receiver, tuned to the frequency of its own thermostat (exclusive signal), which is able to control an ampacity of 16 A.

RID-WL, since it is not wired, it can be moved within the range of use and positioned where controlling the parameters is most necessary.

### Technical characteristics:

- Temperature accuracy: 0,1 °C
- Field of operation: from 0°C to + 40°C
- Field of temperature: from 5°C to + 35°C
- Power supply: 2 AAA 1.5 V batteries
- Degree of protection: IP30
- Frequency: 868 MHz
- Powered receiver: 230 V, 50 Hz
- Relay range: 16 A
- Range in distance: 100 m outdoors, 30 m indoors
- Programmable in 30 minute blocks
- 9 pre-installed programmes and 4 user-set programmes
- "Self-learning" temperature control
- Child lock
- Low battery alarm
- Unlimited programme memory in the case of discharged batteries



It is equipped with an easy to read backlit LCD screen and is programmable and provided with a built-in internal sensor, but can be connected to a separate sensor, for example on the floor



Additional relay device, with a maximum of 6 devices which can be controlled by the same RID-WL timed thermostat

### Technical characteristics:

- Degree of protection: IP30
- Frequency: 868 MHz
- Powered receiver: 230 V, 50 Hz
- Relay range: 16 A
- Range in distance: 100 m outdoors, 30 m indoors

RID-WL, timed thermostat

Including the receiver

RID-WL-R, 16 A receiver

Additional receiver for loads greater than 16A

# THERMO MINI MIX

## Pre-cut heat-shrinking sheaths kit

The ready-to-install heat-shrinking sheaths are divided by diameter in a practical and convenient tray

- Always available
- They don't take up space
- Wide range of diameters
- Wide range of colours
- For all types of applications, both for civil and, industrial installations, and for model making and DIY
- Available in black or a mixed-colour version



### Characteristics

- Quick to apply
- Always ready
- Flexible

### Applications

- Indispensable for
- Electrical systems, as a replacement for taped insulation
  - Wiring of all types, switchboards, Hi-Fi, hobbies
  - For DIY

Item description		Supply diameters/ after free restriction	Single sheath length (mm)	Pieces for package
Black colour	Mixed colours			
THERMO MINI MIX-N	THERMO MINI MIX-MC	1,0 / 0,5	97	60
		2,0 / 1,0	97	40
		3,0 / 1,5	97	30
		4,5 / 2,25	97	20
		6,0 / 3,0	97	10
		9,0 / 4,5	97	10

# HappySolar

## Anti-snow heating kits for photovoltaic panels.

**Happy Solar is the solution for every type of snow and ice formation problem on photovoltaic panels. As is widely known, snow fall and the formation of ice on photovoltaic panels causes blockage, impeding the production of energy and resulting in the plant being completely out of service. It's not difficult to imagine the costs related to a similar event!**



Eliminate snow and ice from solar panels with the Raytech solution



## HappySolar

Today the snow that falls on panel is easily removed in a convenient, quick, reliable and permanent manner! The following are the advantages of the Raytech system:

- Quick and easy to install, without tools
- Does not take up space on the back of the panel
- Fast snow removal
- For new installations or pre-existing panels, simply lift them up for the time required to position the heating sheets.
- Insulation not required on the back of the panel

### Only 2 kits for marking out all the panel types and sizes!

The kits, composed of self-adhering heating sheets and the gel joint for electrical connections, are applied on the back of the panel and connected to the mains via the coupling supplied, complete with connectors and a separator, ready-to-use and re-entenable.

Description	Power	No. pieces for kit
Happy Solar 1	100 W	2
Happy Solar 2	150 W	3

Solar panel sizes	Combination of kits	Installed power	Reference screen
0,65 x 1,3 m	1 kit Happy Solar 2	150 W	1
1 x 1,3 m	2 kit Happy Solar 1	200 W	2
1 x 1,5 or 1,7 m	1 kit Happy Solar 1 + 1 kit Happy Solar 2	250 W	3

Diagram 1

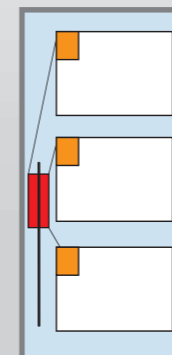


Diagram 2

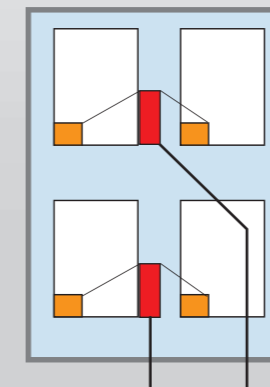
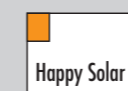
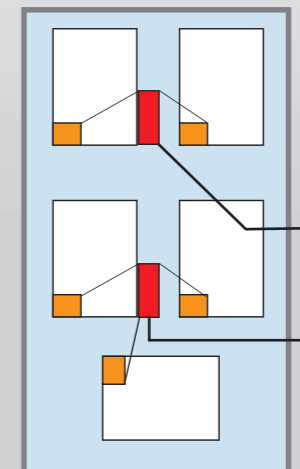
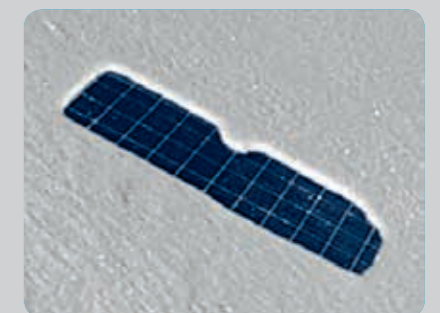
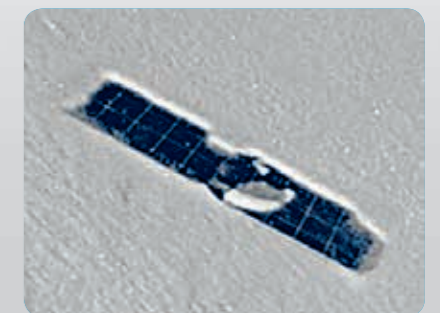
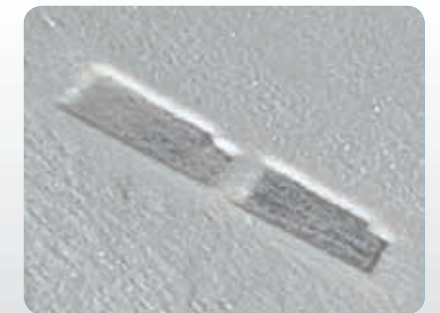
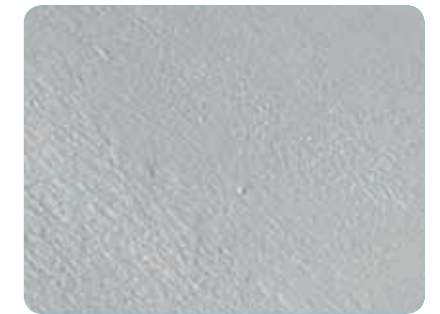


Diagram 3



To accelerate the operation it is recommended that the plant be started as soon as it begins to snow as the removal of snow that has already accumulated requires more time.

### Snow removal sequence of a panel, and recovery of full efficiency!



# GALACTIC LINE

Galactic Solutions for a world of applications

Products of the **GALACTIC LINE** allow for the quick, safe and non-toxic resolution of problems of the electrical world related to the industrial, civil and household sectors.



### GALACTIC RUBBER CONNECTION 6 and 16 FOR HARSH APPLICATIONS

Kit for the insulation and protection of connections in trays or muffles. With 6 mm<sup>2</sup> or 16 mm<sup>2</sup> screw connectors

Product Code	Maximum conductor cross section (n° x mm <sup>2</sup> )
Galactic Rubber connection 6	5 x 1 a 6
Galactic Rubber connection 16	5 x 2,5 a 16



### GALACTIC GEL CONNECTION 6 and 16

Kit for the insulation and protection of connections in trays or muffles. With 6 mm<sup>2</sup> or 16 mm<sup>2</sup> screw connectors

Product Code	Maximum conductor cross section (n° x mm <sup>2</sup> )
Galactic Gel connection 6	5 x 1 a 6
Galactic Gel connection 16	5 x 2,5 a 16



### GALACTIC SEPARATOR

Kit with spacers and connectors for carrying out the Galactic Connection. With 6 mm<sup>2</sup> or 16 mm<sup>2</sup> screw connectors

Product Code	Maximum conductor cross section (n° x mm <sup>2</sup> )
Galactic Separator 6	5 x 1 a 6
Galactic Separator 16	5 x 2,5 a 16



### GALACTIC PROTECTION

Liquid rubber for protecting printed circuits against animal intrusion. Removable, non-toxic and safe

Product Code	Kit composition
Galactic Protection	2 vials bicomponent product for a total of 300 ml of product



### GALACTIC ANIMAL BARRIER

Rubber paste for protecting against animal intrusion. Moldable, removable, non-toxic and safe

Product Code	Kit composition
Galactic Animal Barrier	2 cans (bicomponent) for a total of 250 g of product



### GALACTIC MAMMUT SECURITY

Compact accessory, suited for resolving all insulation and sealing problems and making safe connections carried out with a Mammut or spiral type terminal. Complete with 4 mm<sup>2</sup> Mammut

Product Code	Cable formation	Dimensions AxBxC (mm)
Galactic Mammut Security	Cables 3 x 1 to 4 mm <sup>2</sup> 3 insulated conductors with ground from 1 to 4 mm <sup>2</sup>	61x35x28

Package: 3-piece blister pack



### GALACTIC WATER STOP

Soft, extremely sticky and ready to use single component gel: simply squeeze out the required quantity and place it in the point to protect from infiltration

Product Code	Package type
Galactic Water Stop	Kit of 2 cans, 100 g each



### GALACTIC NANOJOINT 4

Straight and derived unipolar joint complete with a snap connector, for connections up to 4 mm<sup>2</sup>

Product Code	Cable formation (n° x mm <sup>2</sup> )	Dimensions AxBxC (mm)
Galactic Nano Joint 4	1 x 0,08 - 4	61x35x28

Package: 3-piece blister pack



### GALACTIC CLEANER Professional

An extraordinary detergent for all types of use: non-toxic and eco-friendly, extremely effective, able to remove dirt, grease, encrustations and smog without damaging the surfaces on which it is applied

- Cleans
- Degreases
- Protects
- Excellent results even in impossible conditions!

Product Code	Package type
Galactic Cleaner	750 ml vial with spray



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**Ray  
tech**

**FROM THE UNIVERSE OF PROFESSIONALS**

**NEW**



# **MAGIC POWER GEL**



**THE ONLY BICOMPONENT GEL IN A  
RE-ENTERABLE AND REUSABLE  
SINGLE BOTTLE!**