





**DINUY, S.A.**, founded in 1947, is a family business dedicated to electrical solutions used to **control, dim and detect** in the automation of homes and efficient building management.

Our commitment to innovation and new technologies has led us to research and dominate, thanks to our own R&D team, a wide variety of products focused on energy efficiency, thus aiding our pledge to the environment and to reduce our carbon footprint.

A range of products, from dimmers for all lighting sources to motion and presence detectors for all fields of application, time switches, timers and photoelectric controllers, radio frequency and Bluetooth control systems, and devices to manage and automate buildings based on international standards, such as KNX and DALI, are a part of the solutions this general catalogue offers you thanks to our perseverance and attention to detail in terms of quality, innovation and design.

**DINUY** designs, develops and manufactures innovative electronic products to create smart spaces that are more comfortable, efficient and sustainable, all while offering the market and our clients value for more than 75 years.





**DINUY** is a **high-end** brand with more than 75 years of experience on the market. We have remained true to our famed brand values: **our quality, innovation and commitment** to clients.

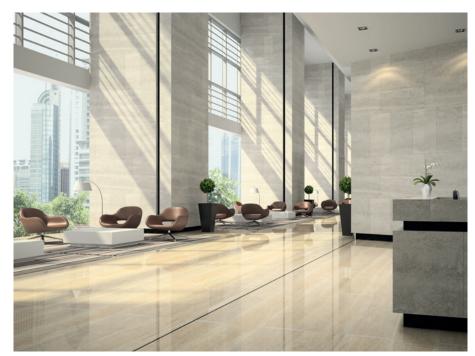
Our **mission** is to be viewed as specialists in lighting control systems and building automation technology, while our **vision** is to be development and manufacturing leaders, offering km0 and innovative products that provide **valuable energy efficiency solutions** to help towards ensuring a more sustainable world.















# Technology & design

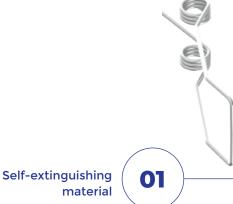
**DINUY**, a national manufacturer with its own R&D team, designs and manufactures an extensive range of products offering the highest standards in technological quality.

Company certified and approved by the strictest standards, accredited by Bureau Veritas.

















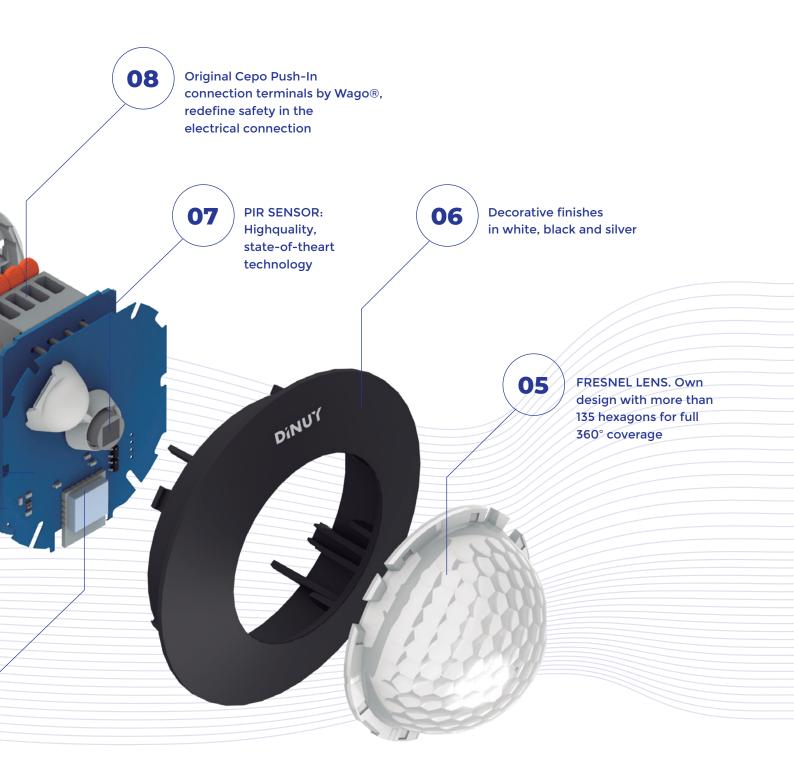


Bluetooth module with high performance



















# **Contents**









# KNX Devices **Twisted Pair System** Laüka buttons Detectors **Actuators** System devices Accessories **Radio Frequency System** Detectors Actuators Communication

# The KNX standard

As a member of the KNX Association Brussels and the KNX Association Spain. in Spain DINUY designs, develops and manufactures smart devices with communications based on the KNX® protocol, proposing specific applications and incorporating standard, reliable, safe technology.

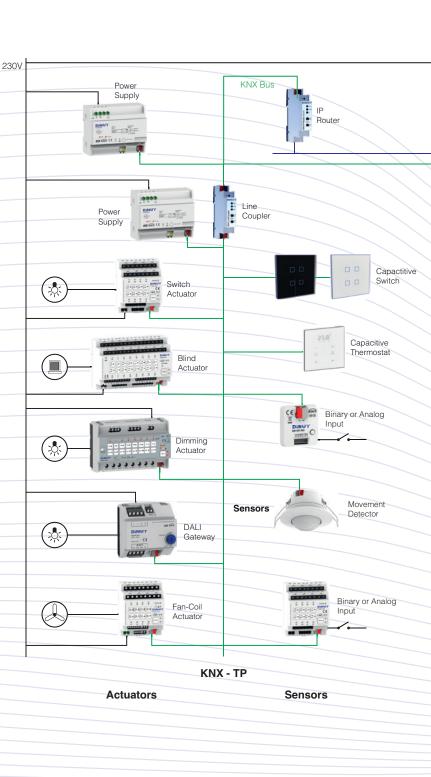
DINUY's philosophy is focused on combining aspects of design with robustness, reliability and, first and foremost, innovation.

Our product catalogue is constantly evolving, with a focus on the residential sector, as well as the tertiary or industrial sectors.

These solutions are aimed at the desire to ensure people's well-being and comfort in homes and buildings, as well as the management of different systems in a way that is more sustainable and more energy efficient.

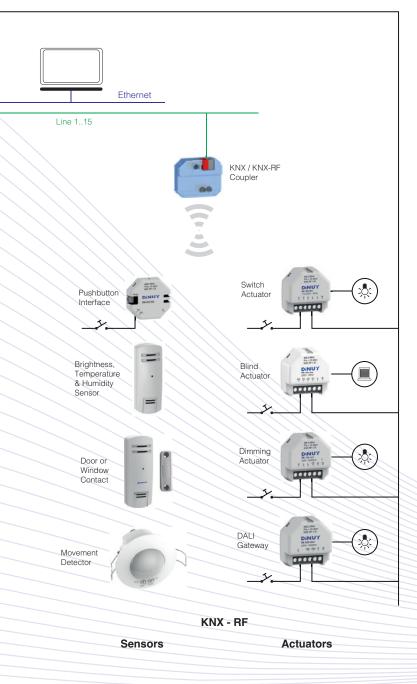
The KNX family includes a variety of solutions for a facility, including lighting control, blind and awning actuators, air conditioning, capacitive buttons and now also remote control of the installation.

KNX is the world's first standardised system for the automation of residential and tertiary buildings with European standards CENELEC EN 50090 and CEN EN 13321-1 and with the global standard ISO/IEC 14543-3.











### **Lighting Control**

Lighting control depending on the presence or absence of people in the room isn't the only possible solution. Constant adjustment based on the supply of natural light and scene management offer a high level of user comfort.



**Air Conditioning Control** Control of heating or air conditioning systems, establishing the corresponding temperature and fan speed setpoints based on the user's presence.



**Blind, Shutter and Awning Control** Not only does smart, automated control of these devices offer the occupants of a room comfort and well-being, but they also make for more efficient consumption of the energy used in lighting and air conditioning.



# PU KNT 001/002/003

### Laüka Capacitive Button BLACK



- · Capacitive multi-function button with four keys and black glass.
- · Built-in temperature sensor and thermostat function.
- Proximity detector (PU KNT 002 and PU KNT 003).
- Customisable icons: https://dinuy. com/es/configurador-lauka/
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
PU KNT 001	Capacitive button in black glass 4 keys and RGB trim
PU KNT 002	Capacitive button in black glass 4 keys and copper trim
PU KNT 003	Capacitive button in black glass 4 keys and chromium trim

# PU KNT 006/007/008

### Laüka Capacitive Button WHITE



- Capacitive multi-function button with four keys and white glass.
- · Built-in temperature sensor and thermostat function.
- Proximity detector (PU KNT 007 and PU KNT 008).
- Customisable icons: https://dinuy. com/es/configurador-lauka/
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
PU KNT 006	Capacitive button in white glass 4 keys and RGB trim
PU KNT 007	Capacitive button in white glass 4 keys and copper trim
PU KNT 008	Capacitive button in white glass 4 keys and chromium trim

# PU KNT PR1/PR2

### **Contactless Proximity Button**



- Glass proximity button with 1 output channel, which enables control over lighting and blinds, while also allowing the option of memorising and restoring scenes with no need to come into contact with the mechanism's surface.
- Built-in temperature sensor.
- Has 2 RGB LEDs.
- · Adjustable sensor sensitivity.
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
PU KNT PR1	Contactless proximity button, black glass and copper trim
PU KNT PR2	Contactless proximity button, white glass and chromium trim



# PU KNT 102/104/106/108

### LaükaDot Capacitive Button BLACK



- · Capacitive multi-function button with two, four, six or eight keys and black glass.
- The light points, which indicate the location of the key areas, offer it a light, modern touch.
- Built-in temperature sensor and thermostat function.
- Brightness sensor.
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
PU KNT 102	Capacitive button in black glass 2 keys and copper trim
PU KNT 104	Capacitive button in black glass 4 keys and copper trim
PU KNT 106	Capacitive button in black glass 6 keys and copper trim
PU KNT 108	Capacitive button in black glass 8 keys and copper trim

# PU KNT 112/114/116/118

### LaükaDot Capacitive Button WHITE



- Capacitive multi-function button with two, four, six or eight keys and white glass.
- The light points, which indicate the location of the key areas, offer it a light, modern touch.
- Built-in temperature sensor and thermostat function.
- Brightness sensor.
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
PU KNT 112	Capacitive button in white glass 2 keys and chromium trim
PU KNT 114	Capacitive button in white glass 4 keys and chromium trim
PU KNT 116	Capacitive button in white glass 6 keys and chromium trim
PU KNT 118	Capacitive button in white glass 8 keys and chromium trim

# TM KNT 001/002

### **Touch Glass Capacitive Thermostat**



- · Touch temperature controller in white glass.
- · Includes six touch keys:
  - Two keys (+/-): desired temperature.
- One key: thermostat On/Off.
- One key: fan speed (TM KNT 001) or HVAC mode (TM KNT 002).
- Two keys: free configuration.
- · Display showing the current/setpoint value for temperature and humidity.
- Four door/window or external temperature sensor contact inputs.
- Relative humidity sensor.
- Assembly in universal mechanism box.

REFERENCE	DESCRIPTION
TM KNT 001	Touch glass capacitive thermostat White for FanCoil with 2 buttons
TM KNT 002	Touch glass capacitive thermostat White for HVAC with 2 buttons



# **EM KNT 001**

### **Input Interface**



- Interface with four binary inputs or LED outputs.
- The binary inputs can be connected to buttons, switches or detectors with potential-free contact.
- The outputs can be used to control powered LED indicators.
- · Installation in universal mechanism or junction box.

REFERENCE	DESCRIPTION
EM KNT 001	Interface with 4 binary inputs/outputs

# **EM KNT 002**

### **Input Interface**



- Interface with four binary or analogue inputs.
- The binary inputs can be connected to buttons, switches or detectors with potential-free contact.
- The analogue inputs can be connected to external temperature sensors.
- Has four built-in thermostats.
- Installation in universal mechanism or junction box.

REFERENCE	DESCRIPTION
EM KNT 002	Interface with 4 binary/analogue inputs

# **EM KNT 003**

### Input Interface



- Interface with eight long-distance binary inputs.
- These inputs can have a cable distance of up to 200.
- The binary inputs can be connected to buttons, switches or detectors with potential-free contact.
- Installation in universal mechanism or junction box.

REFERENCE	DESCRIPTION
EM KNT 003	Interface with 8 long-distance binary inputs

01



# **DM KNT 001**

### 360º Ceiling Motion Detector



- PIR motion detector with built-in brightness sensor.
- Coverage: 360° and diameter of 7 m at height of 2.5 m.
- Functions: motion detector, constant brightness control, photoelectric switch and temperature sensor.
- Recessed assembly in false

REFERENCE	DESCRIPTION
DM KNT 001	KNX motion detector

# **DM KNT 004**

### 360º Ceiling Motion Detector



- PIR motion detector with built-in brightness sensor.
- Coverage: 360° and diameter of 7 m at height of 2.5 m.
- The motion detector must be connected to one of the inputs of the EM KNT 002, EM K5X 004, RE KNT LE3 or IR KNT 044.
- Recessed assembly in false

REFERENCE	DESCRIPTION
DM KNT 004	Motion detector compatible with: EM KNT 002, RE KNT LE3, EM K5X 004 and IR KNT 044

# **DM KNT 003**

### **Mechanism Box Motion Detector**



- PIR motion detector with built-in brightness sensor.
- Coverage: 200° and 8 m at height
- Functions: motion detector, constant brightness control, photoelectric switch and temperature sensor.
- Recessed assembly in universal mechanism box.

REFERENCE	DESCRIPTION
DM KNT 003	KNX motion detector



# **IT KNT 001**

### Switch / Blinds Actuator



- · Mixed switch and blinds actuator with two output channels.
- · Has two potential-free outputs with a maximum switch capacity of 16 A per channel.
- Switching with zero-crossing control, which enables the control of large loads.
- Manual control of its outputs thanks to its potentiometers on the front.
- Timer, forced, logic, threshold and setting functions.
- DIN rail assembly (1 mod).



REFERENCE	DESCRIPTION
IT KNT 001	Switch/blinds actuator with 2 channels

# **PE KNT 001**

### Switch / Blinds Actuator



- Mixed switch and blinds actuator with two output channels.
- Has two potential-free outputs with a maximum switch capacity of 16 A per channel. Switching with zero-crossing control, which enables the control of large loads.
- Four binary/ analogue inputs.



REFERENCE	DESCRIPTION
PE KNT 001	Switch/blinds actuator with 2 channels and 4 inputs

# **PE KNT 002**

### Switch / Blinds Actuator



- Mixed switch and blinds actuator with two output channels.
- · Has two potential-free outputs with a maximum switch capacity of 10 A per channel.
- Switching with zero-crossing control, which enables the control of large loads.
- Four binary/analogue inputs.



REFERENCE	DESCRIPTION
PE KNT 002	Switch/blinds actuator with 2 channels and 4 inputs



# **IT KNT 004**

# A2 81 82 || || || || ON WOFF OFF OFF OFF 00000

### Switch / Blinds Actuator

REFERENCE	DESCRIPTION
IT KNT 004	Switch/blinds actuator with 4 channels and 12 inputs

- · Mixed switch and blinds actuator with four output channels.
- · Has potential-free outputs with a maximum capacity of 16 A per channel.
- Switching with zero-crossing control.
- Manual forcing of each channel via buttons.
- Has eight binary inputs + four binary/analogue inputs.
- The binary inputs can be up to 200 m in length.
  • Four thermostat functions,
- eight logic, centralised control, setting, time functions, etc.
- DIN rail assembly (4 mod).



# **IT KNT 008**



- · Mixed switch and blinds actuator with eight output channels.
- · Has potential-free outputs with a maximum capacity of 16 A per channel.
- Switching with zero-crossing control.
- · Manual forcing of each channel via buttons.
- Has eight binary inputs + four binary/analogue inputs.
- The binary inputs can be up to 200 m in length.
- · Four thermostat functions. eight logic, centralised control, setting, time functions, etc.
- DIN rail assembly (4 mod).



### Switch / Blinds Actuator

REFERENCE	DESCRIPTION
IT KNT 008	Switch/blinds actuator with 8 channels and 12 inputs

# **IT KNT 016**



- Mixed switch and blinds actuator with 16 output channels.
- Has potential-free outputs with a maximum capacity of 16 A per channel.Switching with
- zero-crossing control.
- Manual forcing of each channel via buttons.
- Has 16 binary inputs + seven
- binary/analogue inputs.

  The binary inputs can be up to 200 m in length.
- · Seven thermostat functions, 16 logic, centralised control,
- setting, time functions, etc.
   DIN rail assembly (8 mod).



### Switch / Blinds Actuator

REFERENCE	DESCRIPTION
IT KNT 016	Switch/blinds actuator with 16 channels and 23 inputs



# **IR KNT 044**

### **Switch and Dimming Actuator with Inputs**



- · Multi-function dimming actuator that can function as a switch with four channels or RGBW dimmer.
  The switch channels can act as:
- Four ON/OFF channels
- Two blinds/canopies
- One fan-coil with two pipes and on/off valve.
- Has four potential-free outputs with 16 A per channel and ZCT (Zero-Crossing Technology) switching.

  • Has eight long-distance (200 m) binary inputs and four binary/
- analogue inputs.
- Up to four heating/cooling thermostats.



REFERENCE	DESCRIPTION
IR KNT 044	Multi-function switch/blinds/fan-coil actuator with 4 channels, and LED RGBW strip dimmer with 4 channels and 12 binary/analogue inputs

# **RE KNT LE3**

### **RLC+LED Dimming Actuator**



- Universal RLC +LED dimming actuator with one output channel.
- Suitable for LED lamps at 230 V or 12V, LED strips 230 V, incandescent and halogen lamps.
- · Maximum capacity 250 W.
- · Has four analogue/digital inputs.
- Has four heating and/or cooling control thermostats.
- Assembly in junction box.

REFERENCE	DESCRIPTION
RE KNT LE3	RLC+LED dimming actuator with 1 channel and 4 inputs

# **RE KNT 000**

### **RLC+LED Dimming Actuator**



- Universal RLC +LED dimming actuator with one or four output channels.
- Suitable for LED lamps at 230 V or 12V, LED strips 230 V, incandescent and halogen lamps.
- Maximum capacity 1000 W per channel.
- · Manual control thanks to its front potentiometer.
- DIN rail assembly (5 mod).

REFERENCE	DESCRIPTION
RE KNT 000	RLC+LED dimming actuator with 1 channel

01



# **RE KNT 004**

### **RLC+LED Dimming Actuator**



- Universal RLC +LED dimming actuator with one or four output channels.
- Suitable for LED lamps at 230 V or 12V, LED strips 230 V, incandescent and halogen lamps.
- Maximum capacity 250 W per channel.
- Manual control thanks to its front potentiometer.
- DIN rail assembly (5 mod).

REFERENCE	DESCRIPTION
RE KNT 004	RLC+LED dimming actuator with 4 channels

# **RE KNT 008**



### • Universal RLC +LED dimming actuator with eight

- Suitable for LED lamps at 230 V or 12 V, LED strips 230 V, incandescent and halogen lamps.
- Maximum capacity 250 W per channel.

output channels.

- Manual control thanks to its front button pad.
- DIN rail assembly (8 mod).

### **RLC+LED Dimming Actuator**

REFERENCE	DESCRIPTION
RE KNT 008	RLC +LED dimming actuator with eight channels

# **RE KNT DA1**





- KNX-DALI gateway with three broadcast output channels.
- Option of controlling up to 64 DALI drivers per channel and 128 in total.
- Manual control thanks to its front potentiometer.
- DIN rail assembly (5 un).

REFERENCE	DESCRIPTION
RE KNT DA1	DALI dimming actuator with 3 broadcast channels



# **REKNT DA2**

### **KNX-DALI Gateway**



- KNX-DALI gateway with one addressable output channel.
- Option of controlling up to 64 DALI drivers that can be associated in up to 16 groups.
- Up to 16 settings and sequence configuration.
- · Simple and intuitive DALI addressing via web server, with WiFi Access Point, WiFi Station and Ethernet connectivity.
- RGB, RGBW and Tunable White (DT8) control.
- · Manual broadcast activation thanks to its front button pad.
- DIN rail assembly (4 un).

REFERENCE	DESCRIPTION
RE KNT DA2	KNX-DALI Gateway with 1 addressable channel

# **RE KNT 110**

### 1-10 V Dimming Actuator



- RE KNT 110: 1-10 V dimming actuator with three output channels and one relay per channel, allowing the power supply to be disconnected from the drivers.
- Manual control thanks to its front potentiometer.
- DIN rail assembly (5 m).

REFERENCE	DESCRIPTION
RE KNT 110	1-10 V dimming actuator with 3 channels

# **REKNTRGB**

### **RGBW Dimming Actuator**



- PWM dimming actuator to control LED strips 12-48 VCC.
- The four channels can be configured as four independent channels for single-colour LED strips, and an RGBW channel, or as a RGB+W channel.
- High capacity, with a maximum of 10 A per channel and 40 A in total.
- · Manual control thanks to its front potentiometer.
- DIN rail assembly (5 mod).

REFERENCE	DESCRIPTION
RE KNT RGB	LED RGBW strip LED dimming actuator with 4 channels



# **FA KNT 001**

### **Power Supply**



- Power supply of 640 mA.
- Generates and monitors the voltage of the KNX bus.
- The bus line is isolated from the mains voltage via a filter built into the power supply.
- Has a second 30 VCC voltage output with no filter.
- DIN rail assembly (6 mod).

REFERENCE	DESCRIPTION
FA KNT 001	Power supply 640 mA with auxiliary output

# CO KNT LC1

### **KNX Secure Line Coupler**



- Connects two KNX segments, for example, a line with a KNX area. Has an extended filter table for the main group 0..31.
- Guarantees galvanic isolation between lines.
- Enables long frames and is compatible with ETS® 5.7 or higher.
- Has keys that enables telegram filtering to be disabled for testing.
- LED operation or communication error indicators.
- Compatible with KNX Data Security.

REFERENCE	DESCRIPTION
CO KNT LC1	Secure line coupler in compact format

# CO KNT IPI

### **KNX IP Secure Interface**



- Interface between LAN (IP, Ethernet) and KNX, and can be used as a programming interface for ETS®.
- Interface that enables access to the KNX bus from any point in its LAN and allows the KNX bus to be programmed via the internet.
- Can be used as an ETS® programming interface and can manage long frames.
- Its keys and LEDs enable local diagnostics.
- Compatible with KNX IP Security and KNX Data Security, which protects the device from unauthorised access via the KNX bus.

REFERENCE	DESCRIPTION
CO KNT IPI	Secure KNX IP interface in compact format



# **CO KNT IPR**

### **KNX IP Secure Router**



- Allows the forwarding of telegrams between different lines via a LAN (IP) network as a fast backbone.
- Has an extended filter table for the main group 0.31 and stores up to 150 telegrams.
- Can be used as a
- programming interface.
  Compatible with KNX IP Security and KNX Data Security, which protects the device from unauthorised access via the KNX bus.
- · As a Secure Interface (tunneling), it prevents unauthorised access to the system. The connection between PC and interface is encrypted.
- The IP address can be assigned via DHCP or the ETS\*.
  Its keys and LEDs enable local diagnostics.

REFERENCE	DESCRIPTION
CO KNT IPR	KNX IP Secure router in compact format

# **CO KNT 002**

### **USB KNX Programming Interface**



- KNX-USB communication interface for programming and start-up.
- Establishes two-way communication between the PC and the bus.
- USB connector with galvanic isolation from the bus.
- Can be used as a programming interface for the ETS® software version 3 (or higher) and enables long frames.

REFERENCE	DESCRIPTION
CO KNT 002	USB / KNX programming stick

# ST KNT 001/002

### **Temperature Sensors**



- NTC temperature sensor for the analogue inputs of DINUY devices.
- Has a cable 4 m (ST KNT 001) or 0.5 m (ST KNT 002) long.

REFERENCE	DESCRIPTION
ST KNT 001	Temperature sensor ø7 mm for analogue inputs
ST KNT 002	Temperature sensor ø5 mm for analogue inputs



# EM K5X 002/004

### **Button / Universal Interface**



- EM K5X 002: Interface with two inputs for conventional batteryoperated button. Battery life cycle greater than eight years. Features a "Battery Status" communication object.
- EM K5X 004: Interface with four binary/analogue inputs, powered by 230 V. Has four heating and/or cooling control thermostats.
- Programming and start-up via ETS5, or higher.

REFERENCE	DESCRIPTION
EM K5X 002	KNX-RF interface for button with 2 inputs, battery-operated
EM K5X 004	KNX-RF interface with 4 binary/analogue inputs at 230 V

# SE K5X 002/010

### Temperature, Humidity and Brightness Sensor



- Temperature, brightness and relative humidity sensor.
- Alarms for temperature, sun protection/brightness and humidity.
- Portable or can be fixed to a surface. • Battery-operated, 2 x 3 V CR2032,
- with a life cycle greater than eight years.
- Features a "Battery Status" communication object.
- Programming and start-up via ETS5, or higher.

REFERENCE	DESCRIPTION
SE K5X 002	KNX RF multi-temperature, and humidity sensor
SE K5X 010	KNX-RF multi-temperature, brightness and humidity sensor

# **SE K5X 003**

### **Door/Window Contact**



- · Wireless sensor that detects when a door or window is opened and closed.
- Comprised of a sensor/transmitter and a magnet.
- Installed on the frame and on the door/window itself using adhesive (included) or screws.
- Dimensions: 78 x 28 x 23mm.
- Battery-operated, 2 x 3 V CR2032, with a life cycle greater than 12 years.
- Features a "Battery Status" communication object.
- Programming and start-up via ETS5, or higher.

REFERENCE	DESCRIPTION
SE K5X 003	KNX-RF door/window opening sensor



# **SE K5X 005**

### **Temperature Sensor with Probe**



- Wireless temperature sensor with external probe. Specially designed for use in underfloor heating.
- Over-heating and cooling alarm.
- Has thermostat function.
- Powered by mains supply, 230 V.
- Programming and start-up via ETS5, or higher.

REFERENCE	DESCRIPTION
SE K5X 005	KNX-RF temperature sensor with probe



# **DM K5X 001**





- Wireless motion detector with infrared technology, for recessed assembly in false ceiling.
- Brightness sensor.
- Coverage: 360° and Ø7m at height of 2.5 m.
- · Battery-operated.
- Programming and start-up via ETS5, or higher.

REFERENCE	DESCRIPTION
DM K5X 001	360° KNX-RF battery-operated ceiling motion detector

# **MI K5X 001**





- · Actuator with one channel that enables switching or timing
- Has ZCT
- (Zero-Crossing Technology), enabling it to control large loads. Creation and recovery of
- five settings.
- Has conventional button input.
- · Powered by mains.
- Maximum reach of RF signal 100 m in open air.
  • RF signal repetition.
- Assembly in junction box.



REFERENCE	DESCRIPTION
MI K5X 001	KNX-RF switch actuator with one channel, 16 A per channel



# PE K5X 001

### **Switch Actuator**



- · Switch actuator with two channels or blinds actuator with one channel to control Venetian blinds, roller blinds or ventilation flap.
- ZCT (Zero-Crossing Technology), which enables the control of large loads.
- Has four binary/analogue inputs.
- Powered by mains.
- Has up to four heating/cooling thermostats.
  • Reach of RF signal 100 m
- in open air.



REFERENCE	DESCRIPTION
PE K5X 001	KNX-RF switch/blinds actuator with 2 output channels and 4 inputs

# PE K5X 002

### Switch/Blinds Actuator



- Switch actuator with two channels or blinds actuator with one channel to control Venetian blinds, roller blinds or ventilation flap.
- (Zero-Crossing Technology), which enables the control of large loads.
- · Has two conventional button inputs.
- Powered by mains.
- Reach of RF signal 100 m in open air.



REFERENCE	DESCRIPTION
PE K5X 002	KNX-RF switch/blinds actuator with 2 channels

# RE K5X LE1

### **Dimming Actuator**



- · Actuator with one channel that allows the dimming of RLC+LED loads: LED lamps 230 V or 12V, incandescent lamps or halogen lamps 230 V or 12 V.
- Maximum capacity 250 W.
- Creation and recovery of five settings.
- Has conventional button input.
- · Powered by mains.
- Maximum reach of RF signal 100 m in open air.
- RF signal repetition.
- Assembly in junction box.

REFERENCE	DESCRIPTION
RE K5X LE1	KNX-RF RLC LED dimming actuator with one channel



# RE K5X LE2

### • Actuator with one channel that enables PWM dimming of LED strips 12-48 V.

- Maximum capacity 8 A (12 V: 96 W // 24 V: 192 W).
- Creation and recovery of five settings.
- Has conventional button input.
- Powered by 12-48 V.
- Maximum reach of RF signal 100 m in open air.
- RF signal repetition.
- Assembly in junction box.

### **Dimming Actuator**

REFERENCE	DESCRIPTION
RE K5X LE2	KNX-RF dimming actuator For LED strips with 1 channel

# **RE K5X RGB**



### Actuator with three channels that enables PWM dimming of LED RGB strips 12-48 V.

- · Option of controlling one RGB strip or three single-colour LED strips.
- Maximum capacity 5 A per channel.
- Has four binary/analogue inputs.
- · Maximum reach of RF signal 100 m in open air.

### **Dimming Actuator**

REFERENCE	DESCRIPTION
RE K5X RGB	KNX- RF dimming actuator for LED RGB strips with 3 channels

# **RE K5X 010/DA1**



- RE K5X DA1: DALI interface with one broadcast output channel for 64 devices.
- RE K5X 010: 1-10 V dimming actuator with one output channel. Has a 5 A relay to cut the power supply to drivers.
- Has one conventional button input.
- · Powered by mains.
- Reach of RF signal 100 m in open air.

### **Dimming Actuator**

REFERENCE	DESCRIPTION
RE K5X 010	KNX-RF / 1-10 V dimming actuator with 1 channel
RE K5X DA1	KNX-RF / DALI dimming actuator with 1 channel



# CO K5X 001

### **USB / KNX-RF Interface**



- · Interface that establishes two-way communication between a PC and the KNX bus installation.
- Enables wireless access to a KNX installation from PC or laptop, for example, for addressing, programming or diagnostics through ETS5.
- Enables programming and start-up of KNX-RF sensors and actuators.
- No additional software required, other than ETS5.
- Power supplied via USB port.

REFERENCE	DESCRIPTION
CO K5X 001	USB - KNX-RF communication interface

# CO K5X 002

### KNX-RF / KNX-PT Coupler



- Coupler to connect KNX-RF wireless devices with the KNX bus (KNX-PT).
- In addition to its main function as a coupler, the device can also be used as a KNX-RF repeater to enhance the wireless reach within a KNX-RF wireless system.
- Power supplied via USB port.

REFERENCE	DESCRIPTION
CO K5X 002	KNX / KNX-RF coupler

# **AM K5X 001**

### **KNX-RF Signal Repeater**



- Wireless signal repeater that enables the distance between sensors and actuators to be increased.
- Increased radio coverage in KNX wireless networks.
- Up to three consecutive repeaters can be installed in the same facility.
- No additional programming required.
- Powered by the mains 230 V~ 50 Hz.

REFERENCE	DESCRIPTION
AM K5X 001	KNX-RF signal repeater





# WirelessConnected

### **Radio Frequency System**

Devices

Sensor emitters

Actuator receivers

Communication and accessories

# **RC KNX 001**

### **Remote Control**



- Remote control that enables control of dimming, switch or blinds actuators. Different operating modes: ON/OFF switch, dimmer, blind control, settings, etc.
- Has a sixth channel for general control of the five channels.
- Battery-operated, one x 3 V CR2032, with a life cycle greater than eight years.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
RC KNX 001	Remote control with 5 channels and 5 settings	Control of 5 channels + 1 general Max. RF signal reach: 100 m Battery- operated

# **PU KNX 001**

### **Portable Button**



- Wireless button that enables control of dimming, switch or blinds actuators
- Different operating modes: ON/ OFF switch, dimmer, blind control, settings, etc. Portable or can be fixed to wall.
- Battery-operated, two x 3 V CR2025, with a life cycle greater than eight years.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
PU KNX 001	Portable button with 1 channel	1 output channel Max. RF signal reach: 100 m Battery- operated

# **EM KNX 002**

### Interface for Double Button



- Wireless emitter that enables control of dimming, switch or blinds actuators.
- Different operating modes: ON/ OFF switch, dimmer, blind control, settings, etc.
- Installation inside universal mechanism box, behind the button.
- Battery-operated, two x 3 V CR2025, with a life cycle greater than eight years.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
EM KNX 002	Interface for double button with 1 channel	Interface with 2 inputs Max. RF signal reach: 100 m Battery- operated

# SE KNX 001/002/004

### **Temperature and Brightness Sensors**



### Temperature Sensor:

- Sends the temperature value measured in the space where it is
- The temperature value is sent:
  - Change in temperature greater than
- 60 minutes after the last message.
- Portable or can be fixed to wall.
- The SE KNX 004 can programme a temperature setpoint.
- Dimensions: 78 x 28 x 23mm.
  Compatible with: TM KNX 001 and CO KNX 002.
- Brightness Sensor:
  - Sun protection: automatic control of blinds, or canopies, according to brightness measured.

  - Assembly on the glass of the window.
    Dimensions: 78 x 28 x 23mm.
    Compatible with: PE KNX 001 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
SE KNX 001	Ambient temperature sensor	1 output channel Max. RF signal reach: 100 m Battery-operated
SE KNX 002	Brightness sensor for sun protection	1 output channel Max. RF signal reach: 100 m Battery-operated
SE KNX 004	Ambient temperature sensor with dimmer	1 output channel Max. RF signal reach: 100 m Battery-operated

# **SE KNX 003**

### **Door/Window Opening Sensor**



- · Wireless sensor that detects when a door or window is opened and closed.
- Sends the status of the door/window every time it is opened/closed.
- Each telegram is sent twice, achieving greater security in communication.
- Comprised of a sensor/transmitter and a magnet.
- Installed on the frame of a door or window.
- Dimensions: 78 x 28 x 23mm.
- Battery-operated, txo x 3 V CR2032, with a life cycle greater than 12 years.
- Compatible with: TM KNX 001, IT KNX 001, MI KNX 001 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
SE KNX 003	Door/window opening sensor	1 output channel Max. RF signal reach: 100 m Battery-operated

# **SE KNX 005**

### **Temperature Sensor with Probe**

**DESCRIPTION** 



- · Wireless temperature sensor with external probe.

UY B	<ul> <li>specially designed for use in underfloor heating.</li> <li>Sends the temperature value measured by the probe every minute.</li> <li>Powered by 230 V- 50 Hz.</li> </ul>	SE KNX 005	Temperature sensor with external probe	1 output channel Max. RF signal reach: 100 m Powered by 230 V
N.	<ul> <li>Dimensions: 45 x 42 x 12mm.</li> <li>Compatible with: TM KNX 001 and CO KNX 002.</li> </ul>			

REFERENCE



**TECHNICAL DETAILS** 

# **DM KNX 001**

### 360º Recessed Motion Detector



- Battery-operated PIR wireless motion detector for lighting control.
- · Has built-in light sensor, allowing it to limit operation of the detector in accordance with natural light.
- Compatible with: IT KNX 001, MI KNX 001 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
DM KNX 001	360° motion detector for recessing in ceiling	Diameter of 7 m at height of 2.5 m Time and light dimming Max. RF signal reach: 100 m Battery- operated

# **MI KNX 001**



- Actuator with one channel that enables switching or timing of loads.
- Has ZCT (Zero-Crossing Technology), enabling it to control large loads.
- · Creation and recovery of
- five settings.
   Has conventional button input.
- Powered by mains.
- Maximum reach of RF signal 100 m in open air.
- RF signal repetition.
- Assembly in junction box.
   Compatible with: EM KNX 002, PU KNX 001, RC KNX 001 and CO KNX 001.



### **Switch Actuator**

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
MI KNX 001	Wireless switch actuator with 1 channel	Breaking capacity: 1 x 16 A Max. RF signal reach: 100 m

# **PE KNX 001**



- Switch actuator with two channels or blinds actuator with one channel to control Venetian blinds, roller blinds or ventilation flap.
- (Zero-Crossing Technology), which enables the control of large loads.
- Has two conventional double button inputs.
- Powered by mains.Reach of RF signal
- 100 m in open air.



### **Switch or Blinds Actuator**

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
PE KNX 001	Wireless switch / blinds actuator	Breaking capacity: 2 x 16 A 2 channels (switch/ blinds) Max. RF signal reach: 100 m

# **IT KNX 001**

### **Switch Actuator**



- Has different functions: On/Off switch or timer (3 s ~ 10 min).
- Has a potential-free contact with a maximum capacity of 16 A.
- · Allows wire connection with a button for local control of the connected load.
- Can act as a repeater for RF signals.
- Modular format (1 module wide), DIN rail installation.
- Compatible with: EM KNX 002, PU KNX 001, RC KNX 001, SE KNX 003, DM KNX 001, DM KNX 002 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
IT KNX 001	Wireless switch actuator with 1 channel	Breaking capacity: 1 x 16 A Max. RF signal reach: 100 m

### **RE KNX LE1**

### **RLC+LED Dimming Actuator**



- Actuator with one channel that allows the dimming of RLC+LED loads: LED lamps 230 V or 12 V, incandescent lamps or halogen lamps 230 V or 12 V.
- Maximum capacity 250 W.
- Creation and recovery of five settings.
- · Has conventional button input.
- Powered by mains.
- Maximum reach of RF signal 100 m in open air.
- RF signal repetition.
- Assembly in junction box.
- · Compatible with: EM KNX 002, PU KNX 001, RC KNX 001 and CO KNX 001.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
RE KNX LE1	Wireless dimmer for LED lamps	Maximum load: LED 1 x 250 W Max. RF signal reach: 100 m

# **RE KNX LE2**

### **LED Strips Dimming Actuator**



- · Actuator with one channel that enables PWM dimming of LED strips 12-48 V.
- Maximum capacity 8 A.
- · Creation and recovery of five
- Has conventional button input (LE2).
- Powered by 12-48 V.
- Maximum reach of RF signal 100 m in open air.
- RF signal repetition.
- Compatible with: EM KNX 002, PU KNX 001, RC KNX 001 and CO KNX 001.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
RE KNX LE2	Wireless dimmer for single-colour LED strips	Maximum load: 8 A LED strips 12 V=96 W / 24 V=192 W Max. RF signal reach: 100 m

# **RE KNX RGB**

### **LED RGB Strips Dimming Actuator**



- · Actuator with three channels that enables PWM dimming of LED RGB strips 12-48 V.
- Maximum capacity 5 A per channel.
- · Maximum reach of RF signal 100 m in open air.
- Compatible with: EM KNX 002, PU KNX 001, RC KNX 001 and CO KNX 001.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
RE KNX RGB	Wireless dimmer for LED RGB strips	Maximum load: 3 x 5 A 12 - 48 VCC Max. RF signal reach: 100 m

# **RE KNX 010 / DA1**

### 1-10 V or DALI Dimming Actuator



- RE KNX DA1: DALI interface with one broadcast output channel for 64 devices.
- RE KNX 010: 1-10 V dimming actuator with one output channel. Has a 5 A relay to cut the power supply to drivers.
- Has one conventional button input.
- Powered by mains.
- Reach of RF signal 100 m in open air.
- · Compatible with: EM KNX 002, PU KNX 001, RC KNX 001 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
RE KNX 010	Wireless dimmer for 1-10 V devices	Breaking capacity: 1 x 1.2 A Max. no. of devices: 125 1 channel Max. RF signal reach: 100 m
RE KNX DA1	Wireless dimmer for DALI devices	Max. no. of devices: 64 1 channel Max. RF signal reach: 100 m

# **TM KNX 001**

### Wireless Thermostat



- Has a built-in potentiometer, allowing the user to set the desired temperature.
- Every time a temperature value is received from a sensor, it will be compared with the setpoint value and will act by opening or closing its contact.
- · Can work together with door/window contacts or presence detectors.
- Modular format (1 module wide),
- DIN rail installation.

  Powered by 230 V 50 Hz.

  Compatible with: SE KNX 001, SE KNX 003, SE KNX 004, DP KNX 001 and CO KNX 002.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
TM KNX 001	Wireless thermostat	Breaking capacity: 1 x 16 A Acts as an RF signal repeater Max. RF signal reach: 100 m

## **CO KNX 001**

#### **RF Communication Interface**



- Interface for communication between conventional DINUY dimmers
- One-way communication.
- · Enables wireless control of conventional DINUY dimmers.
- Can also act as an RF signal repeater.
- Modular format (1 module wide), DIN rail installation.
- Compatible with: EM KNX 002. PU KNX 001 and RC KNX 001.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
CO KNX 001	RF / Dinuy dimmers communication interface	Interface between Dinuy dimmers and RF sensors Acts as an RF signal repeater Max. RF signal reach: 100 m

## **AM KNX 001**

#### **RF Signal Repeater**



- RF signal repeater that enables the distance between sensors and actuators to be increased.
- Up to three consecutive repeaters can be installed in the same facility.
- Power supply: 230 V~ 50 Hz.
- Dimensions: 45 x 42 x 12mm.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
AM KNX 001	RF signal repeater	Up to three units can be installed in a single facility Max. RF signal reach: 100 m

## **CO KNX 002**

#### **RF** Coupler



- Coupler to connect wireless KNX devices.
- Device through which KNX actuators can be controlled via wireless sensors, as well as wireless actuators via cabled sensors (twoway communication).
- Has 16 channels, each of which can be configured as:
- Lighting channel.
- Air conditioning channel.
- Blinds/canopies channel.
- Common channel.
- · Can also act as an RF signal repeater.
- Small dimensions: 78 x 28 x 23mm.

REFERENCE	DESCRIPTION	TECHNICAL DETAILS
CO KNX 002	RF / KNX-PT coupler	Connects the RF devices in a radio line with the KNX bus Twisted Pair Max. RF signal reach: 100 m



# Control Devices **LED Lamp and Strip Control LED Strip Control DALI Device Control** 1 / 10 V Device Control **Constant Control via Sensor Incandescent Lamp Control Control Accessories**

# Control **Devices**

#### WHAT IS LIGHTING CONTROL?

Controlling a lamp or luminaire involves changing its light level. Simply by activating a conventional button on the wall, the mood and ambience in a room can quickly be changed. This offers a series of benefits, such as reduced energy consumption and the option of creating different ambiences in a single room.

#### WHAT ARE THE BENEFITS OF **LIGHTING CONTROL?**

It varies the brightness, either manually or automatically, with the goal of achieving:

- · Energy savings: ensuring rational use of lighting in buildings to reduce energy consumption.
- · Comfort: lighting level adapted to the user's real needs, with the ability to create light settings in different rooms.
- Visual well-being: smart and automated systems that adapt artificial lighting to the natural light at any given time of day.

#### **HOW CAN IT BE CONTROLLED?**

The most common control systems include: a button, rotary potentiometer, 0/10 V signal, KNX protocol and radio frequency.

#### WHAT KINDS OF LAMPS CAN BE **CONTROLLED?**

Unlike incandescent or halogen lamps, all others must fulfil one condition: the lamp, or the device supporting it, must be dimmable, meaning they can be controlled:

- Dimmable LED lamps 230 V~ or 12 V~
- LED strips 12 VCC 48 VCC
- Dimmable LED strips 230 V
- LED panels or downlights with 1-10 VCC or DALI driver
- Incandescent or halogen lamps
- Fluorescent lighting associated with electronic ballasts 1-10 VCC or DALL

#### WHEN IS IT APPROPRIATE TO USE LIGHTING **CONTROL?**

Its uses are typically those where the goal is to have control over the lighting and there is a desire to create different settings or ambiences: in homes, hospitals, business premises, bars and restaurants, for example. Interplay between lights makes a room feel different; it defines distinctions in a single room and creates atmospheres.

#### WHAT CONDITIONS MUST A LAMP FULFIL IN **ORDER TO BE CONTROLLED?**

#### LED lamps

LED lamp control is complex and it is NOT possible to control any old lamp. The main characteristic to be considered in order to correctly control an LED lamp is it must be DIMMABLE, otherwise it cannot be controlled and both the dimmer and the lamp could be damaged.



Within the array of dimmable LED lamps available, there are two types of control: leading-edge control and trailing-edge control. These concepts will be explained later.

#### **LED** strips

Any low-voltage (12 V - 48 V) LED strip can be controlled by using a specific dimmer, with no need for the strip itself, nor its associated power supply, to be dimmable.

On the other hand, to control an LED strip of 230 V it must be dimmable.

#### DALI and 1-10 V luminaires

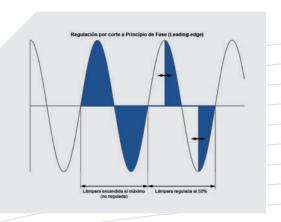
Within the DINUY catalogue there are dimmers used to control luminaires with a DALI or 1-10 V driver.

# WHAT IS THE DIFFERENCE BETWEEN LEADING-EDGE AND TRAILING-EDGE CONTROL?

As their names indicate, they both work by cutting the voltage at several stages of the alternating current's sine wave, thereby reducing the power sent to lamps.

LED lamp dimmers function by reducing the power supplied to the lamp. They do this by cutting a section of the wave, either at the leading edge or the trailing edge.

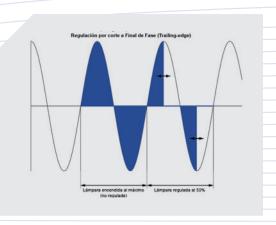
A leading-edge dimmer is the most widely used of the two types when controlling incandescent and halogen lamps.



It is a simple technology that consists of cutting the voltage wave at the start of the phase. As the wave is cut more to the right, the effective voltage supplied to the lamp decreases, as does its brightness.

This type of control is compatible with R and L loads: Incandescent lamps, 230 V halogen lamps, halogen lamps with ferromagnetic or electronic transformer, and 230 V LED lamps.

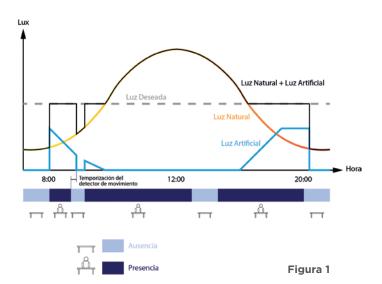
Dimmers with trailing-edge control cut the voltage wave at the end of the phase. As the wave is cut more to the left, the effective voltage supplied to the lamp decreases, as does its brightness.



Compatible with R, L and C loads: incandescent lamps, 230 V halogen lamps, halogen lamps with ferromagnetic or electronic transformer, 230 V LED lamps and 12 V LED lamps with electronic transformer.

#### WHAT IS CONSTANT CONTROL?

Systems that make the most of natural light allow their artificial light to be varied automatically depending on the contribution of external natural light, with the goal of achieving a total sum of light that meeds the user's real needs: (See Figure 1) this image shows how it attempts to offset the lack of natural light with artificial light at all times in order to maintain a desired light level. When there is sufficient natural light to achieve the desired light level, the luminaires are switched off completely (provided this is desired). Furthermore, these devices have a certain control inertia, which avoids sudden changes in the luminaires since these could be irritating to the user. On the other hand, these types of systems can feature motion detection options, conditioning luminaire switch-on to the presence or absence of a person within their operating range.



#### WHAT BENEFITS DO THESE SYSTEMS OFFER?

Constant control systems for LED luminaires offer the following benefits:

- Energy savings: These smart control systems minimise the use of artificial light, achieving energy savings of up to 40%.
- Visual comfort: The option of controlling the light's intensity as required offers users greater visual comfort.
- Improved useful life: These constant control systems can further extend the useful life of light sources.
- Customisation: Constant control systems allow the user to create different light settings.
- Centralised control: They can be controlled in a centralised way, thereby optimising the entire building's automation.

#### WHAT BUILDING REGULATIONS **MUST BE CONSIDERED?**

The main regulations governing constant control systems are detailed in the Basic Document HE3 - Energy Efficiency of the Technical Building Code, which indicates the scope of application for these systems in indoor lighting facilities. Furthermore, the European standard UNE 12464.1 on indoor lighting sets out where these control solutions should be applied, including: health, educational and retail establishments, offices, public places, hotels, halls, libraries and, in general, all publicly used spaces.



#### **CONTROL TECHNOLOGIES USED** IN THESE SYSTEMS

These systems usually use 1/10 V or DALI dimmers. Thus, these devices can be used to control any LED luminaire (downlight, panel, driver, etc.) that has a built-in 1/10 V or DALI dimmer input.

#### WHERE CAN CONSTANT **CONTROL BE APPLIED?**

Constant lighting control can be applied in different environments where precise, efficient lighting control is required.

For example: business or office buildings, health centres, schools, public buildings, warehouses, airports, etc.

#### Load types:

R: 230 V incandescent and halogen lamps

L: Leading-edge dimmable ferromagnetic and electronic transformers

C:Trailing-edge dimmable electronic transformers

**LED 1:** LED lamps or LED strips 230 V (leading-edge dimmable)

**LED 2:** LED lamps or LED strips 230 V (trailing-edge dimmable)

1/10V: 1/10 V drivers **DALI:** DALI drivers

12-24 V LED strip: Low-voltage single-colour LED strip

#### **Dimmer Selection Table**

REFERENCE	Assembly	R	L	С	LED1	LED2	DALI	1/10V	12-24 V LED strip
RE PLA LEO	Mechanism box	-	-	-	80W	200W	-	-	-
RE PLA LE1	Mechanism box	300W	-	300W	100W	350W	-	-	-
RE PLA LE3	Junction box	300W	-	300W	100W	350W	-	-	-
RE DA2 LE3	Junction box	250W	200W	250W	70W	250W	-	-	-
RE EL1 LE3	DIN rail	300W	-	300W	80W	300W	-	-	-
RE EL5 LE1	DIN rail	1.200W	900W	-	1.200W	-	-	-	-
RE EL5 LE3	DIN rail	1.000W	-	1.000W	-	1.000W	-	-	-
RE PLA LE2	Junction box	-	-	-	-	-	-	-	8A
RE EL1 LE2	DIN rail	-	-	-	-	-	-	-	8A
RE EL2 LE2	DIN rail	-	-	-	-	-	-	-	20A
AM PLA LE2	Mechanism box	-	-	-	-	-	-	-	8A
RE PLA DA1	Junction box	-	-	-	-	-	64	-	-
RE EL5 DA1	DIN rail	-	-	-	-	-	128	-	-
RE PLA 010	Junction box	-	-	-	-	-	-	< 100	-
RE EL5 002	DIN rail	-	-	-	-	-	-	< 200	-
RE DMS 001	Recessed in ceiling	-	-	-	-	-	-	< 125	-
RE DMS 003	Recessed in ceiling	-	-	-	-	-	-	< 125	-
RE DMS DA1	Recessed in ceiling	-	-	-	-	-	-	64	-
RE DMS DA3	Recessed in ceiling	-	-	-	-	-	-	64	-
RE DMS 004	Ceiling surface	-	-	-	-	-	-	< 125	-
RE DMS DA4	Ceiling surface	-	-	-	-	-	-	64	-
RE PLA 000	Mechanism box	400W	250W	400W	-	-	-	-	-
RE PLA 001	Mechanism box	500W	3530W	-	-	-	-	-	-

## **RE PLA LEO**

#### Two-Wire Dimmer for Dimmable LED Lamps



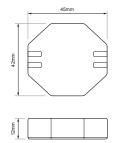
- Dimmer, in box format, specially designed to control dimmable LED lamps, with two wires, no neutral required.
- · Compatible with:
- 230 V leading-edge dimmable LED lamps and strips. LED 1.
- 230 V trailing-edge dimmable LED lamps and strips. LED 2.
- Dimmable 12 V LED lamps with electronic transformer. LED 2.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- · Built-in memory function.

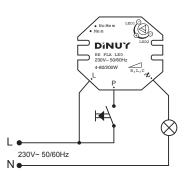
- Extra-flat format (only 12 mm thick). Assembly in mechanism box behind button.
- Option of adjusting the minimum dimming level of lamps to prevent flashing or undesired switch-offs at low levels.
- Protected against surges and short circuits. Has built-in thermal protection that reduces brightness in the event of over-heating.
- Example of use: facilities where the goal is to control LED lamps but there is no neutral wire, or it is difficult to connect it to the dimmer.

#### **Technical features**

REFERENCE	RE PLA LEO		
Supply voltage	230 V~ 50/60 Hz		
Self-consumption	0.7 W		
Installation	Mechanism box		
Load type	Dimmable LED lamps		
230 V leading-edge dimmable LED lamps and strips	4 W ~ 80 W		
230 V trailing-edge dimmable LED lamps and strips	4 W ~ 200 W		
Dimmable 12 V LED lamps with electronic transformer	4 trans. x 50 W y 1 lamp/trans. or 2 trans. x 100 W and 1 lamp/trans.		
Dimming speed	From minimum to maximum: ~ 3 s		
Control	Button		
Maximum number of light buttons	Not permitted		
Dimensions	45 x 42 x 12mm		
Operating temperature	0°C ~ +40°C		
Storage temperature	-30°C ~ +70°C		
Protection rating	IP20 according to UNE 20324		

#### **Dimensions**





## **RE PLA LE1**

#### **Dimmer for Dimmable LED Lamps**



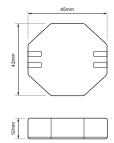
- Dimmer, in box format, specially designed to control dimmable LED lamps.
- Compatible with:
- 230 V leading-edge dimmable LED lamps and strips. LED 1.
- 230 V trailing-edge dimmable LED lamps and strips. LED 2.
- Dimmable 12 V LED lamps with electronic transformer. LED 2.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.

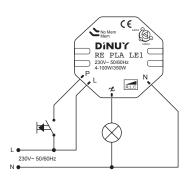
- Built-in memory function.
- Extra-flat format (only 12 mm thick). Assembly in mechanism box behind button.
- Option of adjusting the minimum dimming level of lamps to prevent flashing or undesired switch-offs at low levels.
- Protected against surges and short circuits. Has built-in thermal protection that reduces brightness in the event of over-heating.

#### **Technical features**

REFERENCE	RE PLA LE1		
Supply voltage	230 V~ 50/60 Hz		
Self-consumption	2 VA		
Installation	Mechanism box		
Load type	Dimmable LED lamps		
230 V leading-edge dimmable LED lamps and strips	4 W ~ 100 W		
230 V trailing-edge dimmable LED lamps and strips	4 W ~ 350 W		
Dimmable 12 V LED lamps with electronic transformer	6 trans. x 50 W y 1 lamp/trans. or 3 trans. x 100 W and 1 lamp/trans.		
230 V incandescent and halogen lamps	10 W ~ 300 W		
12 V halogen lamps with electronic transformer	20 W ~ 300 W		
Halogen lamps with ferromagnetic transformer	Not permitted		
Dimming speed	From minimum to maximum: ~ 3 s		
Control	Button		
Maximum number of light buttons	3		
Dimensions	45 x 42 x 12mm		
Operating temperature	0°C ~ +40°C		
Storage temperature	-30°C ~ +70°C		
Protection rating	IP20 according to UNE 20324		

#### **Dimensions**





## **RE PLA LE3**

#### **Dimmer for Dimmable LED Lamps**



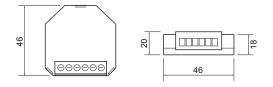
- Dimmer, in box format, specially designed to control dimmable LED lamps.
- Compatible with:
- 230 V leading-edge dimmable LED lamps and strips. LED 1.
- 230 V trailing-edge dimmable LED lamps and strips. LED 2.
- Dimmable 12 V LED lamps with electronic transformer. LED 2.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.

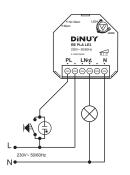
- Built-in memory function.
- Installation via connection terminals in junction box.
- Option of adjusting the minimum dimming level of lamps to prevent flashing or undesired switch-offs at low levels.
- Protected against surges and short circuits. Has built-in thermal protection that reduces brightness in the event of over-heating.

#### **Technical features**

REFERENCE	RE PLA LE3
Supply voltage	230 V~ 50/60 Hz
Self-consumption	0.7 W
Installation	Junction box
Load type	Dimmable LED lamps
230 V leading-edge dimmable LED lamps and strips	4 W ~ 100 W
230 V trailing-edge dimmable LED lamps and strips	4 W ~ 350 W
Dimmable 12 V LED lamps with electronic transformer	6 trans. x 50 W y 1 lamp/trans. or 3 trans. x 100 W and 1 lamp/trans.
230 V incandescent and halogen lamps	10 W ~ 300 W
12 V halogen lamps with electronic transformer	20 W ~ 300 W
Halogen lamps with ferromagnetic transformer	Not permitted
Dimming speed	From minimum to maximum: ~ 3 s
Control	Button
Maximum number of light buttons	3
Dimensions	46 x 46 x 20mm
Connection terminals type	Captive screws
Wire cross section	2.5 mm <sup>2</sup>
Operating temperature	0°C ~ +40°C
Storage temperature	-30°C ~ +70°C
Protection rating	IP20 according to UNE 20324

#### **Dimensions**





## RE DA2 LE3

#### **DALI Phase-Cut Gateway**



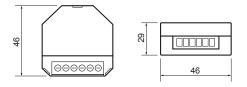
- Interface that allows the integration of RLC-LED loads within a DALI or DALI-2 lighting control system.
- Leading-edge or trailing-edge phasecut dimming control technology, suitable for different types of RLC+LED loads:
  - 230 V dimmable LED lamps and strips.
- Dimmable 12 V LED lamps with electronic transformer.
- 230 V incandescent and halogen lamps.
- 12 V halogen lamps with electronic transformer.

- DALI broadcast or addressable communication.
- Enables the connection of an auxiliary button to control the dimmer directly with no DALI bus. The purpose of this input is to be able to test the lamp's installation before installing the DALI bus.
- Offers the option of selecting the dimming curve: logarithmic or linear.
- Protected against surges and short circuits. Has resettable thermal protection.

#### **Technical features**

REFERENCE	RE DA2 LE3		
Supply voltage	230 V~ 50/60 Hz		
Self-consumption	< 0.7 W		
Installation	Junction box		
Load type	Dimmable LED, incandescent and halogen lamps		
230 V leading-edge dimmable LED lamps and strips	4 W ~ 70 W		
230 V trailing-edge dimmable LED lamps and strips	4 W ~ 250 W		
Dimmable 12 V LED lamps with electronic transformer	5 trans. x 50 W y 1 lamp/trans. or 2 trans. x 100 W and 1 lamp/trans.		
230 V incandescent and halogen lamps	4 W ~ 250 W		
12 V halogen lamps with electronic transformer	10 W ~ 250 VA		
Control	DALI or DALI-2		
Dimensions	46 x 46 x 29mm		
Connection terminals type	Captive screws		
Wire cross section	2.5 mm <sup>2</sup>		
Operating temperature	-5ºC ~ +45ºC		
Storage temperature	-30°C ~ +70°C		
Protection rating	IP20 according to UNE 20324		

#### **Dimensions**





## RE EL1 LE3

#### **Modular Dimmer with Rotary Control**



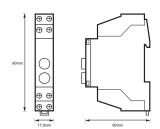
- Modular Dimmer with Rotary Control.
- Leading-edge or trailing-edge dimming technology.
- Suitable for controlling:
  - 230 V dimmable LED lamps and strips.
  - Dimmable 12 V LED lamps with electronic
  - 230 V incandescent and halogen lamps.
- 12 V halogen lamps with electronic transformer.
- Modular format, assembly on DIN rail.
- Control with button or using the potentiometer on the front.
- · Allows up to three light buttons and an unlimited number of no-light buttons.
- The potentiometer on the front enables control from the device itself, with no need for an external button.

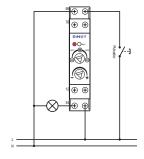
- · Adjustment of the minimum dimming level. This prevents lamps from flashing or appearing switched off at low dimming levels.
- Three operating modes:
- Memory: a short press switches on the lamps to the dimmer level set before they were last switched off.
- No Memory: a short press switches on the lamps to full brightness.
- Auto: similar to Memory mode. In addition, if there is a power loss, the lamps will return to their same state when the power is reestablished.
- Option of master/slave configuration, enabling the power controlled to be increased.
- Protected against short circuits and surges. Has thermal protection that will switch off the lamps in event of the dimmer overheating.

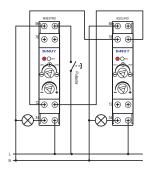
#### **Technical features**

REFERENCE	RE EL1 LE3	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption	2 VA	
Installation	DIN rail	
Load type	Dimmable LED, incandescent and halogen lamps	
230 V leading-edge dimmable LED lamps and strips	4 W ~ 80 W	
230 V trailing-edge dimmable LED lamps and strips	4 W ~ 300 VA	
Dimmable 12 V LED lamps with electronic transformer	6 trans. x 50 W y 1 lamp/trans. or 3 trans. x 100 W and 1 lamp/trans.	
230 V incandescent and halogen lamps	10 W ~ 300 W	
12 V halogen lamps with electronic transformer	20 W ~ 300 W	
Halogen lamps with ferromagnetic transformer	Not permitted	
Control	Built-in button or potentiometer	
Maximum number of light buttons	3	
Dimensions	1 module wide	
Connection terminals type	Captive screws	
Wire cross section	4 mm <sup>2</sup>	
Operating temperature	0ºC ~ +40ºC	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**







## RE EL5 LE1

#### **Dimmer for Leading-Edge Dimmable LED Lamps**



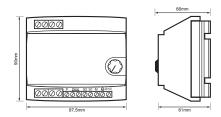
- Dimmer, in modular format, to control leading-edge dimmable LED lamps and strips.
- Control via conventional buttons, potentiometer, 0/10 VCC active signal or 1/10 VCC passive signal.
- Built-in memory function.
- Has a potentiometer that enables control from the device itself.
- DIN rail assembly.

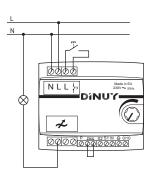
- Option of master/slave configuration that enables the power controlled to be expanded from a single control, through the use of several interconnected dimmers.
- Anti-panic input for safety systems: in event of alarm, the lighting is switched on to full, ignoring the dimmer settings.

#### **Technical features**

REFERENCE	RE EL5 LE1
Supply voltage	230 V~ 50 Hz
Self-consumption	2.5 W
Installation	DIN rail
Load type	Leading-edge dimmable LED lamps
230 V leading-edge dimmable LED lamps and strips	4 W ~ 1200 W
Incandescent and 230 V~ halogen lamps	100-1200 W
12 V halogen lamps with electronic transformer type L	100-900 W
12 V halogen lamps with ferromagnetic transformer	Not permitted
Control	Button, potentiometer or 0/10 VCC signal
Maximum number of light buttons	0
External potentiometer value	10 ΚΩ
Dimensions	5 modules wide
Connection terminals type	Captive screws
Wire cross section	6 mm <sup>2</sup>
Operating temperature	0°C ~ +40°C
Storage temperature	-30°C ~ +70°C
Protection rating	IP20 according to UNE 20324

#### **Dimensions**





## RE EL5 LE3

#### **Dimmer for Trailing-Edge Dimmable LED Lamps**

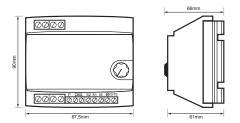


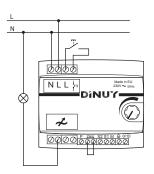
- Dimmer, in modular format, to control leading-edge dimmable LED lamps and strips.
- Control via conventional buttons, potentiometer, 0/10 VCC active signal or 1/10 VCC passive signal.
- Built-in memory function.
- Has a potentiometer that enables control from the device itself.
- DIN rail assembly.
- Option of master/slave configuration that enables the power controlled to be expanded from a single control, through the use of several interconnected dimmers.
- Anti-panic input for safety systems: in event of alarm, the lighting is switched on to full, ignoring the dimmer settings.

#### **Technical features**

REFERENCE	RE EL5 LE3	
Supply voltage	230 V~ 50 Hz	
Self-consumption	1.5 W	
Installation	DIN rail	
Load type	Trailing-edge dimmable LED lamps	
230 V trailing-edge dimmable LED lamps and strips	5 W ~ 1000 W	
Dimmable 12 V LED lamps with electronic transformer	18 trans. x 50 W y 1 lamp/trans. or 9 trans. x 100 W and 1 lamp/trans.	
230 V incandescent and halogen lamps	100-1000 W	
12 V~ halogen lamps with electronic transformer	100-1000 W	
12 V~ halogen lamps with ferromagnetic transformer	Not permitted	
Control	Button, potentiometer or 0/10 VCC signal	
Maximum number of light buttons	0	
External potentiometer value	10 ΚΩ	
Dimensions	5 modules wide	
Connection terminals type	Captive screws	
Wire cross section	6 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## **RE PLA LE2**

#### **Dimmer for Single-Colour LED Strips**

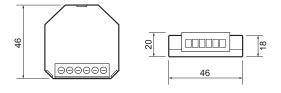


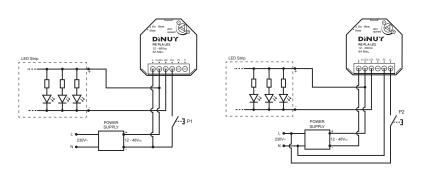
- Dimmer, in box format, specially designed to control 12~48 VCC single-colour LED strips.
- Maximum capacity 8 A: 12 VCC strip = 96 W / 24 VCC strip = 192 W.
- Pulse width modulation (PWM) dimming technology.
- Has two potentiometers:
- "min": sets the minimum dimming level.
- "dim speed": adjusts the dimming speed between 3 s and 10 s.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- Built-in memory function.
- Resettable protection against surges and short circuits.

#### **Technical features**

REFERENCE	RE PLA LE2
Supply voltage	12 VCC - 48 VCC
Self-consumption	< 12 mA
Installation	Junction box
Load type	Single-colour LED strips
Low-voltage LED strips	8 A (12 V strip = 96 W // 24 V strip = 192 W)
Dimming speed	Adjustable: 3 s ~ 10 s
Control	Button
Maximum number of light buttons	0
Dimensions	46 x 46 x 20mm
Connection terminals type	Captive screws
Wire cross section	2.5 mm <sup>2</sup>
Operating temperature	0°C ~ +40°C
Storage temperature	-30°C ~ +70°C
Protection rating	IP20 according to UNE 20324

#### **Dimensions**





## RE EL1 LE2

#### **Modular Dimmer for LED Strips with Rotary Control**

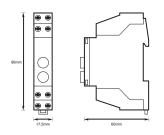


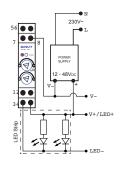
- Modular dimmer with rotary control.
- Pulse-width modulation (PWM) dimming technology. Designed specially to control 12~48 VCC singlecolour LED strips.
- Maximum capacity 8 A (12 VCC strip = 96 W / 24 VCC strip = 192 W).
- Modular format, assembly on DIN rail.
- Control with button or using the potentiometer on the front.
- The potentiometer on the front enables control from the device itself, with no need for an external button.
- · Ability to adjust dimming speed using the potentiometer.
- Two operating modes:
- Memory: a short press switches on the strips to the dimmer level set before they were last switched off.
- No Memory: a short press switches on the strips to full brightness.
- Protected against short circuits and surges. Has thermal protection that will switch off the LED strips in event of the dimmer overheating.

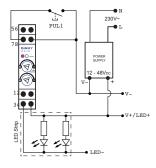
#### **Technical features**

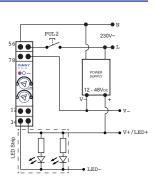
REFERENCE	RE EL1 LE2	
Supply voltage	12 VCC - 48 VCC	
Self-consumption	< 12 mA	
Installation	DIN rail	
Load type	Single-colour LED strips	
Low-voltage LED strips	8 A (12 V strip = 96 W // 24 V strip = 192 W)	
Control	Built-in button or potentiometer	
Maximum number of light buttons	0	
Dimensions	1 module wide	
Connection terminals type	Captive screws	
Wire cross section	4 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**









## RE EL2 LE2

#### **Modular Dimmer for Single-Colour LED Strips**

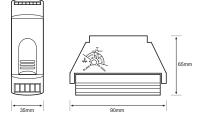


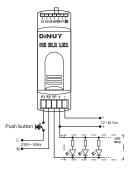
- Modular dimmer specially designed to control 12~48 VCC single-colour LED strips.
- Maximum capacity 20 A: 12 VCC strip = 240 W / 24 VCC strip = 480 W.
- Pulse width modulation (PWM) dimming technology.
- Different control modes: Button, potentiometer or 0/10 V signal.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- Memory and Auto function (if there is a power outage, the dimmer will restore the previous status when the power is re-established).
- Resettable protection against surges and short circuits.
- Option of master/slave configuration, enabling the power controlled to be increased.

#### **Technical features**

REFERENCE	RE EL2 LE2	
Supply voltage	12 VCC - 48 VCC	
Self-consumption	< 12 mA	
Installation	DIN rail	
Load type	Single-colour LED strips	
Low-voltage LED strips	20 A (12 V strip = 240 W // 24 V strip = 480 W)	
Control	Button, potentiometer or 0/10 VCC signal	
Maximum number of light buttons	0	
External potentiometer value	10 ΚΩ	
Dimensions	2 modules wide	
Connection terminals type	Captive screws	
Wire cross section	4 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## **AM PLA LE2**

#### **Amplifier for Controlling Single-Colour LED Strips**

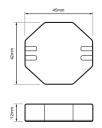


- Signal amplifier designed specially to control 12-24 VCC single-colour LED strips, up to a maximum of 8 A.
- Enables an extension of the metres of LED strips from a dimmer, achieving uniformity of brightness along the entire strip, while also enabling an increase in the power to be controlled.
- Pulse width modulation (PWM) dimming technology.
- The product is equipped with connectors to quickly connect LED strips.
- Extra-flat format (only 12 mm thick).
- Resettable protection against surges and short circuits. Thermal protection. Not resettable above 125ºC.

#### **Technical features**

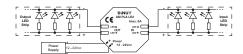
REFERENCE	AM PLA LE2	
Supply voltage 12 VCC - 24 VCC		
Self-consumption	< 12 mA	
Installation	-	
Load type	Single-colour LED strips	
Low-voltage LED strips	8 A (12 V strip = 96 W // 24 V strip = 192 W)	
Dimensions	45 x 42 x 12mm	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**

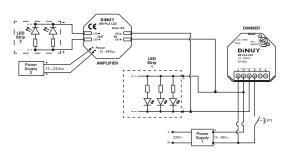


#### **Installation diagrams**

Option 1: Amplifier installed between end of the first strip and the start of the second:



Option 2: Amplifier installed next to the lead dimmer (RE PLA LE2) in a centralised way:



## **RE PLA DA1**

#### **DALI Device Dimmer**



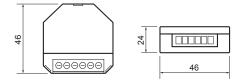
- Dimmer, in box format, to control fluorescent or LED luminaires with DALI driver or ballast.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- Built-in memory function.

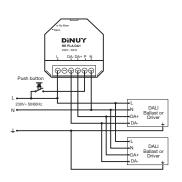
- Recessed assembly in junction box.
- One-way communication and broadcasting (a single group). Individual addressing for luminaires not permitted.
- Ability to adjust dimming speed using the potentiometer.

#### **Technical features**

REFERENCE	RE PLA DA1	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption	< 3 W	
Installation	Junction box	
Load type	DALI driver or ballast	
Maximum no. of devices	64	
Control	Button	
Maximum number of light buttons	0	
Dimensions	46 x 46 x 24mm	
Connection terminals type	Captive screws	
Wire cross section	2.5 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## RE EL5 DA1

#### **Modular Dimmer for DALI Devices**

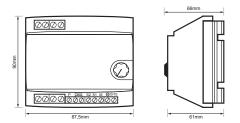


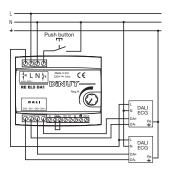
- Dimmer, in modular format, to control fluorescent or LED luminaires with DALI driver or ballast.
- Control via conventional buttons, potentiometer, 0/10 VCC active signal or 1/10 VCC passive signal.
- Built-in memory function.
- Has a potentiometer that enables control from the device itself.
- One-way communication and broadcasting. Addressing of luminaires not permitted.
- DIN rail assembly.
- Has a relay meaning the luminaires can be physically disconnected.
- Anti-panic input for safety systems: in event of alarm, the lighting is switched on to full, ignoring the dimmer settings.

#### **Technical features**

REFERENCE	RE EL5 DA1	
Supply voltage	230 V~ 50 Hz	
Self-consumption	3 W	
Installation	DIN rail	
Load type	DALI driver or ballast	
Maximum no. of devices	128	
Relay breaking capacity	16 A	
Control	Button, potentiometer or 0/10 VCC signal	
Maximum number of light buttons	3	
External potentiometer value	10 ΚΩ	
Dimensions	5 modules wide	
Connection terminals type	Captive screws	
Wire cross section	6 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## **RE PLA 010**

#### Dimmer for 1/10 VCC Devices

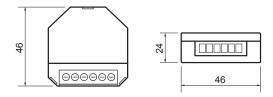


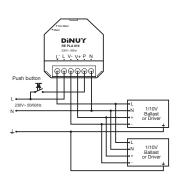
- Dimmer, in box format, to control fluorescent or LED luminaires with dimmable 1/10 VCC signal driver or ballast.
- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- Built-in memory function.
- Recessed assembly in junction box.
- Has a relay meaning the luminaires can be physically disconnected.
- Ability to adjust dimming speed using the potentiometer.

#### **Technical features**

REFERENCE	RE PLA 010	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption Self-consumption	< 5 W	
Installation	Junction box	
Load type	1-10 VCC driver or ballast	
Maximum no. of devices	125	
Relay breaking capacity	5 A	
Maximum absorption current per 1/10 V	500 mA	
Maximum injection current per 1/10 V	250 mA	
Control	Button	
Maximum number of light buttons	0	
Dimensions	46 x 46 x 24mm	
Connection terminals type	Captive screws	
Wire cross section	2.5 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## **RE EL5 002**

#### Modular Dimmer for 1/10 VCC Devices

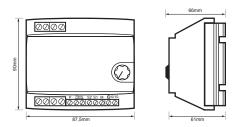


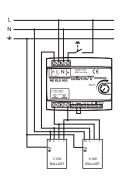
- Dimmer, in modular format, to control fluorescent or LED luminaires with dimmable 1/10 VCC signal driver or ballast.
- Control via conventional buttons, potentiometer, 0/10 V active signal or 1/10 V passive signal.
- Built-in memory function.
- Has a potentiometer that enables control from the device itself.
- DIN rail assembly.
- Has a 16 A relay meaning the luminaires can be physically disconnected.
- Anti-panic input for safety systems: in event of alarm, the lighting is switched on to full, ignoring the dimmer settings.

#### **Technical features**

REFERENCE	RE EL5 002	
Supply voltage	230 V~ 50 Hz	
Self-consumption	2.7 W	
Installation	DIN rail	
Load type	1-10 VCC driver or ballast	
Maximum no. of devices	125	
Relay breaking capacity	16 A	
Maximum absorption current per 1/10 V	500 mA	
Maximum injection current per 1/10 V	250 mA	
Control	Button, potentiometer or 0/10 VCC signal	
Maximum number of light buttons	3	
External potentiometer value	10 ΚΩ	
Dimensions	5 modules wide	
Connection terminals type	Captive screws	
Wire cross section	6 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	

#### **Dimensions**





## RE DMS 001/003/004

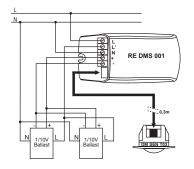
## Constant Lighting Control for 1/10 VCC

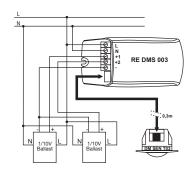


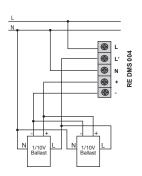
- Automatic energy saving system for 1/10 VCC luminaires: automatically applies to lamps the brightness level required to maintain a minimum lighting level set previously (for example, 500 lux), compensating the natural light at all times.
- Has a motion detector (PIR), enabling activation of lighting to be limited to the presence of people, if desired.
- Two operating modes: Automatic (Automatic Dimming + Motion Detection) or Automatic Dimming (no motion detection).
- Pre-set factory settings to achieve a level of 500 lux, approximately, in the work post, assuming installation in a "standard" office.
- Option of adjusting the minimum dimming level, preventing luminaires from being completely switched off.
- Relay output to disconnect and switch off luminaires completely.
- Option of expanding the motion detection area by using DM SEN T03 slave detectors (models RE DMS 001 and RE DMS 003).
- Option of manual dimming and switching via button/switch, using the AC DMS 001 accessory (models RE DMS 001 and RE
- RE DMS 003 has two output channels. Operation of the second channel is dependent on the first (20% ~ 80% offset).

#### **Technical features**

REFERENCE	RE DMS 001	RE DMS 003	<b>RE DMS 004</b>
Supply voltage	230 V~ 50/60 Hz		
Self-consumption		2 W	
Load type		1/10 VCC driver or ballast	
Relay breaking capacity		16 A	
Maximum absorption current per 1/10 V		500 mA	
Maximum injection current per 1/10 V		250 mA	
Maximum no. of devices		80	
Installation	Recessed	d in ceiling	Ceiling surface
Output channels	1	2	1
Motion detection coverage	36	360° and Ø7 m at height of 2.5 m	
Brightness adjustment		100 Lux - 1000 Lux	
Motion detection timer		10 min - 30 min	
Maximum no. extra motion detectors	Up to 14 x [	Up to 14 x DM SEN TO3 Not pe	
Wire cross section		< 2.5 mm <sup>2</sup>	
Connection terminals type		Lift	
Dimensions	107 x 53	107 x 53 x 34mm 118	
Operating temperature		0°C - +40°C	
Protection rating		IP20 according to UNE 20324	







## RE DMS DA1/DA3/DA4

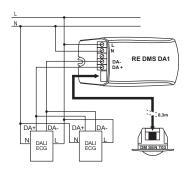
#### **Constant Lighting Control for DALI Devices**

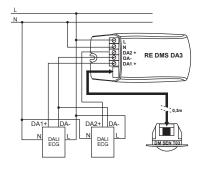


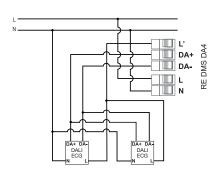
- Automatic energy saving system for DALI luminaires: automatically applies to lamps the brightness level required to maintain a minimum lighting level set previously (for example, 500 lux), compensating the natural light at all times.
- Has a motion detector (PIR), enabling activation of lighting to be limited to the presence of people, if desired.
- Two operating modes: Automatic (Automatic Dimming + Motion Detection) or Automatic Dimming (no motion detection).
- Pre-set factory settings to achieve a level of 500 lux, approximately, in the work post, assuming installation in a "standard" office.
- Option of adjusting the minimum dimming level, preventing luminaires from being completely switched off.
- One-way communication and broadcasting (a single group). Individual addressing for luminaires not permitted.
- Option of expanding the motion detection Option of expanding the motion detection area by using DM SEN TO3 slave detectors (models RE DMS DA1 and RE DMS DA3).
   Option of manual dimming and switching via button/switch, using the AC DMS 001
- accessory (models RE DMS DA1 and RE DMS DA3).
- RE DMS DA3 has two output channels. Operation of the second channel is dependent on the first (20% ~ 80% offset).

#### **Technical features**

REFERENCE	RE DMS DA1	RE DMS DA3	RE DMS DA4
Supply voltage	230 V~ 50/60 Hz		
Self-consumption		2 W	
Load type		DALI driver or ballast	
Relay breaking capacity	-	-	16 A
Maximum no. of devices	64		
Installation	Recessed in ceiling Ceilin		Ceiling surface
Output channels	1	2	1
Motion detection coverage	360° and Ø7 m at height of 2.5 m		5 m
Brightness adjustment	100 Lux - 1000 Lux		
Motion detection timer	10 min - 30 min		
Maximum no. extra motion detectors	Up to 14 x DM SEN TO3		Not permitted
Wire cross section	< 2.5 mm <sup>2</sup>		
Connection terminals type	Lift		
Dimensions	107 x 53	3 x 34mm	118.5 x 45mm
Operating temperature	0°C - +40°C		
Protection rating	IP20 according to UNE 20324		







## **RE PLA 000/001**

#### **Dimmers for Incandescent and Halogen** Lamps

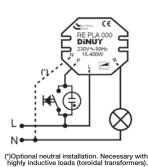


- RE PLA 000, IGBT dimmer, in box format, developed to control incandescent and halogen lamps of 12 V or 230 V.
- RE PLA 001, TRIAC dimmer, in box format, developed to control incandescent and halogen lamps of 12 V or 230 V.
- Compatible with:
- 230 V incandescent and halogen
- 12 V halogen lamps with ferromagnetic transformer.
- 12 V halogen lamps with electronic transformer (type L or C).

- Control via conventional buttons: quick presses switch it on/off and longer presses adjust it.
- Built-in memory function.
- The RE PLA 000 dimmer is protected against surges and short circuits. It has automatic switch-off protection against overheating and safety heat protector. In exchange, the RE PLA 001 and the RE PLA 002 are protected against overheating with a non-resettable heat protector.

#### **Technical features**

REFERENCE	RE PLA 000	RE PLA 001
Supply voltage	230 V~ 5	0 Hz
Self-consumption	3 VA	2 VA
Installation	Mechanisa	n box
Load type	Incandescent and	halogen lamps
230 V incandescent and halogen lamps	15 W ~ 400 W	40 W ~ 500 W
12 V halogen lamps with electronic transformer	15 W ~ 400 W	40 W ~ 500 W
Halogen lamps with ferromagnetic transformer	20 W ~ 250 W	40 W ~ 350 W
Control	Button	
Maximum number of light buttons	3	
Dimensions	45 x 42 x 12mm	40 x 50.5 x 15.5mm
Connection terminals type	Captive screws	
Wire cross section	2.5 mm <sup>2</sup>	
Operating temperature	0°C ~ +40°C	
Storage temperature	-30°C ~ +70°C	
Protection rating	IP20 according to UNE 20324	





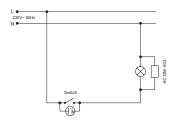
## AC DM-003

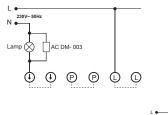
#### **Return Current Compensator**

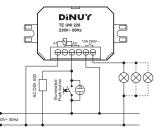


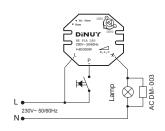
- · This device can absorb residual, or return, currents that keep certain LED lamps switched on with some devices: dimmers, motion detectors,
- Placed in parallel to one of the circuit's lamps, it can fully switch the lamps off if they remain slightly switched on when the user tries to switch them off.
- It also allows the number of buttons, with light, that are connected to a single impulse relay to be increased.
- In installations with no dimmer or detector, only switches, with or without light, it can also be used to absorb the potential residual currents that keep the LED lamps switched
- Unlike other devices, this compensator has no self-consumption. It does not alter the power factor of the lamps. Only one is required per circuit and its reliability is greater.
- · Safety encapsulation to prevent accidental burns.

#### Installation diagrams









## **AC DMS 001**

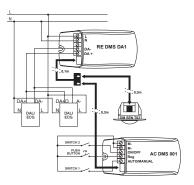
#### **Manual Control of Constant Control Systems**



- Accessory that enables manual control, at a certain time, of the automatic systems that constantly control artificial light based on natural light.
- Option of manual switching and dimming via button and/or switch. Compatible with: RE DMS 001, RE DMS 003, RE DMS DA1 and RE DMS DA3.

#### **Technical features**

REFERENCE	AC DMS 001
Operating temperature	0ºC ~ +40ºC
Dimensions	105 x 50 x 34mm
Protection rating	IP20 according to UNE 20324



## CO REG RO5

#### **Remote Control to Adjust Constant Control Settings**



- IR remote control to adjust and control automatic control systems.
- Its main function is to more easily and precisely adjust the programming of these systems without having to access the ceiling.
- Also enables manual control (switch on/off and dimming) of the lighting connected to these types of devices.
- IR communication, therefore, with a single remote all devices in a facility can be dimmed.
- Compatible with: RE DMS 001, RE DMS 003, RE DMS 004, RE DMS DA1, RE DMS DA3 and RE DMS DA4.

#### **Technical features**

REFERENCE	CO REG RO5
Supply voltage	1 battery 3 V CR2032
Dimensions	105 x 50 x 12mm
Operating temperature	0ºC ~ +40ºC
Protection rating	IP20 according to UNE 20324

## **DM SEN TO3**

#### **Slave Motion Detector for Constant Control Systems**



- Slave detector to be installed together with constant control systems.
- Enables coverage of motion detection to be increased.\_
- Option of connecting up to 14 slave detectors to a single master.
- Compatible with: RE DMS DA1, RE DMS DA3, RE DMS 001 and RE DMS 003.

#### **Technical features**

REFERENCE	DM SEN TO3					
Coverage	360° and Ø7 m at height of 2.5 m and 18°C					
Protection rating	IP20 according to UNE 20324					

### **CO POT 001**

#### 10 $K\Omega$ Rotary Potentiometer



- 10  $K\Omega$  rotary potentiometer to activate brightness dimmers.
- Simple installation on any blanking plate of any series of mechanisms, or on the door of a wardrobe.
- · Supplied with screw, washer, nut and silver grey button.



04

# Motion and Presence Detectors

**Assembly on ceiling** 

Assembly on ceiling with minimum level adjustment

Assembly on wall

**Assembly in flush-mount box** 

Hidden high-frequency

Wireless

**Detector accessories** 

# **Motion and Presence** Detectors

#### **ENERGY, a finite resource**

According to studies, 20% of the world's electricity is used for lighting and a large part of that is not used efficiently.

Often, in buildings and rooms that are unoccupied or have a sufficient supply of natural light, lighting is kept switched on, which leads to a waste of money and energy. Thanks to motion detectors and brightness sensors, this wastage can be considerably and easily reduced.

DINUY manufactures lighting controls and its solutions reduce energy consumption to a minimum, as well as its associated costs.

#### **Detection technology**

Motion detectors are designed to detect moving heat sources inside their range of coverage with high levels of precision. In addition, since they feature a built-in brightness sensor, lighting switching can be limited to ambient brightness when motion is detected. After detecting movement, and after the set amount of time has passed, the lighting is disconnected automatically.

Thanks to their highly sensitive PIR sensor, as well as their design which includes a Fresnel lens with more than 135 hexagons, motion detectors are the perfect solution when it comes to controlling the lighting in a room or area of transit depending on the presence of people.

The detector's lens' coverage area is divided into multiple small segments in which the heat radiation emitted by people or animals, for example, is measured. As differences in temperature are caused in the different segments due to movement, these are captured by the PIR sensor.

Detectors have time, brightness and sensitivity settings that can be adjusted to the needs of each facility via their built-in potentiometers or using a remote control, which is much more convenient and faster.

The majority of DINUY detectors have 16 A relays, as well as Zero-Crossing Technology (ZCT), which enables the switching of all kinds of loads without the risk of these being damaged by high peaks of current during switches.

#### Made in Spain - manufacturing and design

The Technical Department is constantly researching and developing new solutions that can meet our customers' needs.

The design, development and production are all carried out at our facilities, which gives us full knowledge of these types of devices.

"Own technology and design"



#### Difference between motion and presence

Presence and motion detectors use the same infrared detection technology based on changes in temperature and detecting small movements within their coverage area. The difference between both lies in the way in which the brightness setting is measured. Presence detectors measure brightness constantly and are capable of disconnecting the lighting if the natural brightness level increases, even if people remain in their area of detection. On the other hand, motion detectors measure brightness only when they detect movement and they disable the lighting when the time delay passes after last detection.

Application of motion detectors: corridors, bathrooms, etc.

Application of presence detectors: offices, schools, rooms in permanent use, etc.

#### Advantages and main uses:

Comfort: convenience when entering and exiting rooms, without having to remember to switch lights on or off.

**Savings:** reduction in electricity consumption for lighting, thanks to its rational use.

#### **Project consultancy**

You can find the solution that best suits each project within the DINUY catalogue and our technical specialists will offer all the support and advice required via email: proyectos@dinuy.com

#### **Motion Detector Selection Table**

REFERENCE	DESCRIPTION	Assembly	Coverage		Zero Crossing Technology	LED Load	Output	Potential- free	Remote Control	IP
				_/_	ZCT	<b>-</b>			# 1	
DM TEC B3B	White	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Арр	IP40
DM TEC B3P	Silver	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Арр	IP40
DM TEC B3N	Black	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Арр	IP40
DM TEC B1B	White	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	App	IP40
DM TEC B1P	Silver	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	App	IP40
DM TEC B1N	Black	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	App	IP40
DP TEC 003	White	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DP TEC 03N	Black	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DP TEC 03P	Silver	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DP TEC 001	White	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DP TEC 01N	Black	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DP TEC 01P	Silver	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 008	1 channel	Recessed in ceiling	Ø7m 360º	10A	Yes	200W	On/Off	No	No	IP40
DM TEC 003	White	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 03P	Silver	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 03N	Black	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 001	White	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 01P	Silver	Ceiling	Ø7m 360°	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 01N	Black	Ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 000	Mini	Recessed in ceiling	Ø6m 360º	10A	Yes	400W	On/Off	No	No	IP40
DM TEC 004	With slaves	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	No	Yes	IP40
DM SEN TO3	Slave	Recessed in ceiling	Ø7m 360º		-	-	-	-	Yes	IP40
DM TEC 002	2 channels	Recessed in ceiling	Ø7m 360º	16A	Yes	400W	On/Off	Yes	Yes	IP40
DM TEC PA1	Special - Corridor	Recessed in ceiling	22m x 4m	16A	Yes	400W	On/Off	No	Yes	IP40
DM TEC 011	Potential-free	Recessed in ceiling	Ø7m 360°	16A	Yes	400W	On/Off	Yes	Yes	IP40
DM TEC 010	Great height	Ceiling	Ø16m 360°	10A	No	400W	On/Off	No	Yes	IP54
DM TEC 300	Great coverage	Ceiling or recessed	Ø30m 360º	10A	No	400W	On/Off	No	Yes	IP44
DM TEC 241	24 V	Ceiling	Ø7m 360°	16A	Yes	200W	On/Off	Yes	Yes	IP40
DM TEC 243	24 V	Recessed in ceiling	Ø7m 360°	16A	Yes	200W	On/Off	Yes	Yes	IP40
DM TEC IV1	Inverted output	Ceiling	Ø7m 360°	16A	Yes	400W	On/Off	Yes	No	IP40
DM TEC IV8	Inverted output	Recessed in ceiling	Ø7m 360°	16A	Yes	400W	On/Off	Yes	No	IP40
DM TE1 001	Minimum level adjustment	Ceiling	Ø7m 360°	16A	Yes	80 Drivers	1-10V	No	Yes	IP40
DM TE1 002	Minimum level adjustment	Recessed in ceiling	Ø7m 360°	16A	Yes	80 Drivers	1-10V	No	Yes	IP40
DM TE1 DA1	Minimum level adjustment	Ceiling	Ø7m 360°	16A	Yes -	64 Drivers	DALI	No	Yes	
DM TE1 DA2 DM BRA 000	Minimum level adjustment Surface	Recessed in ceiling Wall or ceiling	Ø7m 360° 12m 180°	- 10A	- No	64 Drivers 400W	DALI On/Off	No Yes	Yes No	IP40 IP55
DM SUP 000	Surface	Wall or ceiling		16A	Yes	400W 400W	On/Off	No Yes	Yes	IP55 IP44
DM SUP 000	Surface	vvaii Wall	12m 180° 12m 240°	16A	Yes	400W 400W	On/Off	No	Yes	IP54
DM SOP 002 DM CAM 001	3 wires	Mechanism box	8m 200°	16A	Yes	400W 400W	On/Off	No No	Yes	IP54 IP40
DM CAM 001	2 wires	Mechanism box	8m 200°	1A	Yes	100W	On/Off	No	No Yes	IP40
DM HF1 000	High-frequency	Hidden	Ø8m 360°	4A	No.	200W	On/Off	No	No	IP40
שיו חרו טטט	raigh-frequency	піцаеп	שסווו אסטיי	4A	INO	ZUU VV	OH/OH	INO	INO	1140

# The perfect solution for an efficient and sustainable installation





This new range of Bluetooth-controlled sensors is a cutting-edge solution for installers' professional projects and demonstrates our commitment to technological innovation, functionality, the environment and avant-garde design.

Discover the attributes that make this product range UNIQUE:



## 1st sensor with an eco-design

in installation time Designed with high quality WAGO® screwless connection terminals, the only kind on the market that reduces installation times by enabling installers to connect 16 sensors in the time it would take to

install 10 traditional sensors.

60% reduction

Never before has there been a motion sensor with an eco-design manufactured in Spain that reduces the use of paper and cardboard by up to 78% and is produced via a production process that uses 50% renewable energy, with an almost 40% reduction in components used.

#### 3 functions in 1

DINUY is the only product of its kind that acts as a motion sensor, presence detector and twilight switch all in one, so you always have the function you need for every project. You can also choose the NA or NC contact status with a high breaking capacity of 16A.



#### Reduced carbon footprint

We are fully committed to the environment and to the sustainability of our planet. With these products, every year we help to reduce carbon emissions by an amount that is the equivalent of 500 trees or the emissions of a vehicle driving around the world twice.



#### Low-energy **Bluetooth technology**

No more configurations by remote control or via a selector switch in hazardous situations or at great heights. You can now use your mobile device to make adjustments with precision and flexibility.



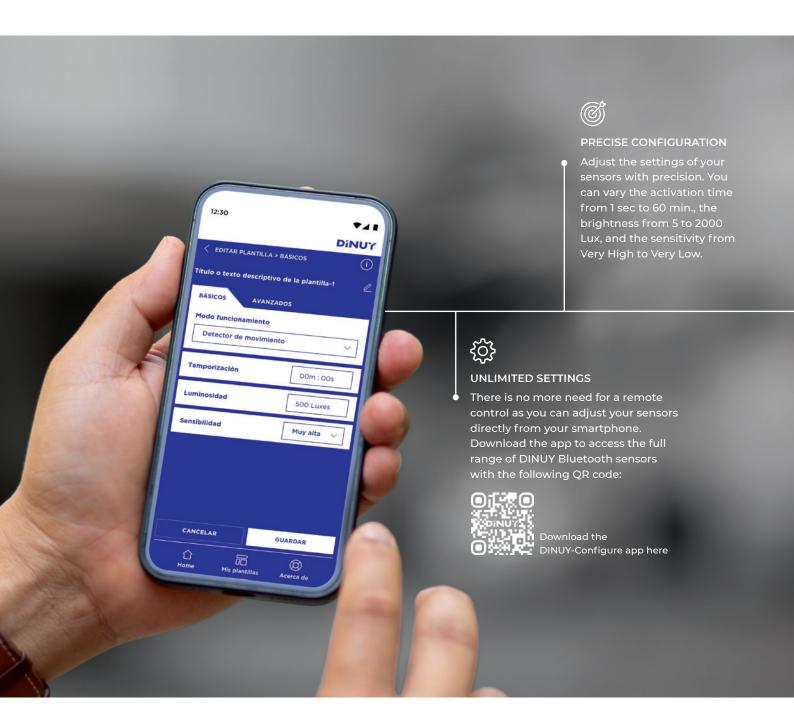
#### Simple and intuitive app

An innovative app that replaces traditional controls, so you can use your mobile device to set up and adjust all the sensors with precision, even making templates for repetitive projects.

## With the app, everything can be controlled through your mobile device

With the new app designed for our entire range of Bluetooth sensors, we have prioritised simplicity and intuition. The user interface has been designed to be user-friendly, so that the installer can configure all of the settings on the sensor.

Now you can easily adjust the settings on your sensors directly from your mobile device.









#### ADVANCED FEATURES

Our sensors offer great versatility thanks to features such as reverse logic and inverted contact, selecting the contact status as either NO or NC. Ideal for specialised applications such as controlling ultraviolet lighting or access to hotel rooms.



#### WARRANTY REGISTRATION

With just one click, you can obtain the warranty certificate by filling in a simple form in the application. Record your systems so you can access the warranty whenever you need.



#### 3 FUNCTIONS IN 1

You can enjoy three individual functions within one single sensor.

- 1. Movement sensor: perfect for areas with moving traffic.
- 2. Presence detector: ideal for spaces that require a constant presence.
- Twilight switch: advanced twilight sensor for indoor applications. It exclusively measures brightness to turn lights on and off automatically.



#### SIMPLIFY YOUR PROJECTS

There is the option to create templates to save specific configurations and apply repeated settings in each system. Efficiency is in your hands.



#### PROTECT YOUR WORK

Lock your sensors once you have configured them from the settings screen. Prevent unauthorised changes and maintain full control of your systems and projects.

## The new generation of current and future sensors

At DINUY we are committed to innovation, offering advanced solutions that satisfy both the current and future needs of our most demanding customers.

Our ability to design, develop and manufacture at our facilities provides us with extensive expertise on these types of devices and the flexibility to always work with our markets in mind.

As a result, DINUY plans to revolutionise the electricity sector via our new technologies and set new trends for the use of cutting-edge lighting.

#### Technology to create a better world

20% of the world's electricity is used for lighting and a large part of that is not used efficiently. In buildings and rooms that are unoccupied or have a sufficient supply of natural light, lighting is kept switched on. which leads to a waste of money and energy.

These cutting-edge devices not only minimise the use of artificial light, providing energy savings of 40%, they also enable automatic activation of energyefficient systems, offering comfort and savings when most needed.

As part of our commitment to sustainability and the environment, DINUY has gone one step further, designing this generation of Bluetooth sensors and launching the market's first eco-designed sensor, which reduces carbon emissions by almost 15%, avoiding the need for battery-controlled remote controls, among other components, which significantly increase the carbon footprint.

These new sensors with "3 in 1" functions demonstrate our design's new focus on sustainability, eco-design, optimisation of resources, better logistics and local manufacturing.

#### Technology to create safer projects

· Highly sensitive PIR sensor

Contains a state-of-the-art dual sensor that, in combination with a Fresnel lens, is capable of sending infrared waves to detect the slightest movement or presence of people.

It also includes 5 different sensitivity options, which can be set up via the DINUY Configure app.

· Zero Crossing Technology (ZCT)

Technology that applies to both the opening and closing of the relay in its zero crossing of the sine wave voltage and current that improves the performance of the relay contacts and the switching of all types of loads (including LED lamps), thus extending the life of the detector itself.

This technology makes it the only sensor on the market that provides a high-capacity breaking relay of 16A.

Bluetooth Low Energy (BLE)

It includes a Bluetooth low-energy module with the lowest consumption in the world. Our goal is to expand this BLE technology to all applications, promoting the digital revolution throughout our product range.

This module also offers a unique combination: the lowest power and the integration of all external components, including the receiving antenna.

Highly sensitive light sensor

The light sensor works in conditions of almost total darkness (5 Lux) and with a wide brightness range, which can reach up to 2000 Lux.

This digital sensor is almost as sensitive to light intensity as the human eye. It has a dual-diode architecture and UV rejection filter and is not affected by other non-visible electromagnetic waves.









DM TEC B3P



DM TEC B3B

DM TEC B1B











DM TEC BIN



DM TEC B1P

### Technology for better comfort and efficiency

· Screwless connection terminals

A robust design that incorporates Wago® innovative and original push-in clamp connection terminals, redefining efficiency and safety in electrical connections. This direct-insertion technology, the most advanced on the market, offers exceptional versatility with snap-in termination that ensures conductors are connected correctly and provides energy savings of 60% on your system.

The conductor section is flexible, available in up to 4 mm2. With extra-reinforced levers for opening the clamp, strategic test points and a clear position indicating the connection status, they set a new standard in the industry. With tool-free maintenance, it is the only sensor on the market that reduces installation times so much that installers can connect 16 sensors in the time it would take to connect 10 traditional sensors.

· Configure via a smartphone

The sensor installation and programming has been completely converted to Bluetooth, with no more need for complex configurations and adjustments. Everything can now be remotely controlled from mobile devices, removing the need for remote controls or manual adjustments from hazardous situations or great heights. Because we also care about the safety of installers.

Our simple and intuitive app makes work easier for the installer. The straightforward user interface has been designed to enable simple configuration of the sensor and a fast and efficient installation.

It can also be configured from the workshop and assembled by personnel, so it is ready for use.

# Technology for optimising logistics and design

· Compact and functional design

The combination of design and advanced technology is another notable advantage. By dispensing with traditional potentiometer adjustments, we not only achieve a cleaner and more elegant design, but also reduce the possibility of manual adjustment errors.

This enables us to offer a robust and practical design that can be installed by all kinds of professionals, thus democratising technology and digitisation with these innovative sensors.

Because innovation is not only in the design.

· Optimising logistics

Did you ever think it would be possible to have it all in one single product?

Well, DINUY has made this possible. You no longer need to choose between a motion sensor, presence detector or twilight switch, with adjustable sensitivity, open or closed contact, and breaking capacity of 6, 10 or 16A.

This new generation of sensors optimises your logistics and allows you to have it all with just one device. What previously you would have needed 24 products to achieve, you can now do with one device.

From now on, you will only need this one exclusive product to meet all your needs.

This product from DINUY will now be an essential part of every professional's toolbox.

# DM TEC B3B/B3P/B3N

# Bluetooth sensor recessed in ceiling



- High-quality, cutting-edge sensor with PIR technology for recessed installation in ceiling.
- The sensor can be configured in 3 different modes: Movement sensor, presence detector or twilight switch.
- Original push-in clamp (direct insertion) connection terminal. Reduce installation times by 60%.
- ZCT (Zero-Crossing Technology), zero-crossing closing and opening of the 16A relay, enabling control of large loads without damaging the relay.
- NA or NC contact status configurable from the app.
- Configuration and settings via the app on your smartphone with Bluetooth.
- Suitable for all types of loads: LEDs, fluorescent light, etc.
- Elegant and minimalist design without physical potentiometers.
- Examples of use: apartment buildings, bathrooms, schools, offices, hotels, etc.









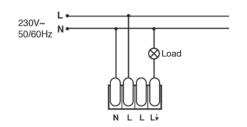
# **Technical features**

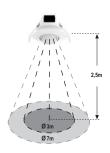
REFERENCE	DM TEC B3B	DM TE	C B3P	DM TEC B3N
Supply voltage	230 V~ 50/60 Hz			
Self-consumption	<1W			
Installation		Recessed	in ceiling	
Configuration	Via Android or iOS app wi	Via Android or iOS app with Bluetooth v5.1 or previous versions (v4.1, v4.2, v5.0)		
Detection field	360º ar	nd Ø7 m at hei	ght of 2.5 m a	nd 18ºC
Relay breaking capacity		16	Α	
LED lamps		400	) W	
230 V incandescent and halogen lamps		300	0 W	
12 V halogen lamps with electronic transformer	3000 W			
Halogen lamps with ferromagnetic transformer	2400 W			
Fluorescent lamps	1300 W (130 μF)			
Contactor permitted	Yes			
Potential-free contact	No			
Contact status	NA or NC (configurable from the app)			app)
Output channels		1	1	
Timer	1 :	sec ~ 60 min.	Factory defa	ult: 1 min.
Brightness level	5 ~ 2000 Lux or	deactivated	Factory defa	ult: deactivated
Sensitivity	5 adjustable levels Factory default: very high			ult: very high
Dimensions	80 x 63.5 mm			
Operating temperature	-10 °C ~ +45 °C			
Protection rating	IP40, Class II			
Colour	White Silver Black		Black	

### **Dimensions**

# 63,5mr Ø 80mm 45mm 63,5mm

# **Installation diagrams**







# DM TEC B1B/B1P/B1N

# Bluetooth sensor for surface installation on ceiling



- High-quality, cutting-edge sensor with PIR technology for surface installation on ceiling.
- The sensor can be configured in 3 different modes: Movement sensor, presence detector or twilight switch.
- NA or NC contact status configurable from the app.
- ZCT (Zero-Crossing Technology), zero-crossing closing and opening of the 16A relay, enabling control of large loads without damaging the relay.
- Configuration and settings via the app on your smartphone with Bluetooth.
- Suitable for all types of loads: LEDs, fluorescent light, etc.
- Examples of use: apartment buildings, bathrooms, schools, offices, hotels,



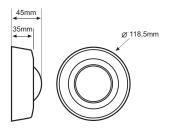




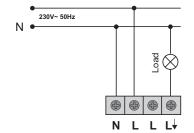
# **Technical features**

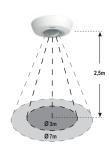
REFERENCE	DM TEC B1B	DM TE	C B1P	DM TEC B1N
Supply voltage		230 V~ 50/60 Hz		
Self-consumption		< 1 W		
Installation		Ceiling	surface	
Configuration	Via Android or iOS app w	ith Bluetooth v	5.1 or previous	versions (v4.1, v4.2, v5.0)
Detection field	360º a	nd Ø7 m at hei	ght of 2.5 m a	nd 18ºC
Relay breaking capacity		16	А	
LED lamps		400	) W	
230 V incandescent and halogen lamps		300	0 W	
12 V halogen lamps with electronic transformer		3000 W		
Halogen lamps with ferromagnetic transformer	2400 W			
Fluorescent lamps	1300 W (130 μF)			
Contactor permitted		Yes		
Potential-free contact		No		
Contact status	NA (	NA or NC (configurable from the app)		
Output channels		1		
Timer	1	sec ~ 60 min.	Factory defa	ult: 1 min.
Brightness level	5 ~ 2000 Lux o	5 ~ 2000 Lux or deactivated Factory default: deactivate		ult: deactivated
Sensitivity	5 adjı	5 adjustable levels Factory default: very high		ult: very high
Dimensions		118.5 x 45 mm		
Operating temperature		-10 °C ~ +45 °C		
Protection rating		IP40, Class II		
Colour	White	White Silver		Black

### **Dimensions**



# **Installation diagrams**







# **Detector Recessed In Ceiling**

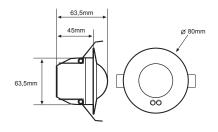


- Motion detector, with PIR technology, for recessed installation on ceiling.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted using potentiometers.
- Examples of use: corridors, bathrooms, neighbourhood communities, etc.

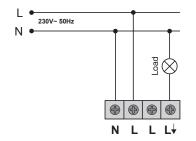
# **Technical features**

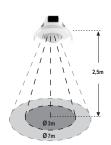
REFERENCE	DM TEC 008	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Relay breaking capacity	10 A	
LED lamps	200 W	
230 V incandescent and halogen lamps	2000 W	
12 V halogen lamps with electronic transformer	2000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	600 W (100 μF)	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	6 s ~ 12 min	
Brightness level	3 ~ 100 Lux	
Sensitivity	Not adjustable	
Dimensions	80 x 63.5mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **Detector with Potential-Free Contact**



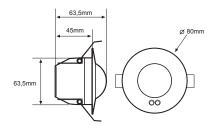
- Motion detector, with PIR technology, for recessed installation on ceiling.
- Has a potential-free contact.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors, bathrooms, neighbourhood communities, etc.



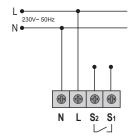
# **Technical features**

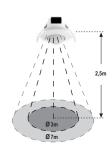
REFERENCE	DM TEC 011	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Relay breaking capacity	16 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	3000 W	
12 V halogen lamps with electronic transformer	3000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	1300 W (130 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	6 s ~ 12 min	
Brightness level	3 ~ 100 Lux	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Dimensions	80 x 63.5mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **Detector Recessed In Ceiling 24 V**



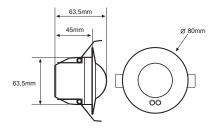
- Motion detector, with PIR technology, for recessed installation on ceiling.
- Powered by 24 V.
  ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps,
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors, bathrooms, neighbourhood communities, etc.



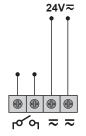
# **Technical features**

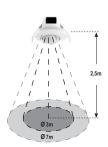
REFERENCE	DM TEC 243	
Supply voltage	24 VCC or 24 VCA	
Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Relay breaking capacity	16 A	
LED lamps	200 W	
230 V incandescent and halogen lamps	1500 W	
12 V halogen lamps with electronic transformer	1500 W	
Halogen lamps with ferromagnetic transformer	1000 W	
Fluorescent lamps	650 VA (65 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	6 s ~ 12 min	
Brightness level	3 ~ 100 Lux	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Dimensions	80 x 63.5mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM TEC IV8**

# **Detector with Inverted Relay**



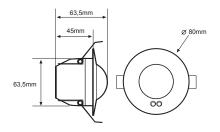
- Motion detector, with PIR technology, for recessed assembly on ceiling.
- Has one output channel with 16 A relay, potential-free, and usually closed contact.
- Inverse operation logic: switches off lighting when it detects a movement.
- A second timer allows the lighting to be activated once it ceases to detect movement and after the set time delay passes.
- ZCT (Zero-Crossing Technology), which enables protection of its relay and the switching of high powers.
- Suitable for all lamp types, including LED and UV (ultraviolet) lamps.
- Example of use: control of germicidal lamps used to disinfect rooms.



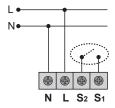
### **Technical features**

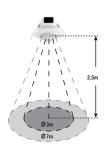
REFERENCE	DM TEC IV8	
Supply voltage	230 V~ 50 Hz	
Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
LED lamps	400 W	
230 V incandescent and halogen lamps	3000 W	
12 V halogen lamps with electronic transformer	3000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	1300 W (130 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	Detection delay: 1 ~ 20 min / Activation delay: 5 ~ 90 min	
Brightness level	Not adjustable	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Dimensions	80 x 63.5mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM TEC PA1**

# **Special Detector for Corridors**



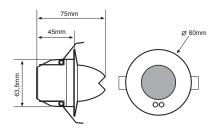
- Motion detector, with PIR technology, for recessed installation on ceiling.
- Designed specially for corridors, with coverage of 22 m x 4 m.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors in schools, offices, hotels, etc.



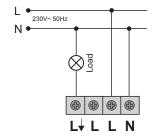
# **Technical features**

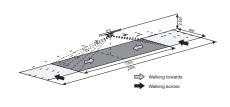
REFERENCE	DM TEC PA1	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	22 m x 4 m at height of 2.5 m and 18°C	
Relay breaking capacity	16 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	3000 W	
12 V halogen lamps with electronic transformer	3000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	1300 W (130 μF)	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	6 s ~ 12 min	
Brightness level	3 ~ 100 Lux	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Dimensions	80 x 75mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **Mini-detector**

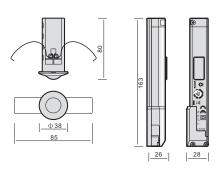


- Mini motion detector, with PIR technology, for recessed installation on ceiling.
- Its design and small size of Ø38 mm ensure it goes almost unnoticed in all types of décor.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted using potentiometers.
- Examples of use: vestibules, wardrobes, etc.

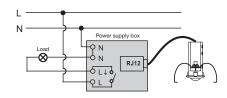
# **Technical features**

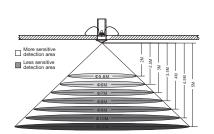
REFERENCE	DM TEC 000	
Supply voltage	230 V~ 50 Hz	
Self-consumption	< 1 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø6 m at height of 2.5 m and 18°C	
Relay breaking capacity	10 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	2000 W	
12 V halogen lamps with electronic transformer	1000 W	
Halogen lamps with ferromagnetic transformer	1000 W	
Fluorescent lamps	900 VA (100 μF)	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	Pulse 1 s/1 min/5 min/10 min/15 min, Test	
Brightness level	10 ~ 1000 Lux	
Sensitivity	Adjustable using potentiometer	
Dimensions	38 x 80mm	
Operating temperature	0ºC ~ +45ºC	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# DM TEC 002/004 - DM SEN T03

# **Detector Recessed** In Ceiling



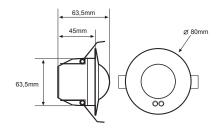
- Motion detectors, with PIR technology, for recessed installation on ceiling.
- Two models:
- DM TEC 002: with two independent output channels:
- DM TEC 004: with option of expanding its coverage via slave sensors (DM SEN TO3).
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors, bathrooms, neighbourhood communities, etc.



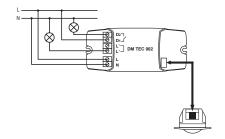
# **Technical features**

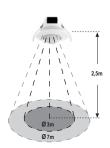
REFERENCE	DM TEC 002	<b>DM TEC 004</b>	DM SEN TO3	
Supply voltage	230 V~ 5	230 V~ 50 Hz		
Self-consumption	< 1 W	< 1 W		
Assembly		Recessed in ceiling		
Detection field	360º and	Ø7 m at height of 2.5 m	and 18°C	
Relay breaking capacity	16 A		-	
LED lamps	400 V	N	-	
230 V incandescent and halogen lamps	3000	W	-	
12 V halogen lamps with electronic transformer	3000	W	-	
Halogen lamps with ferromagnetic transformer	2400	2400 W		
Fluorescent lamps	1300 W (13	1300 W (130 μF)		
Contactor permitted	Yes	Yes		
Potential-free contact	Yes	No	-	
Output channels	2	1	-	
Timer	6 s ~ 12 min / 10 s ~ 30 min	6 s ~ 12 min / 10 s ~ 30 min 6 s ~ 1		
Brightness level		3 ~ 100 Lux		
Sensitivity	Adjustable v	Adjustable via IR remote control (EM MAN DMO)		
Maximum no. extra motion detectors	-	- 14		
Dimensions		80 x 63.5mm		
Operating temperature		-10°C ~ +45°C		
Protection rating		IP40, Class II		

# **Dimensions**



# **Installation diagrams**





# **DP TEC 001/01P/01N**

# Presence Detector for Surface Installation On Ceiling



- Presence detector, with PIR technology, for surface installation on
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.

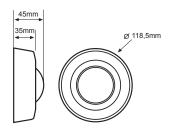


- · Constant measurement of light, enabling its operation to be limited to the natural light present at any given time. Regardless of the presence of a person, the detector will turn off, or will not switch on, the lighting provided that the brightness measured by the sensor is greater than the set limit.
- Examples of use: offices, schools, rooms in permanent use, etc.

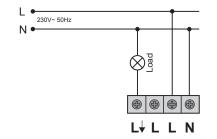
# **Technical features**

REFERENCE	DP TEC 001	DP TEC 01P	DP TEC 01N	
Supply voltage		230 V~ 50/60 Hz		
Self-consumption		<1 W		
Assembly		Surface installation on ceiling		
Detection field	360º a	nd Ø7 m at height of 2.5 m a	nd 18ºC	
Relay breaking capacity		16 A		
LED lamps		400 W		
230 V incandescent and halogen lamps		3000 W		
12 V halogen lamps with electronic transformer		3000 W		
Halogen lamps with ferromagnetic transformer		2400 W		
Fluorescent lamps		1300 W (130 μF)		
Contactor permitted		Yes		
Potential-free contact		No		
Output channels		1		
Timer		6 s ~ 30min		
Brightness level		5 ~ 1000 Lux		
Sensitivity	Adjustabl	Adjustable via IR remote control (EM MAN DMO)		
Dimensions		118.5 x 45mm		
Operating temperature		-10°C ~ +45°C		
Protection rating		IP40, Class II		
Colour	White	Silver	Black	

# **Dimensions**



# **Installation diagrams**





# DM TEC 001/01P/01N

# Motion Detector for Surface Installation On Ceiling



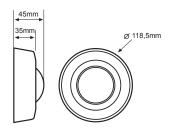
- Motion detector, with PIR technology, for surface installation on ceiling.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: garages, corridors, bathrooms, neighbourhood communities, etc.



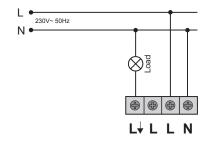
# **Technical features**

REFERENCE	DM TEC 001	DM TEC 01P	DM TEC 01N
Supply voltage	230 V~ 50/60 Hz		
Self-consumption	< 1 W		
Assembly	Surface installation on ceiling		
Detection field	360º ar	nd Ø7 m at height of 2.5 m a	nd 18°C
Relay breaking capacity		16 A	
LED lamps		400 W	
230 V incandescent and halogen lamps		3000 W	
12 V halogen lamps with electronic transformer		3000 W	
Halogen lamps with ferromagnetic transformer	2400 W		
Fluorescent lamps	1300 W (130 μF)		
Contactor permitted	Yes		
Potential-free contact	No		
Output channels	1		
Timer	6 s ~ 12 min		
Brightness level	3 ~ 100 Lux		
Sensitivity	Adjustable via IR remote control (EM MAN DMO)		
Dimensions	118.5 x 45mm		
Operating temperature	-10°C ~ +45°C		
Protection rating	IP40, Class II		
Colour	White	Silver	Black

# **Dimensions**



# **Installation diagrams**





# 24 V Detector for Surface Installation On Ceiling



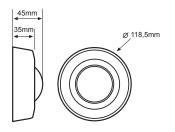
- Motion detector, with PIR technology, for surface installation on ceiling.
- Powered by 24 V.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors, bathrooms, neighbourhood communities, etc.



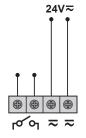
# **Technical features**

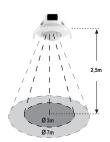
REFERENCE	DM TEC 241	
Supply voltage	24 VCC or 24 VCA	
Self-consumption	< 1 W	
Assembly	Surface installation on ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Relay breaking capacity	16 A	
LED lamps	200 W	
230 V incandescent and halogen lamps	1500 W	
12 V halogen lamps with electronic transformer	1500 W	
Halogen lamps with ferromagnetic transformer	1000 W	
Fluorescent lamps	650 VA (65 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	6 s ~ 12 min	
Brightness level	3 ~ 100 Lux	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Dimensions	118.5 x 45mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM TEC IV1**

# **Detector with Inverted Relay**



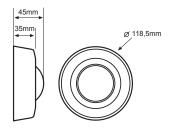
- Motion detector, with PIR technology, for surface installation on ceiling indoors.
- Has one output channel with 16 A relay, potential-free, and usually closed contact.
- Inverse operation logic. Enables the lighting to be switched off when movement is detected inside its coverage area.
- Furthermore, a second timer allows the lighting to be activated once it ceases to detect movement and after the set time delay passes.
- Operates independent to ambient lighting.
- Times can be adjusted using the potentiometer.
- ZCT (Zero-Crossing Technology), which enables protection of relays and the switching of high lighting powers.
- Example of use: control of germicidal lamps used to disinfect rooms.



# **Technical features**

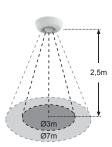
REFERENCE	DM TEC IV1	
Supply voltage	230 V~ 50 Hz	
Self-consumption	< 1 W	
Assembly	Surface installation on ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Relay breaking capacity	16 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	3000 W	
12 V halogen lamps with electronic transformer	3000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	1300 W (130 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	"Detection delay: 1 ~ 20 min / Activation delay: 5 ~ 90 min"	
Brightness level	Not adjustable	
Sensitivity	Adjustable via IR remote control (EM MAN DM0)	
Dimensions	118.5 x 45mm	
Operating temperature	-10°C ~ +45°C	
Protection rating	IP40, Class II	

### **Dimensions**



# **Installation diagrams**





# **Detector for Great Heights**

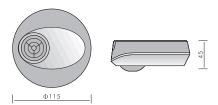


- Motion detector, with PIR technology, for surface installation on ceiling.
- Assembly at great height, up to 10 m.
  Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DM2).
- Examples of use: industrial premises, sports centres, warehouses, etc.

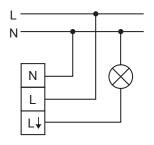
# **Technical features**

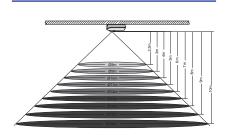
REFERENCE	DM TEC 010	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption Self-consumption	< 1 W	
Assembly	Surface installation on ceiling	
Detection field	360° and Ø16 m at height of 10 m and 18°C	
Installation height	2.5 m - 10 m	
Relay breaking capacity	10 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	2000 W	
12 V halogen lamps with electronic transformer	900 W	
Halogen lamps with ferromagnetic transformer	600 W	
Fluorescent lamps	900 VA (100 μF)	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	Pulse, 5 s ~ 10 min	
Brightness level	10 ~ 2000 Lux	
Sensitivity	Dimmable using potentiometer	
Dimensions	115 x 45mm	
Operating temperature	0°C ~ +45°C	
Protection rating	IP54, Class II	

# **Dimensions**



# **Installation diagrams**





# **Ceiling Detector with Great Coverage**

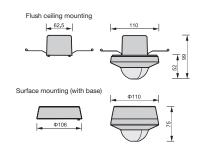


- Motion detector, with PIR technology, for surface or recessed installation on ceiling.
- Great area of detection, up to 30 m in diameter.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DM2).
- Examples of use: car parks, industrial premises, sports centres, etc.

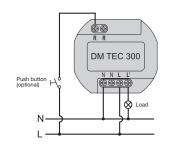
# **Technical features**

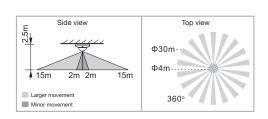
REFERENCE	DM TEC 300	
Supply voltage	230 V~ 50 Hz	
Self-consumption	< 1 W	
Assembly	Surface or recessed in ceiling	
Detection field	360° and Ø30 m at height of 2.5 m and 18°C	
Relay breaking capacity	10 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	2000 W	
12 V halogen lamps with electronic transformer	900 W	
Halogen lamps with ferromagnetic transformer	600 W	
Fluorescent lamps	900 VA (100 μF)	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	Pulse, 10 s ~ 30 min	
Brightness level	10 ~ 2000 Lux	
Sensitivity	Not adjustable	
Dimensions	110 x 75mm	
Operating temperature	-20°C ~ +45°C	
Protection rating	IP44, Class II	

# **Dimensions**



# Installation diagrams





# DM TE1 002/ DA2

# **Detectors with Minimum Light Level Adjustment**

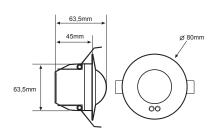


- Motion detectors that allow a minimum lighting level (0% ~ 50%) when no people are detected to be
- Suitable for dimmable 1/10 VCC and DALI devices.
- One output channel.
- Recessed installation in ceiling.
- Can be adjusted via remote control EM MAN DMO
- Option of expanding the motion detection area by using slave detectors (DM SEN T03).
- Examples of use: underground car parks, corridors in hospitals, hotels, public buildings, etc. and, in general, places where there is no desire to fully switch off the lighting, whether or not people are present.

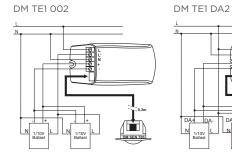
# **Technical features**

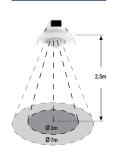
REFERENCE	DM TE1 002	DM TE1 DA2
Supply voltage	230 V~ 50 Hz	
Self-consumption	2 W	
Assembly	Recessed in ceiling	
Detection field	360° and Ø7 m at height of 2.5 m and 18°C	
Load type	1-10 V driver or ballast	DALI driver or ballast
Relay breaking capacity	16 A	-
LED lamps	400 W	-
Maximum no. of devices	125	64
Maximum absorption current per 1/10 V	500 mA	-
Maximum injection current per 1/10 V	250 mA	-
Contactor permitted	Yes	No
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	5 s ~ 10 min	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Maximum no. extra motion detectors DM SEN T03	14	
Switch-off level	0% ~ 50%	
Dimensions	80 x 63.5mm	
Operating temperature	0°C ~ +40°C	
Protection rating	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM TE1 001/DA1**

# **Detectors with Minimum Light Level Adjustment**



- Motion detectors that allow a minimum lighting level (0% ~ 50%) when no people are detected to be set.
- Suitable for dimmable 1/10 VCC and DALI devices.
- One output channel.
- Surface installation on ceiling.
- Can be adjusted via remote control EM MAN DMO
- Examples of use: underground car parks, corridors in hospitals, hotels, public buildings, etc. and, in general, places where there is no desire to fully switch off the lighting, whether or not people are present.

# **Technical features**

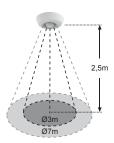
REFERENCE	DM TE1 001	DM TE1 DA1
Supply voltage	230 V~ 50 Hz	
Self-consumption	2 W	
Assembly	Surface installation on ceiling	
Detection field	360° and Ø7 m at height	t of 2.5 m and 18°C
Load type	1-10 V driver or ballast	DALI driver or ballast
Relay breaking capacity	16 A	
LED lamps	400 W	
Maximum no. of devices	125	64
Maximum absorption current per 1/10 V	500 mA	-
Maximum injection current per 1/10 V	250 mA	-
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	5 s ~ 10 min	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	
Switch-off level (%)	0% ~ 50%	
Dimensions	118.5 x 45mm	
Operating temperature	0°C ~ +40°C	
Protection rating	IP40, Class II	

# **Dimensions**

# 45mm Ø 118,5mm

# **Installation diagrams**





# **DM BRA 000**

# 180º Wall or Ceiling Detector

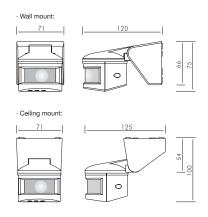


- Detector for indoors or outdoors with a high protection rating, IP55 Class II.
- For wall or ceiling installation with fully mobile head.
- High breaking capacity with all kinds of loads: LEDs, fluorescence, low consumption (CFL and PL), etc.
- Potential-free contact. Contactors permitted.
- Timer, brightness and sensitivity level adjustable using potentiometers.
- Examples of use: corridors, garages, warehouses, etc.

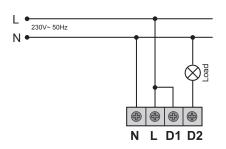
# **Technical features**

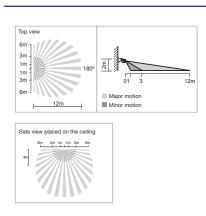
REFERENCE	DM BRA 000	
Supply voltage	230 V~ 50 Hz	
Self-consumption	< 1 W	
Assembly	Wall or ceiling	
Detection field	180º and 12 m at height of 2 m and 18ºC	
Relay breaking capacity	10 A	
LED lamps	400 W	
230 V incandescent and halogen lamps	2000 W	
12 V halogen lamps with electronic transformer	1000 W	
Halogen lamps with ferromagnetic transformer	1000 W	
Fluorescent lamps	900 VA (100 μF)	
Contactor permitted	Yes	
Potential-free contact	Yes	
Output channels	1	
Timer	Pulse (1 s), 5 s ~ 30 min and Test	
Sensitivity	Adjustable using potentiometer	
Dimensions	71 x 120 x 75mm	
Operating temperature	-20°C ~ +50°C	
Protection rating	IP55, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM SUP 000/002**

### **Wall Detectors**



### DM SUP 000

- Motion detector, with PIR technology,
- Motion detector, with PIR technology for surface installation on wall.
   Coverage of 12 m and 180°.
   ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
   Suitable for all types of loads: LEDs, fluorecent large incomplement.
- fluorescent lamps, incandescent
- lamps, etc.

  Can be adjusted via potentiometers or remote control (EM MAN DMO).
- Examples of use: corridors, garages, neighbourhood communities, etc.

### **DM SUP 002**

- Motion detector, with PIR technology, for surface installation on wall or in corner.
- Coverage of 12 m and 240°.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Examples of use: corridors, garages, neighbourhood communities, etc.



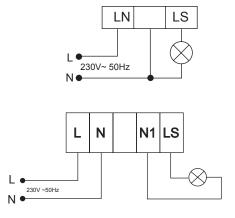
### **Technical features**

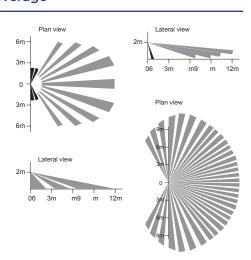
REFERENCE	DM SUP 000	DM SUP 002	
Supply voltage	230 V	230 V~ 50 Hz	
Self-consumption	< .	1 W	
Assembly	Wall	Wall or corner	
Detection field	180° and 12 m at height of 2 m and 18°C	240° and 12 m at height of 2 m and 18°C	
Relay breaking capacity	16	S A	
LED lamps	40	0 W	
230 V incandescent and halogen lamps	300	00 W	
12 V halogen lamps with electronic transformer	300	3000 W	
Halogen lamps with ferromagnetic transformer	240	2400 W	
Fluorescent lamps	1300 W	1300 W (130 μF)	
Contactor permitted	Y	Yes	
Potential-free contact	1	No	
Output channels		1	
Timer	5 s ~	5 s ~ 10 min	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	Adjustable via IR remote control (EM MAN DMO) or potentiometer	
Dimensions	65 x 80 x 95mm	80 x 130 x 100mm	
Operating temperature	-20°C	-20°C ~ +40°C	
Protection rating	IP44	IP54	

### **Dimensions**

# 65m m DM SUP 000 DM SUP 002 130mm

# **Installation diagrams**





# DM CAM 001/003

# **Detectors for Mechanism Box**



- Coverage of 8 m and 200°.
- Examples of use: corridors, bathrooms, etc.

### DM CAM 001:

- Three-wire installation, requires neutral.
- ZCT (Zero-Crossing Technology), enabling control of large loads without damaging the relay.
- Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.
- Can be adjusted via potentiometers or remote control (EM MAN DMO).

# DM CAM 003:

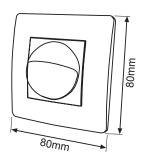
- Two-wire installation, does not require neutral.
- Suitable for LED, incandescent and halogen lamps.
- Can be adjusted using potentiometers.



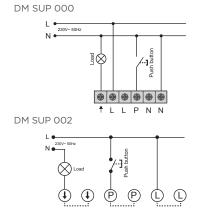
# **Technical features**

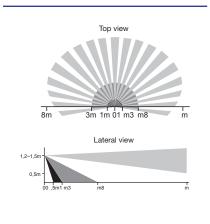
REFERENCE	DM CAM 001	DM CAM 003	
Supply voltage	230 V~ 5	O Hz	
Self-consumption	< 1 W	< 0.2 W	
Assembly	Mechanisi	n box	
Detection field	200º and 8 m at height	of 1.2-1.5 m and 18°C	
Relay breaking capacity	16 A	-	
LED lamps	400 W	3 - 100 W	
230 V incandescent and halogen lamps	3000 W	3 - 200 W	
12 V halogen lamps with electronic transformer	3000 W	3 - 100 W	
Halogen lamps with ferromagnetic transformer	2400 W	3 - 150 W	
Fluorescent lamps	1300 W (130 μF)	5 - 100 W (10 μF)	
Contactor permitted	Yes	No	
Potential-free contact	No	No	
Output channels	1		
Timer	30 s ~ 10 min	Pulse (4 s), 30 s ~ 10 min	
Sensitivity	Adjustable via IR remote control (EM MAN DMO)	Not adjustable	
Dimensions	80 x 40 x	80 x 40 x 80mm	
Operating temperature	0°C ~ +4	0°C ~ +45°C	
Protection rating	IP40, Cla	IP40, Class II	

# **Dimensions**



# **Installation diagrams**





# **DM HF1 000**

# **High-Frequency Detector**

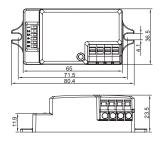


- Motion detector, with high-frequency (radar) technology, for hidden installation.
- Detection is possible through doors, glass, false ceilings, walls, etc. This requires a necessary adjustment in the limitation of the area covered to avoid false detections in adjacent rooms.
- This sensor's emissive power is less than 0.2 mW, which is approximately 1% of the transmission power of a mobile phone or microwave.
- Timer, brightness and sensitivity level adjustable using DIPs.
- Maximum coverage of 360° and Ø 8m at height of 2.5 m and 20°C ~ 25ºC.
- Suitable for all types of lamps, include LEDs and fluorescent lamps.
- Examples of use: public bathrooms, lifts, etc.

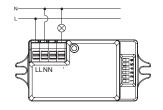
# **Technical features**

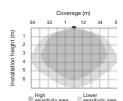
REFERENCE	DM HF1 000	
Supply voltage	230 V~ 50/60 Hz	
Self-consumption	< 0.5 W	
Assembly	Hidden	
Detection field	360° and Ø8 m at height of 2.5 m and 20-25°C	
Relay breaking capacity	4 A	
LED lamps	200 W	
230 V incandescent and halogen lamps	800 W	
12 V halogen lamps with electronic transformer	400 W	
Halogen lamps with ferromagnetic transformer	400 W	
Fluorescent lamps	200 W	
Contactor permitted	Yes	
Potential-free contact	No	
Output channels	1	
Timer	5 s ~ 15 min	
Sensitivity	Adjustable via DIPs	
Dimensions	80.4 x 36.5 x 23.5mm	
Operating temperature	-20ºC ~ +60ºC	
Protection rating	IP20, Class II	

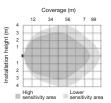
# **Dimensions**



# **Installation diagrams**







# **DM SEN RO2**

# **Wireless Detector**



- Battery-operated detectors with no need for work or wiring.
- Can combine up to 30 detectors with each receiver (MI ACC R01 or MI PLA R02).
- Encrypted emission on 868.4 MHz.
- Reach of 200 metres in open air.
- Surface detector with mobile base for installation on wall.
- Swivel head to optimise detection area.

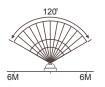
# **Technical features**

REFERENCE	DM SEN RO2	
Supply voltage	3 x batteries 1.5 V LR03	
Battery duration	> 4 years (50 det/day)	
Assembly	Wall or ceiling	
Detection field	120° and 6 m at height of 2.5 m and 18°C	
Sensitivity	Not adjustable	
Compatible with	DINUY radio frequency	
Radio frequency	868.3 MHz	
Maximum reach	200 m	
Dimensions	82 x 65 x 40mm	
Operating temperature	0ºC ~ +45ºC	
Protection rating	IP20, Class II	

# Coverage

# DM SEN RO2

TOP VIEW



High sensitivity area Lower sensitivity area

LATERAL VIEW



# MI PLA R01

# **Impulse Relay Receiver or Timer**

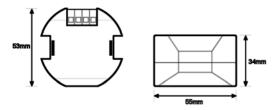


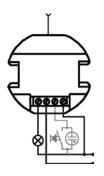
- Wireless receiver with switch or timer function.
- Has 16 A relay.
- Compatible with: DM SEN RO2, EM MIN 001 and EM PUL 002.
- Assembly in junction box.
- Examples of use: installation with wireless detectors, switch on/off of lights or electrical devices using remote, etc.

# **Technical features**

REFERENCE	MI PLA R01
Supply voltage	230 V~ 50 Hz
Self-consumption	40 mA
Assembly	Junction box
Relay breaking capacity	16 A
LED lamps	400 W
230 V incandescent and halogen lamps	3000 W
12 V halogen lamps with electronic transformer	3000 W
Halogen lamps with ferromagnetic transformer	2400 W
Fluorescent lamps	1300 W (130 μF)
Contactor permitted	Yes
Potential-free contact	No
Timer	30 s ~ 10 min
Compatible with	DINUY radio frequency
Radio frequency	868.3 MHz
Maximum reach	200 m
Dimensions	55 x 53 x 34mm
Operating temperature	-10°C ~ +45°C
Protection rating	IP20, Class II

# **Dimensions**





# MI ACC R01

# **Pulse Receiver**

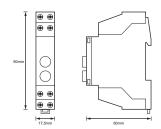


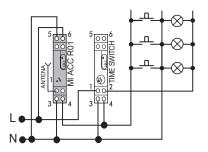
- Wireless receiver with pulse function (5 s).
- Has a potential-free contact.
  Compatible with: DM SEN RO2, EM MIN 001 and EM PUL 002.
- Assembly on DIN rail box.
- Examples of use: activation of staircase time switches, electric locks, industrial extractors, etc.

# **Technical features**

REFERENCE	MI ACC R01
Supply voltage	230 V~ 50 Hz
Self-consumption	35 mA
Assembly	DIN rail
Relay breaking capacity	3 A
LED lamps	Not permitted
230 V incandescent and halogen lamps	600 W
12 V halogen lamps with electronic transformer	600 W
Halogen lamps with ferromagnetic transformer	400 W
Fluorescent lamps	Not permitted
Contactor permitted	Yes
Potential-free contact	Yes
Timer	5 s
Compatible with	DINUY radio frequency
Radio frequency	868.3 MHz
Maximum reach	200 m
Dimensions	1 module wide
Operating temperature	-10°C ~ +45°C
Protection rating	IP20, Class II

# **Dimensions**





# **EM MIN 001**



- This emitter can be used to activate
- receivers manually from anywhere. • Functions: Resettable timer or impulse relay (with MI PLA R01).
- Wireless battery-operated emitter.
- Must be connected to a conventional button.
- Compatible with: MI PLA R01 and MI ACC RO1.

### **Emitter for Button**

REFERENCE	EM MIN 001
Supply voltage	1 x battery 3 V CR2032 Battery duration of more than 4 years (50 emis./day)
Dimensions	42 x 45 x 12mm
Operating temperature	-10°C ~ +45°C
Protection rating	IP20, Class II

# **EM PUL 002**



- Enables amplification of the signal in facilities where there are issues with reach.
- Does not amplify impulse relay signals, only timer signals.
- Wireless battery-operated button.
- Must be connected to a c onventional button.
- Compatible with: MI PLA R01 and MI ACC RO1.

# **Emitter Button**

REFERENCE	EM PUL 002
Supply voltage	Battery duration of more than 4 years (50 emis./day)
Dimensions	77 x 28 x 21mm
Operating temperature	-10°C ~ +45°C
Protection rating	IP44, Class II

# **EM AMP 001**



- Enables amplification of the signal in facilities where there are issues with reach.
- · Does not amplify impulse relay signals, only timer signals.

# **Signal Amplifier**

REFERENCE	EM AMP 001
Supply voltage	230 V~ 50 Hz
Dimensions	42 x 45 x 12mm
Operating temperature	-10°C ~ +45°C
Protection rating	IP20, Class II

# EM MAN DMO/DM1

# **Remote Controls to Adjust Motion Detectors**



- IR remote control to adjust detector settings.
- Enables adjustment of: timer, brightness and sensitivity.
- · Offers three main advantages:
- Time saved on installation.
- Same settings for all detectors.
- Overrides potentiometers, avoiding undesired handling.
- The settings of one detector can be copied to another.

REFERENCE	EM MAN DMO	EM MAN DM1	
Supply voltage	1 x battery 3	3 V CR2032	
Dimensions	105 x 50	x 12mm	
Operating temperature	-10°C ~ +45°C		
Protection rating	IP51, Class II		
Compatible with:	DM TEC 001, DM TEC 002, DM TEC 003, DM TEC 004, DM TEC PA1, DM TEC 241, DM TEC 243, DM SUP 000, DM SUP 002, DM CAM 001	DM TEC 300	

# **EM MAN DM2**

# **Remote Controls to Adjust Motion Detectors**



- IR remote control to adjust settings of the detector DM TEC 010.
- Enables adjustment of: Timer and brightness.
- · Offers three main advantages:
- Time saved on installation.
- Same settings for all detectors.
- Overrides potentiometers, avoiding undesired handling.
- The settings of one detector can be copied to another.

REFERENCE	EM MAN DM2
Supply voltage	1 x battery 3 V CR2032
Dimensions	102.5 x 50 x 9mm
Operating temperature	-10°C ~ +45°C
Protection rating	IP51, Class II
Compatible with:	DM TEC 010

# AC DM-002

- RC filter to suppress the interference generated in switching due to inductive loads, such as relays, contactors, fluorescent lamps, LED lamps, transformers, etc.
- · Prevents continual re-firing of motion detectors caused by high inductive voltage generated in the switching of certain loads.

# MOTION DETECTOR RC FILTER

**RC Filter for Detectors** 



# Timed Devices Buttons

Proximity **Touch Timers** 

Timers

Staircase Light Timers

# PT GAR PRN/PRB

# **Contactless Proximity Button**



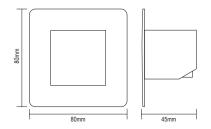
- Proximity button that activates lighting, or opens an automatic door, with no need for physical contact with the mechanism; simply move the hand towards it.
- Three operating modes: Resettable timer, impulse or impulse relay.
- Adjustment of detection distance (5-30 cm).
- Potential-free relay and ZCT (Zero-Control Technology).
- Assembly via clamps.
- White and black trim.

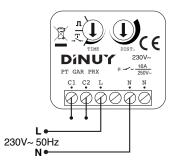


# **Technical features**

REFERENCE	PT GAR PRN	PT GAR PRB
Supply voltage	230 V~ 50 Hz	
Self-consumption	0.5 W	,
Dimensions	80 x 45 x 8	0mm
Installation	3 wire	S
Relay breaking capacity	16 A	
LED lamps	400 W	/
230 V incandescent and halogen lamps	3000 W	
12 V halogen lamps with electronic transformer	3000 W	
Halogen lamps with ferromagnetic transformer	2400 W	
Fluorescent lamps	1300 W	
Contactor permitted	Yes	
Permanent LED light	Yes	
Timer	1 s - 10 min	
Assembly	Universal box. Recessed. With clamps	
Operating temperature	0°C - +40°C	
Protection rating	IP20 according to UNE 20324	
Trim colour	Black	White

# **Dimensions**





# PT GAR 001/EL1

# **Touch Timer Button with Clamps**

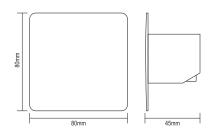


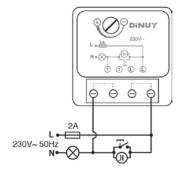
- Touch timer button with clamps.
- PT GAR 001: Two-wire installation.
- PT GAR EL1: Three-wire installation. Neutral required.
- Timer can be reset at any time.
- Option of external activation via conventional buttons.
- LED indicator, which is constantly illuminated.
- Assembly via clamps in universal mechanism box.
- · White.
- Examples of use: corridors, bathrooms, communities, etc.

# **Technical features**

REFERENCE	PT GAR 001	PT GAR EL1
Supply voltage	230 V~ 50 Hz	
Self-consumption	0.7	W
Dimensions	80 x 45 :	x 80mm
Installation	2 wires	3 wires
Relay breaking capacity	-	16 A
LED lamps	Not permitted	400 W
230 V incandescent and halogen lamps	500 W	3000 W
12 V halogen lamps with electronic transformer	500 W	3000 W
Halogen lamps with ferromagnetic transformer	400 W	2400 W
Fluorescent lamps	Not permitted	1300 W
Contactor permitted	No	Yes
Permanent LED light	Yes	
Timer	30 s - 12 min	
Light buttons	No	
Assembly	Universal box. Recessed. With clamps	
Operating temperature	0°C - +40°C	
Protection rating	IP20 according to UNE20324	

# **Dimensions**





# PT EMP 004/005/006

# **Touch Timer Button Attached with Screws**





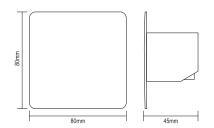


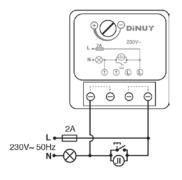
- Touch timer button with two wires.
- Recessed assembly in mechanism box. Safety screws to prevent theft.
- Timer can be reset at any time.
- Option of external activation via conventional buttons.
- LED indicator, which is constantly illuminated.
- Three different colours: white (4), anthracite (5) and silver (6).
- Examples of use: Corridors, communities, bathrooms, etc.

# **Technical features**

REFERENCE	PT EMP 004	PT EMP 005	PT EMP 006	
Supply voltage		230 V~ 50 Hz		
Self-consumption		0.7 W		
Dimensions		80 x 45 x 80mm		
Installation		2 wires		
Relay breaking capacity		-		
LED lamps		Not permitted		
230 V incandescent and halogen lamps		500 W		
12 V halogen lamps with electronic transformer		500 W		
Halogen lamps with ferromagnetic transformer		400 W		
Fluorescent lamps		Not permitted		
Contactor permitted		No		
Permanent LED light		Yes		
Timer		30 s - 12 min		
Light buttons		No		
Assembly	Univ	Universal box. Recessed. Safety screws		
Operating temperature		0°C - +40°C		
Protection rating		IP20 according to UNE20324		
Colour	White	Anthracite	Silver	

# **Dimensions**





# PT EMP EL4/EL5/EL6

# **Touch Timer Button Attached with Screws**

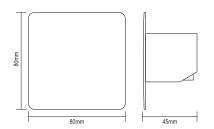


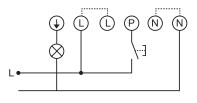
- Touch timer button with three wires.
- Recessed assembly in mechanism box. Safety screws to prevent theft.
- Timer can be reset at any time.
- Option of external activation via conventional buttons.
- · LED indicator, which is constantly illuminated.
- Three different colours: white (4), anthracite (5) and silver (6).
- Examples of use: Corridors, communities, bathrooms, etc.

# **Technical features**

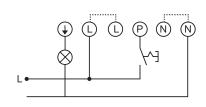
12 V halogen lamps with electronic transformer3000 WHalogen lamps with ferromagnetic transformer2400 WFluorescent lamps1300 W			
Dimensions         80 x 45 x 80           Installation         3 wires           Relay breaking capacity         16 A           LED lamps         400 W           230 V incandescent and halogen lamps         3000 W           12 V halogen lamps with electronic transformer         3000 W           Halogen lamps with ferromagnetic transformer         2400 W           Fluorescent lamps         1300 W	)mm		
Installation3 wiresRelay breaking capacity16 ALED lamps400 W230 V incandescent and halogen lamps3000 W12 V halogen lamps with electronic transformer3000 WHalogen lamps with ferromagnetic transformer2400 WFluorescent lamps1300 W	)mm		
Relay breaking capacity  LED lamps  400 W 230 V incandescent and halogen lamps  3000 W 12 V halogen lamps with electronic transformer  Halogen lamps with ferromagnetic transformer  2400 W Fluorescent lamps	лин		
LED lamps400 W230 V incandescent and halogen lamps3000 W12 V halogen lamps with electronic transformer3000 WHalogen lamps with ferromagnetic transformer2400 WFluorescent lamps1300 W			
230 V incandescent and halogen lamps3000 W12 V halogen lamps with electronic transformer3000 WHalogen lamps with ferromagnetic transformer2400 WFluorescent lamps1300 W			
12 V halogen lamps with electronic transformer3000 WHalogen lamps with ferromagnetic transformer2400 WFluorescent lamps1300 W			
Halogen lamps with ferromagnetic transformer 2400 W Fluorescent lamps 1300 W	3000 W		
Fluorescent lamps 1300 W	3000 W		
	2400 W		
Control to the second state of	1300 W		
Contactor permitted Yes	Yes		
Permanent LED light Yes	Yes		
Timer 30 s - 12 m	30 s - 12 min		
Light buttons No	No		
Assembly Universal box. Recessed	Universal box. Recessed. Safety screws		
Operating temperature 0°C - +40°	0°C - +40°C		
Protection rating IP20 according to	IP20 according to UNE20324		
Colour White Anthracit	e Silver		

# **Dimensions**





With additional conventional push button



With additional switch for permanent switch-on

# **PT SUP 004/EL4**

# **Surface Touch Timer Button**

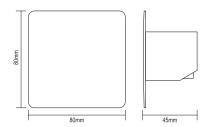


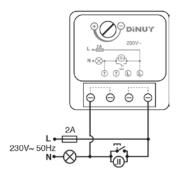
- Touch timer button for surface installation.
- Safety screws to prevent theft.
- Timer can be reset at any time.
- Option of external activation via conventional buttons.
- LED indicator, which is constantly illuminated.
- PT SUP EL4: two-wire surface.
- PT SUP 004: three-wire surface with neutral.
- Examples of use: Corridors, communities, bathrooms, etc.

# **Technical features**

REFERENCE	PT SUP 004	PT SUP EL4
Supply voltage	230 V~ 50 Hz	
Self-consumption	0.7	W
Dimensions	80 x 45 :	x 80mm
Installation	2 wires	3 wires
Relay breaking capacity	-	16 A
LED lamps	Not permitted	400 W
230 V incandescent and halogen lamps	500 W	3000 W
12 V halogen lamps with electronic transformer	500 W	3000 W
Halogen lamps with ferromagnetic transformer	400 W	2400 W
Fluorescent lamps	Not permitted	1300 W
Contactor permitted	No	Yes
Permanent LED light	Yes	
Timer	30 s - 12 min	
Light buttons	No	
Assembly	Surface. Safety screws	
Operating temperature	0ºC - +40ºC	
Protection rating	IP20 according to UNE20324	

# **Dimensions**





# MI PLA LEO/001R

# **Two-Wire Electronic Timer**



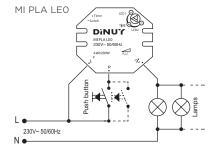
- Electronic timer for installation in mechanism box.
- Two-wire connection. Does not require neutral.
- The MI PLA LEO is suitable for LED lamps.
- Activated via buttons.
- Built-in non-resettable heat protection.

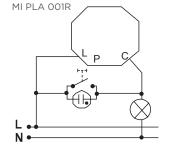
- Has two operating modes:
- Resettable timer: the timer cycle is started by pressing the button. If the button is pressed again during the cycle, the timer starts again.
- Timed impulse relay: the timer cycle is started by pressing the button. If the button is pressed again during the cycle, the timer is stopped and disconnected.

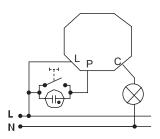
# **Technical features**

REFERENCE	MI PLA LEO	MI PLA 001R
Supply voltage	230 V~ 50/60 Hz	230 V~ 50 Hz
Self-consumption	0.7 W	5 VA
Dimensions	42 x 12 :	x 45mm
Installation	2 w	ires
LED lamps	80 W	Not permitted
230 V incandescent and halogen lamps	200 W	400 W
12 V halogen lamps with electronic transformer	200 W	400 W
Halogen lamps with ferromagnetic transformer	Not permitted	320 W
Fluorescent lamps	Not permitted	
Motors	Not permitted	
Contactor permitted	No	
Timed impulse relay	Yes	
Timer	30 s - 10 min	
Light buttons	No	Yes (maximum: 3)
Assembly	Mechanism box	
Operating temperature	0°C - +40°C	
Protection rating	IP20 according to UNE20324	

# **Dimensions**







# **MI PLA 002**

# **Three-Wire Timer**



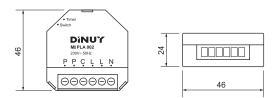
- Timer for installation in junction box.
- Three-wire connection model. Neutral required.
- Timer can be adjusted from 30 seconds to 10 minutes.
- Two operating modes: resettable timer or timed impulse relay.
- Timer can be reset at any time.
- Relay of 16 A.
- ZCT (Zero-Crossing Technology), which enables protection of relays and the switching of high lighting powers.
- Built-in heat protection.
- Suitable for controlling LED lamps, fluorescent lamps and contactors.
- Examples of use: corridors, communities, bathrooms, etc.

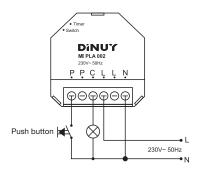


# **Technical features**

REFERENCE	MI PLA 002
Supply voltage	230 V~ 50/60 Hz
Self-consumption Self-consumption	0.7 W
Dimensions	46 x 24 x 46mm
Installation	3 wires
Relay breaking capacity	16 A
LED lamps	400 W
230 V incandescent and halogen lamps	3000 W
12 V halogen lamps with electronic transformer	3000 W
Halogen lamps with ferromagnetic transformer	2400 W
Fluorescent lamps	1300 W
Contactor permitted	Yes
Timed impulse relay	Yes
Timer	30 s - 10 min
Light buttons	Yes (maximum: 20)
Assembly	Junction box
Operating temperature	0°C - +40°C
Protection rating	IP20 according to UNE20324

# **Dimensions**





# MI EL3 003/004/304/305/125

# **Electronic Modules EL3000**



- · Staircase time switches for three- or four-wire installation.
- They have a manual, two-position switch: automatic switch-on or permanent switch-on.
- Resettable at any time.
- They each have a 16 A relay.
- ZCT (Zero-Crossing Technology), enabling control of large loads
- without damaging the relay.

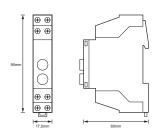
   Suitable for all types of loads: LEDs, fluorescent lamps, incandescent lamps, etc.

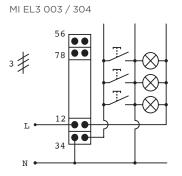


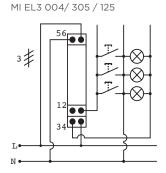
# **Technical features**

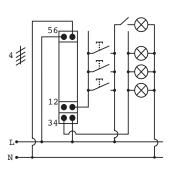
REFERENCE	MI EL3 003	MI EL3 004	MI EL3 304	MI EL3 305	MI EL3 125
Supply voltage	230 V~ 50 Hz			125 V~ 50 Hz	
Self-consumption	0.7 W				
Dimensions	17.5 x 53 x 90.5mm				
Installation	3 wires	3 and 4 wires	3 wires	3 and	4 wires
Relay breaking capacity			16 A		
LED lamps	400 W			200 W	
230 V incandescent and halogen lamps	3000 W			1500 W	
12 V halogen lamps with electronic transformer	3000 W			1500 W	
Halogen lamps with ferromagnetic transformer	2400 W			1200 W	
Fluorescent lamps	1300 W			650 W	
Contactor permitted	Yes				
Permanent lighting	Yes				
Switch-off warning		No		Yes	No
Timer	30 s -	10 min	2 min - 40 min	1 min - 12 min	30 s - 10 min
Light buttons	Yes (maximum: 100 mA)				
Assembly	DIN rail. 1 module				
Operating temperature	-10°C - 50°C				
Protection rating	IP20 according to UNE20324				

# **Dimensions**

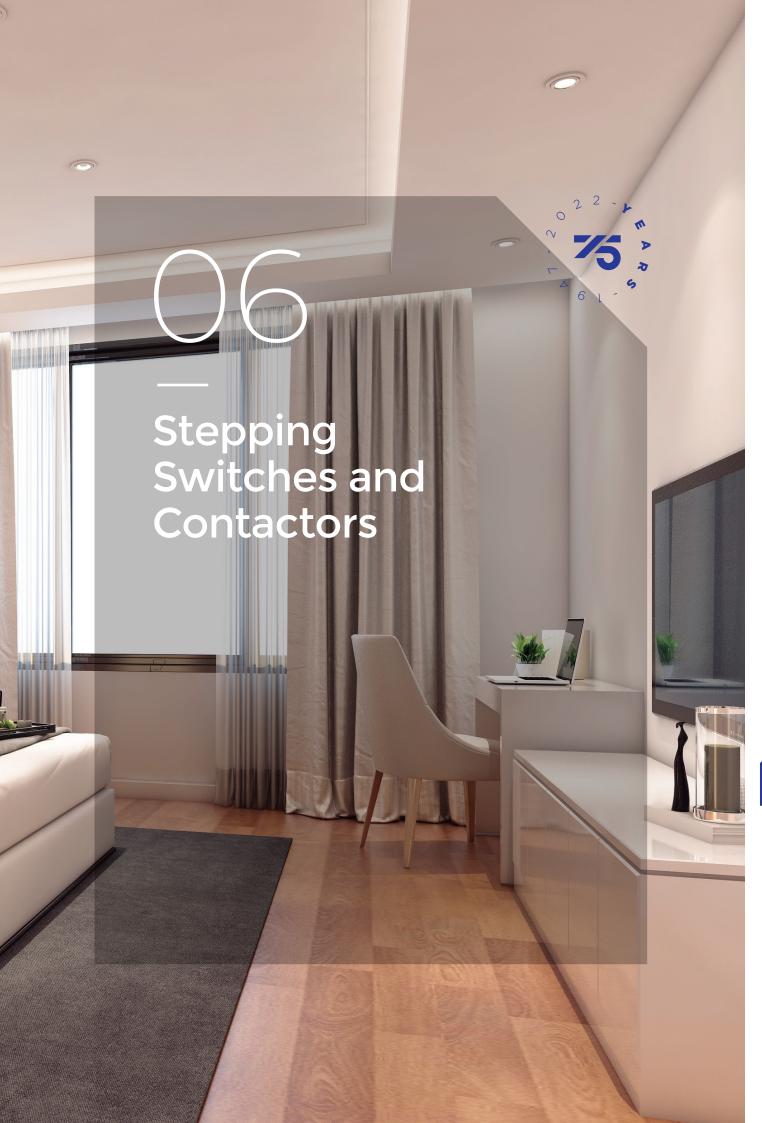












# TE UNI 220/226/024

# 230 V Single-Pole Impulse Relay



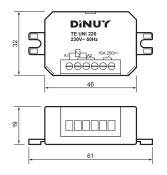
- TE UNI 220, impulse relay 10 A
- TE UNI 226, impulse relay 16 A
- TE UNI 024, impulse relay 8 A
- All models have one NA potentialfree contact.
- Recessed assembly in junction box.
- Its output contact changes status every time its coil is powered via the button. In other words, a press of the button closes its contact and the next press opens it.

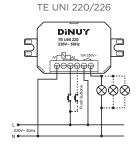
- High load capacity. Suitable for all types of loads: LEDs, fluorescent lamps, PLs, etc.
- No sound. Silent.
- Examples of use: bedrooms in hotels and hospitals, homes, corridors, etc.

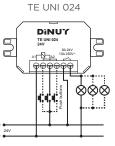
# **Technical features**

REFERENCE	TE UNI 220	TE UNI 226	TE UNI 024	
Supply voltage	230V~ 50Hz		24 VCC or 24 V~ 50 Hz	
Coil consumption	Operation: 0 W Pressed: 50 mW			
Dimensions	61 x 19 x 32mm			
Contacts	NA single-pole switch			
Relay breaking capacity	10A	16A	8A	
LED lamps	400W	600W		
230 V incandescent and halogen lamps	2000W	3000W		
12 V halogen lamps with electronic transformer	1000W	3000W		
Fluorescent lamps	600W	1300W		
Potential-free contact	Yes			
Contactor permitted	Yes			
Light buttons	Up to 3 (up to 10 with AC DM- 003)			
Minimum press duration	0.05 s			
Minimum interval between presses	0.1 s (maximum 20 per minute)			
Assembly	Mechanism box			
Operating temperature	-20°C +45°C			
Electrical life	With maximum load: > 200,000 operations			
Mechanical life	>1 million full operations			
Protection rating	IP20, Class II			

# **Dimensions**





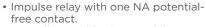


- With load supplied to 24V.

# TE DIN 220 Modular Impulse Relay

# TE CON 220 Modular Contactor





- DIN rail assembly. One module.
- Its output contact changes status every time its coil is powered via the button. In other words, a press of the button closes its contact and the next press opens it.
- Unlike a contactor, the coil in the impulse switch does not remain powered and there is no permanent energy consumption.
- Very low sound level. Very quiet.
- Examples of use: bedrooms in hotels and hospitals, homes, classrooms, etc.

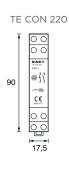
- Two impulse relays with NA potential-free contact.
- DIN rail assembly. One module.
- The output contacts are closed each time the coils are powered via a switch or button.
- On the other hand, when the coils are not powered, the contacts open.
- Examples of use: bedrooms in hotels and hospitals, homes, classrooms, etc.

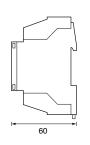
### **Technical features**

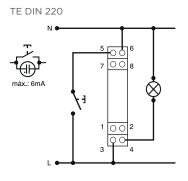
REFERENCE	TE DIN 220	TE CON 220		
Supply voltage	230V~ 50/60Hz	230V~ 50/60Hz		
Coil consumption	Operation: 0 VA; Pressed: 7 W	Operation: 16 W		
Dimensions	17.5 x 53 x 90mm	90 x 17.5 x 60mm		
Contacts	NA single-pole switch	NA two-pole contact		
Relay breaking capacity	16A	20A		
LED lamps	600W	800W		
230 V incandescent and halogen lamps	3000W	4600W		
12 V halogen lamps with electronic transformer	3000W	4600W		
Fluorescent lamps	1300W	1300W		
Potential-free contact	Yes	Yes		
Assembly	DIN rail	DIN rail		
Operating temperature	-20°C +45°C	-20°C +45°C		
Electrical life	With maximum load: > 50,000 operations With maximum load: > 50,000			
Mechanical life	>1 million full operations >1 million full operation			
Protection rating	IP20	IP20 IP20, Class II		

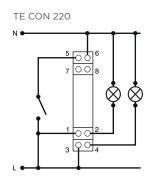
### **Dimensions**

# **TE DIN 220** 90 C€









# Sales Network

# A Coruña and Lugo

Santiago Simón Tel.: (+34) 667 444 030 acoruna@dinuy.es



# **Albacete - Cuenca**

Juan Hidalgo Tel.: (+34) 620 931 844 albacete@dinuy.es



### **Alicante**

Moisés Lopez Tel.: (+34) 639 823 850 alicante@dinuy.es



### Aragón

Silvia Hernández Tel.: (+34) 630 263 224 aragon@dinuy.es



### **Asturias**

Iñaki Santa Cruz Tel.: (+34) 627 595 734 asturias@dinuy.es



# Bizkaia and Araba

Roberto Perez Tel.: (+34) 667 313 050 bizkaia@dinuy.es



# Barcelona, Lleida and **Tarragona**

Albert Perez Tel.: (+34) 600 520 502 barcelona@dinuy.es



# Cádiz, Huelva and Sevilla

Juan Antonio Cortes Tel.: (+34) 607 516 728 sevilla@dinuy.es



### **Cantabria**

Ana de la Serna Tel.: (+34) 653 935 776 cantabria@dinuy.es



### **Ciudad Real**

Juan Antonio Verdejo Tel.: (+34) 629 365 343 ciudadreal@dinuy.es



### Córdoba

Rafael Martínez Tel.: (+34) 619 303 225 cordoba@dinuy.es



### **Extremadura**

Rafael Lavado Tel.: (+34) 639 113 807 extremadura@dinuy.es



# **Girona and Andorra**

Miguel Gascón Tel.: (+34) 625 799 385 girona@dinuy.es



### **Granada**

José Miguel Montoro Tel.: (+34) 658 764 632 granada@dinuy.es



### **Gipuzkoa and Navarra**

Roberto Perez Tel.: (+34) 667 313 050 gipuzkoa@dinuy.es



### **Balearic Islands**

Caty Payeras Tel.: (+34) 650 447 087 baleares@dinuy.es



### **Canary Islands**

Julio Pérez Falcón Tel.: (+34) 696 942 226 canarias@dinuy.es



# Jaén

Gillermo Cobo Tel.: (+34) 610 556 750 jaen@dinuy.es



# La Rioja, Burgos and Soria

Hugo Grijalba Tel.: (+34) 629 406 576 larioja@dinuy.es



### León

Juan José Guavo Tel.: (+34) 658 478 792 leon@dinuy.es



# Madrid. Guadalajara and Toledo

Ángel López Tel.: (+34) 647 525 323 madrid@dinuy.es



# Málaga, Almería, Ceuta and Melilla

José María Frías Tel.: (+34) 639 170 700 malaga@dinuy.es



### Murcia

David Hernandez Tel.: (+34) 608 555 514 murcia@dinuy.es



# **Pontevedra** and Ourense

Antonio Duran Tel.: (+34) 640 150 923 pontevedra@dinuy.es



# **Valencia** and Castellón

Juan Baixauli Tel.: (+34) 617 522 218 valencia@dinuy.es



# Valladolid, Ávila, Palencia, Salamanca, Segovia and Zamora

Javier Gómez Tel.: (+34) 649 915 570 valladolid@dinuy.es



### Sales information

Tel.: (+34) 943 62 79 88 info@dinuy.com

# **Order Administration**

Tel.: (+34) 943 62 79 88 pedidos@dinuy.com

# **Technical Support and Projets**

soporte@dinuy.com proyectos@dinuy.com



Auzolan, 2 20303 IRUN

T 943 62 79 88 E info@dinuy.com www.dinuy.com



