

MODULE BOX

MBX05-10-15-20-25-30-35

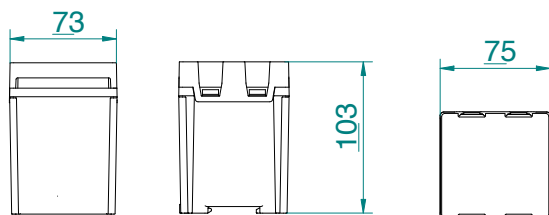
The project comes from the awareness that the wiring of electrical board and analog peripheral components take a long time and is extremely problematic where there is a need to intervene on the spot. For this reason we have created a complete range of products that simplify the work of the installers of monumental clocks. The system consists of units with microprocessor able to interface and control the various devices present on the bell tower. Simple to wire, easy to set up and reliable, the MODULE BOX products represent a new way of conceiving monumental clock installations.

With the MODULE BOX products the safety increases significantly thanks to the electronic control of the equipment and real-time verification of the safety parameters. In this way, if a fault occurs, the MODULE BOX products are able to manage it and stop the device before it can generate significant damages.

The MODULE BOX range have been specifically conceived to be adapted to existing installations. The equipment present in the belfry, such as strikers, motors and gearboxes, if in good condition, do not need intervention.

Le projet vient de la prise de conscience que le câblage du tableau électrique et des périphériques analogiques prend beaucoup de temps, donc il est extrêmement problématique, si vous devez agir sur place. Pour cette raison, l'équipe ECAT a créé une gamme complète de produits qui peut simplifier le travail des techniciens de l'horlogerie monumentale. Le système se compose d'unités à microprocesseur capables d'interfacer et contrôler les différents équipements sur le clocher. Faciles à câbler, faciles à installer et sûres, les produits MODULE BOX représentent une manière différente de concevoir les installations de l'horlogerie monumentale.

MODULE BOX augmente la sécurité grâce au contrôle électronique de l'équipement et à la vérification en temps réel des paramètres de sécurité. De cette façon, en cas d'anomalie, MODULE BOX est en mesure de le gérer et d'arrêter l'appareil avant de dommages importants se produisent. Les produits MODULE BOX ont été conçus pour s'adapter aux systèmes existants. L'équipement dans le clocher – electro-tintements, moteurs, réducteur – si en bon état, ne nécessitent pas d'intervention.



MBX05 POWERBOX

Device to supply 5 or 10 MODULE BOX

TECHNICAL CHARACTERISTICS

- Power supply: 220 VAC
- Output: 12 VDC
- DIN bar for easy installation

CODE	DESCRIPTION
MBX0504002	POWERBOX-10 POWER SUPPLY FOR 10 MODULES

MODULE BOX

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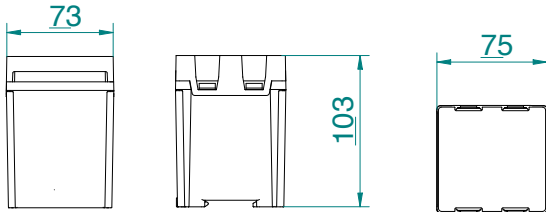
MBX10 HAMMERBOX

Device employed to action the strikers



TECHNICAL CHARACTERISTICS

- No wear of the contacts due to the passage of direct current flowing
- Setting of the impulse duration to optimise the hammer strike speed
- No danger of overheating of the coil
- Rapid dissipation of striker residual energy
- DIN bar for easy installation
- MBX1004001: 12 VDC power supply; command impulses from 24 VAC to 220 VAC
- MBX1004002: 220 VAC power supply; 220 VAC command impulses



CODE	DESCRIPTION
MBX1004001	HAMMERBOX ELECTRONIC CONTROLLER FOR STRIKER
MBX1004002	HAMMERBOX-220V ELECTRONIC CONTROLLER FOR STRIKER



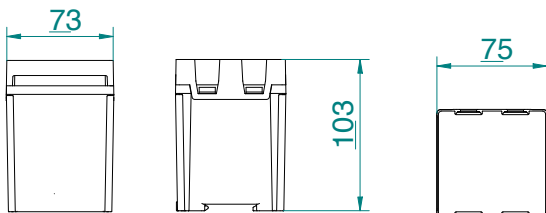
MBX15 REMOTEBOX

Remote relay expansion for PUNTO SP1



TECHNICAL CHARACTERISTICS

- RS485 communication protocol
- Connection: it is recommended the connection via bus RS485 in accordance with CAT5 standard
- Power supply: 12 VDC
- Number of outputs/relays: 4
- It allows you to replace completely the traditional power line with a 3-wire digital bus
- DIN bar for easy installation



CODE	DESCRIPTION
MBX1504001	REMOTEBOX REMOTE RELAY FOR SP1 SERIES

MODULE BOX

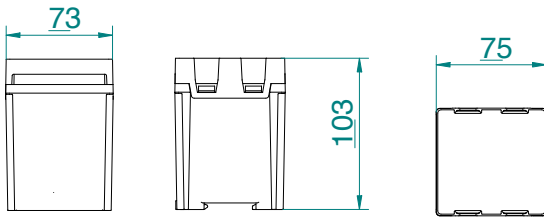
MBX05-10-15-20-25-30-35

MBX20 SWINGBOX

Device employed for the control of bells in motion

TECHNICAL CHARACTERISTICS

- Electronic controller in real time of the bell swinging
- Seven feedback parameters for the management of anomalies
- Setting of the swing amplitude and the braking
- Command impulses from 24 VAC to 220 VAC
- 12 VDC power supply
- Programming terminal not required
- DIN bar for easy installation
- MBX2004001: system provided for use with mechanical micro clutch.
- MBX2004002: system provided for use with proximity sensor without contact.

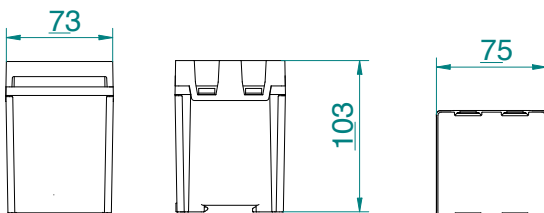


CODE	DESCRIPTION
MBX2004001	SWINGBOX-F ELECTRONIC CONTROLLER FOR BELL WITH CLUTCH
MBX2004002	SWINGBOX-S ELECTRONIC CONTROLLER FOR BELL WITH HALL SENSOR



MBX2004003

Hall Sensor for Swingbox



MBX25 SYNCHROBOX-HM

Device used for the synchronization of bell tolling sound and swinging bell sound

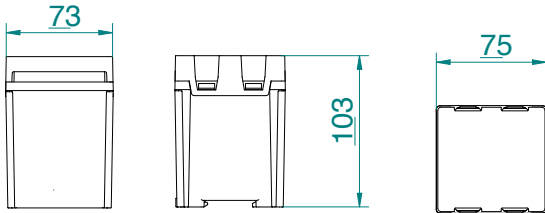
TECHNICAL CHARACTERISTICS

- Number of strikers to manage: 2
- Number of strikes to manage: 4 (two for each side)
- Setting and real-time display of the intervals of action
- Command impulses from 24 VAC to 220 VAC
- 12 VDC power supply
- DIN bar for easy installation

CODE	DESCRIPTION
MBX2504001	SYNCHROBOX-HM STRIKER-BELL SWING SYNCHRONIZER

MODULE BOX

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MBX30 TELEBOX

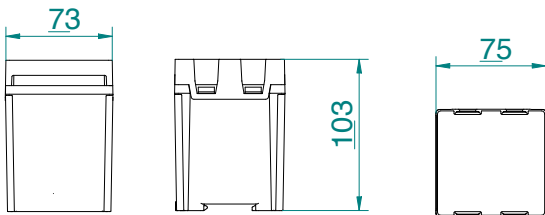
Device used for the control, via GSM, of the PUNTO SP1 clocks.



TECHNICAL CHARACTERISTICS

- Remote control via VOICE, SMS, SMARTPHONE APP.
- Parameters: blackout alert and malfunction alarm via SMS, SMS alert for operation confirmation
- Operations performed by remote control: set up of an immediate event, stop sounds, set up of an exceptional programming, reactivation/suspension of all programmed sounds
- Connection: it is recommended the connection via bus RS485 in accordance with CAT5 standard
- 12 VDC power supply
- DIN bar for easy installation

CODE	DESCRIPTION
MBX3004001	TELEBOX GSM COMMUNICATION MODULE FOR SP1 SERIES



MBX35 CONTACTBOX

Three-phase motor-reversing solid-state relays. Specifically designed for the management of three-phase motors and for their use within monumental clocks.

TECHNICAL CHARACTERISTICS

- The soft start of the motor prevents excessive current absorptions
- Security check input commands
- Silent switching during operation
- Extremely long service life, completely free from mechanical wear
- Simplified wiring, integrated locking circuit and load connection
- Max load current: 16 A
- Max output voltage: 575 V
- MBX3504002: 110/220 VAC command impulse
- DIN bar for easy installation

CODE	DESCRIPTION
MBX3504002	CONTACTBOX-220V 3-PHASE SOLID STATE REVERSING CONTACTOR



WIRED DISTRIBUTION BOARD

QDE05

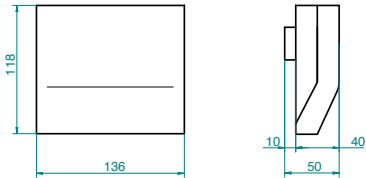
CODE	DESCRIPTION
QDE0504001	CABLED CONTROL PANEL ON REQUEST
QDE0504002	CABLED CONTROL PANEL FOR EASYCARILLON 5 BELLS

RADIO REMOTE CONTROLS / TÉLÉCOMMANDES RIC-RAD

Radio remote controls of high reliability for the remote activation of bells or melodies.

Télécommande d'une grande fiabilité pour l'activation à distance des cloches ou mélodies.

TRANSMITTER-RECEIVER 2/4 CHANNELS, MAX 200 M (656,16 FT)* ÉMETTEUR-RÉCEPTEUR 2/4 CANAUX, MAX 200 M*

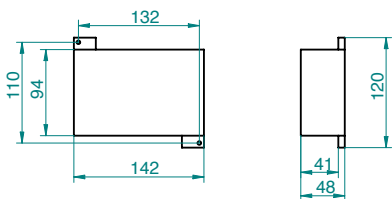


TECHNICAL CHARACTERISTICS

- Container in shock resistant plastic material
- Powered by a 9 V dry battery
- Sliding back panel, to allow access for programming the code and battery replacement
- 2 or 4 channels
- Signal control LED

CODE	DESCRIPTION
RIC-RAD-TRAS-2CAN-201	TRANSMITTER 2 CHANNELS MAX 200 M
RIC-RAD-TRAS-4CAN-200	TRANSMITTER 4 CHANNELS MAX 200 M
RIC-RAD1/4CAN200	RECEIVER RADIO WITH N.1 RELAIS 200 MT

TRANSMITTER-RECEIVER 4 CHANNELS MAX 700 M (2296,59 FT)* ÉMETTEUR-RÉCEPTEUR 4 CANAUX MAX 700 M*



TECHNICAL CHARACTERISTICS

- Container in ABS
- 12-24 VAC-VDC power supply
- Electronic circuit in a modular construction equipped for the insertion of up to 4 channels

CODE	DESCRIPTION
RIC-RAD-TRAS-700	TRANSMITTER 4 CHANNELS MAX 700 M
RIC-RAD4CAN700	RECEIVER RADIO WITH 4 RELAIS MAX 700 M

* Estimate maximum range (open air)

ANTENNA / ANTENNE

TECHNICAL CHARACTERISTICS

- Whip antenna for receiver

CODE	DESCRIPTION
RIC-RAD RELE - IMPULS	IMPULSE RELAIS N/ O
RIC-RAD - S38	WHIP AERIAL FOR RADIO RECEIVER MAX 200 MT
RIC-RAD - S40L	WHIP AERIAL FOR RADIO RECEIVER MAX 700 MT

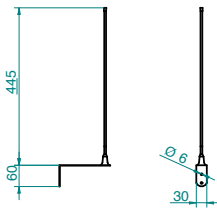


TABLE OF PRODUCT CODES

ACCESSORIES

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MBX0504002	POWERBOX-10 POWER SUPPLY FOR 10 MODULES
MBX1004001	HAMMERBOX ELECTRONIC CONTROLLER FOR STRIKER
MBX1004002	HAMMERBOX-220V ELECTRONIC CONTROLLER FOR STRIKER
MBX1504001	REMOTEBOX REMOTE RELAY FOR SP1 SERIES
MBX2004001	SWINGBOX-F ELECTRONIC CONTROLLER FOR BELL WITH CLUTCH
MBX2004002	SWINGBOX-S ELECTRONIC CONTROLLER FOR BELL WIT HALL SENSOR
MBX2504001	SYNCHROBOX-HM STRIKER-BELL SWING SYNCHRONIZER
MBX3004001	TELEBOX GSM COMMUNICATION MODULE FOR SP1 SERIES
MBX3504002	CONTACTBOX-220V 3-PHASE SOLID STATE REVERSING CONTACTOR
QDE0504001	CABLED CONTROL PANEL CABLED ON REQUEST
QDE0504002	CABLED CONTROL PANEL FOR EASYCARILLON 5 BELLS
ALI0504001	ELETTRO-MECHANICAL POWER SUPPLY FOR 1 STRIKER
ALI0504002	ELETTRO-MECHANICAL POWER SUPPLY FOR 2 STRIKERS
MBX2004003	COMPLETE HALL SENSOR FOR SWINGBOX-S
RIC-RAD-RELE-IMPULS	IMPULSE RELAIS N/O
RIC-RAD-S38	WHIP AERIAL FOR RADIO RECEIVER MAX 200 M
RIC-RAD-S40L	WHIP AERIAL FOR RADIO RECEIVER MAX 700 M
RIC-RAD-TRAS-2CAN-201	TRANSMITTER 2 CHANNELS MAX 200 M
RIC-RAD-TRAS-4CAN-200	TRANSMITTER 4 CHANNELS MAX 200 M
RIC-RAD-TRAS-700	TRANSMITTER 4 CHANNELS MAX 700 M
RIC-RAD1/4CAN200	RECEIVER RADIO WITH RELAIS 200 M
RIC-RAD4CAN700	RECEIVER RADIO WITH 4 RELAIS MAX 700 M