

C A T A L O G U E | P R O D U C T S  
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**ecat**



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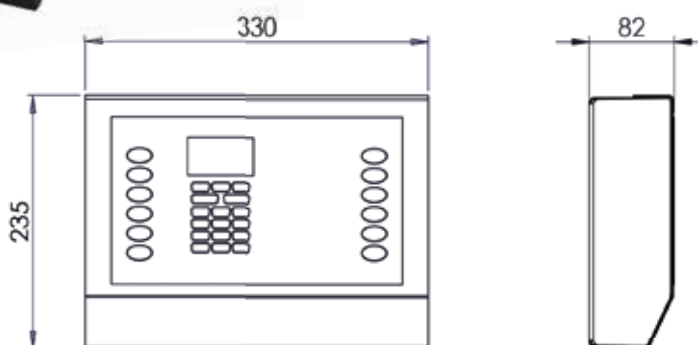
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## PUNTO SP1 CLK05



Master clock with flexible programming. Designed to meet ecclesiastic requirements and more: Punto SP1 works both automatically and manually; no technical knowhow required.

The clock can be connected to a bell tower-control panel with a 2-wire or standard RS485 connection.

The classical version comes in white scratch-resistance ABS. Punto SP1.DODICI and .VENTI come in metal casing.

Punto SP1 triples its potential without sacrificing its habitual reliability.

The Punto SP1 master clock comes in 3 versions to cover all operational situations.

Three versions offering 3 performance levels and multiple personalised configurations – and all in a single product.

Flexible, simple and precise are the buzzwords behind the new Ecat project. We have the clock for you whatever your needs and knowhow (from installer to end user). Try us!

From Punto SP1 to Sp1.DODICI and .VENTI

The classical SP1 developed and revamped by Ecat engineers controls up to 44 channels (4 internal + 40 external outputs) with 2 independent controls for slave clocks.

Punto SP1.DODICI, again for up to 44 channels, contains 12 outputs plus a slot for a MIDI keyboard or for use as required.

Punto SP1.VENTI further boosts the internal output capacity to 20, with 2 free slots for a totally personalised master clock.

Punto SP1.DODICI and .VENTI are both compatible with standard MIDI peripherals.

You can now also calculate sunrise and sunset times automatically, simply by inputting the latitude and longitude of your location.

Horloge électronique de contrôle-avertisseur à programmation flexible. Conçue pour répondre aux exigences ecclésiastiques, mais pas seulement: Punto SP1 opère tant en automatique que manuellement et son utilisation ne requiert pas de compétences techniques particulières.

L'horloge électronique de contrôle peut être reliée au tableau de commandes du clocher par un branchement RS485 deux fils ou traditionnel.

La version classique est disponible en ABS inrayable blanc. Tandis que les versions Punto SP1.DODICI et 20 ont un boîtier métallique.

Punto SP1 triple ses potentialités en maintenant sa fiabilité de toujours

L'horloge électronique de contrôle Punto SP1 s'est mise en 3 pour gérer toute situation de travail. 3 versions pour 3 niveaux de performance, de multiples configurations personnalisées, le tout en un seul produit.

Souplesse, simplicité et précision, sont les principes sur lesquels se fonde le nouveau projet Ecat. Quelles que soient vos exigences et compétences (de l'installateur à l'utilisateur final), nous avons l'horloge électronique de contrôle dont vous avez besoin. Mettez-nous à l'épreuve!

De Punto SP1 à SP1.DODICI et .VENTI

La version classique SP1, perfectionnée et revue par les ingénieurs Ecat, offre la possibilité de gérer jusqu'à 44 chaînes (4 sorties internes + 40 externes) avec 2 commandes indépendantes par panneaux secondaire.

Punto SP1.DODICI, toujours pour un maximum de 44 chaînes, renferme 12 sorties plus un slot pour connecter un clavier MIDI ou à utiliser en fonction de vos besoins.

## PUNTO SP1 CLK05

Punto SP1.VENTI accroît ultérieurement la capacité de sorties internes jusqu'à 20 avec 2 slots libres pour une personnalisation absolue de votre horloge de contrôle.

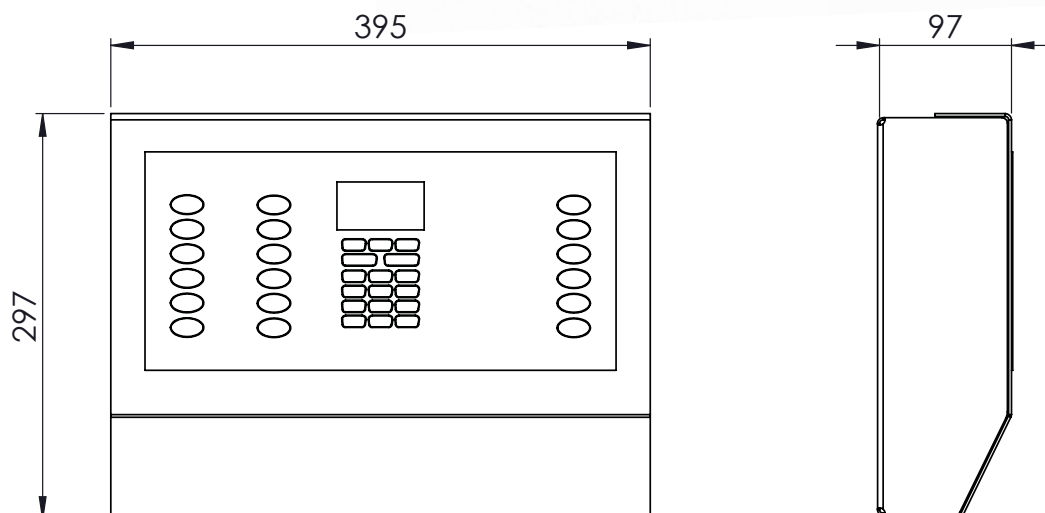
Punto SP1.DODICI et .VENTI sont toutes les deux compatibles avec des périphériques standard MIDI.

En outre, à partir d'aujourd'hui il vous sera possible de calculer automatiquement l'horaire du lever et du coucher du soleil, en saisissant tout simplement la latitude et la longitude correspondant à votre position.

### TECHNICAL CHARACTERISTICS

All versions feature:

- simple and intuitive interface;
- shortcut program keys (except SP1 Basic, see technical specifications);
- shortcut keys for immediate programming (except for SP1 Basic, see technical specifications);
- backlit, high-contrast keyboard, suitable for visually-impaired users;
- memory card for program backup;
- USB port;
- multi-language menu;
- controls up to 32 bells, 32 electro-magnetic hammers, 16 bells in movement;
- GPS synchronisation, NTP server, DCF77;
- GSM connectivity and Android or IOS management smartphone app for remote clock control;
- MIDI file compatible;
- manual execution and melody recording;
- maxi personalisation of programmable events;
- manual execution and melody recording;
- Easter and Easter festivity calculation;
- multilevel password (up to 6 levels) to control device access.



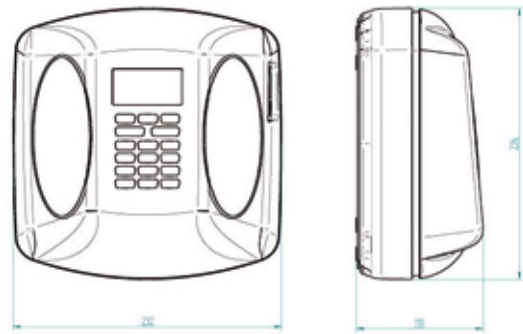
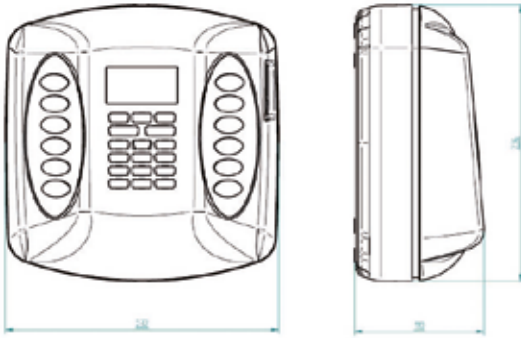
## PUNTO SP1 CLK05

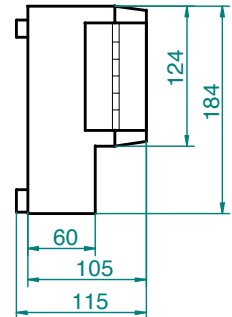
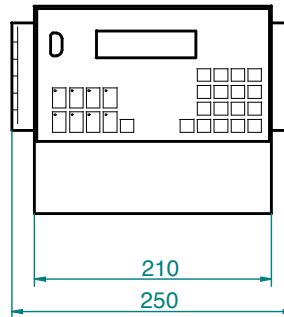
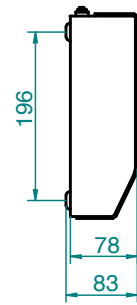
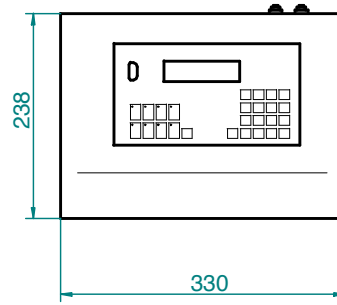
CODE	DESCRIPTION	CASING	CHANNELS	LINE 12/24	FUNCTION KEYS	DCF77/ GPS/ NTP	MEMORY CARD USB PORT	STANDARD MIDI DEVICE COMPATIBLE	EXPANSION SLOT
CLK0504001	PUNTO SP1 CLOCK FULL VERSION	PLASTIC	4 - 44	•	6	•	•		
CLK0504002	PUNTO SP1 CLOCK FULL VERSION 110V	PLASTIC	4 - 44	•	6	•	•		
CLK0504020	PUNTO SP1 CLOCK STANDARD VERSION	PLASTIC	4 - 44		6	•	•		
CLK0504021	PUNTO SP1 CLOCK STANDARD VERSION 110V	PLASTIC	4 - 44		6	•	•		
CLK0504022	PUNTO SP1 CLOCK BASIC VERSION	PLASTIC	4 - 44			•	•		
CLK0504023	PUNTO SP1 CLOCK BASIC VERSION 110V	PLASTIC	4 - 44			•	•		
CLK0504040	PUNTO SP1.DODICI CLOCK 110/220V	METAL	12 - 44		6	•	•	•	1
CLK0504050	PUNTO SP1.VENTI CLOCK 110/220V	METAL	20 - 44		12	•	•	•	2
CLK0504060	PUNTO SP1 CLOCK RACK 110/220V	METAL	12 - 44		12	•	•	•	1
CLK0504070	PUNTO SP1 CLOCK "LARGE CASE" 110/220V	METAL	12 - 44		12	•	•	•	1





PUNTO SP1  
CLK05





Receiver and transmitter master clock with annual programming on 4 channels with 2 independent commands for secondary clocks 12-24 VDC and 220 VAC. Particularly well suited for the command of bell automation system, tower clocks, hour striking and for the service planning. It is equipped with a large memory capacity which allows to storage and change melodies directly from the keyboard of the clock. The following are some of the features that make this device complete and versatile: the interface for the synchronization via DCF radio, the possibility to interact with the computer and the planning by phone.

Horloge mère, modèle indépendant ou récepteur à 4 circuits de programmation et double commande indépendante d'horloges secondaires 12-24 VDC et 220 VAC.

Cette horloge est particulièrement indiquée pour les commandes manuelles et automatiques des cloches d'églises et des horloges monumentales, et pour la mise en marche des sonneries usuelles (heures et services). Elle est dotée d'une grande capacité de mémoire qui permet à travers le clavier de mémoriser ou changer les mélodies directement sur place. L'interface pour synchronisation par radio DCF, la possibilité de dialoguer avec un ordinateur, la programmation par téléphone font de cette horloge un appareil complet et flexible.

#### TECHNICAL CHARACTERISTICS

- 12-24 VDC and 220 VAC independent pulses of secondary clocks with programming of the forward speed; output signals: 4 relays with 4 A (resistive load)
- Annual, periodical, weekly, cyclical and exceptional programming
- User interface with clear reading on LCD display
- Easy programming via self-guided menu
- Direct storage of any kind of festive or funeral ringing, according to the needs of the parish
- Any kind of hour striking
- Perpetual calendar for calculating leap years
- Automatic summer/winter time change
- Automatic blockage of the hammer when the bell is in motion

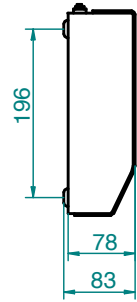
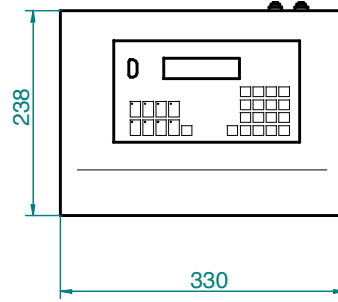
PUNTO4  
PUN05-10-15

- RS232 connection to PC for storing and printing programs, standard output of date and time
- Electronic access code for user programming
- Safeguard for 10 years in case of power cut of all stored melodies and programs
- Battery back-up of 30 days in case of power-cut
- ON/OFF output signals on 4 relays with 4 A (resistive load)
- Timer function from 1 to 99 seconds or ON/OFF signal function for unlimited duration
- 220 VAC power supply
- Accuracy +/- 0,1 second/day at 22° C (72°F)
- Polycarbonate container with IP55 protection and transparent cover

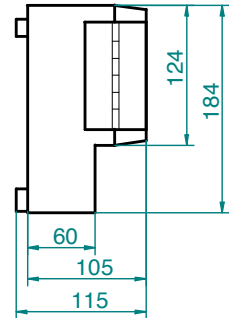
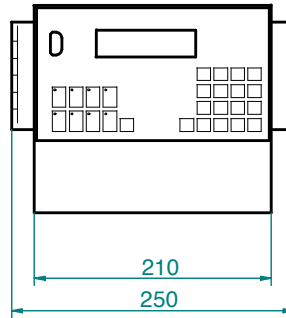
CODE	DESCRIPTION	CONTAINER	CHANNELS	SLAVE CLOCK LINE 12/24V	TOWER CLOCK LINE 110/220 VAC	PC CONNECTION	BACKLIT DISPLAY	GPS/DCF77 MODE
PUN0504001	PUNTO4 CLOCK PLASTIC CASE	PLASTIC	4	•	•	•		•
PUN0504002	PUNTO4 CLOCK BACK LIGHTED PLASTIC CASE	PLASTIC	4	•	•	•	•	•
PUN0504003	PUNTO4 CLOCK METAL CASE	METAL	4	•	•	•		•
PUN0504004	PUNTO4 CLOCK BACK LIGHTED METAL CASE	METAL	4	•	•	•	•	•
PUN0504005	PUNTO4 CLOCK 4 CHANNELS PLASTIC CASE	PLASTIC	4			•		•
PUN0504006	PUNTO4 CLOCK 4 CHANNELS METAL CASE	METAL	4			•		•
PUN0504007	PUNTO4 CLOCK 2 CHANNELS PLASTIC CASE	PLASTIC	2		•	•		•
PUN0504008	PUNTO4 CLOCK 2 CHANNELS METAL CASE	METAL	2		•	•		•
PUN0504009	PUNTO4 CLOCK RACK VERSION	RACK	4	•	•	•		•

PUNTO4  
PUN05-10-15

PUNTO4



MASTER CLOCKS / HORLOGES MÈRE



Receiver and transmitter master clock with annual programming on 4 channels and 2 independent commands for secondary clocks 12-24 VDC and 220 VAC. Particularly well suited for use in schools, hospitals, railway stations, airports, industrial plants, public buildings, department stores etc. where it is necessary to have the efficient functioning of everything at an established time.

Lighting, heating, switching on of machinery, sounding of sirens, school bells, sports hall lighting, opening of shutters, opening and closing of doors, action of escalator, garden irrigation etc., everything can be actioned at an exact and regulated time under the constant control of Punto4i.

Every problem of time switch is resolved with the various programs available: annual, periodic, cyclical, weekly, exceptional etc. Also the DCF synchronization makes it absolutely accurate.

The RS232 interface allows the synchronization of time and date of the computer to which it is connected. It is also possible, with the use of software, to program, store data, to modify and print at any time the introduced programs.

The EEPROM memory guarantees the total safeguard of data.

Horloge mère émetteur et récepteur à programmation annuelle à 4 circuits et double commande indépendante d'horloges secondaires 12-24 VDC et 220 VAC. PUNTO4i est particulièrement indiquée pour la commande de distributions horaires et d'automatismes dans les écoles, hôpitaux, gares, aéroports, bâtiments industriels, bâtiments publics, grands magasins etc.

L'horloge compte plusieurs programmes – hebdomadaires, cycliques, annuelles ou exceptionnelles – spécialement conçus pour: sonneries d'écoles, éclairage, commande de chauffage, mise en marche de machines, ouverture/fermeture de portes, mise en marche d'escaliers roulants, arrosage, essais de sirène.

La synchronisation par radio DCF en font une horloge de précision absolue qui répond à toutes vos exigences.

L'interface RS232 permet la synchronisation de l'heure et la date de vos ordinateurs.

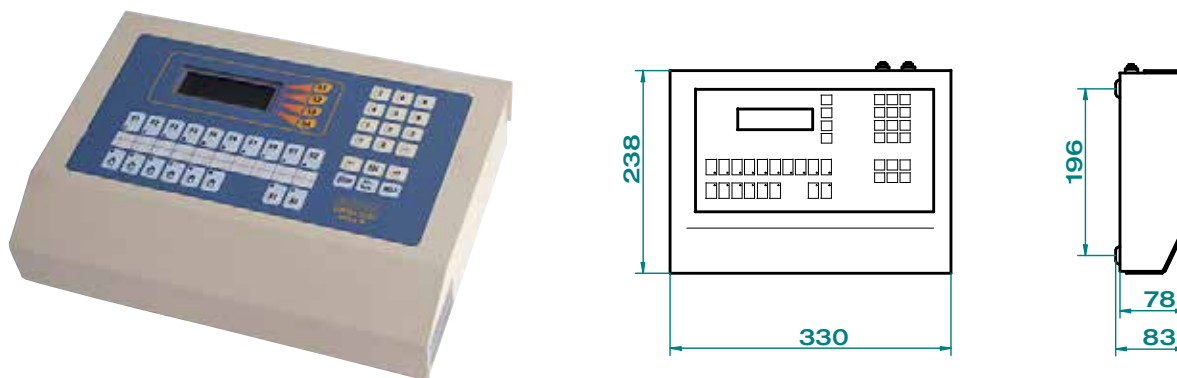
Possibilité de programmer, changer ou imprimer à tout moment les données introduites.

La mémoire EEPROM sauvegarde la totalité des programmations.

#### TECHNICAL CHARACTERISTICS

- 12-24 VDC pulses of secondary clocks with programming of the forward speed; output signals: 10 W relay, with the possibility to master 30 secondaries of a standard power
- 220 VAC pulses with programming of the forward speed on 4 A relay (resistive load)
- Punto4i receiver model: it accepts 1 minute or 1/2 minute signals between 6 and 36 VDC
- Perpetual calendar for calculating leap years
- Annual, periodical, weekly, cyclical and exceptional programming
- Automatic summer/winter time change
- Electronic access code for user programming
- Easy programming via self-guided menu
- User interface with clear reading on LCD display
- RS232 connection to PC for storing and printing programs, standard output of date and time
- Connection to a computer to programme, store and print programs
- Safeguard for 10 years in case of power cut of all stored programs
- 220 VAC power supply
- Battery back-up of 30 days in case of power cut
- Accuracy +/- 0,1 second/day at 22° C (72° F)
- Polycarbonate container with IP55 protection and transparent cover

CODE	DESCRIPTION	CONTAINER	CHANNELS	SLAVE CLOCK LINE 12/24V	TOWER CLOCK LINE 110/220 VAC	PC CONNECTION	BACKLIT DISPLAY	PRED. DCF77
PUN1004001	PUNTO4 CLOCK IND. PLASTIC CASE	PLASTIC	4	•	•	•		•
PUN1004002	PUNTO4 CLOCK IND. BACK LIGHTED PLASTIC CASE	PLASTIC	4	•	•	•	•	•
PUN1004003	PUNTO4 IND. METAL CASE	METAL	4	•	•	•		•
PUN1004004	PUNTO4 CLOCK IND. BACK LIGHTED METAL CASE	METAL	4	•	•	•	•	•
PUN1004005	PUNTO4 CLOCK IND. 12/24 V 2 CHANNELS PLASTIC CASE	PLASTIC	2	•		•		•
PUN1004006	PUNTO4 CLOCK IND. 12/24 V 2 CHANNELS METAL CASE	METAL	2	•		•		•

BETA8  
BET05

BETA8 is a transmitter master clock that is particularly indicated for the management of automatic bells, control and illumination of clock dials, and hour striking. It is equipped with a simple control panel, by which it is possible to execute either manual sounds or automatic programs. It is possible to realise all type of sounds: bell peals, funeral toll, celebratory peal, hour strike etc. Thanks to a large capacity of memory, BETA8 is also capable of storing and executing each of the above sounds. With BETA8, it is also possible to control central heating, illumination, alarms, opening/closing doors, irrigation, sprinklers etc.

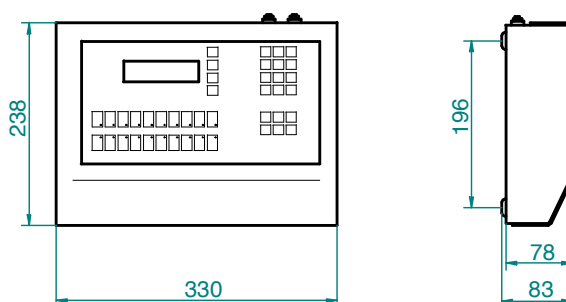
BETA8 est une horloge mère, modèle indépendant ou récepteur. Particulièrement indiquée pour la commande de cadrans d'édifices, les sonneries horaires, les programmations d'automatismes respectant les traditions locales. La programmation très simple permet d'enregistrer différents types de mélodies: carillons, sonneries en volée, tintement, glas etc. Dotée d'une grande capacité de mémoire, elle peut mémoriser un million de données, ce qui lui permet de gérer sans difficulté les programmes les plus complexes. BETA8 contrôle également les services: chauffage, éclairage, antivol, ouverture/fermeture des portes etc.

#### TECHNICAL CHARACTERISTICS

- Programming keyboard protected by electronic key to prevent access to unauthorized persons
- 8 function keys for manual commands and for the immediate ringing of prerecorded sounds
- 6 keys for manual ringing of bells, either in motion or strikes
- 6 service keys for suspension of sounds, hour striking, Angelus, funeral
- Simple and dynamic programming with self-guided menus in native language
- Annual, periodical, weekly, cyclical and exceptional programming
- Programming is compatible with Microsoft Windows ®
- Programming menu can be simplified and personalised according to the user requirements
- User interface with clear reading on LCD display
- Storage via keyboard of festive ringing or funerals, depending on the parishes requirements
- Strike of the hour with the possibility of excluding the ringing during the night
- 220 VAC pulses for the command of the motor for the advancement of the clock hands on the clock tower
- Perpetual liturgical calendar for the automatic programming of religious festivals: Easter, Ascension, All Saints, Christmas etc.
- Automatic change of summer/winter time
- Automatic blockage of the hammer when the bell is in motion
- RS232 connection to PC for storing and printing programs, standard output of date and time
- Manual command panel
- Back up of 30 days in case of power cut
- Safeguard of 10 years of the melodies and stored programs, in case of power cut
- Power supply 220 VAC
- Accuracy +/- 0,1 second/day at 22° C (72° F)
- ON/OFF output signal on 6 relays with 4 A, 220 V (resistive load) for the command of bells, hammers, central heating etc.

CODE	DESCRIPTION	CONTAINER	CHANNELS	SLAVE CLOCK LINE 12/24V	TOWER CLOCK LINE 110/220 VAC	PC CONNECTION	BACKLIT DISPLAY	GPS/ DCF MODE
BET0504001	BETA8 CLOCK METAL CASE	METAL	6		•	•	•	•
BET0504002	BETA8 CLOCK LARGE CASE	METAL	6		•	•	•	•
BET0504003	BETA8 CLOCK FOR RACK MODULE	RACK	6		•	•	•	•
BET0504004	BETA8 CLOCK PLASTIC CASE	PLASTIC	6		•	•	•	•

## SIRIO12 SIR05



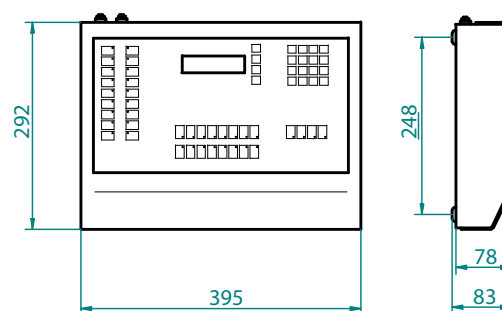
SIRIO12 is a transmitter master clock that is particularly indicated for the management of automatic bells, control and illumination of clock dials, and hour striking. It is equipped with a simple control panel, by which it is possible to execute either manual sounds or automatic programs. Faithfully respecting local traditions, it is possible to realise all type of sounds: bell peals, funeral toll, celebratory peal, hour strike etc. Thanks to a large capacity of memory, SIRIO12 is also capable of storing and executing each of the above sounds. With SIRIO12, it is also possible to control central heating, illumination, alarms, opening/closing doors, irrigation etc.

SIRIO12 est une horloge mère, modèle indépendant ou récepteur. Particulièrement indiquée pour la commande de cadrans d'édifices, les sonneries horaires, les programmations d'automatismes respectant les traditions locales. La programmation très simple permet d'enregistrer différents types de mélodies: carillons, sonneries en volée, tintement, glas etc. Dotée d'une grande capacité de mémoire, SIRIO12 peut mémoriser un million de données, ce qui lui permet de gérer sans difficulté les programmes les plus complexes. SIRIO12 contrôle également les services: chauffage, éclairage, antivol, ouverture/fermeture des portes etc.

### TECHNICAL CHARACTERISTICS

- Programming keyboard protected by electronic key to prevent access to unauthorized persons
- 8 function keys for manual commands and for the immediate ringing of prerecorded sounds
- 8 keys for manual ringing of bells, either in motion or strikes
- 4 service keys for suspension of sounds, hour striking, Angelus, funeral
- 12-24 VDC and 220 VAC independent pulses with programming of the speed, output signals on 4 relays with 4 A (resistive load)
- Annual, periodical, weekly, cyclical and exceptional programming
- The programme menu can be simplified and personalized according to the user requirements
- User interface with clear reading on LCD display
- Dynamic guided menu for programming
- Storage via keyboard of any type of festive or funeral ringing, depending on the needs of the parish
- Any type of strike of the hour with the possibility of excluding the ringing during the night
- Perpetual liturgical calendar for the automatic programming of the religious festivals: Easter, Ascension Day etc.
- Automatic summer/winter time change and automatic blockage of the hammer when the bell is in motion
- RS232 connection to PC for storing and printing programs, standard output of date and time
- Programming keyboard protected by electronic key to prevent access to unauthorized persons
- Safeguard for 10 years of the stored melodies and programs, in case of power cut
- Battery back-up for 30 days in case of power cut
- ON/OFF output signals on 8 relays 5 A (resistive load) for control of the bells, central heating, illumination etc.
- Power supply 220 VAC
- Accuracy +/- 0,1 second/day at 22° C (72° F)

CODE	DESCRIPTION	CONTAINER	CHANNELS	SLAVE CLOCK LINE 12/24V	TOWER CLOCK LINE 110/220 VAC	PC CONNECTION	BACKLIT DISPLAY	GPS/ DCF MODE
SIR0504001	SIRIO12 CLOCK METAL CASE	METAL	8	•	•	•	•	•
SIR0504002	SIRIO 12 CLOCK PLASTIC CASE	PLASTIC	8	•	•	•	•	•
SIR0504003	SIRIO 12 CLOCK LARGE CASE	METAL	8	•	•	•	•	•
SIR0504004	SIRIO12 CLOCK FOR RACK MODULE	RACK	8	•	•	•	•	•

CRONOS20  
CRO05

CRONOS20 is a transmitter master clock that is particularly indicated for the management of automatic bells, control and illumination of clock dials, and hour striking. It is equipped with a simple control panel, by which it is possible to execute either manual sounds or automatic programs. It is possible to realise all type of sounds: bell peals, funeral toll, celebratory peal, hour strike etc. Thanks to a large capacity of memory, CRONOS20 is also capable of storing and executing each of the above sounds. With CRONOS20, it is also possible to control central heating, illumination, alarms, opening/closing doors, irrigation, sprinklers etc.

CRONOS20 est une horloge mère, modèle indépendant ou récepteur. Particulièrement indiquée pour la commande de cadrans d'édifices, les sonneries horaires, les programmations d'automatismes respectant les traditions locales. La programmation très simple permet d'enregistrer différents types de mélodies: carillons, sonneries en volée, tintement, glas etc. Dotée d'une grande capacité de mémoire, elle peut mémoriser un million de données, ce qui lui permet de gérer sans difficulté les programmes les plus complexes. CRONOS20 contrôle également les services : chauffage, éclairage, antivol, ouverture/fermeture des portes etc.

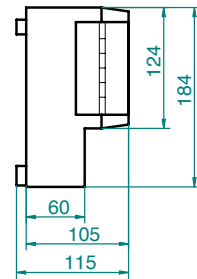
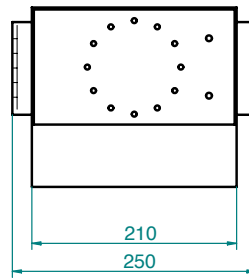
## TECHNICAL CHARACTERISTICS

- Programming keyboard protected by electronic key to prevent access to unauthorized persons
- 16 function keys for manual and immediate commands of prerecorded melodies
- 16 keys for the manual ringing of the bells, either in motion or just strikes
- 4 keys for services such as suspension of sounds, hour striking, Angelus, funeral
- Simple and dynamic programming with self-guided menus in native language
- Annual, periodical, weekly, cyclical and exceptional programming
- Programming is compatible with Microsoft Windows ®
- Programming menu can be simplified and personalised according to the user requirements
- User interface with clear reading on LCD display
- Storage via keyboard of any type of festive or funeral ringing, depending on the requirements of the user
- Any type of hour striking with the possibility of excluding the ringing during the night
- Independent recovery – 220 VAC – for the command of any type of servo-motor for the advancement of the clock hands on the bell tower
- Programmable recovery – 12-24 VDC – for secondary clocks
- Perpetual liturgical calendar for the automatic programming of religious festivals: Easter, Ascension, All Saints, Christmas etc.
- Automatic summer/winter time change
- Automatic blockage of the hammer when the bell is in motion
- RS232 connection to PC for storing and printing programs, standard output of date and time
- Control panel for manual use
- Battery back-up for 30 days in case of power cut
- Safeguard for 10 years of the memorized melodies and programs, in case of power cut
- Power supply 220 VAC
- Accuracy +/- 0,1 second/day, 22° C (72° F)
- ON/OFF output signals on 16 relays with 4 A 220 V (resistive load) for the command of bells, hammers, central heating etc.

CODE	DESCRIPTION	CONTAINER	CHANNELS	SLAVE CLOCK LINE 12/24V	TOWER CLOCK LINE 110/220 VAC	PC CONNECTION	BACKLIT DISPLAY	GPS/DCF MODE
CRO0504001	CRONOS20 CLOCK METAL CASE	METAL	16	•	•	•	•	•
CRO0504002	CRONOS20 CLOCK LARGE CASE	LARGE CASE	16	•	•	•	•	•
CRO0504003	CRONOS20 CLOCK FOR RACK MODULE	RACK	16	•	•	•	•	•



# TIDECLOCK CLK30



Master clock specifically designed to show the high and low tide. It can be used by non-expert users, supplied with a particularly simple and strong interface. Supplied in a polycarbonate container with IP55 protection, the unit is able to withstand the particularly difficult climate conditions found close to the sea.

Can be used paired with a double sided clock for outdoor use, mounted or not on a pole (see TAM05-10, p.23) or as a master clock for large-size facade clocks (see RIC05-10-15-20-25-30, p. 72).

It can be used paired with one or more clock dials following the graphic scheme as illustrated in the example.

Horloge mère étudiée pour indiquer la haute ou la basse marée. Cette horloge a été prévue pour être utilisée par de personnes qui ne sont pas des experts et a une interface très simple et robuste. C'est douée d'une boîte en polycarbonate avec degré de protection IP55 et peut bien résister aux conditions très sévères des milieux de mer.

Peut être également utilisée en accouplement à une horloge double face pour extérieur, assemblé ou pas sur colonne (v. TAM05-10, p.23) ou comme horloge mère pour un grand cadran installé sur la façade d'un bâtiment ou d'une tour (v. RIC05-10-15-20-25-30, p. 72).

Tidelock doit être utilisé en accouplement avec un ou plus cadrans réalisés selon le schéma graphique indiqué dans la figure.

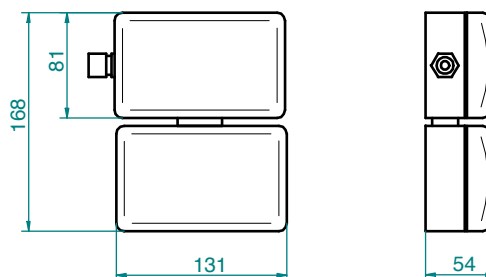
## TECHNICAL CHARACTERISTICS

- Power supply: 220 VAC-115 VAC
- Robust and high contrast LED/SWITCH analog interface
- Control of the clock dials via 2 channels with phase inversion
- Back up of 25 days in case of power cuts
- Nickel metal hydride rechargeable battery for the back up
- Accuracy to +/- 0,1 seconds/day at 22°C (72° F)
- Body in polycarbonate with IP55 protection and transparent cover
- Time base: moon cycle

CODE	DESCRIPTION
CLK3004001	TIDECLOCK
CLK3004002	TIDECLOCK 110V

# DCF RADIO SYNCHRONISED CITYCLOCK / CITYCLOCK RADIO SYNCHRONISÉE DCF

CIT05-09



This master clock controls city and advertising clocks with two/three/four clock faces.  
It runs on lithium batteries that guarantee up to 9 years' operation.  
Total precision and no maintenance.  
It has a quartz timebase with DCF77 reception and synchronisation

Horloge électronique de contrôle adaptée pour le contrôle des horloges de ville et publicitaires à deux-quatre faces.  
Alimentation avec piles au Lithium qui garantissent jusqu'à 9 ans de fonctionnement.  
Précision absolue et absence d'entretien.  
Elle est dotée d'une base temps au quartz avec dispositif de réception et de synchronisation via radio DCF77.

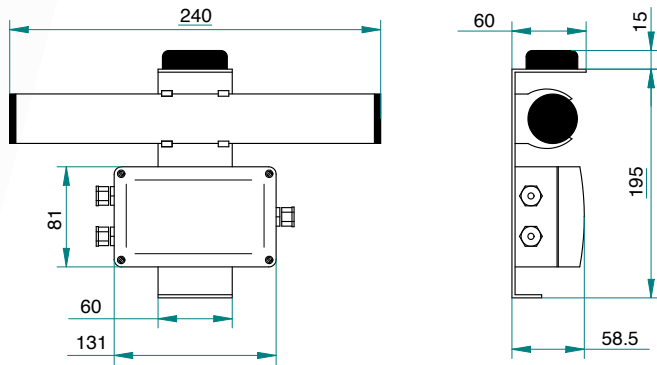
## TECHNICAL CHARACTERISTICS

- Autonomous functioning: 8 years for two clock dials diameter 80 cm (31,5 in)
- Absolute accuracy of the time
- Adjustable aerial to maximise the signal reception
- Maintenance free
- Self-setting of the secondary clocks
- Excellent value for money – Made in Italy
- Short circuit protection: entry current 50 mA, insertion time 1ms
- Duration of the programmable impulse: 0,25 s, 0,5 s
- Power supply of secondary clocks: max 35 VDC
- Impulses are memorized in case of battery being disconnected or insufficient voltage
- Reset of correct time upon replacement of flat battery of the secondary clocks
- Change of summer/winter time programmable from a table or via RADIO signal
- Choice of change between LAST SUNDAY OF SEPTEMBER, LAST SUNDAY OF OCTOBER, FORTH SUNDAY OF OCTOBER
- Box in ABS, IP55 protection
- Led to check the quality of the radio signal
- Absolute precision (1 thousandth of a second/year) with DCF signal
- Weight: 600 g (21,16 oz)

CODE	DESCRIPTION
CIT0504002	CITYCLOCK WITH BATTERY 10.8 VDC DCF RADIOSYNCHRONIZED
CIT0904002	CITYCLOCK WITH 220VAC POWER DCF RADIOSYNCHRONIZED

# GPS SYNCHRONISED CITYCLOCK / CITYCLOCK SYNCHRONISÉE GPS

CLK35



The innovative GPS-CITYCLOCK project stems from the experience of ECAT engineers and their desire to develop a precise, inexpensive and maintenance-free clock. Now GPS-CITYCLOCK makes this a reality. The result is a clock with an automatic hand-positioning and GPS synchronisation device that is totally independent, exploiting its long battery life (up to 9 years).

In the event of synchronisation-signal black-out, the clock continues to work with its internal quartz, self-synchronising when signal reception returns. Automatic daylight saving time changes.

Le projet innovant CITYCLOCK-GPS est le fruit de l'expérience des ingénieurs ECAT et de leur ambition à créer une horloge précise, économique et en même temps sans entretien. Aujourd'hui CITYCLOCK-GPS transforme cette ambition en réalité: le résultat c'est une horloge dotée d'un système de réglage automatique de la position des aiguilles et de synchronisation GPS, un dispositif en mesure de se gérer en indépendance totale en bénéficiant de sa grande autonomie de fonctionnement à piles (jusqu'à 9 ans).

En cas de black-out du signal de synchronisation l'horloge continue à fonctionner avec le quartz interne, en s'auto synchronisant à la reprise de la réception du signal. Changement automatique de l'heure légale/solaire.

## TECHNICAL CHARACTERISTICS

- Autonomous functioning: 9 years for two clock dials diameter MAX 90 cm
- Absolute precision (1 thousandth of a second/year) with GPS signal
- System for self-correction of hands position of hands (see SEC10, p. 83)
- Maintenance free
- Adjustable/removable aerial to maximise the signal reception
- LED to check the quality of the radio signal
- Self-setting of the secondary clocks
- Impulses are memorized in case of battery being disconnected or insufficient voltage
- Impulse of secondary clocks. Programmable impulse: 0.25 s, 0.5 s
- Protection for secondary clocks. Short circuit protection: entry current 50 mA, insertion time 1ms
- MASTER signal output: to synchronize multiple CITYCLOCK
- Programmable time zone
- Automatic change summer/winter time
- Case in break resistant ABS, protection IP55
- Weight: 950 g

CODE	DESCRIPTION
CLK3504001	CITYCLOCK WITH BATTERY 10.8 VDC GPS SYNCHRONIZED
CLK3504002	CITYCLOCK WITH BATTERY 220VAC GPS SYNCHRONIZED

## ACCESSORIES

CODE	DESCRIPTION
CLK0504001	PUNTO SP1 CLOCK FULL VERSION
CLK0504002	PUNTO SP1 CLOCK FULL VERSION 110V
CLK0504020	PUNTO SP1 CLOCK STANDARD VERSION
CLK0504021	PUNTO SP1 CLOCK STANDARD VERSION 110V
CLK0504022	PUNTO SP1 CLOCK BASIC VERSION
CLK0504023	PUNTO SP1 CLOCK BASIC VERSION 110V
CLK0504040	PUNTO SP1.DODICI CLOCK 110/220V
CLK0504050	PUNTO SP1.VENTI CLOCK 110/220V
CLK0504060	PUNTO SP1 RACK CLOCK 110/220V
CLK0504070	PUNTO SP1 CLOCK "LARGE CASE" 110/220V
PUN0504001	PUNTO4 CLOCK PLASTIC CASE
PUN0504002	PUNTO4 CLOCK BACK LIGHTED PLASTIC CASE
PUN0504003	PUNTO4 CLOCK METAL CASE
PUN0504004	PUNTO4 CLOCK BACK LIGHTED METAL CASE
PUN0504005	PUNTO4 CLOCK 4 CHANNELS PLASTIC CASE
PUN0504006	PUNTO4 CLOCK 4 CHANNELS METAL CASE
PUN0504007	PUNTO4 CLOCK 2 CHANNELS PLASTIC CASE
PUN0504008	PUNTO4 CLOCK 2 CHANNELS METAL CASE
PUN0504009	PUNTO4 CLOCK RACK VERSION
PUN1004001	PUNTO4 CLOCK IND. PLASTIC CASE
PUN1004002	PUNTO4 CLOCK IND. BACK LIGHTED PLASTIC CASE
PUN1004003	PUNTO4 CLOCK IND. METAL CASE
PUN1004004	PUNTO4 CLOCK IND. BACK LIGHTED METAL CASE
PUN1004005	PUNTO4 CLOCK IND. 12:24V 2 CHANNEL PLASTIC CASE
PUN1004006	PUNTO4 CLOCK IND. 12:24V 2 CHANNEL METAL CASE
BET0504001	BETA8 CLOCK METAL CASE
BET0504002	BETA8 CLOCK LARGE CASE
BET0504003	BETA8 CLOCK FOR RACK MODULE
BET0504004	BETA8 CLOCK PLASTIC CASE
CRO0504001	CRONOS20 CLOCK METAL CASE
CRO0504002	CRONOS20 CLOCK LARGE CASE
CRO0504003	CRONOS20 CLOCK FOR RACK MODULE
SIR0504001	SIRIO12 CLOCK METAL CASE
SIR0504002	SIRIO12 CLOCK PLASTIC CASE
SIR0504003	SIRIO12 CLOCK LARGE CASE
SIR0504004	SIRIO12 CLOCK FOR RACK MODULE
CLK3004001	TIDECLOCK 220V
CLK3004002	TIDECLOCK 110V
CIT0504002	CITYCLOCK WITH BATTERY 10.8 VDC DCF RADIOSYNCHRONIZED
CIT0904002	CITYCLOCK WITH 220VAC POWER DCF RADIOSYNCHRONIZED
CLK3504001	CITYCLOCK WITH BATTERY 10.8 VDC GPS SYNCHRONIZED
CLK3504002	CITYCLOCK WITH BATTERY 220VAC GPS SYNCHRONIZED
CAS1001008	PROTECTION FOR PUNTO4 BASIC VERSION
CAV-KIT-GPS-6P6C	LINE CORD CABLE 6P6C FOR CLK35
CAV-KIT-TAM	WIRING KIT FOR CIT05-09
CAV09/RS232	RS232 CONNECTION CABLE CLOCK - PC
CLK9004001	FIRMWARE PROGRAMMING TERMINAL USB PUNTO SP1 CLOCK
CLK9004002	PIANO KEYBOARD 2 OCTAVES
CLK9004010	SCHEDA INTERFACCIA INGRESSI ESTERNI SP1
CLK9004015	SCHEDA INTERFACCIA TASTIERA MUSICALE MIDI SP1
CSM-S20	S20 INTERFACE CARD FOR SLAVE MOVEMENT SEC05
FIL04001	ADDITIONAL FILTER 220V - 20 VA
FRT0504003	FERRITE RING FOR POWER SUPPLY PROTECTION
RCG9504001	PANEL FOR SWITCHES
RDE0504001	RADIO SYNCHRONIZER DCF ECAT FOR INDOOR INSTALLATION
RDE0504002	RADIO SYNCHRONIZER DCF ECAT FOR OUTDOOR INSTALLATION
RDE1004001	SYNCHRONIZER GPS ECAT

ANALOG QUARTZ CLOCKS FOR INDOOR USE  
HORLOGES ANALOGIQUES POUR INTÉRIEUR AVEC MOUVEMENT À QUARTZ  
GOL05 -10



Equipped with independent high quality quartz movement and powered by a 1,5 V battery that guarantees the maintenance free functioning for over a year. The independent movement allows an extremely easy installation without the need of an electrical line. Excellent legibility (viewing distance up to 50 m – 164 ft). The clock is available with single or double face. Wall ceiling or flag mounting system available.

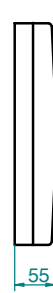
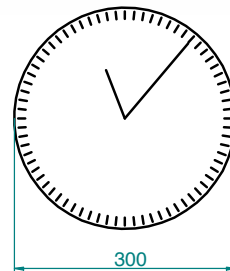
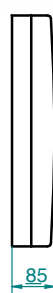
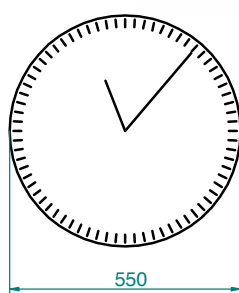
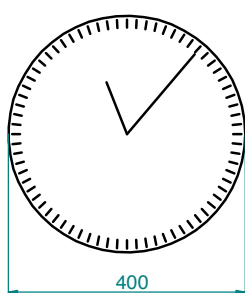
Équipée d'un mouvement indépendant à quartz et alimentée par une pile de 1,5 V qui garantie une autonomie de plus de un an, n'exige pas d'entretien. Le mouvement indépendant permet une grande facilité d'installation sans raccordement électrique. Lisibilité parfaite même à grande distance (jusqu'à 50 m). Disponible simple ou double face. Supports en options : montage mural, au plafond ou montage latéral.

**TECHNICAL CHARACTERISTICS**

- Diameter 30 cm (11,81 in)/40 cm (15,75 in), injected ABS
- Colour: white (black on request)
- Cover manufactured from unbreakable transparent polystyrene
- Frequency of quartz movement 4,194 Mhz
- Accuracy +/- 0.2 s/day + 20° C (68° F)
- Battery power: 1,5 V
- Duration: minimum 1 year

CODE	DESCRIPTION
GOL0501001	BASE FOR DIAM.30 CM IN ABS
GOL0501002	PLEXIGLAS COVER D.30 CM
GOL0504001	QUARTZ CLOCK 30 CM ARABIC NUMERALS BATTERY-POWERED
GOL0504002	QUARTZ CLOCK 30 CM DASHES NUMERALS BATTERY-POWERED
GOL0504003	QUARTZ CLOCK 30 CM ARABIC NUMERALS 220 VAC
GOL0504004	QUARTZ CLOCK 30 CM DASHES NUMERALS 220 VAC
GOL0504007	QUARTZ CLOCK 30 CM ARABIC NUMERALS DCF SYNC BATTERY-POWERED
GOL0504008	QUARTZ CLOCK 30 CM DASHES NUMERALS DCF SYNC BATTERY-POWERED
GOL0504009	QUARTZ CLOCK 30 CM ARABIC NUMERALS 220 VAC DCF SYNC
GOL0504010	QUARTZ CLOCK 30 CM DASHES NUMERALS 220 VAC DCF SYNC
GOL1001001	BASE FOR DIAM. 40 CM IN ABS
GOL1001002	PLEXIGLAS COVER D.40 CM
GOL1004001	QUARTZ CLOCK 40 CM ARABIC NUMERALS BATTERY-POWERED
GOL1004002	QUARTZ CLOCK 40 CM DASHES NUMERALS BATTERY-POWERED
GOL1004003	QUARTZ CLOCK 40 CM ARABIC NUMERALS 220 VAC
GOL1004004	QUARTZ CLOCK 40 CM DASHES NUMERALS 220 VAC

ANALOG SLAVE CLOCKS FOR INDOOR USE  
HORLOGES ANALOGIQUES POUR INTÉRIEUR AVEC MOUVEMENT RÉCEPTEUR  
GOL05-10-15



Equipped with receiver movement, these clocks are robustly constructed, extremely reliable and maintenance free. The receiver movement allows an unlimited number of clocks to be fitted, all accurately synchronized, connected to a master clock with polarized impulses 12-24 VDC. Excellent legibility (viewing distance up to 50 m, 164 ft). The clock is available with single or double face. Wall ceiling or flag mounting system available.

Équipée d'un mouvement récepteur robuste et extrêmement fiable, n'exige pas d'entretien. Le mouvement récepteur permet un branchement illimité d'horloges sur l'horloge mère à impulsions polarisées 12-24 VDC. Lisibilité parfaite même à grande distance (jusqu'à 50 m). Disponible simple ou double face. Supports en options : montage mural, au plafond ou montage latéral.

**TECHNICAL CHARACTERISTICS**

- Diameter 30 cm (11,81 in), 40 cm (15,75 in), 55 cm (21,65 in)
- Injected ABS, painted sheet metal
- Colour: white (black on request)
- Protective cover in unbreakable clear polystyrene
- Receiver movement: Power 12-24 VDC +- 25%
- Functioning: minute inversion of polarity
- Consumption: 12mA -12 VDC, 6 mA 24 VDC
- Duration of impulse: 0.5 s

CODE	DESCRIPTION
GOL0504011	SLAVE CLOCK 30 CM ARABIC NUMERALS 12 VDC
GOL0504012	SLAVE CLOCK 30 CM DASHES NUMERALS 12 VDC
GOL0504013	SLAVE CLOCK 30 CM ARABIC NUMERALS 24 VDC
GOL0504014	SLAVE CLOCK 30 CM DASHES NUMERALS 24 VDC
GOL1004005	SLAVE CLOCK 40 CM ARABIC NUMERALS 12 VDC
GOL1004006	SLAVE CLOCK 40 CM DASHES NUMERALS 12 VDC
GOL1004007	SLAVE CLOCK 40 CM ARABIC NUMERALS 24 VDC
GOL1004008	SLAVE CLOCK 40 CM DASHES NUMERALS 24 VDC
GOL1504001	SLAVE CLOCK 55 CM ARABIC NUMERALS 12 VDC
GOL1504002	SLAVE CLOCK 55 CM ARABIC NUMERALS 24 VDC

## ANALOG CLOCK FOR OUTDOOR USE HORLOGE ANALOGIQUE POUR EXTÉRIEUR

TAM05-10



The ECAT analog clock for outdoor use is an elegant solution for signalling time in the city and as an element of street decoration, advertising panel in highways, railway stations, airports etc.

Available in modern or antique style, single or double clock face, Cityclock can be purchased and decorated with a cast iron column. Different models are available to blend in with any type of architecture.

L'horloge analogique d'extérieur ECAT est une solution élégante pour l'indication de l'heure dans la ville et comme un élément de mobilier urbain, panneaux d'affichage dans les routes, les gares, les aéroports, etc.

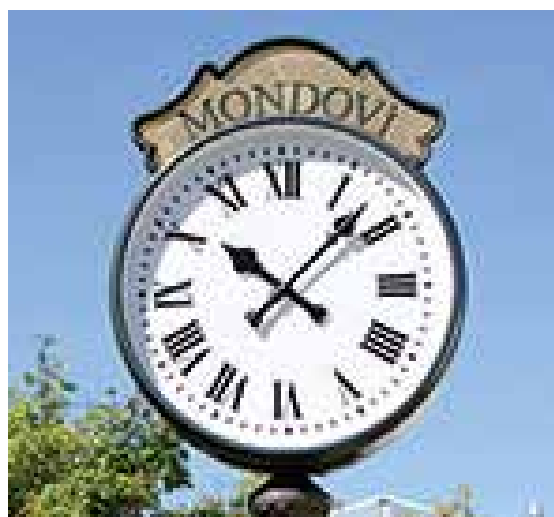
Disponible dans un style moderne ou ancien, simple ou double face, Cityclock peut être décoré et acheté avec une colonne en fonte. Les différents modèles que nous proposons sont parfaitement adaptés à tout type d'architecture.

### TECHNICAL CHARACTERISTICS

- Case in oven varnished galvanized steel and aluminium with epoxy resins that are resistant to the atmosphere agents
- Cover in unbreakable Plexiglas ®
- Power supply: lithium battery, duration 9 years or 220 VAC
- Absolute accuracy: 1 thousandth of a second/year (with GPS or DCF77 signal)
- Weight 13 kg ca (28 lb)

### RELATED PRODUCTS

- Time base: quartz with synchronized device via GPS or DCF-77 signal (see master clock CIT05-09 or CLK35, p. 18)
- Removable GPS antenna to optimize signal reception (see RDE10)
- High sensitivity adjustable DCF77 antenna for signal reception up to 3000 km from Mainflingen (see RDE05)
- Movement of the clock hands with polarized minutes



ANALOG CLOCK FOR OUTDOOR USE  
HORLOGE ANALOGIQUE POUR EXTÉRIEUR  
TAM05-10



CODE
F1



CODE
F2



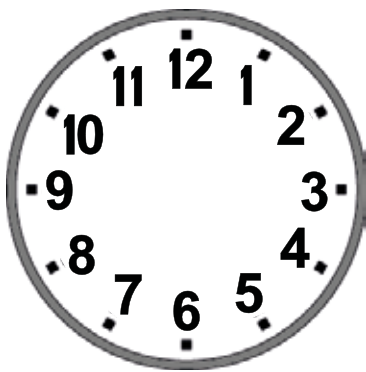
CODE
F3



CODE
F4



CODE
F5



CODE
Q1



CODE
Q2



CODE
Q3



CODE
L1



CODE
L2



CODE
L3



ANALOG CLOCK FOR OUTDOOR USE /  
HORLOGE ANALOGIQUE POUR EXTÉRIEUR

TAM05-10

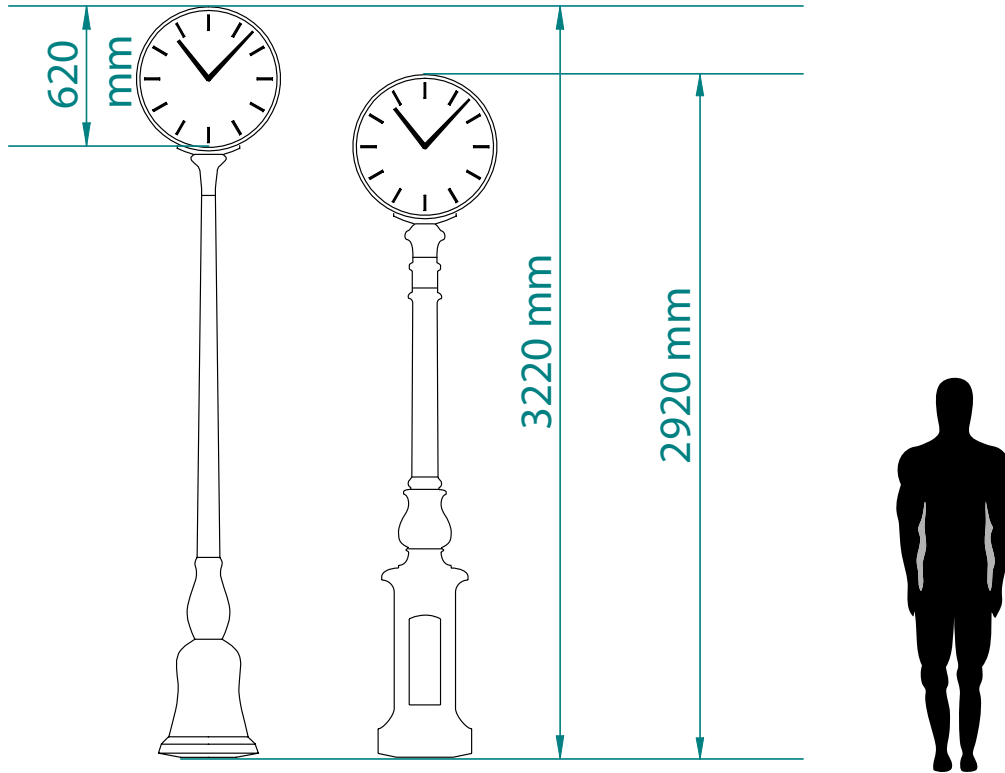


POLE P1 - TAM8504030



POLE P2 - TAM8504031

ANALOG CLOCK FOR OUTDOOR USE /  
HORLOGE ANALOGIQUE POUR EXTÉRIEUR  
TAM05-10



TAM1004013 - DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L1

ANALOG CLOCK FOR OUTDOOR USE /  
HORLOGE ANALOGIQUE POUR EXTÉRIEUR

TAM05-10

CODE	DESCRIPTION
TAM0504001	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L1
TAM0504002	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L2
TAM0504003	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L3
TAM0504004	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L1
TAM0504005	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L2
TAM0504006	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L3
TAM0504007	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L1
TAM0504008	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L2
TAM0504009	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L3
TAM0504010	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L1
TAM0504011	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L2
TAM0504012	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L3
TAM0504013	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L1
TAM0504014	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L2
TAM0504015	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L3
TAM0504016	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L1
TAM0504017	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L2
TAM0504018	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L3
TAM0504019	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L1
TAM0504020	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L2
TAM0504021	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L3
TAM0504022	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L1
TAM0504023	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L2
TAM0504024	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L3
TAM0504025	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L1
TAM0504026	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L2
TAM0504027	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L3
TAM0504028	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L1
TAM0504029	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L2
TAM0504030	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L3
TAM0504031	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L1
TAM0504032	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L2
TAM0504033	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L3
TAM0504034	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L1
TAM0504035	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L2
TAM0504036	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L3
TAM0504037	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L1
TAM0504038	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L2
TAM0504039	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L3

## ANALOG CLOCK FOR OUTDOOR USE / HORLOGE ANALOGIQUE POUR EXTÉRIEUR

### TAM05-10

TAM0504040	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L1
TAM0504041	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L2
TAM0504042	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L3
TAM0504043	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L1
TAM0504044	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L2
TAM0504045	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L3
TAM0504046	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L1
TAM0504047	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L2
TAM0504048	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L3
TAM0504049	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L1
TAM0504050	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L2
TAM0504051	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L3
TAM0504052	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L1
TAM0504053	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L2
TAM0504054	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L3
TAM1004001	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L1
TAM1004002	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L2
TAM1004003	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L3
TAM1004004	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L1
TAM1004005	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L2
TAM1004006	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L3
TAM1004007	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L1
TAM1004008	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L2
TAM1004009	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L3
TAM1004010	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L1
TAM1004011	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L2
TAM1004012	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L3
TAM1004013	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L1
TAM1004014	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L2
TAM1004015	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L3
TAM1004016	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L1
TAM1004017	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L2
TAM1004018	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L3
TAM1004019	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L1
TAM1004020	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L2
TAM1004021	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L3
TAM1004022	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L1
TAM1004023	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L2
TAM1004024	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L3
TAM1004025	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L1

ANALOG CLOCK FOR OUTDOOR USE /  
HORLOGE ANALOGIQUE POUR EXTÉRIEUR

TAM05-10

TAM1004026	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L2
TAM1004027	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L3
TAM1004028	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L1
TAM1004029	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L2
TAM1004030	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L3
TAM1004031	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L1
TAM1004032	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L2
TAM1004033	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L3
TAM1004034	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L1
TAM1004035	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L2
TAM1004036	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L3
TAM1004037	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L1
TAM1004038	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L2
TAM1004039	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L3
TAM1004040	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L1
TAM1004041	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L2
TAM1004042	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L3
TAM1004043	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L1
TAM1004044	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L2
TAM1004045	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L3
TAM1004046	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L1
TAM1004047	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L2
TAM1004048	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L3
TAM1004049	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L1
TAM1004050	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L2
TAM1004051	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L3
TAM1004052	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L1
TAM1004053	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L2
TAM1004054	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L3

## ANALOG PACE CLOCKS / HORLOGES COMPTE-SECONDES ANALOGIQUES

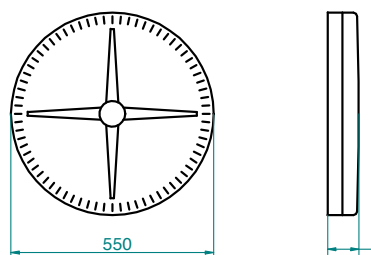
PSC05-10

Easy legibility is a feature of this pace clock, complete with Plexiglas cover.  
Equipped with four clock hands of different colours to note the start time.

L'horloge compte-secondes est d'une grande lisibilité et protégée par un plexiglas.  
Cette horloge est dotée de quatre aiguilles de couleur différente pour indiquer les départs.



### PSC05



#### TECHNICAL CHARACTERISTICS

- Round version, diameter 55 cm (21,65 in)
- Clock face in iron oven varnished
- Protection glass in unbreakable Plexiglas
- 24 VAC movement (transformer not included)

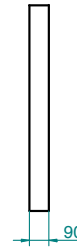
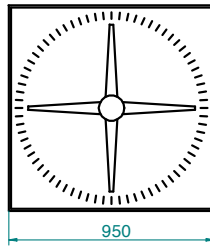
CODE	DESCRIPTION
PSC0504001	SECOND COUNTER CLOCK FOR SWIMMING POOL PISCINA55



ANALOG PACE CLOCKS /  
HORLOGES COMPTE-SECONDES ANALOGIQUES

PSC05-10

PSC10



TECHNICAL CHARACTERISTICS

- Square version 95 cm (37,41 in)
- Dial in acrylic material
- Unbreakable Plexiglas cover
- 24 VAC movement (transformer not included)



CODE	DESCRIPTION
PSC1004001	SECOND COUNTER CLOCK FOR SWIMMING POOL PISCINA95

## TABLE OF PRODUCT CODES

TABLE OF PRODUCT CODES

ANALOG CLOCKS / HORLOGES ANALOGIQUES

CODE	DESCRIPTION
GOL0501001	PLEXIGLAS COVER D.30 CM
GOL0501002	ABS CLOCK BASE GOLD D. 30 NEUTRAL SILK SCREEN ARABIC NUMBERS
GOL0504001	QUARTZ CLOCK 30 CM ARABIC NUMERALS BATTERY-POWERED
GOL0504002	QUARTZ CLOCK 30 CM DASHES NUMERALS BATTERY-POWERED
GOL0504003	QUARTZ CLOCK 30 CM ARABIC NUMERALS 220 VAC
GOL0504004	QUARTZ CLOCK 30 CM DASHES NUMERALS 220 VAC
GOL0504007	QUARTZ CLOCK 30 CM ARABIC NUMERALS DCF SYNC BATTERY-POWERED
GOL0504008	QUARTZ CLOCK 30 CM DASHES NUMERALS DCF SYNC BATTERY-POWERED
GOL0504009	QUARTZ CLOCK 30 CM ARABIC NUMERALS 220 VAC DCF SYNC
GOL0504010	QUARTZ CLOCK 30 CM DASHES NUMERALS 220 VAC DCF SYNC
GOL0504011	SLAVE CLOCK 30 CM ARABIC NUMERALS 12 VDC
GOL0504012	SLAVE CLOCK 30 CM DASHES NUMERALS 12 VDC
GOL0504013	SLAVE CLOCK 30 CM ARABIC NUMERALS 24 VDC
GOL0504014	SLAVE CLOCK 30 CM DASHES NUMERALS 24 VDC
GOL1001001	PLEXIGLAS COVER D.40 CM
GOL1001002	ABS CLOCK BASE GOLD D.40 NEUTRAL SILK SCREEN ARABIC NUMBERS
GOL1004001	QUARTZ CLOCK 40 CM ARABIC NUMERALS BATTERY-POWERED
GOL1004002	QUARTZ CLOCK 40 CM DASHES NUMERALS BATTERY-POWERED
GOL1004003	QUARTZ CLOCK 40 CM ARABIC NUMERALS 220 VAC
GOL1004004	QUARTZ CLOCK 40 CM DASHES NUMERALS 220 VAC
GOL1004005	SLAVE CLOCK 40 CM ARABIC NUMERALS 12 VDC
GOL1004006	SLAVE CLOCK 40 CM DASHES NUMERALS 12 VDC
GOL1004007	SLAVE CLOCK 40 CM ARABIC NUMERALS 24 VDC
GOL1004008	SLAVE CLOCK 40 CM DASHES NUMERALS 24 VDC
GOL1504001	SLAVE CLOCK 55 CM ARABIC NUMERALS 12 VDC
GOL1504002	SLAVE CLOCK 55 CM ARABIC NUMERALS 24 VDC
TAM0504001	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L1
TAM0504002	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L2
TAM0504003	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L3
TAM0504004	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L1
TAM0504005	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L2
TAM0504006	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L3
TAM0504007	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L1
TAM0504008	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L2
TAM0504009	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L3
TAM0504010	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L1
TAM0504011	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L2
TAM0504012	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L3
TAM0504013	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L1
TAM0504014	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L2
TAM0504015	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L3
TAM0504016	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L1
TAM0504017	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L2
TAM0504018	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L3
TAM0504019	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L1
TAM0504020	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L2
TAM0504021	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L3



## TABLE OF PRODUCT CODES

TAM0504022	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L1
TAM0504023	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L2
TAM0504024	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L3
TAM0504025	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L1
TAM0504026	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L2
TAM0504027	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L3
TAM0504028	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L1
TAM0504029	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L2
TAM0504030	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L3
TAM0504031	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L1
TAM0504032	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L2
TAM0504033	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L3
TAM0504034	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L1
TAM0504035	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L2
TAM0504036	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L3
TAM0504037	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L1
TAM0504038	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L2
TAM0504039	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L3
TAM0504040	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L1
TAM0504041	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L2
TAM0504042	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L3
TAM0504043	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L1
TAM0504044	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L2
TAM0504045	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L3
TAM0504046	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L1
TAM0504047	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L2
TAM0504048	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L3
TAM0504049	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L1
TAM0504050	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L2
TAM0504051	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L3
TAM0504052	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L1
TAM0504053	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L2
TAM0504054	SINGLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L3
TAM1004001	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L1
TAM1004002	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L2
TAM1004003	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q1 L3
TAM1004004	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L1
TAM1004005	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L2
TAM1004006	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q2 L3
TAM1004007	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L1
TAM1004008	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L2
TAM1004009	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK Q3 L3
TAM1004010	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L1
TAM1004011	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L2
TAM1004012	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q1 L3
TAM1004013	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L1
TAM1004014	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L2
TAM1004015	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q2 L3

## TABLE OF PRODUCT CODES

TAM1004016	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L1
TAM1004017	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L2
TAM1004018	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F1 Q3 L3
TAM1004019	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L1
TAM1004020	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L2
TAM1004021	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q1 L3
TAM1004022	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L1
TAM1004023	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L2
TAM1004024	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q2 L3
TAM1004025	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L1
TAM1004026	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L2
TAM1004027	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F2 Q3 L3
TAM1004028	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L1
TAM1004029	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L2
TAM1004030	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q1 L3
TAM1004031	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L1
TAM1004032	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L2
TAM1004033	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q2 L3
TAM1004034	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L1
TAM1004035	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L2
TAM1004036	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F3 Q3 L3
TAM1004037	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L1
TAM1004038	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L2
TAM1004039	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q1 L3
TAM1004040	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L1
TAM1004041	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L2
TAM1004042	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q2 L3
TAM1004043	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L1
TAM1004044	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L2
TAM1004045	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F4 Q3 L3
TAM1004046	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L1
TAM1004047	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L2
TAM1004048	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q1 L3
TAM1004049	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L1
TAM1004050	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L2
TAM1004051	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q2 L3
TAM1004052	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L1
TAM1004053	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L2
TAM1004054	DOUBLE FACE ENCASED CLOCK W/O MASTER CLOCK F5 Q3 L3
PSC0504001	SECOND COUNTER CLOCK FOR SWIMMING POOL PISCINA55
PSC1004001	SECOND COUNTER CLOCK FOR SWIMMING POOL PISCINA95
GOL8504001	FLAG STYLE BRACKET FOR DIAMETER 30 CM
GOL8504002	CEILING STYLE BRACKET FOR DIAMETER 30 CM
GOL8504003	FLAG STYLE BRACKET FOR DIAMETER 40 CM
GOL8504004	CEILING STYLE BRACKET FOR DIAMETER 40 CM
GOL8504005	FLAG STYLE BRACKET FOR DIAMETER 55 CM
GOL8504006	CEILING STYLE BRACKET FOR DIAMETER 55 CM
GOL9004003	POWER SUPPLY 220V FOR QUARTZ MOVEMENT

## TABLE OF PRODUCT CODES

### ACCESSORIES

TAM8004001	LED ILLUMINATION FOR DOUBLE FACE CLOCK
TAM8004002	LED ILLUMINATION FOR SINGLE FACE CLOCK
TAM8504010	FIXING BRACKET D. 60 POLE MOUNTING
TAM8504011	FIXING BRACKET D. 60 FLAG STYLE
TAM8504012	FIXING BRACKET D. 60 HORIZONTAL MOUNTING
TAM8504013	FIXING BRACKET D. 60 CEILING STYLE
TAM8504030	OLD STYLE POLE MOD P1
TAM8504031	OLD STYLE POLE MOD P2



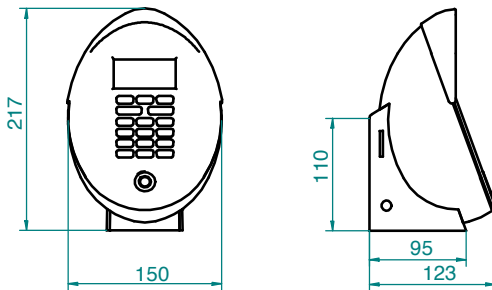
## ACCESS CONTROL READER OVO / BADGEUSE OVO OVO05

### TECHNICAL CHARACTERISTICS



- Complete package hardware/software
- Multi-company management
- Management of up to 200 employees
- Multipoint terminal network
- Export data by USB – RS232 – memory card
- 21.000 storable clocking in/out  
(10 years data retention without power supply)
- Transponder reading without any contact with safety code 64 bit
- Data format compatible for sending by Internet
- Device for DCF synchronization\*
- Device for GPS synchronization\*
- Memory card and USB reader for memory card\*

- Graphic display 128 x 64 (5,04 x 2,52 in) blue colour
- Power supply 110-220 VAC
- Container in ABS injected
- Table or wall mounting
- It does not require qualified personnel
- 2 programmable relay outputs 10A/250 V\*



*Minimum requirements: Hardware: PC RAM 512 MB; Software: Windows XP SP3 or upper  
\*optional*

CODE	DESCRIPTION
OVO0504001	CLOCK TIME RECORDER OVO GREY
OVO0504002	CLOCK TIME RECORDER OVO BLACK
OVO0504003	CLOCK TIME RECORDER OVO YELLOW
OVO0504004	CLOCK TIME RECORDER OVO WHITE
OVO0504005	CLOCK TIME RECORDER OVO PINK
OVO0504006	CLOCK TIME RECORDER OVO BLUE
OVO0504007	CLOCK TIME RECORDER OVO GREEN



## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
OV00504001	CLOCK TIME RECORDER OVO GREY
OV00504002	CLOCK TIME RECORDER OVO BLACK
OV00504003	CLOCK TIME RECORDER OVO YELLOW
OV00504004	CLOCK TIME RECORDER OVO WHITE
OV00504005	CLOCK TIME RECORDER OVO PINK
OV00504006	CLOCK TIME RECORDER OVO BLUE
OV00504007	CLOCK TIME RECORDER OVO GREEN
BADGE-NTR	WHITE TRANSPONDER BADGE FOR OVO CLOCK MIN 15 PCS
BADGE-OVO	OVO TRANSPONDER BADGE FOR OVO CLOCK MIN 15 PCS
BADGE-PRS	TRANSPONDER BADGE FOR OVO CLOCK ON REQUEST
OV08004001	MEMORY CARD
OV08004002	MEMORY CARD READER
OV08004003	USB CABLE 2 MT
OV08004004	RADIO DCF SYNCHRONIZATION FOR TIME CLOCK RECORDER OVO
OV08004006	LAN MODULE FOR DATA TRANSMISSION
OV08004007	RELAIS MODULE FOR ALARM SYSTEM
OV08004008	SERIAL CABLE 9 PIN M-F 2 MT
OV08004009	WiFi MODULE
OV08504001	CARD HOLDER FOR BADGES 24 PLACES
STF0504001	SOFTWARE OVO FULL VERSION
TIM8504001	CARDS FOR TIME CLOCK RECORDER ER2100 (ER1500-2200-2500-3100)
TIM8504002	CARDS FOR TIME CLOCK RECORDER ER200 (ER2600)
TIM8504003	CARDS FOR TIME CLOCK RECORDER QR350-550 (QR120-312)
TIM8504005	25 PLACES CARD HOLDER
TIM8504006	RIBBON FOR ER-IR100E (ER1100-1500)
TIM8504007	RIBBON FOR ER-IR101 (ER2100-2200)
TIM8504008	RIBBON FOR ER-IR102 (ER2500-2600-3100)
TIM8504009	RIBBON FOR QR-120 (QR210)
TIM8504011	RIBBON FOR QR-700/800 (QR725)

ACCESSORIES

TABLE OF PRODUCT CODES

ACCESS CONTROL / CONTRÔLE D'ACCÈS

## MODULE BOX

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

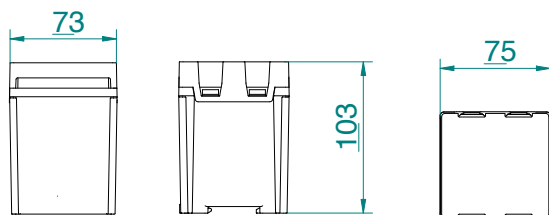
The project comes from the awareness that the wiring of electrical board and analog peripheral components take a long time and is extremely problematic where there is a need to intervene on the spot. For this reason we have created a complete range of products that simplify the work of the installers 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

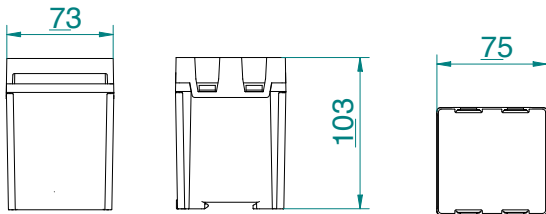
## MBX05-10-15-20-25-30-35

### 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



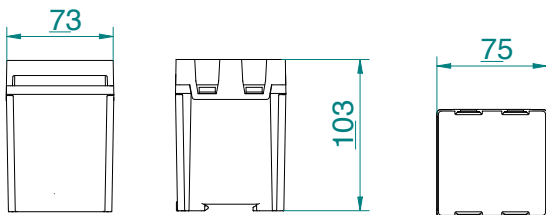
### MBX15 REMOTEBOX

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

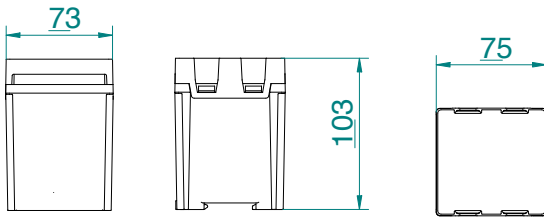
### MBX05-10-15-20-25-30-35

#### 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.

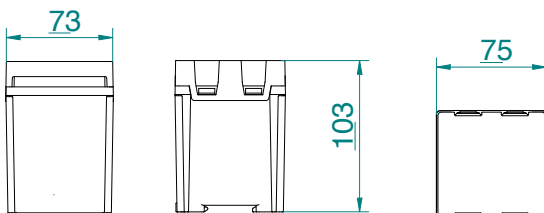


CODE	DESCRIPTION
MBX2004001	SWINGBOX-F ELECTRONIC CONTROLLER FOR BELL WITH CLUTCH
MBX2004002	SWINGBOX-S ELECTRONIC CONTROLLER FOR BELL WITH HALL SENSOR



#### MBX2004003

Hall Sensor for Swingbox



#### MBX25 SYNCHROBOX-HM

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

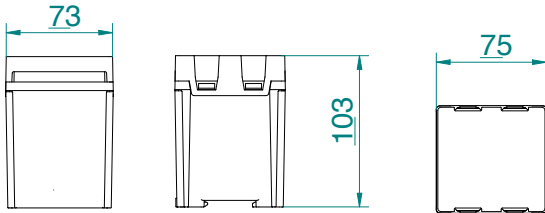
##### TECHNICAL CHARACTERISTICS

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



MBX30 TELEBOX

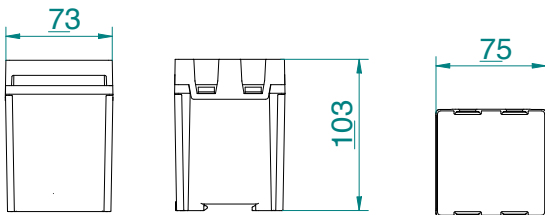
Device used for the control, via GSM, of the PUNTO SP1 clocks.



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

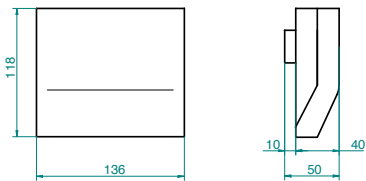
CODE	DESCRIPTION
QDE0504001	CABLED CONTROL PANEL ON REQUEST
QDE0504002	CABLED CONTROL PANEL FOR EASYCARILLON 5 BELLS

## 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\*

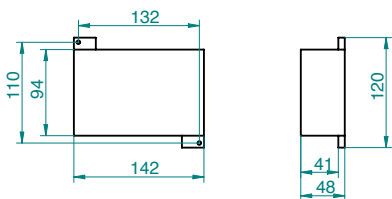


#### TECHNICAL CHARACTERISTICS

- 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

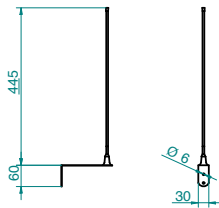
\* Estimate maximum range (open air)

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

CODE	DESCRIPTION
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

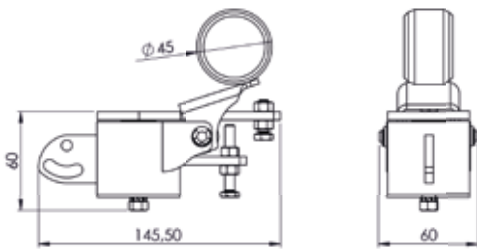
### ACCESSORIES



INTERNAL STRIKERS / MARTEAUX ÉLECTRIQUES INTERNES  
ELE30-35-40-45-50

The internal bell strikers are used for tolling the bells, carillons and on fixed bells. They are available in five standard types for bells between 10 kg (22 lb) and 500 kg (1100 lb). The speed and power of the percussion are adjustable to ensure that the sound is harmonious and powerful. The use of direct current allows a minimum power consumption and the total absence of noise during the functioning. Strikers are simple, of solid construction and easy to install.

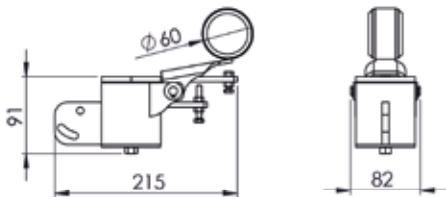
Ce marteau électrique placé à l'intérieur de la cloche est utilisé pour le carillon. Cinq modèles standard pour cloches entre 10 et 500 kg sont disponibles. La vitesse et la puissance de frappe sont réglables afin de émettre un son harmonieux et pur. L'utilisation de courant continu permet une très faible consommation et l'absence de «bruit électrique» pendant le fonctionnement. Cet électro-tintement se distingue par sa robustesse de construction et sa facilité d'installation.

STRIKER ELE30  
MARTEAU ÉLECTRIQUE ELE30

## TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 28 kg (62 lb)
- Hammer: 0,4 kg (0,9 lb)
- Power supply: 220 VDC/1 A
- Strikes per seconds: 4

CODE	DESCRIPTION
ELE3004001	INTERNAL STRIKER ELE30 FOR BELLS UP TO 30 KG (66LB)

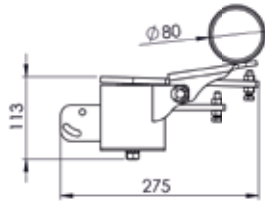
STRIKER ELE35  
MARTEAU ÉLECTRIQUE ELE35

## TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 59 kg (130 lb)
- Hammer: 0,9 kg (2 lb)
- Power supply: 220 VDC/1,25 A
- Strikes per seconds: 4

CODE	DESCRIPTION
ELE3504001	INTERNAL STRIKER ELE35 FOR BELLS 30-60 KG (66LB-130LB)

INTERNAL STRIKERS / MARTEAUX ÉLECTRIQUES INTERNES  
ELE30-35-40-45-50

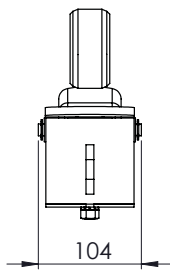
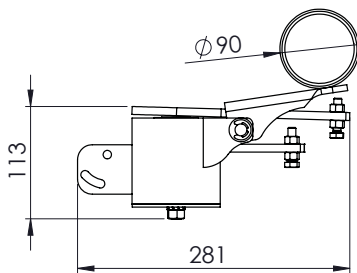


STRIKER ELE40  
MARTEAU ÉLECTRIQUE ELE40

TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 150 kg (330 lb)
- Hammer: 2 kg (4,5 lb)
- Power supply: 220 VDC / 1,5 A
- Strikes per seconds: 3

CODE	DESCRIPTION
ELE4004001	INTERNAL STRIKER ELE40 FOR BELLS 60-150 KG (130LB-320LB)

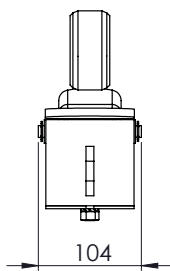
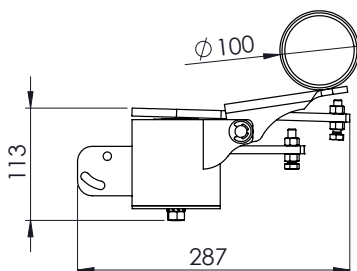


STRIKER ELE45  
MARTEAU ÉLECTRIQUE ELE45

TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 300 kg (600 lb)
- Hammer: 2,5 Kg (5,5 lb)
- Power supply: 220 VDC / 2,5 A
- Strikes per seconds: 3

CODE	DESCRIPTION
ELE4504001	INTERNAL STRIKER ELE45 FOR BELLS 150-300 KG (320LB-600LB)



STRIKER ELE50  
MARTEAU ÉLECTRIQUE ELE50

TECHNICAL CHARACTERISTICS

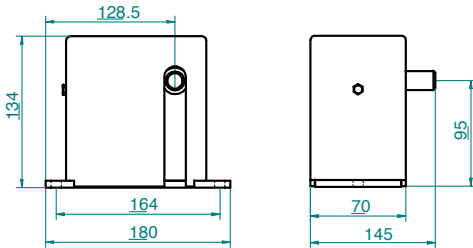
- Percussion power: for bells up to 500 Kg (1100 lb)
- Hammer: 3,4 kg (7,5 lb)
- Power supply: 220 VDC / 3 A
- Strikes per seconds: 3

CODE	DESCRIPTION
ELE5004001	INTERNAL STRIKER ELE50 FOR BELLS 300-500 KG (600LB-1100LB)

## EXTERNAL STRIKERS / MARTEAUX ÉLECTRIQUES EXTERNES ELE05-10-15-20

Strikers are used for tolling the bells, carillons, lauds and hour striking. They are available in four standard types for bells between 15 kg (33 lb) and 2300 kg (5000 lb). The speed and power of the percussion are adjustable to ensure that the sound is harmonious and powerful. The use of direct current allows a minimum power consumption and the total absence of noise during the functioning. Strikers are simple, of solid construction and easy to install.

Les marteau électrique sont utilisés pour les tintements, les carillons, l'Angélus, la sonnerie des heures. Il y a quatre modèles standard disponibles pour des cloches d'un poids à partir de 15 kg jusqu'à 2300 kg. La puissance et la vitesse de percussion sont réglables donnant à la cloche toutes ses harmonies avec la force souhaitée. L'utilisation du courant continu permet une consommation d'électricité très faible et l'absence de « bruit électrique » pendant le fonctionnement. Les marteaux électriques ECAT sont simples, très solides et très faciles à installer.

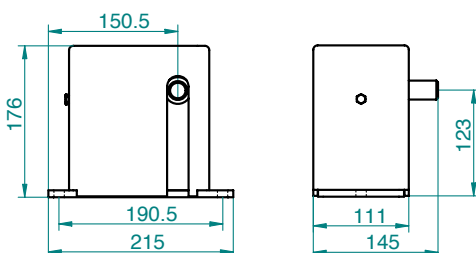


### ELE05 STRIKER W/ O Mallet MARTEAU ÉLECTRIQUE ELE05 SANS BOULE

#### TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 85 Kg (190 lb)
- Hammer: from 0,2 to 0,5 kg (0,45 lb - 1,1 lb)
- Power supply: 220 VDC / 1 A
- Tollings: 5 per second
- Torque: 3,9 Nm
- Case: ABS

CODE	DESCRIPTION
ELE0504001	EXTERNAL STRIKER ELE05 FOR BELLS UP TO 100 KG (220LB)



### ELE10 STRIKER W/ O Mallet MARTEAU ÉLECTRIQUE ELE10 SANS BOULE

#### TECHNICAL CHARACTERISTICS

- Percussion power: for bells up to 470 kg (1036 lb)
- Hammer: from 0,5 to 2 kg (1,1 lb - 4,5 lb)
- Power supply: 220 VDC / 2,5 A
- Tollings: 4 per second
- Torque: 16,6 Nm
- Case: ABS

CODE	DESCRIPTION
ELE1004001	EXTERNAL STRIKER ELE10 FOR BELLS 100-500 KG (220-1100LB)

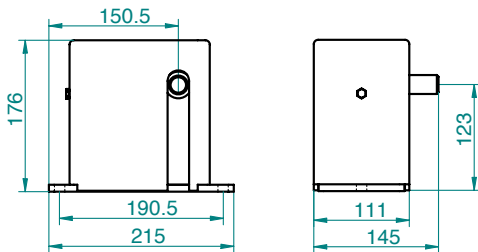




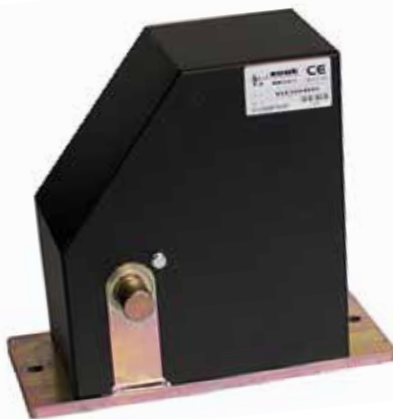
**ELE15 STRIKER W/O Mallet**  
**MARTEAU ÉLECTRIQUE ELE15 SANS BOULE**

**TECHNICAL CHARACTERISTICS**

- Percussion power: for bells up to 1370 Kg (3020 lb)
- Hammer: from 2 to 5 kg (4,5 lb - 11 lb)
- Power supply: 220 VDC / 3 A
- Tollings: 3 per second
- Torque: 23,5 Nm
- Case: ABS



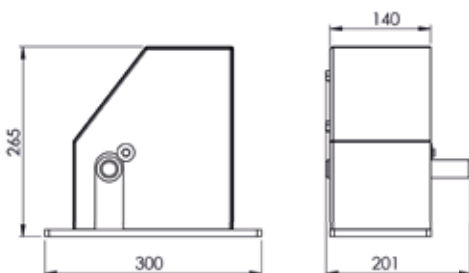
CODE	DESCRIPTION
ELE1504001	EXTERNAL STRIKER ELE15 FOR BELLS 500-1300 KG (1100-2860LB)
ELE1504002	EXTERNAL STRIKER ELE15 FOR BELLS 1000-1500 KG (2200-3300LB)



**ELE20 STRIKER W/ O Mallet**  
**MARTEAU ÉLECTRIQUE ELE20 SANS BOULE**

**TECHNICAL CHARACTERISTICS**

- Percussion power: for bells up to 2300 kg (5070 lb)
- Hammer: from 5 to 9 Kg (11 lb - 20 lb)
- Power supply: 220 VDC / 5 A
- Tollings: 2 per second
- Torque: 63,7 Nm
- Case: sheet metal

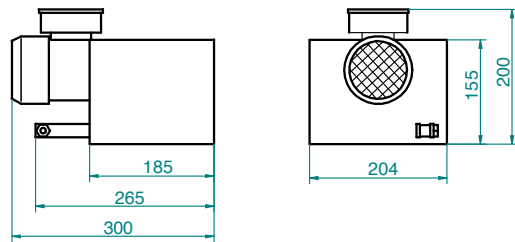


CODE	DESCRIPTION
ELE2004001	EXTERNAL STRIKER ELE20 FOR BELLS 1300-2500 KG (2860-5510LB)

MOTORIZED STRIKERS  
TINTEMENTS À TIRAGE POUR BRAS DE FRAPPE MÉCANIQUE  
ELE25

The motorized striker is used for tolling heavy bells. The use of asynchronous three-phase motors, the particularly robust construction and the simplicity of the installation ensures that this product is extremely reliable.

Le tintement à moteur est utilisé pour s'adapter sur des frappes mécaniques souvent existantes et sur des cloches de très grands diamètres. L'utilisation d'un moteur asynchrone triphasé, la structure particulièrement robuste, la simplicité de fonctionnement, rendent ce produit particulièrement attractif.



TECHNICAL CHARACTERISTICS

- Asynchronous three-phase motor 220V 380V 6 poles
- Power 0,09 Kw (0,12 HP)
- Percussion speed: 1 stroke/1,5 s

CODE	DESCRIPTION
ELE2504001	3 PHASE MOTORIZED STRIKER

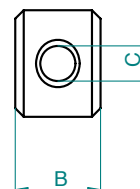
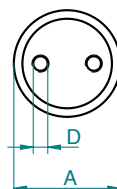
# HAMMERS FOR STRIKERS

## BOULES DE FRAPPE POUR MARTEAUX ÉLECTRIQUES

### MAZ05-10

The hammer is the element that comes directly into contact with the bell. It has to be dimensioned to the weight of the bell and of the striker used. In particular, the adjustable hammer has to be matched with a pole for adjustable hammer. This kind of regulation allows in the possibility of modifying the length of the arm.

La boule de frappe est la partie qui entre directement en contact avec la cloche. Elle doit être proportionnée avec le poids de la cloche et du marteau électrique utilisé. En particulier la boule réglable de frappe doit être couplée avec un bras pour boule de frappe réglable. Cette variante offre la possibilité de modifier la longueur du bras.



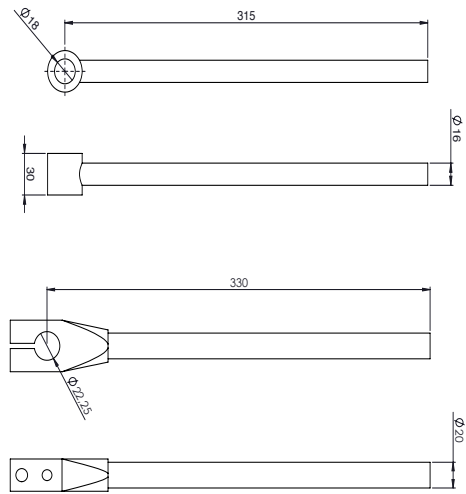
CODE	DESCRIPTION	HAMMER NUMBER	A (mm)	B (mm)	C (mm)	D (mm)	HAMMER WEIGHT (Kg)
MAZ0504006	ADJUSTABLE HAMMER N. 3 FOR STRIKER ELE05	03	50	40	16,5	2 X 8 MA	0.600
MAZ0504007	ADJUSTABLE HAMMER N. 4 FOR STRIKER ELE05	04	60	40	16,5	2 X 8 MA	0.850
MAZ1004012	ADJUSTABLE HAMMER N. 3 FOR STRIKER ELE10-15	3	50	50	20,5	2 X 8 MA	0,750
MAZ1004013	ADJUSTABLE HAMMER N. 4 FOR STRIKER ELE10-15	4	60	50	20,5	2 X 10 MA	1,05
MAZ1004014	ADJUSTABLE HAMMER N. 5 FOR STRIKER ELE10-15	5	70	50	20,5	2 X 10 MA	1,5
MAZ1004015	ADJUSTABLE HAMMER N. 6 FOR STRIKER ELE10-15	6	80	50	20,5	2 X 12 MA	1,9
MAZ1004016	ADJUSTABLE HAMMER N. 7 FOR STRIKER ELE10-15	7	90	50	20,5	2 X 12 MA	2,4
MAZ1004017	ADJUSTABLE HAMMER N. 8 FOR STRIKER ELE10-15	8	90	60	20,5	2 X 12 MA	2,9
MAZ1004018	ADJUSTABLE HAMMER N. 9 FOR STRIKER ELE10-15	9	100	60	20,5	2 X 12 MA	3,5
MAZ1004019	ADJUSTABLE HAMMER N. 10 FOR STRIKER ELE10-15	10	100	70	20,5	2 X 12 MA	4,2

CODE	DESCRIPTION	HAMMER NUMBER	A (mm)	L (LENGTH) (mm)	B HAMMER THICKNESS (mm)	HAMMER WEIGHT (Kg)
MAZ1504001	FIXED HAMMER N.11 FOR STRIKER ELE20	11	120	283	60	5,1
MAZ1504002	FIXED HAMMER N. 12 FOR STRIKER ELE20	12	120	283	70	5,95
MAZ1504003	FIXED HAMMER N. 13 FOR STRIKER ELE20	13	130	283	75	6,8
MAZ1504004	FIXED HAMMER N. 14 FOR STRIKER ELE20	14	130	283	85	8,5

## POLE FOR ADJUSTABLE HAMMER / BRAS DE FRAPPE POUR BOULE RÉGLABLE MAZ05-10

The pole for adjustable hammer has to be clearly matched with a particular adjustable hammer. This kind of regulation consists in the possibility to modify the length of the arm to get round difficulties in fixing of the striker.

Le bras de frappe pour boule réglable doit être couplé à une boule de frappe spécifique réglable. Cette variante offre la possibilité de modifier la longueur du bras afin de faciliter la fixation du marteau électrique.



CODE	DESCRIPTION	Length (mm)	Diameter (mm)
MAZ0504005	POLE FOR ADJUSTABLE HAMMER FOR STRIKER ELE05	315	16
MAZ0504011	POLE FOR ADJUSTABLE HAMMER FOR STRIKER ELE10-15	330	20



## COMPATIBILITY TABLE BELL/STRIKER/HAMMER

### TABLEAU DE CORRESPONDANCE CLOCHE/MARTEAU ÉLECTRIQUE/BOULE DE FRAPPE

STONE	ANGLO-SAXON TONE	DIAMETER (mm)	HAMMER WEIGHT (Kg)	ADJUSTABLE HAMMER FOR ELE05 STRIKER	ADJUSTABLE HAMMER FOR ELE10 STRIKER	ADJUSTABLE HAMMER FOR ELE1504001 STRIKER	ADJUSTABLE HAMMER FOR ELE1504002 STRIKER	ADJUSTABLE HAMMER FOR ELE20 STRIKER
SOL	G3	240	9	MAZ0504006				
SOLb	Fis3	250	10	MAZ0504006				
FA	F3	260	12	MAZ0504006				
MI	E3	280	14	MAZ0504006				
Mib	Dis3	295	16	MAZ0504006				
RE	D3	315	19	MAZ0504006				
REb	Cis3	335	22	MAZ0504006				
DO	C3	355	26	MAZ0504006				
SI	B2	375	31	MAZ0504006				
Sib	Ais2	400	37	MAZ0504006				
LA	A2	420	43	MAZ0504007				
Lab	Gis2	445	50	MAZ0504007				
SOL	G2	470	60	MAZ0504007	MAZ1004012			
SOLb	Fis2	500	72	MAZ0504007	MAZ1004012			
FA	F2	530	85	MAZ0504007	MAZ1004012			
MI	E2	560	100	MAZ0504007	MAZ1004013			
Mib	Dis2	595	120		MAZ1004013			
RE	D2	630	140		MAZ1004013			
REb	Cis2	665	170		MAZ1004013			
DO	C2	705	200		MAZ1004014			
SI	B1	750	245		MAZ1004014			
Sib	Ais1	795	290		MAZ1004014			
LA	A1	840	340		MAZ1004014			
Lab	Gis1	890	410		MAZ1004014	MAZ1004014		
SOL	G1	945	480		MAZ1004015	MAZ1004015		
SOLb	Fis1	1000	550		MAZ1004015	MAZ1004015		
FA	F1	1060	680			MAZ1004016		
MI	E1	1120	810			MAZ1004017		
Mib	Dis1	1185	980			MAZ1004018		
RE	D1	1255	1200			MAZ1004019	MAZ1004019	MAZ1504001
REb	Cis1	1330	1400			MAZ1004019	MAZ1004019	MAZ1504001 MAZ1504002
DO	C1	1410	1680				MAZ1004019	MAZ1504002
SI	B0	1495	1950					MAZ1504003
Sib	Ais0	1580	2300					MAZ1504004
LA	A0	1675	2800					MAZ1504004
Lab	Gis0	1775	3300					
SOL	G0	1880	3900					
SOLb	Fis0	1995	4900					

## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
ELE3004001	INTERNAL STRIKER ELE30 FOR BELLS UP TO 30 KG (66LB)
ELE3504001	INTERNAL STRIKER ELE35 FOR BELLS 30-60 KG (66LB-130LB)
ELE4004001	INTERNAL STRIKER ELE40 FOR BELLS 60-150 KG (130LB-320LB)
ELE4504001	INTERNAL STRIKER ELE45 FOR BELLS 150-300 KG (320LB-600LB)
ELE5004001	INTERNAL STRIKER ELE50 FOR BELLS 300-500 KG (600LB-1100LB)
ELE0504001	EXTERNAL STRIKER ELE05 FOR BELLS UP TO 100 KG (220LB)
ELE1004001	EXTERNAL STRIKER ELE10 FOR BELLS 100-500 KG (220-1100LB)
ELE1504001	EXTERNAL STRIKER ELE15 FOR BELLS 500-1300 KG (1100-2860LB)
ELE1504002	EXTERNAL STRIKER ELE15 FOR BELLS 1000-1500 KG (2200-3300LB)
ELE2004001	EXTERNAL STRIKER ELE20 FOR BELLS 1300-2500 KG (2860-5510LB)
ELE2504001	3 PHASE MOTORIZED STRIKER
MAZ0504005	POLE FOR ADJUSTABLE HAMMER FOR STRIKER ELE05
MAZ0504006	ADJUSTABLE HAMMER N. 3 FOR STRIKER ELE05
MAZ0504007	ADJUSTABLE HAMMER N. 4 FOR STRIKER ELE05
MAZ1004011	POLE FOR ADJUSTABLE HAMMER FOR STRIKER ELE05-10
MAZ1004012	ADJUSTABLE HAMMER N. 3 FOR STRIKER ELE10-15
MAZ1004013	ADJUSTABLE HAMMER N. 4 FOR STRIKER ELE10-15
MAZ1004014	ADJUSTABLE HAMMER N. 5 FOR STRIKER ELE10-15
MAZ1004015	ADJUSTABLE HAMMER N. 6 FOR STRIKER ELE10-15
MAZ1004016	ADJUSTABLE HAMMER N. 7 FOR STRIKER ELE10-15
MAZ1004017	ADJUSTABLE HAMMER N. 8 FOR STRIKER ELE10-15
MAZ1004018	ADJUSTABLE HAMMER N. 9 FOR STRIKER ELE10-15
MAZ1004019	ADJUSTABLE HAMMER N. 10 FOR STRIKER ELE10-15
MAZ1504001	FIXED HAMMER N.11 FOR STRIKER ELE20
MAZ1504002	FIXED HAMMER N. 12 FOR STRIKER ELE20
MAZ1504003	FIXED HAMMER N. 13 FOR STRIKER ELE20
MAZ1504004	FIXED HAMMER N. 14 FOR STRIKER ELE20
ELE8504001	FIXING BRACKET FOR ELE05 STRIKER
ELE8504002	FIXING BRACKET FOR ELE10-15 STRIKER
ELE8504003	FIXING BRACKET FOR ELE20 STRIKER
ELE8504010	FIXING BRACKET FOR ELE30-35 STRIKER
ELE8504011	FIXING BRACKET FOR ELE40 STRIKER
ELE8504012	FIXING BRACKET FOR ELE45-50 STRIKER
PRAD-BR5010	DIODE BRIDGE 50A 1000V
PRAD-KBL407	DIODE BRIDGE 4A 1000V

### ACCESSORIES



MONDOVI



6-POLES ELECTROMECHANICAL MOTORS  
MOTEURS ÉLECTROMÉCANIQUES À 6 PÔLES

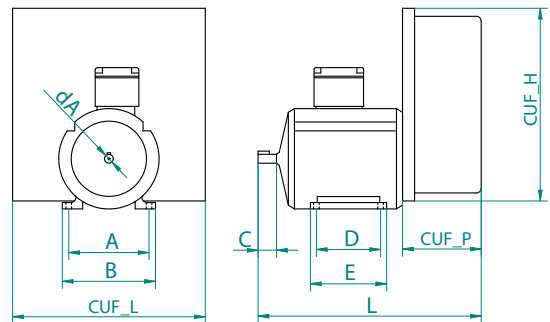
MOT05-10

6-poles three-phase asynchronous motor, IP55 protection. Especially strong in cast iron with tropicalized winding made for external use. Protective cover for the oscillation control system in ABS with sealing gasket, protection level IP55.

Device for complete control of microswitches and connecting cables, and 2 cams for command of the independent regulation for the motor thrust.

Moteur asynchrone triphasé à 6-pôles, protection IP55. Particulièrement solide en fonte avec enroulements tropicalisés conçus pour un usage externe. Capot de protection pour le système de commande d'oscillation en ABS avec joint d'étanchéité IP55.

Dispositif pour le contrôle complet de micro-interrupteurs et les câbles de connexion, et 2 cammes de commande de la régulation indépendante de la poussée du moteur.



## TECHNICAL CHARACTERISTICS

- 6P asynchronous three-phase motor protection IP55
- Protective cover in ABS of the swing control system
- Device of control with microswitches, wired cables and 2 control cams

CODE	DESCRIPTION
MOT0504001	6P MOTOR 0,12 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504002	6P MOTOR 0,18 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504003	6P MOTOR 0,25 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504004	6P MOTOR 0,37 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504005	6P MOTOR 0,55 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504006	6P MOTOR 0,75 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504007	6P MOTOR 1,10 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504008	6P MOTOR 1,50 KW 2 CAMS REDUCTION - GEAR INCLUDED
MOT0504009	6P MOTOR 1,70 KW 2 CAMS REDUCTION - GEAR INCLUDED



6-POLES ELECTROMECHANICAL MOTORS  
MOTEURS ÉLECTROMÉCANIQUES À 6 PÔLES

MOT05-10

MOT1004001	6P MOTOR 0,12 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004003	6P MOTOR 0,18 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004005	6P MOTOR 0,25 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004007	6P MOTOR 0,37 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004009	6P MOTOR 0,55 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004011	6P MOTOR 0,75 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004013	6P MOTOR 1,10 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004015	6P MOTOR 1,50 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004017	6P MOTOR 1,70 KW 2 C REDUCTION - GEAR INCLUDED AND COMMAND BOX
MOT1004002	6P MOTOR 0,12 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004004	6P MOTOR 0,18 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004006	6P MOTOR 0,25 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004008	6P MOTOR 0,37 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004010	6P MOTOR 0,55 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004012	6P MOTOR 0,75 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004014	6P MOTOR 1,10 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004016	6P MOTOR 1,50 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX
MOT1004018	6P MOTOR 1,70 KW 2 C REDUCTION - GEAR INCLUDED WIRED COMMAND BOX

MOT05-10 DIMENSIONS TABLE  
 TABLEAU DES DIMENSIONS MOT05-10

CODE	A	B	C	D	E	L	dA	CUF_L	CUF_H	CUF_P
MOT0504001 MOT1004001 MOT1004002	100	116	23	80	95	250	11	240	240	98
MOT0504002 MOT1004003 MOT1004004  MOT0504003 MOT1004005 MOT1004006	112	132	30	90	113,5	270	14	240	240	98
MOT0504004 MOT1004007 MOT1004008  MOT0504005 MOT1004009 MOT1004010	125	149	40	100	125,5	290	19	240	240	98
MOT0504006 MOT1004011 MOT1004012	140	164	50	100	131	320	24	240	240	98
MOT0504007 MOT1004013 MOT1004014	140	164	50	125	156	345	24	240	240	98
MOT0504008 MOT1004015 MOT1004016  MOT0504009 MOT1004017 MOT1004018	160	188	60	140	173	380	24	240	240	98

TABLE BELL/MOTOR/SPROCKET / TABLEAU CLOCHE/MOTEUR/PIGNON

MOT05-10

TONE	ANGLO-SAXON TONE	BELL DIAMETER (mm)	WEIGHT (Kg)	FALLING CLAPPER BELL 6P MOTOR (KW)	SPROCKET Z*	FLYING CLAPPER BELL 6P MOTOR (KW)	SPROCKET*
SOL	G2	</ = 470	</ = 60	0,12/0,18 KW MOT0504001 MOT0504002 MOT1004001 MOT1004002 MOT1004003 MOT1004004	10	0,12/0,18 KW MOT0504001 MOT0504002 MOT1004001 MOT1004002 MOT1004003 MOT1004004	10
SOLb	Fis2	500	72	0,18 KW MOT0504002 MOT1004003 MOT1004004	10	0,18 KW MOT0504002 MOT1004003 MOT1004004	10
FA	F2	530	85	0,18 KW MOT0504002 MOT1004003 MOT1004004	11	0,18 KW MOT0504002 MOT1004003 MOT1004004	10
MI	E2	560	100	0,18 KW MOT0504002 MOT1004003 MOT1004004	11	0,18 KW MOT0504002 MOT1004003 MOT1004004	10
Mlb	Dis2	595	120	0,18 KW MOT0504002 MOT1004003 MOT1004004	12	0,25 KW MOT0504003 MOT1004005 MOT1004006	11
RE	D2	630	140	0,25 KW MOT0504003 MOT1004005 MOT1004006	12	0,25 KW MOT0504003 MOT1004005 MOT1004006	11
REb	Cis2	665	170	0,25 KW MOT0504003 MOT1004005 MOT1004006	12	0,25 KW MOT0504003 MOT1004005 MOT1004006	11
DO	C2	705	200	0,25 KW MOT0504003 MOT1004005 MOT1004006	14	0,25 KW MOT0504003 MOT1004005 MOT1004006	11
SI	B1	750	245	0,25 KW MOT0504003 MOT1004005 MOT1004006	14	0,37 KW MOT0504004 MOT1004007 MOT1004008	12
Sib	Ais1	795	290	0,37 KW MOT0504004 MOT1004007 MOT1004008	14	0,37 KW MOT0504004 MOT1004007 MOT1004008	12
LA	A1	840	340	0,37 KW MOT0504004 MOT1004007 MOT1004008	14	0,37 KW MOT0504004 MOT1004007 MOT1004008	12

\* Approximate data calculated according to the following ratio: bell wheel diameter equal to 130% of the bell diameter (falling clapper bell) or 110% (flying clapper bell).

TABLE BELL/ MOTOR/ SPROCKET / TABLEAU CLOCHE/ MOTEUR/ PIGNON

MOT05-10

Lab	Gis1	890	410	0,37 KW MOT0504004 MOT1004007 MOT1004008	14	0,37 KW MOT0504004 MOT1004007 MOT1004008	12
SOL	G1	945	480	0,37 KW MOT0504004 MOT1004007 MOT1004008	16	0,55 KW MOT0504005 MOT1004009 MOT1004010	14
SOLb	Fis1	1000	550	0,55 KW MOT0504005 MOT1004009 MOT1004010	16	0,55 KW MOT0504005 MOT1004009 MOT1004010	14
FA	F1	1060	680	0,55 KW MOT0504005 MOT1004009 MOT1004010	16	0,55 KW MOT0504005 MOT1004009 MOT1004010	14
MI	E1	1120	810	0,55 KW MOT0504005 MOT1004009 MOT1004010	16	0,75 KW MOT0504006 MOT1004011 MOT1004012	14
Mlb	Dis1	1185	980	0,75 KW MOT0504006 MOT1004011 MOT1004012	18	0,75 KW MOT0504006 MOT1004011 MOT1004012	14
RE	D1	1255	1200	0,75 KW MOT0504006 MOT1004011 MOT1004012	18	1,10 KW MOT0504007 MOT1004013 MOT1004014	16
REb	Cis1	1330	1400	1,10 KW MOT0504007 MOT1004013 MOT1004014	18	1,10 KW MOT0504007 MOT1004013 MOT1004014	16
DO	C1	1410	1680	1,10 KW MOT0504007 MOT1004013 MOT1004014	18	1,50 KW MOT0504008 MOT1004015 MOT1004016	16
SI	B0	1495	1950	1,50 KW MOT0504008 MOT1004015 MOT1004016	21	1,50 KW MOT0504008 MOT1004015 MOT1004016	18
Sib	Ais0	1580	2300	1,50 KW MOT0504008 MOT1004015 MOT1004016	21	1,70 KW MOT0504009 MOT1004017 MOT1004018	18

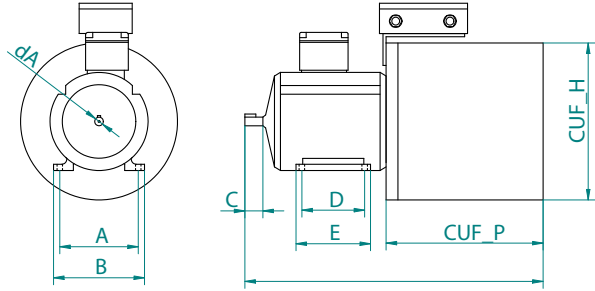
\* Approximate data calculated according to the following ratio: bell wheel diameter equal to 130% of the bell diameter (falling clapper bell) or 110% (flying clapper bell).

# 8-POLES MOTORS WITH GEAR BOX AND ELECTROMAGNETIC BRAKE MOTEURS À 8 PÔLES AVEC RÉDUCTEUR ET FREIN ÉLECTROMAGNÉTIQUE

## MOT25

8-poles three-phase asynchronous motor with electromagnetic brake 24 VDC. Especially strong in cast iron with tropicalized winding made for external use (IP55 protection). Junction box containing all the wiring, IP55 protection. Protective cover in PVC of the swing control system. Device for complete control of microswitches and connecting cables, and cam for command of the independent regulation for the thrust of the motor and the brake action.

Moteur asynchrone triphasé à 8 pôles avec frein électromagnétique 24 VDC. Particulièrement solide en fonte avec enroulements tropicalisés conçus pour un usage externe (protection IP55). Boîte de jonction contenant tout le câblage, protection IP55. Capot de protection pour le système de commande d'oscillation en PVC. Dispositif pour le contrôle complet de micro-interrupteurs, les câbles de connexion, et came pour la commande de la régulation indépendante de la poussée du moteur et l'action de freinage.



CODE	DESCRIPTION
MOT2504001	8P MOTOR 0,25KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504002	8P MOTOR 0,25KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504005	8P MOTOR 0,55KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504006	8P MOTOR 0,55KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504009	8P MOTOR 1,10KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504010	8P MOTOR 1,10KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE

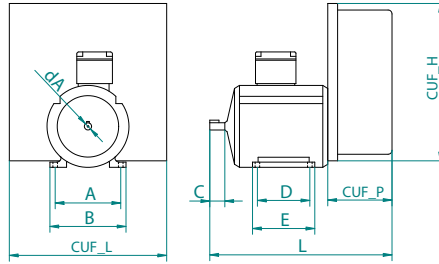
### DIMENSIONS TABLE / TABLEAU DES DIMENSIONS

CODE	A	B	C	D	E	L	dA	CUF_L	CUF_H	CUF_P
MOT2504001 MOT2504002	125	149	40	100	125,5	450	19	200	200	210
MOT2504005 MOT2504006	140	164	50	125	156	497	24	200	200	210
MOT2504009 MOT2504010	160	188	60	140	173	536	28	250	250	210

### TABLE BELL/MOTOR/SPROCKET – TABLEAU CLOCHE/MOTEUR/PIGNON

TONE	ANGLO-SAXON TONE	BELL DIAMETER (mm)	WEIGHT (Kg)	8P MOTOR (KW)	SPROCKET Z*
FA - SI	F2 - B1	530 - 750	85 - 245	0,25 KW MOT2504001 MOT2504002	14 - 18
Sib - FA	AIS1 - F1	795 - 1060	290 - 680	0,55 KW MOT2504005 MOT2504006	18 - 24
MI - DO	E1 - C1	1120 - 1410	810 - 1680	1,1 KW MOT2504009 MOT2504010	21 - 32

\* Approximate data calculated according to the following ratio: bell wheel diameter equal to 170% of the bell diameter.



Revolutionary system for the bell ringing that combine electronic technology with tradition, and complete respect for the church, bell tower and bells. ECATRON offers these unquestionable advantages:

**SAFETY:**

- Reduction of the effort of pushing
- Protection of the support structures against stresses (framework, headstock or yoke)
- Protection of the bell tower (reduction of stresses)
- Emergency brake in case of malfunctions

**INNOVATIVE:**

- 220 VAC single-phase power supply: the three-phase is generated automatically
- Control of all of the most commonly used kinds of ringing: falling/flying clapper bell, tollings etc.
- Use of low-power standard motors
- Elimination of the electrical board in the bell tower
- Regulation of sound parameters via simple commands
- Self-diagnosis of the working compatibly with existing systems
- Self-regulation that works independently of consumption and working temperature with automatic electronic protection against overheating and malfunctions
- Braking of the bell for a quick stop of the ringing

**RESPECT FOR TRADITION:**

- Complete quality of the manual ringing
- Possibility of special ringing that needs the synchronization of the bells
- Use of particular devices such as bell clapper stop, synchronized chiming

**TECHNICAL CHARACTERISTICS**

- 6P asynchronous three-phase motor, IP55 protection
- ABS protective case of the system control
- 220 VAC power supply
- Additional programmable relay outputs

Un système révolutionnaire pour la mise en volée des cloches. Électronique et tradition se rassemblent pour vous offrir le meilleur dans le respect des sonneries habituelles avec:

**SÉCURITÉ:**

- Diminution des efforts de poussée
- Protection des supports des cloches (charpente/beffroi, joug)
- Protection du clocher (réduction des vibrations)
- Frein d'urgence en cas d'anomalies

**INNOVATION:**

- Alimentation 220 VAC monophasé: le triphasé sera généré automatiquement
- Programmation de tous types de sonneries: volée lancée, volée, rétro lancée, volée piquée, volée tournante, etc.
- Utilisation de moteurs standards
- Réduction de la puissance des moteurs
- Suppression du tableau électrique de clocher
- Réglage simple des paramètres de commandes
- Auto-diagnostics de fonctionnement et de la compatibilité avec les systèmes existants;
- Autorégulation indépendante de l'usure et de la température de fonctionnement avec protection électronique automatique en cas de surchauffe et d'anomalies
- Possibilité d'arrêt rapide de la cloche

**RESPECT DES TRADITIONS:**

- Excellente qualité d'une sonnerie manuelle
- Possibilité de synchroniser la volée des cloches
- Réalisation de sonnerie spéciale (stop battant, tintements synchronisés, glas)

CODE	DESCRIPTION
MOT1504001	6P MOTOR 0,18 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504002	6P MOTOR 0,25 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504003	6P MOTOR 0,37 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504004	6P MOTOR 0,55 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504005	6P MOTOR 0,75 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504006	6P MOTOR 1,10 KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504020	6P MOTOR 0,18 KW ECATRON SEPARATE ELECTRONIC
MOT1504021	6P MOTOR 0,25 KW ECATRON SEPARATE ELECTRONIC
MOT1504022	6P MOTOR 0,37 KW ECATRON SEPARATE ELECTRONIC
MOT1504023	6P MOTOR 0,55 KW ECATRON SEPARATE ELECTRONIC
MOT1504024	6P MOTOR 0,75 KW ECATRON SEPARATE ELECTRONIC
MOT1504025	6P MOTOR 1,10 KW ECATRON SEPARATE ELECTRONIC

## ECATRON DIMENSIONS TABLE / TABLEAU DES DIMENSIONS ECATRON

CODE	A	B	C	D	E	L	dA	CUF_L	CUF_H	CUF_P
MOT1504001 MOT1504020	112	132	30	90	113,5	270	14	240	240	98
MOT1504002 MOT1504021	112	132	30	90	113,5	270	14	240	240	98
MOT1504003 MOT1504022	125	149	40	100	125,5	290	19	240	240	98
MOT1504004 MOT1504023	125	149	40	100	125,5	290	19	240	240	98
MOT1504005 MOT1504024	140	164	50	125	156	345	24	240	240	98
MOT1504006 MOT1504025	160	188	60	140	173	380	24	240	240	98

## TABLE BELL/MOTOR/SPROCKET – TABLEAU CLOCHE/MOTEUR/PIGNON

FALLING CLAPPER - VOLTEO  
VOLÉE RÉTRO - VOLTEO

STONE FROM TO	ANGLO-SAXON TONE FROM TO	WEIGHT (KG) FROM TO	6P MOTOR EQUIPPED WITH ECATRON (KW)	SPROCKET Z*
FA DO	F3 C2	12 200	0,18 KW MOT1504001 MOT1504020	10
SI SOL	B1 G1	245 480	0,25 KW MOT1504002 MOT1504021	12
SOLb Mlb	Fis1 Dis1	550 980	0,37 KW MOT1504003 MOT1504022	14
RE DO	D1 C1	1200 1680	0,55KW MOT1504004 MOT1504023	16
SI LA	B0 A0	1950 2800	0,75 KW MOT1504005 MOT1504024	16
LAB SOL	Gis0 G0	3300 3900	1,10 KW MOT1504006 MOT1504025	18

FLYING CLAPPER  
VOLÉE LANCÉE

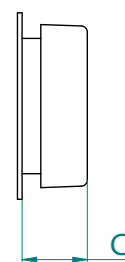
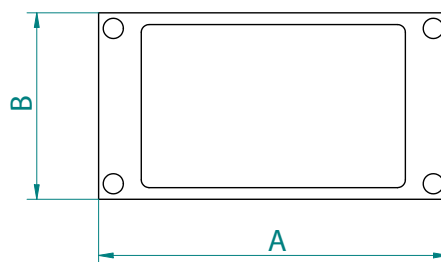
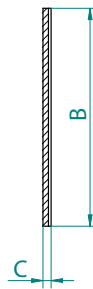
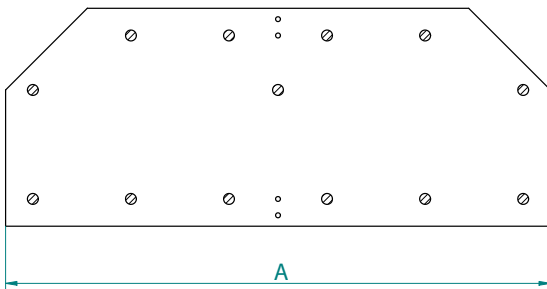
STONE FROM TO	ANGLO-SAXON TONE FROM TO	WEIGHT (KG) FROM TO	6P MOTOR EQUIPPED WITH ECATRON (KW)	SPROCKET Z*
FA REb	F3 Cis2	12 170	0,18 KW MOT1504001 MOT1504020	10
DO LA	C2 A1	200 340	0,25 KW MOT1504002 MOT1504021	12
LAB SOLb	Gis1 Fis1	410 550	0,37 KW MOT1504003 MOT1504022	14
FA MI	F1 E1	680 800	0,55KW MOT1504004 MOT1504023	14
Mlb RE	Dis1 D1	980 1140	0,75 KW MOT1504005 MOT1504024	16
REb SI	Cis1 B0	1400 1950	1,10 KW MOT1504006 MOT1504025	16

\* Approximate data calculated according to the following ratio: bell wheel diameter equal to 130% of the bell diameter (falling clapper bell), 170% (volteo) or 110% (flying clapper bell).

# BELL SWINGING LINEAR MOTORS MOTEUR DE VOLÉE LINÉAIRE MOT30

These bell swinging linear motors do not need a chain or any other physical connection with the bell, the movement is transmitted magnetically. It is extremely silent and requires very little maintenance thanks to the absence of moving mechanical parts subject to wear. The installation kit includes everything necessary for the installation: inductor, rotor, power controller and sensor for the movement. Thanks to the linear motor we guarantee efficiency and excellent value for money without losing traditional sound performance. We propose different versions depending on the weight of the bell (up to 2500 kg).

Moteur linéaire pour le mouvement des cloches. Chaînes ou d'autres connexions physiques avec la cloche ne sont pas nécessaires puisque le mouvement est transmis magnétiquement. Il est vraiment très silencieux et nécessite peu d'entretien grâce à l'absence de pièces mécaniques soumises à l'usure. Le kit pour l'installation comprend tout le nécessaire pour l'assemblage: l'inducteur, le contrôle de puissance et le capteur de mouvement. Notre moteur linéaire assure une efficacité et un excellent rapport qualité-prix, sans perdre la performance du son traditionnel. Nous vous proposons différentes versions en fonction du poids de la cloche (jusqu'à 2500 kg).





**BELL SWINGING LINEAR MOTORS  
MOTEUR DE VOLÉE LINÉAIRE  
MOT30**

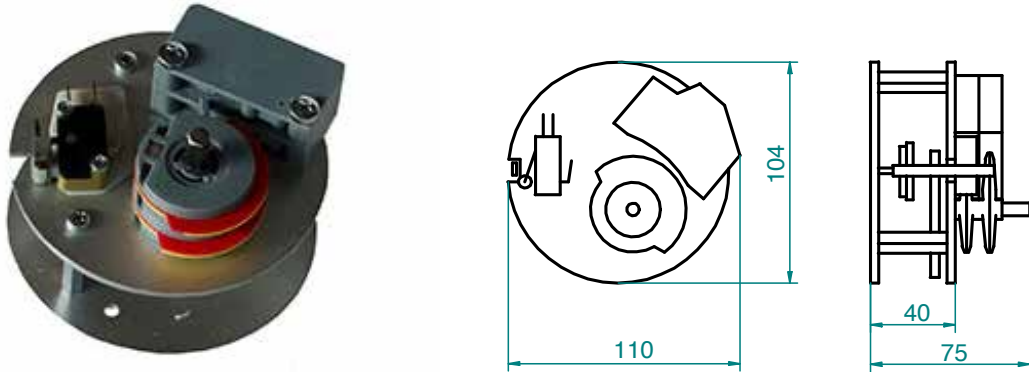
CODE	DESCRIPTION
MOT3004001	LINEAR MOTOR KIT 380V FOR BELLS UP TO 60 KG (132 LB)
MOT3004002	LINEAR MOTOR KIT 220V FOR BELLS UP TO 30 KG (66 LB)
MOT3004003	LINEAR MOTOR KIT 380V FOR BELLS UP TO 100 KG (220 LB)
MOT3004004	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 70 KG (154 LB)
MOT3004005	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 250 KG (551 LB)
MOT3004006	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 100 KG (220 LB)
MOT3004007	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 400 KG (881 LB)
MOT3004008	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 400 KG (881 LB)
MOT3004009	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 700KG (1543 LB)
MOT3004010	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 1000 KG (2204 LB)
MOT3004011	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 1300 KG (2866 LB)
MOT3004012	LINEAR MOTOR KIT 380V FOR BELLS UP TO 2500 KG (5511 LB)

# GEAR BOX MOTORÉDUCTEUR

RID05-10-15

Device to be applied to the electric motors for the thrust control for the swinging of the bells. Simple and strong construction that is easily adjustable to any type of motor. Maintenance free. Two types of reduction available with a maximum of 4 cams to satisfy all requirements of ringing.

Dispositif à appliquer aux moteurs électriques pour le contrôle de la vitesse d'oscillation de la cloche. Simple et de construction robuste, il s'adapte facilement à tous types de moteur. Proposé avec deux modèles de réducteurs et un maximum de quatre cames, répondant aux diverses exigences de sonneries.



CODE	DESCRIPTION
RID0504001	GEAR BOX 1:20 1 CAM
RID0504002	GEAR BOX 1:20 2 CAMS
RID0504003	GEAR BOX 1:20 3 CAMS
RID0504004	GEAR BOX 1:20 4 CAMS
RID1004001	GEAR BOX 1:32 1.CAM CONCERT
RID1004002	GEAR BOX 1:32 2.CAMS CONCERT
RID1004003	GEAR BOX 1:32 3.CAMS CONCERT
RID1004004	GEAR BOX 1:32 4.CAMS CONCERT
RID1004005	GEAR BOX 1:32 6 CAMS CONCERT
RID1504001	GEAR BOX 1:8 1 CAM
RID1504002	GEAR BOX 1:8 2 CAMS
RID1504003	GEAR BOX 1:8 3 CAMS
RID1504004	GEAR BOX 1:8 4 CAMS

## SPROCKETS / PIGNONS

PIGZ 8-9-10-11-12-14-16-18-21-24-26-28-30-32-34-36-38-40

The number of sprocket's cogs is usually defined with "Z" followed by the number of cogs. Sprockets are employed to transmit through a chain the swinging movement from motor to bell. That element is very important because, if the sprocket is connected to the motor, the speed is directly proportionate to the number of cogs.

Les pignons sont utilisés pour la transmission par chaîne du mouvement oscillatoire du moteur à la cloche. Le nombre de dents du pignon est indiqué avec "Z" suivi du nombre de dents. Cet élément est important parce que, la vitesse d'entraînement est directement proportionnelle au nombre de dents.

CODE	DESCRIPTION
PIG-Z8/11/316	SPROCKET Z8 D.11X3/16"
PIG-Z9/11/316	SPROCKET Z9 D.11X3/16"
PIG-Z10/14/316	SPROCKET Z10 D.14X3/16"
PIG-Z10/14/516	SPROCKET Z10 D.14X5/16"
PIG-Z11/14/316	SPROCKET Z11 D.14X3/16"
PIG-Z11/14/516	SPROCKET Z11 D.14X5/16"
PIG-Z12/14/316	SPROCKET Z12 D.14X3/16"
PIG-Z12/14/516	SPROCKET Z12 D.14X5/16"
PIG-Z12/19/316	SPROCKET Z12 D.19X3/16"
PIG-Z12/19/516	SPROCKET Z12 D.19X5/16"
PIG-Z14/14/316	SPROCKET Z14 D.14X3/16"
PIG-Z14/14/516	SPROCKET Z14 D.14X5/16"
PIG-Z14/19/316	SPROCKET Z14 D.19X3/16"
PIG-Z14/19/516	SPROCKET Z14 D.19X5/16"
PIG-Z14/24/316	SPROCKET Z14 D.24X3/16"
PIG-Z14/24/516	SPROCKET Z14 D.24X5/16"
PIG-Z16/14/316	SPROCKET Z16 D.14X3/16"
PIG-Z16/14/516	SPROCKET Z16 D.14X5/16"
PIG-Z16/19/316	SPROCKET Z16 D.19X3/16"
PIG-Z16/19/516	SPROCKET Z16 D.19X5/16"
PIG-Z16/24/316	SPROCKET Z16 D.24X3/16"
PIG-Z16/24/516	SPROCKET Z16 D.24X5/16"
PIG-Z18/14/316	SPROCKET Z18 D.14X3/16"
PIG-Z18/14/516	SPROCKET Z18 D.14X5/16"
PIG-Z18/19/316	SPROCKET Z18 D.19X3/16"
PIG-Z18/19/516	SPROCKET Z18 D.19X5/16"
PIG-Z18/24/316	SPROCKET Z18 D.24X3/16"
PIG-Z18/24/516	SPROCKET Z18 D.24X5/16"
PIG-Z18/28/516	SPROCKET Z18 D.28X5/16"
PIG-Z21/19/316	SPROCKET Z21 D.19X3/16"
PIG-Z21/19/516	SPROCKET Z21 D.19X5/16"
PIG-Z21/24/316	SPROCKET Z21 D.24X3/16"
PIG-Z21/24/516	SPROCKET Z21 D.24X5/16"
PIG-Z21/28/516	SPROCKET Z21 D.28X5/16"
PIG-Z24/19/316	SPROCKET Z24 D.19X3/16"
PIG-Z24/19/516	SPROCKET Z24 D.19X5/16"
PIG-Z24/24/316	SPROCKET Z24 D.24X3/16"
PIG-Z24/24/516	SPROCKET Z24 D.24X5/16"
PIG-Z24/28/516	SPROCKET Z24 D.28X5/16"
PIG-Z26/28/516	SPROCKET Z26 D.28X5/16"
PIG-Z28/28/516	SPROCKET Z28 D.28X5/16"
PIG-Z30/28/516	SPROCKET Z30 D.28X5/16"
PIG-Z32/28/516	SPROCKET Z32 D.28X5/16"
PIG-Z34/28/516	SPROCKET Z34 D.28X5/16"
PIG-Z36/28/516	SPROCKET Z36 D.28X5/16"
PIG-Z38/28/516	SPROCKET Z38 D.28X5/16"
PIG-Z40/28/516	SPROCKET Z40 D.28X5/16"

## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
MOT0504001	6P MOTOR 0.12KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504002	6P MOTOR 0.18KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504003	6P MOTOR 0.25KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504004	6P MOTOR 0.37KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504005	6P MOTOR 0.55KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504006	6P MOTOR 0.75KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504007	6P MOTOR 1.10KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504008	6P MOTOR 1.50KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT0504009	6P MOTOR 1.70KW 2 CAMS REDUCTION-GEAR INCLUDED
MOT1004001	6P MOTOR 0.12KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004002	6P MOTOR 0.12KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004003	6P MOTOR 0.18KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004004	6P MOTOR 0.18KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004005	6P MOTOR 0.25KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004006	6P MOTOR 0.25KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004007	6P MOTOR 0.37KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004008	6P MOTOR 0.37KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004009	6P MOTOR 0.55KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004010	6P MOTOR 0.55KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004011	6P MOTOR 0.75KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004012	6P MOTOR 0.75KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004013	6P MOTOR 1.10KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004014	6P MOTOR 1.10KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004015	6P MOTOR 1.50KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004016	6P MOTOR 1.50KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT1004017	6P MOTOR 1.70KW 2 C REDUCTION-GEAR INCLUDED AND COMMAND BOX
MOT1004018	6P MOTOR 1.70KW 2C REDUCTION-GEAR INCLUDED WIRED COMMAND BOX
MOT2504001	8P MOTOR 0,25KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504002	8P MOTOR 0,25KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504005	8P MOTOR 0,55KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504006	8P MOTOR 0,55KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504009	8P MOTOR 1,10KW 4C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT2504010	8P MOTOR 1,10KW 6C REDUCTION-GEAR AND ELECTROMAGNETIC BRAKE
MOT1504001	6P MOTOR 0.18KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504002	6P MOTOR 0.25KW ECATRON WITH ELECTRONIC ON BOARD

## TABLE OF PRODUCT CODES

MOT1504003	6P MOTOR 0.37KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504004	6P MOTOR 0,55KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504005	6P MOTOR 0.75KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504006	6P MOTOR 1.10KW ECATRON WITH ELECTRONIC ON BOARD
MOT1504020	6P MOTOR 0.18KW ECATRON SEPARATE ELECTRONIC
MOT1504021	6P MOTOR 0.25KW ECATRON SEPARATE ELECTRONIC
MOT1504022	6P MOTOR 0.37KW ECATRON SEPARATE ELECTRONIC
MOT1504023	6P MOTOR 0.55KW ECATRON SEPARATE ELECTRONIC
MOT1504024	6P MOTOR 0.75KW ECATRON SEPARATE ELECTRONIC
MOT1504025	6P MOTOR 1.10KW ECATRON SEPARATE ELECTRONIC
MOT3004001	LINEAR MOTOR KIT 380V FOR BELLS UP TO 60 KG (132 LB)
MOT3004002	LINEAR MOTOR KIT 220V FOR BELLS UP TO 30 KG (66 LB)
MOT3004003	LINEAR MOTOR KIT 380V FOR BELLS UP TO 100 KG (220 LB)
MOT3004004	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 70 KG (154 LB)
MOT3004005	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 250 KG (551 LB)
MOT3004006	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 100 KG (220 LB)
MOT3004007	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 400 KG (881 LB)
MOT3004008	LINEAR MOTOR KIT 220V FOR BELLS UP TO MAX 400 KG (881 LB)
MOT3004009	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 700KG (1543 LB)
MOT3004010	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 1000 KG (2204 LB)
MOT3004011	LINEAR MOTOR KIT 380V FOR BELLS UP TO MAX 1300 KG (2866 LB)
MOT3004012	LINEAR MOTOR KIT 380V FOR BELLS UP TO 2500 KG (5511 LB)
RID0504001	GEAR BOX 1:20 1 CAM
RID0504002	GEAR BOX 1:20 2 CAMS
RID0504003	GEAR BOX 1:20 3 CAMS
RID0504004	GEAR BOX 1:20 4 CAMS
RID1004001	GEAR BOX 1:32 1 CAM CONCERT
RID1004002	GEAR BOX 1:32 2 CAMS CONCERT
RID1004003	GEAR BOX 1:32 3 CAMS CONCERT
RID1004004	GEAR BOX 1:32 4 CAMS CONCERT
RID1004005	GEAR BOX 1:32 6 CAMS CONCERT
RID1504001	GEAR BOX 1:8 1 CAM
RID1504002	GEAR BOX 1:8 2 CAMS
RID1504003	GEAR BOX 1:8 3 CAMS
RID1504004	GEAR BOX 1:8 4 CAMS
PIG-Z8/11/316	SPROCKET Z8 D.11X3/16"

## TABLE OF PRODUCT CODES

PIG-Z9/11/316	SPROCKET Z8 D.11X3/16"
PIG-Z10/14/316	SPROCKET Z10 D.14X3/16"
PIG-Z10/14/516	SPROCKET Z10 D.14X5/16"
PIG-Z11/14/316	SPROCKET Z11 D.14X3/16"
PIG-Z11/14/516	SPROCKET Z11 D.14X5/16"
PIG-Z12/14/316	SPROCKET Z12 D.14X3/16"
PIG-Z12/14/516	SPROCKET Z12 D.14X5/16"
PIG-Z12/19/316	SPROCKET Z12 D.19X3/16"
PIG-Z12/19/516	SPROCKET Z12 D.19X5/16"
PIG-Z14/14/316	SPROCKET Z14 D.14X3/16"
PIG-Z14/14/515	SPROCKET Z14 D.14X5/16"
PIG-Z14/19/316	SPROCKET Z14 D.19X3/16"
PIG-Z14/19/516	SPROCKET Z14 D.19X5/16"
PIG-Z14/24/316	SPROCKET Z14 D.24X3/16"
PIG-Z14/24/516	SPROCKET Z14 D.24X5/16"
PIG-Z16/14/316	SPROCKET Z16 D.14X3/16"
PIG-Z16/14/516	SPROCKET Z16 D.14X5/16"
PIG-Z16/19/316	SPROCKET Z16 D.19X3/16"
PIG-Z16/19/516	SPROCKET Z16 D.19X5/16"
PIG-Z16/24/316	SPROCKET Z16 D.24X3/16"
PIG-Z16/24/516	SPROCKET Z16 D.24X5/16"
PIG-Z18/14/316	SPROCKET Z18 D.14X3/16"
PIG-Z18/14/516	SPROCKET Z18 D.14X5/16"
PIG-Z18/19/316	SPROCKET Z18 D.19X3/16"
PIG-Z18/19/516	SPROCKET Z18 D.19X5/16"
PIG-Z18/24/316	SPROCKET Z18 D.24X3/16"
PIG-Z18/24/516	SPROCKET Z18 D.24X5/16"
PIG-Z18/28/516	SPROCKET Z18 D.28X5/16"
PIG-Z21/19/316	SPROCKET Z21 D.19X3/16"
PIG-Z21/19/516	SPROCKET Z21 D.19X5/16"
PIG-Z21/24/316	SPROCKET Z21 D.24X3/16"
PIG-Z21/24/516	SPROCKET Z21 D.24X5/16"
PIG-Z21/28/516	SPROCKET Z21 D.28X5/16"
PIG-Z24/19/316	SPROCKET Z24 D.19X3/16"
PIG-Z24/19/516	SPROCKET Z24 D.19X5/16"

## TABLE OF PRODUCT CODES

### ACCESSORIES

PIG-Z24/24/316	SPROCKET Z24 D.24X3/16"
PIG-Z24/24/516	SPROCKET Z24 D.24X5/16"
PIG-Z24/28/516	SPROCKET Z24 D.28X5/16"
PIG-Z26/28/516	SPROCKET Z26 D.28X5/16"
PIG-Z28/28/516	SPROCKET Z28 D.28X5/16"
PIG-Z30/28/516	SPROCKET Z30 D.28X5/16"
PIG-Z32/28/516	SPROCKET Z32 D.28X5/16"
PIG-Z34/28/516	SPROCKET Z34 D.28X5/16"
PIG-Z36/28/516	SPROCKET Z36 D.28X5/16"
PIG-Z38/28/516	SPROCKET Z38 D.28X5/16"
PIG-Z40/28/516	SPROCKET Z40 D.28X5/16"
MOT2004001	VARIANT C 10MF MOTOR 0.12KW 6P POWER 220V
MOT2004002	VARIANT C 16MF MOTOR 0.18KW 6P POWER 220V
MOT2004003	VARIANT C 25MF MOTOR 0.25KW 6P POWER 220V
MOT2004004	VARIANT C 35MF MOTOR 0.37KW 6P POWER 220V
MOT2004005	VARIANT C 50MF MOTOR 0.55KW 6P POWER 220V
MOT2004006	VARIANT C 50MF MOTOR 0.75KW 6P POWER 220V
MOT2004007	VARIANT C 76MF MOTOR 1.10KW 6P POWER 220V
MOT2004008	VARIANT C 76+35MF MOTOR 1.50KW 6P POWER 220V
MOT2004009	VARIANT C 76+50MF MOTOR 1.70KW 6P POWER 220V
MOT8001001	PROGRAMMING TERMINAL FOR ECATRON MOTOR
MOT8504001	FIXING BRACKET FOR MOTOR 0.12KW
MOT8504002	FIXING BRACKET FOR MOTOR 0.18-0.25KW
MOT8504003	FIXING BRACKET FOR MOTOR 0.37-0.55KW
MOT8504004	FIXING BRACKET FOR MOTOR 0.75-1.10KW
MOT8504005	FIXING BRACKET FOR MOTOR 1.5-1.70KW
MOT8504006	FIXING BRACKET FOR VOLTEO MOTOR UP TO 0.75 KW
MOT8504007	FIXING BRACKET FOR VOLTEO MOTOR > 0.75 KW
MOT9004035	PROGRAMMING TERMINAL FOR LINEAR MOTORS

CLOCK RECEIVERS / MOUVEMENTS

RIC05-10-20-30-35

These clock receivers are used for the movement of the clock hands of outdoor clocks installed on bell towers, municipal buildings, schools, railway stations etc. They receive impulses from a master clock and transmit it to the clock hands every 60 seconds. Robustly constructed and with an enormous dragging power, they are able to control clock hands on dials between 0,9 and 4 m diameter (2,9 ft-13,1 ft).

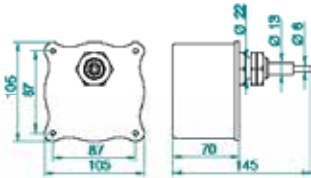
Ces mouvements sont utilisés pour commander l'avance des aiguilles de cadrans installés sur les clochers, édifices scolaires et municipaux ou gares. Le récepteur reçoit l'impulsion d'une centrale horaire toutes les minutes et transmet l'avance aux aiguilles. De construction robuste et d'une grande puissance de transmission, les récepteurs font fonctionner les cadrans jusqu'à 4 m de diamètre.

CLOCK RECEIVER FOR DIAL UP TO 90 CM – RIC05  
 MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 90 CM – RIC05



TECHNICAL CHARACTERISTICS

- Diameter dial: max 90 cm (2,9 ft)
- Power: 220-230 VAC, 50/60 Hz, 9,5 W (RIC0504001, RIC0504003); 110/115 VAC, 50/60 Hz, 3,5 W (RIC0504002)
- Torque: 2,45 Nm
- Functioning: minute inversion phase



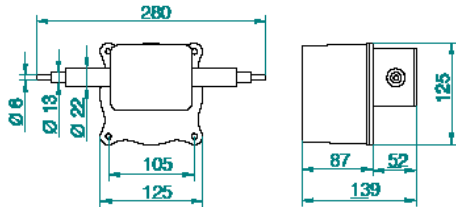
CODE	DESCRIPTION
RIC0504001	CLOCK MOVEMENT MAX 90CM BUSH 25MM
RIC0504002	CLOCK MOVEMENT MAX 90CM BUSH 76MM (3IN) 110V
RIC0504003	CLOCK MOVEMENT MAX 90CM BUSH 76MM




2 OUTPUTS CLOCK RECEIVER FOR DIAL UP TO 90 CM – RIC10  
 MOUVEMENT POUR COMMANDE DE 2 CADRANS JUSQU'À 90 CM – RIC10



TECHNICAL CHARACTERISTICS

- Diameter dial: max 90 cm (2,9 ft)
- Outputs: 2 parallel
- Power: 220-230 VAC, 50/60 Hz, 9,5 W (RIC1004023-24-25); 110/115 VAC, 50/60 Hz, 3,5 W (RIC1004015-16-17)
- Torque: 2,94 Nm
- Functioning: minute inversion phase



CODE	DESCRIPTION
RIC1004015 	CLOCK MOVEMENT MAX 90CM BUSH 46MM (1.8IN) 2 EXITS 110V
RIC1004016 	CLOCK MOVEMENT MAX 90CM BUSH 68MM (2.6IN) 2 EXITS 110V
RIC1004017 	CLOCK MOVEMENT MAX 90CM BUSH 81MM (3.1IN) 2 EXITS 110V
RIC1004023	CLOCK MOVEMENT MAX 90CM BUSH 46MM 2 EXITS
RIC1004024	CLOCK MOVEMENT MAX 90CM BUSH 68MM 2 EXITS
RIC1004025	CLOCK MOVEMENT MAX 90CM BUSH 81MM 2 EXITS



## CLOCK RECEIVERS / MOUVEMENTS

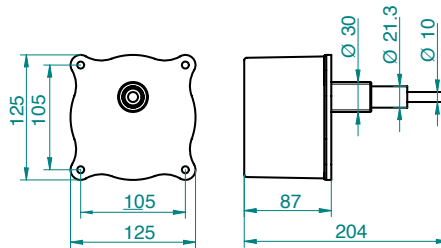
RIC05-10-20-30-35

### CLOCK RECEIVER FOR DIAL UP TO 150 CM – RIC10 MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 150 CM – RIC10



#### TECHNICAL CHARACTERISTICS

- Dial diameter: max 150 cm (4,9 ft)
- Power: 220-230 VAC, 50/60 Hz, 16,7 W (RIC1004003-05-06-07-08-09-10-11-12-13-14-19); 110/115 VAC, 50/60 Hz, 5 W (RIC1004004-20-21-22-27)
- Torque: 4,9 Nm
- Functioning: minute inversion phase



CODE	DESCRIPTION
RIC1004003	CLOCK MOVEMENT MAX 150CM BUSH 35MM
RIC1004004 <b>C</b> <b>RU</b> <b>us</b>	CLOCK MOVEMENT MAX 150CM BUSH 76MM (3IN) 110V
RIC1004005	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 300MM
RIC1004006	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 300MM PRT
RIC1004007	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 600MM
RIC1004008	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 600MM PRT
RIC1004009	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 900MM
RIC1004010	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 900MM PRT
RIC1004011	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 1200MM
RIC1004012	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 1200MM PRT
RIC1004013	CLOCK MOVEMENT MAX 150CM HOURS SHAFT ON REQUEST<1200MM
RIC1004014	CLOCK MOVEMENT MAX 150CM HOURS SHAFT ON REQUEST<1200MM PRT
RIC1004019	CLOCK MOVEMENT MAX 150CM BUSH 76MM
RIC1004020 <b>C</b> <b>RU</b> <b>us</b>	CLOCK MOVEMENT MAX 150CM BUSH 300MM (11.8IN) 110V
RIC1004021 <b>C</b> <b>RU</b> <b>us</b>	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 500 MM(19.6IN) 110V PRT
RIC1004022 <b>C</b> <b>RU</b> <b>us</b>	CLOCK MOVEMENT MAX 150CM BUSH 165MM (6.5IN) 110V
RIC1004027	CLOCK MOVEMENT MAX 150CM H. SHAFT ON REQUEST<1200MM 110V PRT

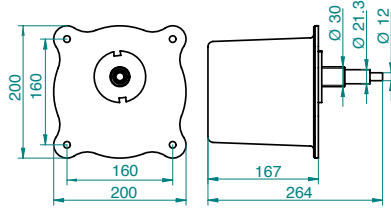
## CLOCK RECEIVER FOR DIAL UP TO 400 CM – RIC20

### MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 400 CM – RIC20



#### TECHNICAL CHARACTERISTICS

- Dial diameter: max 400 cm (13,1 ft)
- Power: 220-230 VAC, 50/60 Hz, 30 W (RIC2004003-05-06-07-08-10-11-12-13-14-15-21-24); 110/115 VAC, 50/60 Hz, 29,7 W (RIC2004004-09-20-22)
- Torque: 29,4 Nm
- Functioning: minute inversion phase



CODE	DESCRIPTION
RIC2004003	CLOCK MOVEMENT MAX 400CM BUSH 35MM
RIC2004004	CLOCK MOVEMENT MAX 400CM BUSH 76MM (3IN) 110V
RIC2004005	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 300MM
RIC2004006	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 300MM PRT
RIC2004007	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 600MM
RIC2004008	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 600MM PRT
RIC2004009	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 500MM (19,6IN) PRT 110V
RIC2004010	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 900MM
RIC2004011	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 900MM PRT
RIC2004012	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 1200MM
RIC2004013	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 1200MM PRT
RIC2004014	CLOCK MOVEMENT MAX 400CM HOURS SHAFT ON REQUEST<1200MM
RIC2004015	CLOCK MOVEMENT MAX 400CM HOURS SHAFT ON REQUEST<1200MM PRT
RIC2004020	CLOCK MOVEMENT MAX 400CM BUSH 300MM (11,8IN) 110V
RIC2004021	CLOCK MOVEMENT MAX 400CM BUSH 76MM
RIC2004022	CLOCK MOVEMENT MAX 400CM BUSH 165MM (6,5IN) 110V
RIC2004024	CLOCK MOVEMENT MAX 400CM H. SHAFT ON REQUEST<1200MM 110V PRT

## CLOCK RECEIVER FOR ILLUMINATED HANDS CLOCK – RIC30 MOUVEMENT POUR AIGUILLES LUMINEUSES – RIC30

This kind of clock receiver has been designed for the movement of illuminated hands clock. Indicated for use together with a LED system lighting, but it can be also used with any type of light source. The LED lighting system enables the dial to maintain its' aesthetic characteristics during the day and to offer an excellent level of brightness during the night hours. The materials used are of high quality to ensure optimum efficiency in outdoor environments.

Ce genre de mouvement a été créé spécialement pour la mise en mouvement des aiguilles lumineuses. Le RIC30 est proposé en accouplement avec le système d'éclairage par LED, mais peut être utilisée avec d'autres sources lumineuses adaptées. Le système d'éclairage par LED permet au cadran de maintenir dans la durée ses caractéristiques de départ, d'offrir un excellent niveau de luminosité dans la nuit et d'esthétiques dans la journée. Les matériaux utilisés sont de haute qualité pour assurer une efficacité optimale dans des environnements extérieurs.

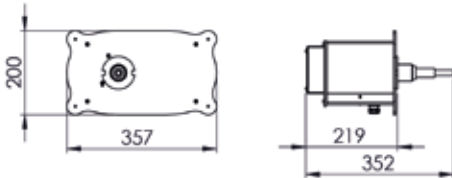


### TECHNICAL CHARACTERISTICS

- Case in aluminium, resistant to the weather conditions
- Wheels in bronze
- Pin output in zinc coated iron with ertalyte bushes to protect the electric connection
- Antifriction bearing in teflon
- Electric connection through commutator
- Functioning: minute inversion phase
- Power: 220-230 VAC, 50/60 Hz, 30 W; 110/115 VAC, 50/60 Hz, 29,7 W)
- Torque: 29,4 Nm

### RELATED PRODUCTS – PRODUITS ASSOCIÉS

- NUMERALS NUM6504003 (see pp. 88-90)
- CLOCK HANDS LAN6504002 (see pp. 88-90)



CODE	DESCRIPTION
RIC3004001	CLOCK MOVEMENT MAX 300CM FOR ILLUMINATED HANDS DIAL
RIC3004003	CLOCK MOVEMENT MAX 300CM FOR ILLUMINATED HANDS DIAL - RGB

## SYNCHRONISED MOVEMENT FOR CLOCK DIAL MAX 130 CM – RIC35 MOUVEMENT SYNCHRONE AVEC MINUTERIE POUR CADRAN MAX 130 CM – RIC35

A clock for large indoor clock faces, a perfect feature for public places (bars and restaurants), offices and the home. Ecat Orologi's decades of experience in monumental and industrial clocks is placed at the service of businesses and enters the home. Simple manual hand adjustment.

Horloge pour cadrans d'intérieur de grandes tailles idéale comme complément d'ameublement pour locaux publics (bars et restaurants), bureaux ou habitations privées. L'expérience décennale de Ecat Orologi en horlogerie monumentale et industrielle se met au service des activités commerciales et pénètre entre les murs domestiques. Simple correction manuelle des aiguilles.

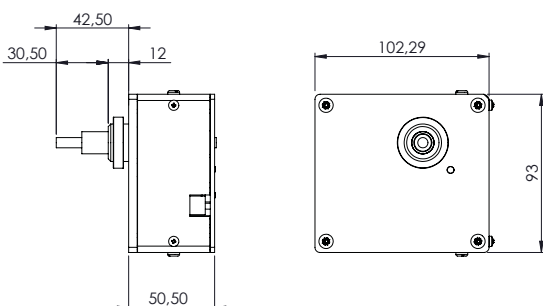


### TECHNICAL CHARACTERISTICS

- Case in aluminium, resistant to the weather conditions
- Power: 220-230 VAC, 50/60 Hz, 9,5 W, without power reserve
- Torque 2,45 Nm
- Time correction through manual movement of the hands

### RELATED PRODUCTS – PRODUITS ASSOCIÉS

- Clock hands and numerals (see pp. 88-90)



CODE	DESCRIPTION
RIC3504001	SYNCHRONOUS CLOCK MOVEMENT MAX 130CM NO POWER RESERVE 220V

## CLOCK MOVEMENTS W/O HAND SHAFT / MOUVEMENTS SANS MINUTERIE

RIC10-15-20-25

These clock movements w/o hand shaft are used for the movement of the clock hands of outdoor clocks installed on bell towers, municipal buildings, schools, railway stations etc. These devices (to be used in combination with one or more cog wheels) receive impulses from a master clock and transmit it to the clock hands every 60 seconds. Robustly constructed and with an enormous dragging power, they are able to control clock hands on dials between 0,9 and 10 m diameter (2,9 ft-32 ft).

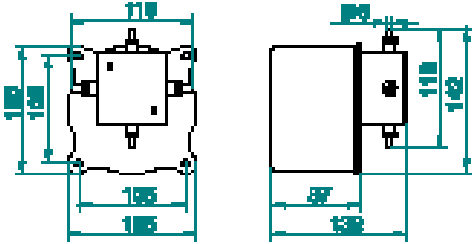
Ces mouvements sans minuterie sont utilisés pour commander l'avance des aiguilles de cadrans installés sur les clochers, édifices scolaires et municipaux ou gares. Le récepteur (pour être utilisé en combinaison avec une ou plusieurs minuterie) reçoit l'impulsion d'une centrale horaire toutes les minutes et transmet l'avance aux aiguilles. De construction robuste et d'une grande puissance de transmission, les récepteurs font fonctionner les cadrans jusqu'à 10 m de diamètre.


### 4 OUTPUTS CLOCK MOVEMENT DIAL UP TO 90 CM – RIC10 MOUVEMENT POUR COMMANDE DE 4 CADRANS JUSQU'À 90 CM – RIC10



#### TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 90 cm (2,9 ft)
- Outputs: 4
- Power: 220-230 VAC, 50/60 Hz, 9,5 W (RIC1004026); 115 VAC, 50/60 Hz, 3,5 W (RIC1004018)
- Torque: 2,94 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



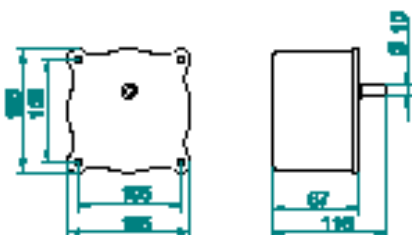
CODE	DESCRIPTION
RIC1004018 	CLOCK MOVEMENT MAX 90CM PIN EXIT 4 EXITS 110V
RIC1004026	CLOCK MOVEMENT MAX 90CM PIN EXIT 4 EXITS

### CLOCK MOVEMENT FOR DIAL UP TO 150 CM – RIC10 MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 150 CM - RIC10



#### TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 150 cm (4,9 ft)
- Power: 220-230 VAC, 50/60 Hz, 9,5 W
- Torque: 4,9 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



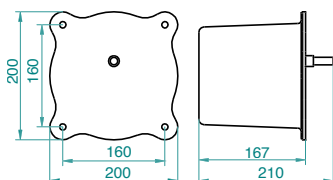
CODE	DESCRIPTION
RIC1004001	CLOCK MOVEMENT MAX 150CM PIN EXIT

CLOCK MOVEMENT FOR DIAL UP TO 250 CM – RIC15  
MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 250 CM – RIC15



TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 250 cm (8,2 ft)
- Power: 220-230 VAC, 50 Hz, 16,7 W; 115 VAC, 60 Hz, 5 W
- Torque: 111,77 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



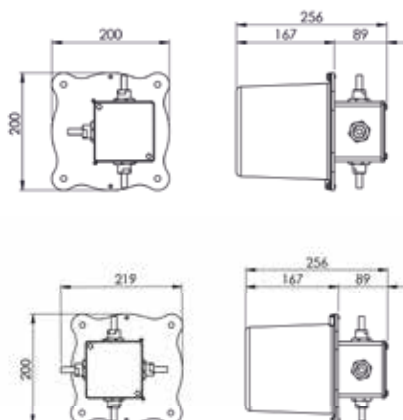
CODE	DESCRIPTION
RIC1504001	CLOCK MOVEMENT MAX 250CM PIN EXIT

3/4 OUTPUTS CLOCK MOVEMENT DIAL UP TO 250 CM – RIC15  
MOUVEMENT POUR COMMANDE DE 3/4 CADRANS JUSQU'À 250 CM – RIC15



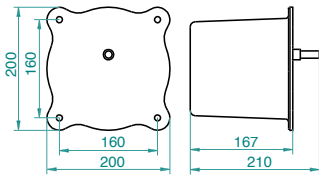
TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 250 cm (8,2 ft)
- Outputs: 3/4
- Power: 220-230 VAC, 50 Hz, 16,7 W (RIC1504003-04); 115 VAC, 60 Hz, 5 W (RIC1504005)
- Torque: 11,7 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



CODE	DESCRIPTION
RIC1504003	CLOCK MOVEMENT MAX 250CM PIN EXIT 3 EXITS
RIC1504004	CLOCK MOVEMENT MAX 250CM PIN EXIT 4 EXITS
RIC1504005	CLOCK MOVEMENT MAX 250CM PIN EXIT 4 EXITS 110V

CLOCK MOVEMENT FOR DIAL UP TO 400 CM – RIC20  
 MOUVEMENT POUR COMMANDE DE CADRANS JUSQU'À 400 CM – RIC20

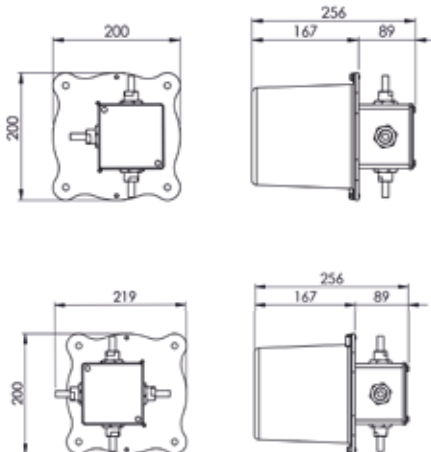


TECHNICAL CHARACTERISTICS

- Dial diameter: max 400 cm (13,1 ft)
- To be used combined with one or more cog wheels
- Power: 230 VAC, 50 Hz, 30 W; 115 VAC, 60 Hz, 29,7 W
- Torque: 29,4 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)

CODE	DESCRIPTION
RIC2004001	CLOCK MOVEMENT MAX 400CM PIN EXIT

3/4 OUTPUTS CLOCK MOVEMENT DIAL UP TO 400 CM – RIC20  
 MOUVEMENT POUR COMMANDE DE 3/4 CADRANS PARALLELES  
 JUSQU'À 400 CM – RIC20



TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 400 cm (13,1 ft)
- Outputs: 3/4
- Power: 230 VAC, 50 Hz, 30 W (RIC2004017-19);  
115 VAC, 60 Hz, 29,7 W (RIC2004023-26)
- Torque: 29,4 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)

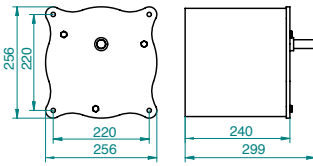
CODE	DESCRIPTION
RIC2004017	CLOCK MOVEMENT MAX 400CM PIN EXIT 3 EXITS
RIC2004019	CLOCK MOVEMENT MAX 400CM PIN EXIT 4 EXITS
RIC2004023	CLOCK MOVEMENT MAX 400CM PIN EXIT 4 EXITS 110V
RIC2004026	CLOCK MOVEMENT MAX 400CM PIN EXIT 3 EXITS 110V

CLOCK MOVEMENT FOR DIAL MAX 1000 CM – RIC25  
MOUVEMENT POUR COMMANDE DE CADRANS MAX 1000 CM – RIC25



TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 1000 cm (32,8 ft)
- Power: 220-230 VAC, 50/60 Hz, 25 W (RIC2504001);  
110-115 VAC, 60 Hz, 25 W (RIC2504003)
- Torque: 98 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



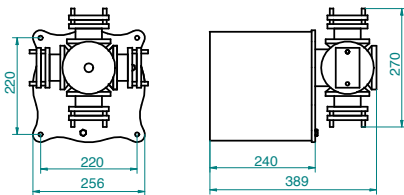
CODE	DESCRIPTION
RIC2504001	CLOCK MOVEMENT MAX 1000CM PIN EXIT
RIC2504003	CLOCK MOVEMENT MAX 1000CM PIN EXIT 110V

4 OUTPUTS CLOCK MOVEMENT FOR DIAL MAX 800 CM – RIC25  
MOUVEMENT POUR COMMANDE DE 4 CADRANS MAX 800 CM – RIC25



TECHNICAL CHARACTERISTICS

- To be used combined with one or more cog wheels
- Dial diameter: max 800 cm (26,2 ft)
- Outputs: 4
- Power: 220-230 VAC, 50/60 Hz, 25 W (RIC2504002);  
110-115 VAC, 60 Hz, 25 W (RIC2504004)
- Torque: 39,2 Nm
- Functioning: minute inversion phase
- Stainless steel outputs (AISI 304)



CODE	DESCRIPTION
RIC2504002	CLOCK MOVEMENT MAX 800CM PIN EXIT 4 EXITS
RIC2504004	CLOCK MOVEMENT MAX 800CM PIN EXIT 4 EXITS 110V

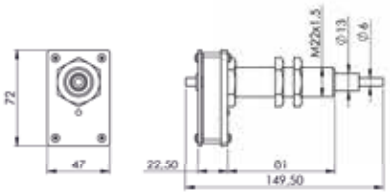
MINUTE HANDS COG WHEEL / MINUTERIES POUR CADRANS  
MIN05-10-15-20-30-35

MINUTE HANDS COG WHEEL FOR DIAL UP TO 90 CM – MIN05  
MINUTERIE POUR CADRANS JUSQU'À 90 CM – MIN05



TECHNICAL CHARACTERISTICS

- Wheels in brass
- Sprockets in brass
- Pin in steel
- Cog wheels with protective cover in aluminium
- For the command of clock dials up to 90 cm (2,9 ft) diameter
- It can be used with backlit dial
- Stainless steel outputs (AISI 304)



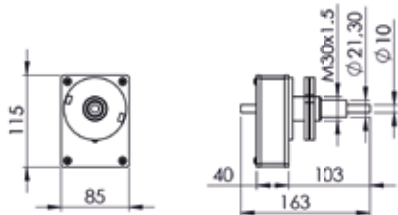
CODE	DESCRIPTION
MIN0504001	MINUTE HANDS COG WHEEL MAX 90CM BUSH 76MM (3IN)

MINUTE HANDS COG WHEEL FOR DIAL UP TO 150 CM – MIN10  
MINUTERIE POUR CADRANS JUSQU'À 150 CM – MIN10



TECHNICAL CHARACTERISTICS

- Wheels in brass
- Sprockets in brass
- Pin in steel
- Cog wheels with protective cover in aluminium
- For the command of clock dials up to 150 cm m (4,9 ft) diameter
- Stainless steel outputs (AISI 304)

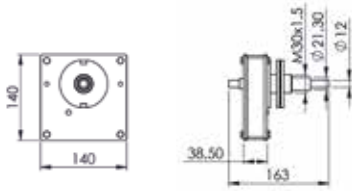


CODE	DESCRIPTION
MIN1004001	MINUTE HANDS COG WHEEL MAX 150CM BUSH 35MM (1,4IN)
MIN1004002	MINUTE HANDS COG WHEEL MAX 150CM BUSH 76MM (3IN)



MINUTE HANDS COG WHEEL / MINUTERIES POUR CADRANS  
MIN05-10-15-20-30-35

MINUTE HANDS COG WHEEL FOR DIAL UP TO 400 CM – MIN15  
MINUTERIE POUR CADRANS JUSQU'À 400 CM – MIN15

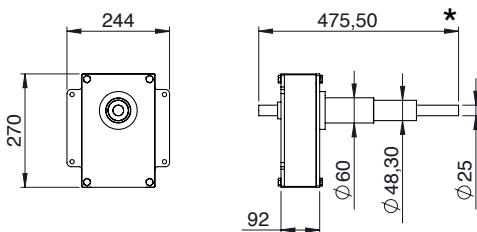


TECHNICAL CHARACTERISTICS

- Wheels in brass
- Sprockets in brass
- Pin in steel
- Cog wheels with protective cover in aluminium
- For the command of clock dials up to 400 cm (13,1 ft)
- Stainless steel outputs (AISI 304)

CODE	DESCRIPTION
MIN1504001	MINUTE HANDS COG WHEEL MAX 400CM BUSH 35MM (1,4IN)
MIN1504002	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 300MM (11,8IN)
MIN1504003	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 600MM (23,6IN)
MIN1504004	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 900MM (35,4IN)
MIN1504005	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 1200MM (47,2IN)
MIN1504006	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT ON REQUEST<1200MM
MIN1504007	MINUTE HANDS COG WHEEL MAX 400CM BUSH 76MM (3IN)
MIN1504008	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 300MM (11,8IN) PRT
MIN1504009	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 600MM (23,6IN) PRT
MIN1504010	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 900MM (35,4IN) PRT
MIN1504011	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 1200MM (47,2IN)PRT
MIN1504012	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT ON RQST<1200MM PRT

MINUTE HANDS COG WHEEL FOR DIAL MAX 800 CM – MIN20  
MINUTERIE POUR CADRANS MAX 800 CM – MIN20



TECHNICAL CHARACTERISTICS

- Wheels in steel
- Sprockets in steel
- Protection tube in steel
- For the command of clock dials up to 800 cm (26,2 ft) diameter
- Customized length of output pin
- Stainless steel outputs (AISI 304)

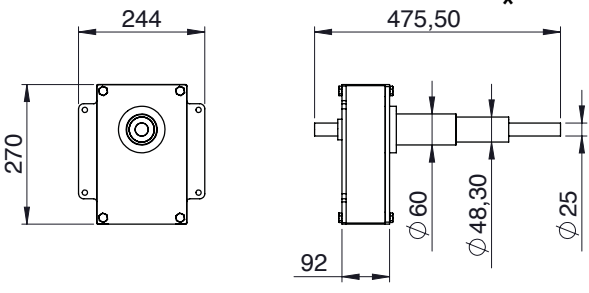
CODE	DESCRIPTION
MIN2004001	MINUTE HANDS COG WHEEL MAX 800CM H. SHAFT ON REQUEST<1200MM

\* The drawing shows the minimum dimension of the cog wheel. Made-to-measure product.

MINUTE HANDS COG WHEEL / MINUTERIES POUR CADRANS

MIN05-10-15-20-30-35

MINUTE HANDS COG WHEEL FOR FLORAL CLOCK – MIN30  
MINUTERIE POUR CADRANS DES HORLOGES FLORALES – MIN30



\* The drawing shows the minimum dimension of the cog wheel. Made-to-measure product.

Located at the entrance of a park or any public area, the floral clock allows you to decorate the city environment. This kind of clock is equipped with friction set on the outputs: in this way the clock hands can easily be released in the event of routine maintenance (eg. cutting grass). In addition, the cog wheel is mounted on thrust bearings which perform the function of supporting the hands clock.

Placée à l'entrée d'un parc ou dans n'importe qu'elle zone publique, l'horloge florale permet d'embellir l'environnement urbain. Ce genre d'horloge est caractérisé par un délicat et précis mécanisme intérieur, doté de frictions placées sur les commandes de sorties: de cette manière, l'aiguille peut être facilement enlevé en cas de maintenance de routine. De plus, la minuterie est montée sur des roulements qui supportent les aiguilles.

TECHNICAL CHARACTERISTICS

- Frictions for command dials up to 1000 cm (32,8 ft)
- Surface treatment zinc-nickel
- Stainless steel outputs (AISI 304)

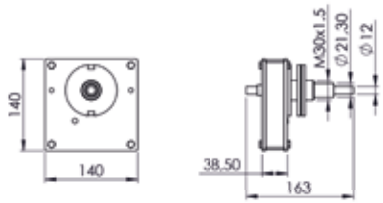
A floral clock is made to customer specifications and it consists of:

- master clock
- clock movement (we recommend the RIC25 model)
- cog wheel

CODE	DESCRIPTION
MIN3004001	MINUTE HANDS COG WHEEL MAX 1000 CM FOR FLORAL CLOCK

1:24 MINUTE HANDS COG WHEEL FOR DIAL UP TO 400 CM – MIN35

1:24 MINUTERIE POUR CADRANS MAX 400 CM – MIN35



This kind of cog wheel is specifically designed to move the hands of 24-hour dials.

Ce genre de minuterie est expressément conçue pour faire fonctionner les aiguilles de cadrans 24 heures.

TECHNICAL CHARACTERISTICS

- Wheels in steel
- Sprockets in steel
- Pin in steel
- Cog wheels with protective cover in aluminium
- For the command of clock dials up to 400 cm (13,1 ft) diameter
- Stainless steel outputs (AISI 304)

CODE	DESCRIPTION
MIN3504001	MINUTE HANDS COG WHEEL MAX 400CM BUSH 35MM (1,4IN) 1:24

## SECONDARY MOVEMENTS / MOUVEMENTS SECONDAIRES

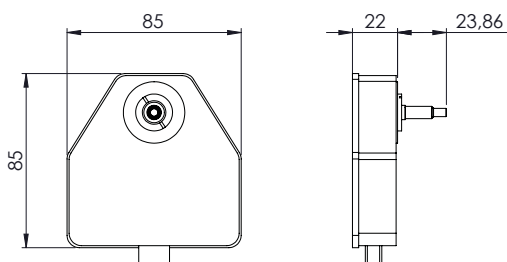
### SEC05-10

Secondary movements with reversed polarity have two bushings: 4 and 24 mm; the latter is the ideal solution for thicker than usual clock faces and backlit ones. The 24-mm bushing resolves the aesthetic problem of shadows, guaranteeing uniform illumination of the clock face and excellent nocturnal readability.

Les mouvements secondaires à inversion de polarité sont dotés de deux typologies de pierre: de 4 et de 24 mm; cette dernière est la solution idéale pour des cadrans d'une épaisseur supérieure à la norme et pour des cadrans rétroéclairés. La pierre de 24 mm en effet permet de résoudre le problème esthétique des zones d'ombre, en garantissant une illumination uniforme du cadran et une lisibilité optimale dans l'obscurité.

### SECONDARY MOVEMENTS – SEC05

#### MOUVEMENT SECONDAIRE, PIERRE 4 MM – SEC05



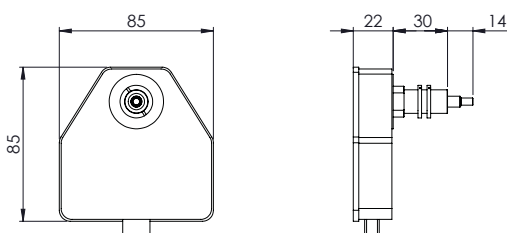
#### TECHNICAL CHARACTERISTICS

- Power: 10,8/12 VDC (SEC0504001); 24VDC (SEC0504002)
- Torque: 1,6 Ncm
- Functioning: reversed polarity

CODE	DESCRIPTION
SEC0504001	SLAVE MOVEMENT 4MM BUSH (0,15IN) 10.8 /12VDC
SEC0504002	SLAVE MOVEMENT 4MM BUSH (0,15IN) 24VDC

### SECONDARY MOVEMENTS – SEC05

#### MOUVEMENT SECONDAIRE, PIERRE 24 MM – SEC05



#### TECHNICAL CHARACTERISTICS

- Power: 10,8/12 VDC (SEC0504010); 24VDC (SEC0504011)
- Torque: 1,6 Ncm
- Functioning: reversed polarity

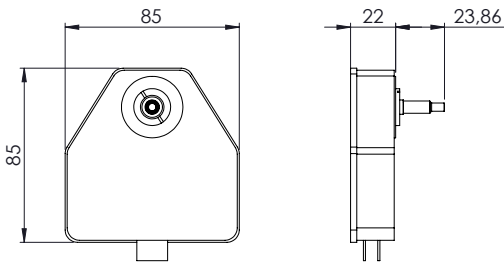
CODE	DESCRIPTION
SEC0504010	SLAVE MOVEMENT 24MM BUSH (0,94IN) 10,8/12VDC
SEC0504011	SLAVE MOVEMENT 24MM BUSH (0,94IN) 24VDC

SECONDARY MOVEMENTS – SEC05  
AUTOMATIC SET-UP – SEC05  
MOUVEMENT SECONDAIRE, PIERRE 4/24 MM  
AUTOMATIQUE SET-UP – SEC05



TECHNICAL CHARACTERISTICS

- Power: 10,8/12 VDC (SEC1004001); 24VDC (SEC1004010)
- Torque: 1,6 Ncm
- Functioning: reversed polarity
- To be used in conjunction with CLK35



CODE	DESCRIPTION
SEC1004001	SLAVE MOVEMENT 4MM BUSH (0,15IN) SELF SETTING
SEC1004010	SLAVE MOVEMENT 24MM BUSH (0,94IN) SELF SETTING



## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
RIC0504001	CLOCK MOVEMENT MAX 90CM BUSH 25MM
RIC0504002	CLOCK MOVEMENT MAX 90CM BUSH 76MM (3IN) 110V
RIC0504003	CLOCK MOVEMENT MAX 90CM BUSH 76MM
RIC1004001	CLOCK MOVEMENT MAX 150CM PIN EXIT
RIC1004003	CLOCK MOVEMENT MAX 150CM BUSH 35MM
RIC1004004	CLOCK MOVEMENT MAX 150CM BUSH 76MM (3IN) 110V
RIC1004005	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 300MM
RIC1004006	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 300MM PRT
RIC1004007	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 600MM
RIC1004008	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 600MM PRT
RIC1004009	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 900MM
RIC1004010	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 900MM PRT
RIC1004011	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 1200MM
RIC1004012	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 1200MM PRT
RIC1004013	CLOCK MOVEMENT MAX 150CM HOURS SHAFT ON REQUEST<1200MM
RIC1004014	CLOCK MOVEMENT MAX 150CM HOURS SHAFT ON REQUEST<1200MM PRT
RIC1004015	CLOCK MOVEMENT MAX 90CM BUSH 46MM (1.8IN) 2 EXITS 110V
RIC1004016	CLOCK MOVEMENT MAX 90CM BUSH 68MM (2.6IN) 2 EXITS 110V
RIC1004017	CLOCK MOVEMENT MAX 90CM BUSH 81MM (3.1IN) 2 EXITS 110V
RIC1004018	CLOCK MOVEMENT MAX 90CM PIN EXIT 4 EXITS 110V
RIC1004019	CLOCK MOVEMENT MAX 150CM BUSH 76MM
RIC1004020	CLOCK MOVEMENT MAX 150CM BUSH 300MM (11.8IN) 110V
RIC1004021	CLOCK MOVEMENT MAX 150CM HOURS SHAFT 500 MM(19.6IN) 110V PRT
RIC1004022	CLOCK MOVEMENT MAX 150CM BUSH 165MM (6.5IN) 110V
RIC1004023	CLOCK MOVEMENT MAX 90CM BUSH 46MM 2 EXITS
RIC1004024	CLOCK MOVEMENT MAX 90CM BUSH 68MM 2 EXITS
RIC1004025	CLOCK MOVEMENT MAX 90CM BUSH 81MM 2 EXITS
RIC1004026	CLOCK MOVEMENT MAX 90CM PIN EXIT 4 EXITS
RIC1004027	CLOCK MOVEMENT MAX 150CM H. SHAFT ON REQUEST<1200MM 110V PRT
RIC1504001	CLOCK MOVEMENT MAX 250CM PIN EXIT
RIC1504003	CLOCK MOVEMENT MAX 250CM PIN EXIT 3 EXITS
RIC1504004	CLOCK MOVEMENT MAX 250CM PIN EXIT 4 EXITS
RIC1504005	CLOCK MOVEMENT MAX 250CM PIN EXIT 4 EXITS 110V
RIC2004001	CLOCK MOVEMENT MAX 400CM PIN EXIT
RIC2004003	CLOCK MOVEMENT MAX 400CM BUSH 35MM
RIC2004004	CLOCK MOVEMENT MAX 400CM BUSH 76MM (3IN) 110V
RIC2004005	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 300MM
RIC2004006	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 300MM PRT
RIC2004007	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 600MM
RIC2004008	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 600MM PRT
RIC2004009	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 500MM (19,6IN) PRT 110V
RIC2004010	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 900MM
RIC2004011	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 900MM PRT
RIC2004012	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 1200MM

## TABLE OF PRODUCT CODES

RIC2004013	CLOCK MOVEMENT MAX 400CM HOURS SHAFT 1200MM PRT
RIC2004014	CLOCK MOVEMENT MAX 400CM HOURS SHAFT ON REQUEST<1200MM
RIC2004015	CLOCK MOVEMENT MAX 400CM HOURS SHAFT ON REQUEST<1200MM PRT
RIC2004017	CLOCK MOVEMENT MAX 400CM PIN EXIT 3 EXITS
RIC2004019	CLOCK MOVEMENT MAX 400CM PIN EXIT 4 EXITS
RIC2004020	CLOCK MOVEMENT MAX 400CM BUSH 300MM (11,8IN) 110V
RIC2004021	CLOCK MOVEMENT MAX 400CM BUSH 76MM
RIC2004022	CLOCK MOVEMENT MAX 400CM BUSH 165MM (6,5IN) 110V
RIC2004023	CLOCK MOVEMENT MAX 400CM PIN EXIT 4 EXITS 110V
RIC2004024	CLOCK MOVEMENT MAX 400CM H. SHAFT ON REQUEST<1200MM 110V PRT
RIC2004026	CLOCK MOVEMENT MAX 400CM PIN EXIT 3 EXITS 110V
RIC2504001	CLOCK MOVEMENT MAX 1000CM PIN EXIT
RIC2504002	CLOCK MOVEMENT MAX 800CM PIN EXIT 4 EXITS
RIC2504003	CLOCK MOVEMENT MAX 1000CM PIN EXIT 110V
RIC2504004	CLOCK MOVEMENT MAX 800CM PIN EXIT 4 EXITS 110V
RIC3004001	CLOCK MOVEMENT MAX 300CM FOR ILLUMINATED HANDS DIAL
RIC3004003	CLOCK MOVEMENT MAX 300CM FOR ILLUMINATED HANDS DIAL - RGB
RIC3504001	SYNCHRONOUS CLOCK MOVEMENT MAX 130CM NO POWER RESERVE 220V
MIN0504001	MINUTE HANDS COG WHEEL MAX 90CM BUSH 76MM (3IN)
MIN1004001	MINUTE HANDS COG WHEEL MAX 150CM BUSH 35MM (1,4IN)
MIN1004002	MINUTE HANDS COG WHEEL MAX 150CM BUSH 76MM (3IN)
MIN1504001	MINUTE HANDS COG WHEEL MAX 400CM BUSH 35MM (1,4IN)
MIN1504002	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 300MM (11,8IN)
MIN1504003	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 600MM (23,6IN)
MIN1504004	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 900MM (35,4IN)
MIN1504005	MINUTE HANDS COG WHEEL MAX 400CM HOURS SHAFT 1200MM (47,2IN)
MIN1504006	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT ON REQUEST<1200MM
MIN1504007	MINUTE HANDS COG WHEEL MAX 400CM BUSH 76MM (3IN)
MIN1504008	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 300MM (11,8IN) PRT
MIN1504009	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 600MM (23,6IN) PRT
MIN1504010	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 900MM (35,4IN) PRT
MIN1504011	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT 1200MM (47,2IN)PRT
MIN1504012	MINUTE HANDS COG WHEEL MAX 400CM H. SHAFT ON RQST<1200MM PRT
MIN2004001	MINUTE HANDS COG WHEEL MAX 800CM H. SHAFT ON REQUEST<1200MM
MIN3004001	MINUTE HANDS COG WHEEL MAX 1000 CM FOR FLORAL CLOCK
MIN3504001	MINUTE HANDS COG WHEEL MAX 400CM BUSH 35MM (1,4IN) 1:24
SEC0504001	SLAVE MOVEMENT 4MM BUSH (0,15IN) 10.8 /12VDC
SEC0504002	SLAVE MOVEMENT 4MM BUSH (0,15IN) 24VDC
SEC0504010	SLAVE MOVEMENT 24MM BUSH (0,94IN) 10,8/12VDC
SEC0504011	SLAVE MOVEMENT 24MM BUSH (0,94IN) 24VDC
SEC1004001	SLAVE MOVEMENT 4MM BUSH (0,15IN) SELF SETTING
SEC1004010	SLAVE MOVEMENT 24MM BUSH (0,94IN) SELF SETTING

## TABLE OF PRODUCT CODES

ACCESSORIES

FIL0504002	RC ADDITIONAL FILTER FOR CLOCK MOTOR 10-15-20-25
LAN9504001	BUSH FOR DIAL HANDS RIC05
LAN9504002	BUSH FOR DIAL HANDS RIC10
LAN9504003	BUSH FOR DIAL HANDS RIC20
LAN9504004	BUSH FOR DIAL HANDS SEC05-10
MIN8504001	ANGLE ATTACHMENT FOR CLOCK HANDS MOTOR 90 DEGREES
MIN8504002	UNIVERSAL JOINT IN BRASS DIAMETER 10/10 MM
MIN8504003	ARTICULATED BRASS ATTACHMENT 10/10MM
MIN8504004	ARTICULATED BRASS ATTACHMENT 6/6 MM
MIN8504005	UNIVERSAL JOINT IN BRASS 10/12MM
MIN8504006	UNIVERSAL JOINT IN BRASS 12/12MM
MIN8504010	ARTICULATED JOINT IN BRASS 10/12MM
MIN8504011	ARTICULATED JOINT IN BRASS 12/12MM
MIN8504020	UNIVERSAL JOINT IN GALVANIZED STEEL 10/10MM
MIN8504021	UNIVERSAL JOINT IN GALVANIZED STEEL 10/12MM
MIN8504022	UNIVERSAL JOINT IN GALVANIZED STEEL 12/12MM
RIC8504001	MOUNTING BRACKET FOR RIC20
RIC8504002	MOUNTING BRACKET FOR RIC25
RIC8504003	FIXING RING NUT FOR RIC10-20-MIN15 WITH PROTECTIVE TUBE
RIC8504004	CENTRAL SUPPORT BRACKET FOR RIC10-20-MIN15

TABLE OF PRODUCT CODES

CLOCK HANDS MOVEMENT / MOUVEMENT DES AIGUILLES

## CLOCK DIALS / CADRANS

CODE	DESCRIPTION
QDR2004001	ACRYLIC CLOCK DIAL ON REQUEST
QDR2004002	SKELETT CLOCK DIAL ON MEASURE
QDR2004003	ILLUMINATED CLOCK DIAL ON REQUEST
QDR2004010	CLOCK DIAL ON REQUEST (MATERIAL - DESIGN)

### NUMERALS / CHIFFRES

1 2 3 4 5 6 7 8 9 10 11 12

ARABIC NUMERALS / CHIFFRES ARABES

1 2 3 4 5 6 7 8 9 10 11 12

ARIAL NUMERALS / CHIFFRES ARIAL

1 2 3 4 5 6 7 8 9 10 11 12

GOTHIC NUMERALS / CHIFFRES GOTHIQUES

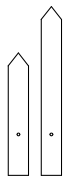
I II III IIII V VI VII VIII IX X XI XII

ROMAN NUMERALS / CHIFFRES ROMAINS

CODE	DESCRIPTION
NUM6004001	SERIES OF ARABIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004002	SERIES OF ARABIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004003	SERIES OF GOTHIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004004	SERIES OF ROMAN NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6504001	SERIES OF NUMERALS ON REQUEST
NUM6504002	SERIES OF DASHES ON REQUEST
NUM6504003	SERIES OF ILLUMINATED DASHES ON REQUEST

### CLOCK HANDS / AIGUILLES

LAN 20



LAN 25



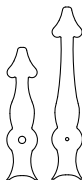
LAN 30



LAN 35



LAN 40



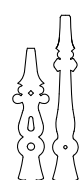
LAN 45



LAN 50



LAN 55



### LAN6504002

Customized lighted hands (RGB)





## CLOCK DIALS / CADRANS

CODE	DESCRIPTION
LAN2004001	MOD. 20 CLOCK HANDS FOR DIAL UP TO 1 M
LAN2004002	MOD. 20 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN2004003	MOD. 20 CLOCK HANDS FOR DIAL UP TO 2 M
LAN2004004	MOD. 20 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN2504001	MOD. 25 CLOCK HANDS FOR DIAL UP TO 1 M
LAN2504002	MOD. 25 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN2504003	MOD. 25 CLOCK HANDS FOR DIAL UP TO 2 M
LAN2504004	MOD. 25 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN3004001	MOD. 30 CLOCK HANDS FOR DIAL UP TO 1 M
LAN3004002	MOD. 30 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN3004003	MOD. 30 CLOCK HANDS FOR DIAL UP TO 2 M
LAN3004004	MOD. 30 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN3504001	MOD. 35 CLOCK HANDS FOR DIAL UP TO 1 M
LAN3504002	MOD. 35 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN3504003	MOD. 35 CLOCK HANDS FOR DIAL UP TO 2 M
LAN3504004	MOD. 35 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN4004001	MOD. 40 CLOCK HANDS FOR DIAL UP TO 1 M
LAN4004002	MOD. 40 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN4004003	MOD. 40 CLOCK HANDS FOR DIAL UP TO 2 M
LAN4004004	MOD. 40 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN4504001	MOD. 45 CLOCK HANDS FOR DIAL UP TO 1 M
LAN4504002	MOD. 45 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN4504003	MOD. 45 CLOCK HANDS FOR DIAL UP TO 2 M
LAN4504004	MOD. 45 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN5004001	MOD. 50 CLOCK HANDS FOR DIAL UP TO 1 M
LAN5004002	MOD. 50 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN5004003	MOD. 50 CLOCK HANDS FOR DIAL UP TO 2 M
LAN5004004	MOD. 50 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN5504001	MOD. 55 CLOCK HANDS FOR DIAL UP TO 1 M
LAN5504002	MOD. 55 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN5504003	MOD. 55 CLOCK HANDS FOR DIAL UP TO 2 M
LAN5504004	MOD. 55 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN6504001	CLOCK HANDS DIAL ON REQUEST (MATERIAL-DESIGN)
LAN6504002	ILLUMINATED CLOCK HANDS DIAL ON REQUEST

## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
QDR2004001	ACRYLIC CLOCK DIAL ON REQUEST
QDR2004002	SKELETT CLOCK DIAL ON MEASURE
QDR2004003	ILLUMINATED CLOCK DIAL ON REQUEST
QDR2004010	CLOCK DIAL ON REQUEST (MATERIAL - DESIGN)
LAN2004001	MOD. 20 CLOCK HANDS FOR DIAL UP TO 1 M
LAN2004002	MOD. 20 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN2004003	MOD. 20 CLOCK HANDS FOR DIAL UP TO 2 M
LAN2004004	MOD. 20 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN2504001	MOD. 25 CLOCK HANDS FOR DIAL UP TO 1 M
LAN2504002	MOD. 25 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN2504003	MOD. 25 CLOCK HANDS FOR DIAL UP TO 2 M
LAN2504004	MOD. 25 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN3004001	MOD. 30 CLOCK HANDS FOR DIAL UP TO 1 M
LAN3004002	MOD. 30 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN3004003	MOD. 30 CLOCK HANDS FOR DIAL UP TO 2 M
LAN3004004	MOD. 30 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN3504001	MOD. 35 CLOCK HANDS FOR DIAL UP TO 1 M
LAN3504002	MOD. 35 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN3504003	MOD. 35 CLOCK HANDS FOR DIAL UP TO 2 M
LAN3504004	MOD. 35 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN4004001	MOD. 40 CLOCK HANDS FOR DIAL UP TO 1 M
LAN4004002	MOD. 40 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN4004003	MOD. 40 CLOCK HANDS FOR DIAL UP TO 2 M
LAN4004004	MOD. 40 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN4504001	MOD. 45 CLOCK HANDS FOR DIAL UP TO 1 M
LAN4504002	MOD. 45 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN4504003	MOD. 45 CLOCK HANDS FOR DIAL UP TO 2 M
LAN4504004	MOD. 45 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN5004001	MOD. 50 CLOCK HANDS FOR DIAL UP TO 1 M
LAN5004002	MOD. 50 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN5004003	MOD. 50 CLOCK HANDS FOR DIAL UP TO 2 M
LAN5004004	MOD. 50 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN5504001	MOD. 55 CLOCK HANDS FOR DIAL UP TO 1 M
LAN5504002	MOD. 55 CLOCK HANDS FOR DIAL UP TO 1.5 M
LAN5504003	MOD. 55 CLOCK HANDS FOR DIAL UP TO 2 M
LAN5504004	MOD. 55 CLOCK HANDS FOR DIAL UP TO 2.5 M
LAN6504001	CLOCK HANDS DIAL ON REQUEST
LAN6504002	ILLUMINATED CLOCK HANDS DIAL ON REQUEST
NUM6004001	SERIES OF ARABIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004002	SERIES OF ARABIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004003	SERIES OF GOTHIC NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6004004	SERIES OF ROMAN NUMERALS IN BLACK METHACRYLATE ON MEASURE
NUM6504001	SERIES OF NUMERALS ON REQUEST
NUM6504002	SERIES OF DASHES ON REQUEST
NUM6504003	SERIES OF ILLUMINATED DASHES ON REQUEST

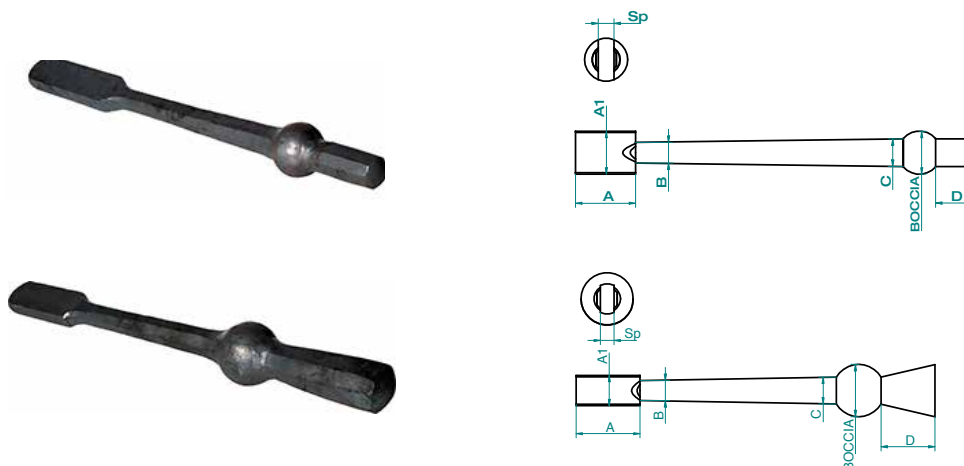


## CLAPPERS / BATTANTS

### BAT15-20

A clapper is the swinging device that, fixed inside the bell, enables to generate the sound by striking against the bell. It is usually manufactured in ductile iron to avoid an excessive consumption of the bell at the point of impact. It could be ordered also provided with cable seals and safety bracket in leather.

Le battant est le dispositif oscillant que, fixé à l'intérieur de la cloche, permet de générer le son en battant dans elle même. Il est toujours réalisé en fer doux pour éviter une usure excessive de la cloche dans le point de frappe. Le battant peut être aussi ordonné fourni de chaumards et retenues de sécurité.



CODE	DESCRIPTION
BAT1504010	FALLING CLAPPER FOR BELL L 240
BAT1504011	FALLING CLAPPER FOR BELL L 270
BAT1504012	FALLING CLAPPER FOR BELL L310
BAT1504013	FALLING CLAPPER FOR BELL L 340
BAT1504014	FALLING CLAPPER FOR BELL L 385
BAT1504015	FALLING CLAPPER FOR BELL L 430
BAT1504016	FALLING CLAPPER FOR BELL L 480
BAT1504017	FALLING CLAPPER FOR BELL L 530
BAT1504018	FALLING CLAPPER FOR BELL L 580
BAT1504019	FALLING CLAPPER FOR BELL L 650
BAT1504020	FALLING CLAPPER FOR BELL L 730
BAT1504021	FALLING CLAPPER FOR BELL L 810
BAT1504022	FALLING CLAPPER FOR BELL L 870
BAT1504023	FALLING CLAPPER FOR BELL L 950
BAT1504024	FALLING CLAPPER FOR BELL L 1020
BAT1504025	FALLING CLAPPER FOR BELL L 1100
BAT1504026	FALLING CLAPPER FOR BELL L 1150
BAT2004010	FLYING CLAPPER FOR BELL L 240
BAT2004011	FLYING CLAPPER FOR BELL L 270
BAT2004012	FLYING CLAPPER FOR BELL L 310
BAT2004013	FLYING CLAPPER FOR BELL L 340
BAT2004014	FLYING CLAPPER FOR BELL L 385
BAT2004015	FLYING CLAPPER FOR BELL L 430
BAT2004016	FLYING CLAPPER FOR BELL L 480

## CLAPPERS / BATTANTS

### BAT15-20

BAT2004017	FLYING CLAPPER FOR BELL L 530
BAT2004018	FLYING CLAPPER FOR BELL L 580
BAT2004019	FLYING CLAPPER FOR BELL L 650
BAT2004020	FLYING CLAPPER FOR BELL L 730
BAT2004021	FLYING CLAPPER FOR BELL L 810
BAT2004022	FLYING CLAPPER FOR BELL L 860
BAT2004023	FLYING CLAPPER FOR BELL L 910
BAT2004024	FLYING CLAPPER FOR BELL L 1020
BAT2004025	FLYING CLAPPER FOR BELL L 1100
BAT2004026	FLYING CLAPPER FOR BELL L 1150

## TABLE FOR BELL "FALLING CLAPPER" / TABLEAU POUR CLOCHE "VOLÉE RÉTRO"

### BAT15

CODE	DESCRIPTION	BELL WEIGHT (Kg)	lb	STONE	ANGLO-SAXON TONE	L (mm) from the end of the tongue to the center of the head
BAT1504010	FALLING CLAPPER FOR BELL L 240	16 19	35,27 41,89	Mib RE	Dis3 D3	240
BAT1504011	FALLING CLAPPER FOR BELL L 270	22 26	48,50 57,32	Reb DO	Cis3 C3	270
BAT1504012	FALLING CLAPPER FOR BELL L310	31 37	68,34 81,57	SI Sib	B2 Ais2	310
BAT1504013	FALLING CLAPPER FOR BELL L 340	43 50	94,80 110,23	LA Lab	A2 Gis2	340
BAT1504014	FALLING CLAPPER FOR BELL L 385	60 72	132,28 158,73	SOL SOLb	G2 Fis2	385
BAT1504015	FALLING CLAPPER FOR BELL L 430	85 100	187,39 220,46	FA MI	F2 E2	430
BAT1504016	FALLING CLAPPER FOR BELL L 480	120 140	264,55 308,65	Mib RE	Dis2 D2	480
BAT1504017	FALLING CLAPPER FOR BELL L 530	170 200	374,79 440,92	Reb DO	Cis2 C2	540
BAT1504018	FALLING CLAPPER FOR BELL L 580	245	540,13	SI	B1	580
BAT1504019	FALLING CLAPPER FOR BELL L 650	290 340	639,34 749,57	Sib LA	Ais1 A1	650
BAT1504020	FALLING CLAPPER FOR BELL L 730	410 480	903,90 1058,22	Lab SOL	Gis1 G1	730
BAT1504021	FALLING CLAPPER FOR BELL L 810	550 680	1212,54 1499,14	SOLb FA	Fis1 F1	810
BAT1504022	FALLING CLAPPER FOR BELL L 870	810	1785,74	MI	E1	870
BAT1504023	FALLING CLAPPER FOR BELL L 950	980	2160,53	Mib	Dis1	950
BAT1504024	FALLING CLAPPER FOR BELL L 1020	1200 1400	2645,55 3086,47	RE Reb	D1 Cis1	1020
BAT1504025	FALLING CLAPPER FOR BELL L 1100	1680	3703,77	DO	C1	1100
BAT1504026	FALLING CLAPPER FOR BELL L 1150	1950	4299,01	SI	B0	1150

TABLE FOR BELL "FLYING CLAPPER" / TABLEAU POUR CLOCHE "VOLÉE LANCÉE"  
BAT20

CODE	DESCRIPTION	BELL WEIGHT (Kg)	lb	TONE	ANGLO-SAXON TONE	L (mm) from the end of the tongue to the center of the head
BAT2004010	FLYING CLAPPER FOR BELL L 240	16 19	35,27 41,89	Mib RE	Dis3 D3	240
BAT2004011	FLYING CLAPPER FOR BELL L 270	22 26	48,50 57,32	Reb D0	Cis3 C3	270
BAT2004012	FLYING CLAPPER FOR BELL L 310	31 37	68,34 81,57	SI Sib	B2 Ais2	310
BAT2004013	FLYING CLAPPER FOR BELL L 340	43 50	94,80 110,23	LA Lab	A2 Gis2	340
BAT2004014	FLYING CLAPPER FOR BELL L 385	60 72	132,28 158,73	SOL SOLb	G2 Fis2	385
BAT2004015	FLYING CLAPPER FOR BELL L 430	85 100	187,39 220,46	FA MI	F2 E2	430
BAT2004016	FLYING CLAPPER FOR BELL L 480	120 140	264,55 308,65	Mib RE	Dis2 D2	480
BAT2004017	FLYING CLAPPER FOR BELL L 530	170 200	374,79 440,92	Reb D0	Cis2 C2	540
BAT2004018	FLYING CLAPPER FOR BELL L 580	245	540,13	SI	B1	580
BAT2004019	FLYING CLAPPER FOR BELL L 650	290 340	639,34 749,57	Sib LA	Ais1 A1	650
BAT2004020	FLYING CLAPPER FOR BELL L 730	410 480	903,90 1058,22	Lab SOL	Gis1 G1	730
BAT2004021	FLYING CLAPPER FOR BELL L 810	550 680	1212,54 1499,14	SOLb FA	Fis1 F1	810
BAT2004022	FLYING CLAPPER FOR BELL L 860	810	1785,74	MI	E1	870
BAT2004023	FLYING CLAPPER FOR BELL L 910	980	2160,53	Mib	Dis1	950
BAT2004024	FLYING CLAPPER FOR BELL L 1020	1200 1400	2645,55 3086,47	RE Reb	D1 Cis1	1020
BAT2004025	FLYING CLAPPER FOR BELL L 1100	1680	3703,77	D0	C1	1100
BAT2004026	FLYING CLAPPER FOR BELL L 1150	1950	4299,01	SI	B0	1150

N.B. In order to choose a clapper, please refer to the length (L) in mm measured from the handle below (eyelet) to the striking point inside the bell.

N.B. Pour le choix du battant vous pouvez faire référence à la longueur (L) en mm mesurée à partir de l'anse au point de frappe à l'intérieur de la cloche.

## CHAINS AND ACCESSORIES / CHAINES ET ACCESSOIRES

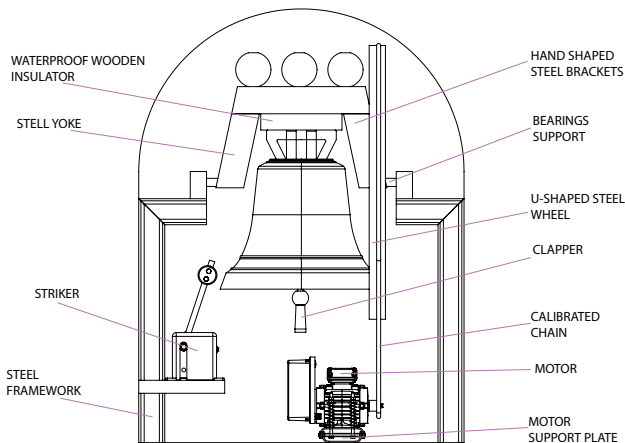
RANGE OF PRODUCTS ESSENTIAL FOR TRANSMITTING THE MOVEMENT FROM MOTOR TO BELL  
ENSEMBLE DES PRODUITS NÉCESSAIRES POUR LA TRANSMISSION DU MOUVEMENT DU MOTEUR À LA CLOCHE

CODE	DESCRIPTION
CAT3/16RIN	CHAIN 3/16" ½" STRENGTHENED
CAT3/16RIN - GIU	JOINT FOR CHAIN 3/16" STRENGTHENED
CAT5/16RIN	CHAIN 5/16" ½"
CAT5/16RIN - GIU	JOINT FOR CHAIN 5/16"
MOT8504008	CHAIN TIGHTENER FLYING CLAPPER SYST.-MOTOR UP TO 0.55KW
MOT8504009	CHAIN TIGHTENER FLYING CLAPPER SYST.-MOTOR UP TO 1.50KW
MOT8504010	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 0.37KW
MOT8504011	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 0.75KW
MOT8504012	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 1.50KW

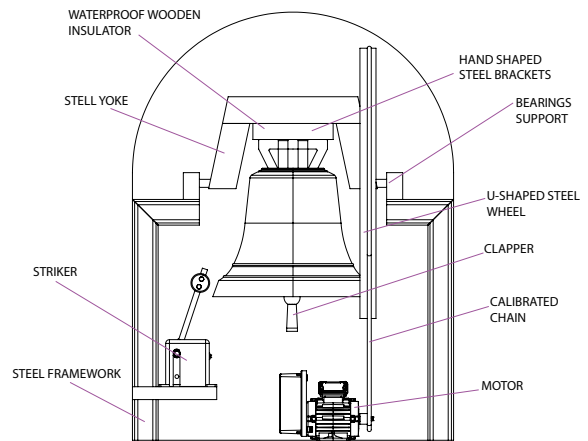
## BELL ELECTRIFICATION / ÉLECTRIFICATION DES CLOCHES

RANGE OF PRODUCTS REQUIRED FOR BELL INSTALLATION AND MOVEMENT WITHIN THE BELL TOWER  
ENSEMBLE DES PRODUITS NÉCESSAIRES POUR LE SOUTIEN ET LE MOUVEMENT DE LA CLOCHE DANS LA TOUR DE LA MÊME CLOCHE

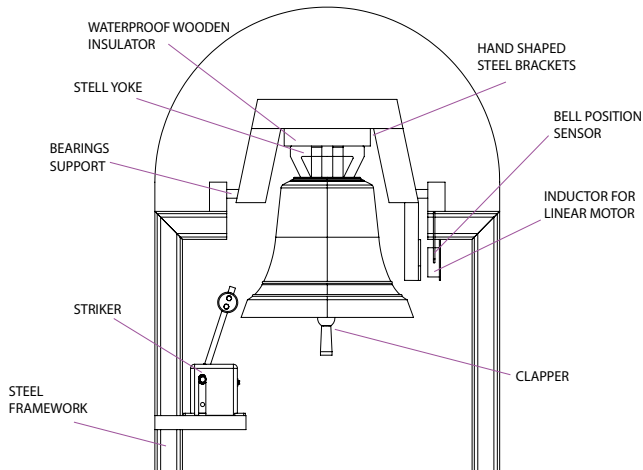
COMPLETE SWINGING BELL  
CLOCHE VOLÉE TOURNANTE



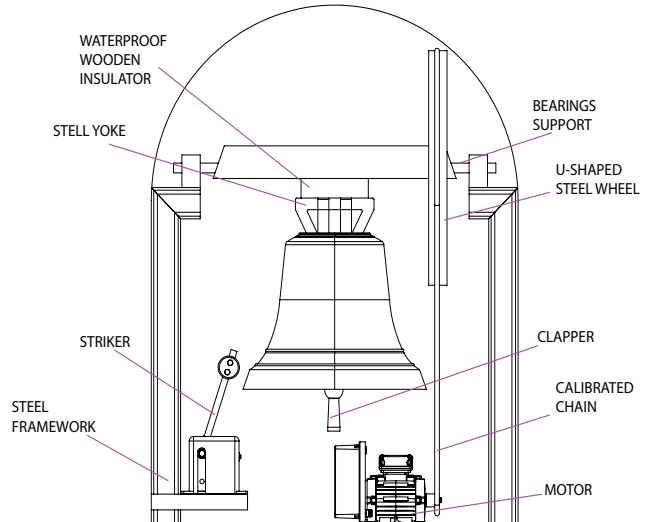
FALLING CLAPPER BELL  
CLOCHE VOLÉE RÉTRO-LANCÉ



LINEAR MOTOR BELL SYSTEM  
MOTEUR LINÉAIRE POUR INSTALLATION DE CLOCHE



FLYING CLAPPER BELL  
CLOCHE VOLÉE LANCÉE



## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
BAT1504010	FALLING CLAPPER FOR BELL L 240
BAT1504011	FALLING CLAPPER FOR BELL L 270
BAT1504012	FALLING CLAPPER FOR BELL L 310
BAT1504013	FALLING CLAPPER FOR BELL L 340
BAT1504014	FALLING CLAPPER FOR BELL L 385
BAT1504015	FALLING CLAPPER FOR BELL L 430
BAT1504016	FALLING CLAPPER FOR BELL L 480
BAT1504017	FALLING CLAPPER FOR BELL L 530
BAT1504018	FALLING CLAPPER FOR BELL L 580
BAT1504019	FALLING CLAPPER FOR BELL L 650
BAT1504020	FALLING CLAPPER FOR BELL L 730
BAT1504021	FALLING CLAPPER FOR BELL L 810
BAT1504022	FALLING CLAPPER FOR BELL L 870
BAT1504023	FALLING CLAPPER FOR BELL L 950
BAT1504024	FALLING CLAPPER FOR BELL L 1020
BAT1504025	FALLING CLAPPER FOR BELL L 1100
BAT1504026	FALLING CLAPPER FOR BELL L 1150
BAT2004010	FLYING CLAPPER FOR BELL L 240
BAT2004011	FLYING CLAPPER FOR BELL L 270
BAT2004012	FLYING CLAPPER FOR BELL L 310
BAT2004013	FLYING CLAPPER FOR BELL L 340
BAT2004014	FLYING CLAPPER FOR BELL L 385
BAT2004015	FLYING CLAPPER FOR BELL L 430
BAT2004016	FLYING CLAPPER FOR BELL L 480
BAT2004017	FLYING CLAPPER FOR BELL L 530
BAT2004018	FLYING CLAPPER FOR BELL L 580
BAT2004019	FLYING CLAPPER FOR BELL L 650
BAT2004020	FLYING CLAPPER FOR BELL L 730
BAT2004021	FLYING CLAPPER FOR BELL L 810
BAT2004022	FLYING CLAPPER FOR BELL L 860
BAT2004023	FLYING CLAPPER FOR BELL L 910
BAT2004024	FLYING CLAPPER FOR BELL L 1020
BAT2004025	FLYING CLAPPER FOR BELL L 1100
BAT2004026	FLYING CLAPPER FOR BELL L 1150
CAT3/16RIN	CHAIN 3/16" 1/2" STRENGTHENED
CAT3/16RIN-GIU	JOINT FOR CHAIN 3/16" STRENGTHENED
CAT5/16RIN	CHAIN 5/16" 1/2"
CAT5/16RIN-GIU	JOINT FOR CHAIN 5/16"



## TABLE OF PRODUCT CODES

ACCESSORIES

MOT8504008	CHAIN TIGHTENER FOR FLYING CLAPPER SYST.-MOTOR UP TO 0.55KW
MOT8504009	CHAIN TIGHTENER FLYING CLAPPER SYST.-MOTOR UP TO 1.50KW
MOT8504010	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 0.37KW
MOT8504011	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 0.75KW
MOT8504012	CHAIN TIGHTENER FALLING CLAPPER SYST.-MOTOR UP TO 1.50KW
BAT2504001	COMPLETE SET LEATHER AND CLAMP L 40 MM
BAT2504002	COMPLETE SET LEATHER AND CLAMP L 50 MM
BAT2504003	COMPLETE SET LEATHER AND CLAMP L 60 MM
BAT2504004	COMPLETE SET LEATHER AND CLAMP L 70 MM
BAT2504005	COMPLETE SET LEATHER AND CLAMP L 80 MM
BAT2504006	COMPLETE SET LEATHER AND CLAMP L 90 MM
BAT2504007	COMPLETE SET LEATHER AND CLAMP L 100 MM
BAT3004001	COMPLETE SET LEATHER AND CLAMP ON REQUEST
CPP0504001	YOKE FOR FALLING CLAPPER SYSTEM FOR BELLS UP TO 55 CM
CPP0504002	YOKE FOR FALLING CLAPPER SYSTEM FOR BELLS 56 - 70 CM
CPP0504003	YOKE FOR FALLING CLAPPER SYSTEM FOR BELLS 71 - 95 CM
CPP0504004	YOKE FOR FALLING CLAPPER SYSTEM FOR BELLS 96 - 110 CM
CPP0504005	YOKE FOR FALLING CLAPPER SYSTEM FOR BELLS 111 - 155 CM
CPP1004001	YOKE FOR FLYING CLAPPER SYSTEM FOR BELLS UP TO 55 CM
CPP1004002	YOKE FOR FLYING CLAPPER SYSTEM FOR BELLS 56 - 70 CM
CPP1004003	YOKE FOR FLYING CLAPPER SYSTEM FOR BELLS 71 - 95 CM
CPP1004004	YOKE FOR FLYING CLAPPER SYSTEM FOR BELLS 96 - 110 CM
CPP1004005	YOKE FOR FLYING CLAPPER SYSTEM FOR BELLS 111 - 155 CM
CPP1504001	INSULATOR FOR YOKE 120 X 120
CPP1504002	INSULATOR FOR YOKE 130 X 130
CPP1504003	INSULATOR FOR YOKE 170 X 170
CPP1504004	INSULATOR FOR YOKE 200 X 200
CPP1504005	INSULATOR FOR YOKE 220 X 220
CPP1504006	INSULATOR FOR YOKE 270 X 270
CPP1504007	INSULATOR FOR YOKE 300 X 300
CPP1504008	INSULATOR FOR YOKE 350 X 350
CPP1504009	INSULATOR FOR YOKE ON REQUEST
CUS25SOP	BEARING WITH BUILT-IN SUPPORT D.25
CUS35SOP	BEARING WITH BUILT-IN SUPPORT D.35
CUS45SOP	BEARING WITH BUILT-IN SUPPORT D.45
CUS50SOP	BEARING WITH BUILT-IN SUPPORT D.50
FRR0504001	CLEVIS FOR BELL FIXING M16 H.165
FRR0504002	CLEVIS FOR BELL FIXING M18 H.165
FRR0504003	CLEVIS FOR BELL FIXING M20 H.180

TABLE OF PRODUCT CODES

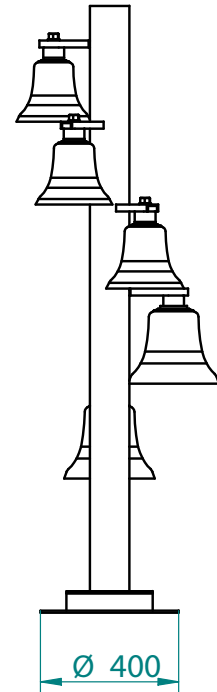
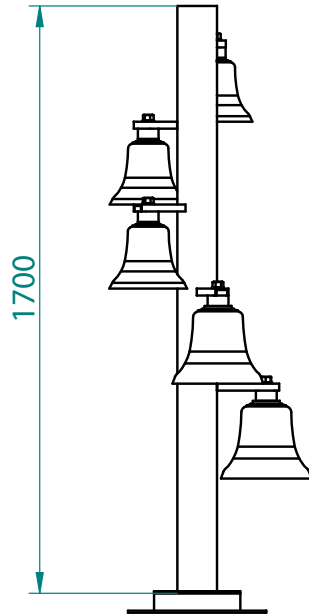
BELLS-CHAINS-ACCESSORIES / CLOCHES-CHAINES-ACCESSOIRES

## TABLE OF PRODUCT CODES

ACCESSORIES

FRR0504004	CLEVIS FOR BELL FIXING M22 H.180
FRR0504005	CLEVIS FOR BELL FIXING M24 H.220
FRR0504006	CLEVIS FOR BELL FIXING M27 H.220
FRR0504008	CLEVIS FOR BELL FIXING M33 H.300
FRR0504010	CLEVIS FOR BELL FIXING ON REQUEST
FRR1004001	ROD FOR BELL FIXING M16 H.350
FRR1004002	ROD FOR BELL FIXING M18 H.350
FRR1004003	ROD FOR BELL FIXING M20 H.360
FRR1004004	ROD FOR BELL FIXING M24 H.400
FRR1004005	ROD FOR BELL FIXING M27 H.470
FRR1004006	ROD FOR BELL FIXING M30 H.500
FRR1004007	ROD FOR BELL FIXING M33 H.300
FRR1004010	ROD FOR BELL FIXING ON REQUEST
FRR1504001	CROSSBAR FOR BELL FIXING 80X27
FRR1504002	CROSSBAR FOR BELL FIXING 95X27
FRR1504003	CROSSBAR FOR BELL FIXING 120X30
FRR1504004	CROSSBAR FOR BELL FIXING 130X30
FRR1504005	CROSSBAR FOR BELL FIXING 160X35
FRR1504006	CROSSBAR FOR BELL FIXING 180X35
FRR1504007	CROSSBAR FOR BELL FIXING 260X55
FRR1504010	CROSSBAR FOR BELL FIXING ON REQUEST
INC0504001	FRAME FOR BELLS ON REQUEST - KG
RU00504001	BELL WHEEL FOR FALLING CLAPPER SYSTEM BELLS UP TO 55 CM
RU00504002	BELL WHEEL FOR FALLING CLAPPER SYSTEM BELLS 56 -71CM
RU00504003	BELL WHEEL FOR FALLING CLAPPER SYSTEM BELLS 71 - 95 CM
RU00504004	BELL WHEEL FOR FALLING CLAPPER SYSTEM BELLS 95 -110 CM
RU00504005	BELL WHEEL FOR FALLING CLAPPER SYSTEM BELLS 111 - 155 CM
RU01004001	BELL WHEEL FOR FLYING CLAPPER SYSTEM BELLS UP TO 55 CM
RU01004002	BELL WHEEL FOR FLYING CLAPPER SYSTEM BELLS 56 -70 CM
RU01004003	BELL WHEEL FOR FLYING CLAPPER SYSTEM BELLS 71 - 95 CM
RU01004004	BELL WHEEL FOR FLYING CLAPPER SYSTEM BELLS 96 -110 CM
RU01004005	BELL WHEEL FOR FLYING CLAPPER SYSTEM BELLS 111 - 155 CM
RU01504001	STEEL CIRCLE DIAMETER UP TO 100 CM
RU01504002	STEEL CIRCLE DIAMETER UP 100 - 150 CM
RU01504003	STEEL CIRCLE DIAMETER 150 - 200 CM
SUP0504025	BEARING AND CAST IRON SUPPORT KIT D.25
SUP0504035	BEARING AND CAST IRON SUPPORT KIT D.35
SUP0504045	BEARING AND CAST IRON SUPPORT KIT D.45
SUP0504050	BEARING AND CAST IRON SUPPORT KIT D.50

## EASY CARILLON SCR05



Ready to use small carillon bell set. This system is supplied completely assembled, wired and complete with elettrohammers (ELE3004001) and electrical power board, necessary for the connection of the unit to a master clock. Made up of 5 bells of "carillon" style in perfect musical chord, this product has been designed for small installations (roadside decorations, installation on roundabouts, as a compliment to advertising panels) where a competitive price is required.

Petit carillon prêt-à-utiliser. Cet appareil est fourni complètement assemblé, câblé, complet de électro-marteaux (ELE3004001) et tableau électrique de puissance. Il nécessite seulement de la connexion électrique et de la connexion à une horloge mère. Il est composé de 5 cloches avec profil « carillon » en accord musical. Il a été conçu pour être utilisé dans de petites installations (décoration urbaine, ronds-points, installations de publicité), lorsque des prix pas trop élevés sont demandés.

### TECHNICAL CHARACTERISTICS

- Weight: 119kg;
- Musical notes: DO-RE-MI-FA-SOL (C4-D4-E4-F4-G4)

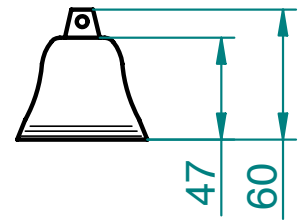
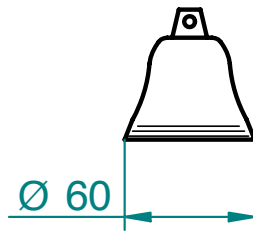
CODE	DESCRIPTION
SCR0504001	EASycARILLON - NOTES C4/D4/E4/F4/G4

## LITTLE MEMORIAL BELL

### LMB05

Commemorative small bell to use as a gadget. Particularly suited for blessings of new bells, concerts or important events to the parish community. It sounds like a true bell because it is made of metal and equipped with a small clapper. Customizable with an engraving.

Petite cloche commémorative utilisée comme gadget. Particulièrement adaptée à la bénédiction d'une nouvelle cloche, aux concerts ou aux événements significatifs relatifs à la communauté paroissiale. Elle sonne comme une vraie cloche parce qu'elle est réalisée en métal et elle possède un petit battant. Personnalisable avec une gravure.



CODE	DESCRIPTION
LMB0504001	LITTLE MEMORIAL BELL

## TABLE OF PRODUCT CODES

CODE	DESCRIPTION
SCR0504001	EASYCARILLON - NOTES C4/D4/E4/F4/G4

### BELLS ACCESSORIES / ACCESSOIRES CLOCHES

CODE	DESCRIPTION
LMB0504001	LITTLE MEMORIAL BELL







## BELLS / CLOCHES

ECAT CAMPANE is a foundry dedicated to casting bronze bells.

It is possible to cast bell concerts of any weight and tone, single bells to be integrated and harmonized with other bells, or ancient bells to be reproduced in the same manner of the originals.

Each bell is meticulously manufactured, with the maximum care of images, inscriptions and decorations, because every bell is a unique and unrepeatable example...

The aim of the company consists in the modernisation of the productive system combined with the traditional systems of constructing bronze bells.

ECAT CAMPANE est une fonderie dédiée à la fusion de cloches en bronze.

Nous pouvons fondre des gammes complètes de cloches de tous poids et de toutes tonalités: cloches seules ou à compléter et à harmoniser à d'autres, ou d'anciennes cloches à reproduire de façons identiques aux originales.

Chaque cloche est construite avec la plus grande minutie, avec un soin extrême apporté à la réalisation des images, des inscriptions, des décorations, parce que chaque cloche est un exemplaire unique et irremplaçable.

L'objectif de l'entreprise consiste à moderniser le système de production tout en conservant les systèmes de traditions liés à la construction des cloches en bronze.





Bells for churches are normally used in communities to announce religious events, for example Ave Maria, Mass, funeral or any other type of signal.

The bells sound can be divided in four different kinds: falling clapper, flying clapper, striking sound, and upside down bell.

The falling clapper sound is typical of the regions of Northern Italy (Piedmont, Lombardy, Liguria), of Spain and of the South of France: it is characterized by a clapper which tends to fall, or to strike on the lower part of the bell.

The flying clapper sound is mostly spread in Northern Europe and in the South of Italy; it is distinguished by a clapper which tends to rise, that means to strike on the upper part of the bell, and it is typical of faster sounds. The striking sound is realized, instead, with the bell in a stationary position, for example for the sound of praises or the striking of hours.

The sound with the mouth of the bell upwards is typical funeral sounds. In this case the bell is blocked in upright position and the resulting sound is characterized with greater emphasis.

Bells for churches are composed of a head provided with handles (crown) which enables to fix them to the frame for bells that allow the swinging movement.

Les cloches pour églises sont normalement utilisées dans une communauté pour annoncer des événements religieux, par exemple l'Ave Maria, la Messe, les funérailles ou tout autre type de sonneries.

Les sonneries de cloches peuvent être divisées en quatre catégories: volée rétro, volée lancée, son par le tintement et son à bouche inversée.

La volée rétro est typique des régions du Nord de l'Italie (Piémont, Lombardie, Ligurie), de l'Espagne et du Sud de la France: ce type de sonnerie est caractérisé par le fait que le battant frappe la partie basse de la cloche, le battant tend à descendre plutôt que de monter en même temps que la cloche en volée et de frapper cette dernière en hauteur.

La volée lancée est plus commune dans le Nord de l'Europe et dans le Sud de l'Italie, ce type de sonnerie se caractérise par le fait que le battant est lancé et monte pendant la volée pour frapper la partie supérieure de la cloche. De cette façon la cadence de sonnerie est plus rapide.

Le son par le tintement se réalise avec une cloche en position fixe, par exemple pour le son de louanges ou la frappe des heures.

Le son à bouche invertie est typique des funérailles ou des jeux solennelles. Dans ce cas, la cloche est bloquée en position verticale inversée et le son produit au retour est caractérisé par une plus grande emphase.

Les cloches pour églises sont composées d'une tête équipée d'anses, qui permettent une fixation plus aisée et plus sûre aux structures pour permettre l'oscillation.



TABLE BELLS FOR CHURCHES / TABLEAU CLOCHES POUR ÉGLISES

CORRESPONDENCE BETWEEN TONE, DIAMETER AND BELLS' WEIGHT  
CORRESPONDANCE ENTRE NOTE, DIAMÈTRE ET POIDS DES CLOCHES

CODE	TONE	ANGLO-SAXON TONE	DIAMETER (mm)	WEIGHT (Kg)
BLL0504018	SOLb	Fis0	1995	4900
BLL0504019	SOL	G0	1880	3900
BLL0504020	LAB	Gis0	1775	3300
BLL0504021	LA	A0	1675	2800
BLL0504022	Sib	Ais0	1580	2300
BLL0504023	SI	B0	1495	1950
BLL0504024	D03	C1	1410	1680
BLL0504025	Reb	Cis1	1330	1400
BLL0504026	RE	D1	1255	1200
BLL0504027	Mib	Dis1	1185	980
BLL0504028	MI	E1	1120	810
BLL0504029	FA	F1	1060	680
BLL0504030	SOLb	Fis1	1000	550
BLL0504031	SOL	G1	945	480
BLL0504032	LAB	Gis1	890	410
BLL0504033	LA	A1	840	340
BLL0504034	Sib	Ais1	795	290
BLL0504035	SI	B1	750	245
BLL0504036	D04	C2	705	200
BLL0504037	REb	Cis2	665	170
BLL0504038	RE	D2	630	140
BLL0504039	Mib	Dis2	595	120
BLL0504040	MI	E2	560	100
BLL0504041	FA	F2	530	85
BLL0504042	SOLb	Fis2	500	72
BLL0504043	SOL	G2	470	60
BLL0504044	LAB	Gis2	445	50
BLL0504045	LA	A2	420	43
BLL0504046	Sib	Ais2	400	37
BLL0504047	SI	B2	375	31
BLL0504048	D05	C3	355	26
BLL0504049	REb	Cis3	335	22
BLL0504050	RE	D3	315	19
BLL0504051	Mib	Dis3	295	16
BLL0504052	MI	E3	280	14
BLL0504053	FA	F3	260	12
BLL0504054	SOLb	Fis3	250	10
BLL0504055	SOL	G3	240	9
BLL0504056	Lab	Gis3	225	8
BLL0504057	LA	A3	210	7



## CARILLON BELLS / CLOCHES POUR CARILLON

Carillon bells are used for the performance of concerts or musical compositions combined with the hour striking (Westminster, Whittington, Salzburg, Bells of Corneville).

The carillon are usually composed of musical octaves or multiples of octaves, and they are considered as instruments for concerts. They are employed

for decorative reasons, folkloristic or as appeal in places of particular touristic interest because they create an atmosphere of celebration and friendship.

Carillon bells, unlike church bells, are fixed and realised without a head to make it possible to fix them directly to the frame for bells through the central hole.

They can be played manually or provided with a striker for an automatic sound.

These bells usually have no decorations and they are characterized of a different shape from the ones for churches: they are only used to produce the music of the carillon.

Les cloches pour carillon sont utilisées pour exécuter des concerts ou des pièces musicales combinées avec le son des heures (Westminster, Whittington, Salzburg, cloches de Corneville...).

Les carillons sont d'habitude composés par octaves musicales ou multiples d'octaves, et sont de vrais instruments de concert. Ils sont utilisés en tant que décorations, oeuvres d'art, de folklore, ou tout simplement pour créer dans un lieu particulier une atmosphère de fête et d'amitié.

Les cloches pour carillon, contrairement aux cloches d'églises, sont fixes et sont réalisées sans une tête avec des anses, seul un trou central est existant pour les fixer directement au beffroi.

Elles peuvent être jouées manuellement ou équipées de marteaux électriques pour des sons automatiques.

En générale ces cloches sont n'ont pas de décorations et ont une forme différente de celles des cloches d'églises: elles ne sont utilisées que pour la musicalité du carillon.

### TABLE FOR CARILLON BELLS / TABLEAU CLOCHES POUR CARILLON

#### CORRESPONDENCE BETWEEN TONE, DIAMETER AND BELLS' WEIGHT CORRESPONDANCE ENTRE NOTE, DIAMÈTRE ET POIDS DES CLOCHES

CODE	TONE	ANGLO-SAXON TONE	DIAMETER (mm)	WEIGHT (Kg)
BLL1504024	D03	C1	1515	2150
BLL1504025	Reb	Cis1	1430	1800
BLL1504026	RE	D1	1345	1500
BLL1504027	Mib	Dis1	1270	1250
BLL1504028	MI	E1	1200	1060
BLL1504029	FA	F1	1130	905
BLL1504030	SOLb	Fis1	1070	765
BLL1504031	SOL	G1	1010	640
BLL1504032	Lab	Gis1	950	540
BLL1504033	LA	A1	900	455
BLL1504034	Sib	Ais1	850	380
BLL1504035	SI	B1	800	320
BLL1504036	D04	C2	755	265
BLL1504037	Reb	Cis2	715	220
BLL1504038	RE	D2	675	185
BLL1504039	Mib	Dis2	635	155
BLL1504040	MI	E2	600	132
BLL1504041	FA	F2	572	115
BLL1504042	SOLb	Fis2	547	100

TABLE FOR CARILLON BELLS / TABLEAU CLOCHES POUR CARILLON

BLL1504043	SOL	G2	523	90
BLL1504044	LAB	Gis2	500	80
BLL1504045	LA	A2	477	70
BLL1504046	Sib	Ais2	456	64
BLL1504047	SI	B2	440	59
BLL1504048	DO5	C3	425	54
BLL1504049	Reb	Cis3	410	49
BLL1504050	RE	D3	396	45
BLL1504051	Mib	Dis3	382	41
BLL1504052	MI	E3	368	37
BLL1504053	FA	F3	355	34
BLL1504054	SOLb	Fis3	342	31
BLL1504055	SOL	G3	329	28
BLL1504056	LAB	Gis3	317	26
BLL1504057	LA	A3	305	24
BLL1504058	Sib	Ais3	293	22
BLL1504059	SI	B3	282	20
BLL1504060	DO6	C4	271	18
BLL1504061	Reb	Cis4	262	17
BLL1504062	RE	D4	254	16
BLL1504063	Mib	Dis4	247	15,5
BLL1504064	MI	E4	240	15
BLL1504065	FA	F4	235	14,5
BLL1504066	SOLb	Fis4	230	14
BLL1504067	SOL	G4	225	13,5
BLL1504068	Lab	Gis4	220	13
BLL1504069	LA	A4	215	12,5
BLL1504070	Sib	Ais4	210	12
BLL1504071	SI	B4	205	11,5
BLL1504072	DO7	C5	200	11

The measures in this catalog are approximate and subject to change without notice. Contact us to have all the technical specifications of the individual products.





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