Doorbells – Wireless / Electronic / Electromechanical



»Our doorbells are off the charts!«

Doorbells - Wireless / Electronic / Electromechanical

The right doorbell to suit all tastes!

GROTHE doorbells sound good and look good. Choose your doorbell from a diverse product range – whether classically electromechanical, innovatively electronic or in combination with state-of-the-art wireless technology!

Wireless Doorbell Set - CALIMA 200



Our new Wireless Doorbell

- Wireless
- o Rapid operation
- o 13 superb melodies / tunes
- o Easy menu function
- Voice display
- o Multi-coloured LED Halo light
- Mute function with display
- o Snooze mode
- Pre-set time function

Our wireless doorbell means you can work either in the house or in the garden and still hear your visitors.

The CALIMA wireless doorbell is not only quick and easy to operate but it is also extremely flexible. Simply place the wireless doorbell in a desired place and due to the variable melody/tune programming, easy to see, colourful LED Halo light of CALIMA you will be notified reliably of every visitor.

CALIMA is a team player. Several wireless bell buttons and wireless doorbells are supplemented either via individual, central or matrix call and can be combined together without any transmission interference due to the individual codes available.

The settings on the CALIMA offer distinctions which are not only made on the melody but also the colour of the LED Halo light depending on which bell button is being used.



CALIMA 200 Set: Wireless doorbell and wireless bell button

Features / Operation / Functions

- Wireles doorbell and wireless bell button already coupled
- Duel touch (menu and select button)
- Menu navigation with voice output (languages depending on model)
- Optical call signaling with LED Halo light blinking coloured (adjustable colour)
- 13 polyphone melodies
- Slumber function: mute for 1, 3 or 9 hours with optical indication as reminder
- Mute function with optical indication as reminder
- Large range 250 m: in combination with wireless bell button MISTRAL-SE03 range can be extended up to auf 500 m (optional / included in delivery, depending on model , order no. 43441)
- Central call: One wireless bell button can be coupled with several wireless doorbells ECHO, MISTRAL CALIMA series
- Individual call: Up to 11 wireless bell buttons can be coupled with one wireless doorboll
- Matrix call: Several wireless bell buttons are coupled with several wireless doorbells
- Optical and acoustic Low Battery notification (wireless bell button MISTRAL SE03 only)
- Expandable system: additional wireless bell buttons and wireless doorbells can be coupled easily
- Colour of the LED Halo light and melody can be set individually for each wireless bell button.
- Interference-free radio connection (each wireless bell button sends an indivual code)
- Possiblity to combine with existing door bells in combination with wireless bell button type MISTRAL SE03 (optional / included in delivery, depending on model)
- Compatibel to all wireless bell buttons type MISTRAL
- Optional alarm function (only in combination with wireless bell button type MISTRAL SE03, depending on model)

Technical Information

- Frequency: 868,35 MHz
- Operating Range: 250 m
- Dimensions

Receiver: Ø 60 x 102 mm Sender: 36 x 100 x 17 mm

Wireless doorbell Calima 200

- Colour: White
- Wall mout: No
- Call differentiation: 11-fold
- Volume: upt ot 83 dB(A) depending on melody
- Dimensions: 60 (D) x 102 mm
- Power supply: 4 batteries 1.5 V type AA (LR6)* (approx. 2 years battery life span)
- Temperature range: 5 to 40 °C
- Use: Indoors only

Wireless bell button

- · Colour: white
- Wall mounting: Yes
- Frequency: 868.35 MHz
- Maximum transmitting power: < 25 mW
- Range 250 m / 500 m
- Dimensions: 36 x 100 x 17 mm
- Power supply: 2 batteries 1.5 V type AAA (LR03)* (approx. 7 years battery life span)
- Protection degree: IP54
- Use: Indoor / Outdoor
- $\bullet~$ Temperature range: -15 to 50 $^{\circ}\text{C}$
- *Batteries not included in delivery

Model	Order no.	Description / Features*	Model	Order no.	Description / Features*
CALIMA 200	43560	Wireless doorbell set	CALIMA 200 NL	43563	Wireless doorbell set
		Voice output: German			Voice output: Dutch
CALIMA 200 GB	43561	Wireless doorbell set	CALIMA 200 BE	43564	Wireless doorbell set
		Voice output: English			Voice output: Dutch / French

Wireless doorbells - ECHO Series

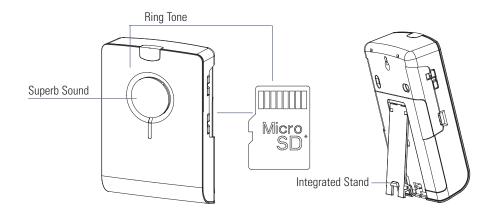


- Set individual ring tones
- MicroSD-Card slot 0
- Superb sound
- LED Flash
- Variable call combination
- Gloss finish 0
- Software included
- Pre-installed melodies / tunes

Add your favorite song as a Ring Tone! With the premium HiFi wireless doorbell ECHO, favorite melodies become ring tones via the use of a MicroSD-Card. Individual and flexible.

Variable call combinations allow a myriad of different ring tones to be set.

Enclosed in an elegant gloss casing with dual colour variation, the wireless doorbell ECHO not only adds visual style, but whether used as a wall mount or in use as a stand alone applicance - makes it optimal for all entry areas and leaves room for change if required.



NOTE:

The HiFi wireless doorbell is also available as an electronic doorbell in 8–12 V AC/DC and 230 V AC.

HiFi Wireless Doorbell ECHO M / BM

Features / Operation / Functions

- Gloss finish
- Superb Sound
- · Bright LED-flash
- Independent activation / deactivation of sound and light function
- Central system: one wireless bell button is linked with several wireless doorbells
- Individual system: several wireless bell buttons are linked with one wireless doorbell
- Matrix call: several wireless bell buttons are linked with several wireless doorbells
- Optic and acoustic Low Battery notification
- Up to 20 wireless bell buttons can be coupled with one wireless doorbell
- Individual wireless bell button ring tone
- 20-fold call differentiation
- Ring tone transmission via Micro-SD-Card*
- Up to 90 seconds total playing time of ring tones
- Incl. software for compilation of ring tones
- Pre-installed melodies

Technical Information

- Wireless doorbell ECHO:
- Wall mounted: yes, or use integrated stand
- Variable volume control max. 86 dB(A)
- Dimensions: 180 x 120 x 50 mm
- Power supply: batteries 4 x 1.5 V LR14 (AAA) (not incl.) or 8–12 V AC/DC with wall mount (order no. 43505)
- Temperature range: 5 °C to 40 °C
- Use: in dry rooms only

• Wireless bell button MISTRAL SE03:

- Colour: White
- Power supply: 2 x 1.5 V LR03 (AA) (incl.) or 8-12 V DC
- Frequency: 868.35 MHz
- Range: 500 m open area
- Degree of protection: IP54
- Dimensions: 36 x 100 x 17 mm
- $\bullet~$ Temperature range: -15 to 50 $^{\circ}\text{C}$

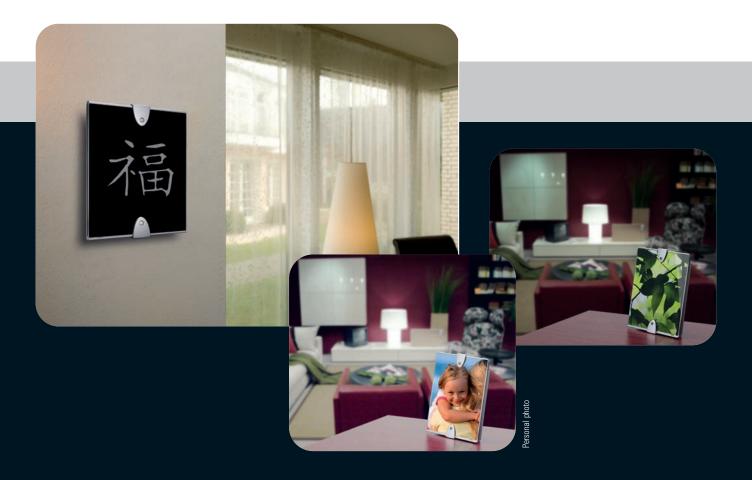
Model	Order no.	Description	
ECHO M SW	43501	HiFi wireless doorbell Set	
		Colour: Black/ White	 Incl. wireless bell button MISTRAL SE03
ECHO M WS	43502	HiFi wireless doorbell set	
		Colour: White	 Incl. wireless bell button MISTRAL SE03
ECHO BM SW	43515	HiFi Wireless doorbell set	
		Colour: Black / White	 Incl. motion sensor MISTRAL BM03
ECHO BM WS	43516	HiFi Wireless doorbell set	
		Colour White	 Incl. motion sensor MISTRAL BM03
MH ECHO 120/M	43505	Wall Mount Echo M	
		Adapts to power supply socket and up to 2 conventional bell buttons on wireless doorbell ECHO M Colour: White	

^{*} MicroSD-Card not included



Back to table of contents

Wireless doorbells - MISTRAL Series



- o Maximum reliability
- o Signals to suit your style
- Motion sensor
- o Flexible installation
- Pre-programmed wireless bell button and wireless doorbell
- o 868.35 MHz transmission frequency

MISTRAL

Since its market launch, the wireless doorbell Mistral Series has won the heart of every electrician due to both its uncompromising quality and sophisticated technology.

It is not only cell freaks who are astounded by the new polyphone ring tones as the effective "System easyTIP" makes it easy to seek and find your favourite melodies quickly and easily.

The 5 to 10 year battery life span of the MISTRAL Series not only ensures years of reliable functions but also helps conserve the environment. MISTRAL wireless bell buttons and wireless doorbells annouce punctually, optically and acoustically when a battery change is required.



MISTRAL Accessories



MISTRAL RELAISBOX

A potential free contact in the MISTRAL series can be switched on via radio in the relaisbox. This potential free contact switches on charges up to 10 A and can be pre-timed which makes it ideal for exterior lighting, automatic doors or blinds.



MISTRAL MAGNETIC CONTACT

The window and door magnetic contact activates not only the MISTRAL wireless bell button but also electronic doorbells such as the CROMA 50, 100, 150 and 250 or ECHO 120. Ideal for alarm systems, eg: garden shed security.



MISTRAL WIRELESS REPEATER

The Mistral repeater increases the operating range of the MISTRAL wireless door bells series by 500 metres. Up to 20 MISTRAL wireless bell buttons can be tuned in to the repeater.



MISTRAL 800 MOBILE

Be reachable everywhere in the house with the mobile receiver MISTRAL 800. In addition to the acoustic and optic signal, a vibration effect is generated in loud environments.















Wireless doorbells MISTRAL SETS – Product overview / MISTRAL 350 / 350E / 650



MISTRAL 650 SW Set



MISTRAL 650 WS Set



MISTRAL 350 SW Set



MISTRAL 350 WS Set



MISTRAL 350 SW



MISTRAL 350 WS

Functions

- · Gloss finish
- 12 polyphone ring tones
- Bright LED flash
- Independent activation / deactivation of sound and light function
- Variable volume control max. 86 dB(A)
- Adjustable mute function / time limit setting
- Central call: multiple wireless doorbells coupled with one wireless bell buttonr
- Individual call: several wireless doorbells coupled with one wireless bell button
- Matrix Call: Central and individual call combination
- Optic and acoustic Low battery display
- 12 wireless bell button combinations
- Individual wireless bell button ring tone
- 12-fold call differentiation

Technical Information:

Power Supply

Wireless doorbell:

Batteries 4 x 1.5 V LR14/C (not included) or 8–12 V AC/DC Wireless bell button:

Batteries 2 x 1.5 V LR03 / AA (included) or 8–12 V DC

- Frequency: 868.35 MHz
- Operating Range: 500 m open area
- Dimensions

Wireless doorbell: 180 x 120 x 50 mm Wireless bell button: 36 x 100 x 17 mm

Sets

Model	Order no.	Description
MISTRAL 650 SW	43552	Wireless doorbell set
		Colour: Black / White
		12-fold Call differentiation, 14-fold with a cable connection
		Incl. wireless bell button MISTRAL SE03
MISTRAL 650 WS	43553	Wireless doorbell set
		Colour: White
		12-fold Call differentiation, 14-fold with a cable connection
		Incl. wireless bell button MISTRAL SE03
MISTRAL 350 SW	43550	Wireless doorbell set
		Colour: Black/ White
		• 12-fold Call Differentiation
		Incl. wireless bell button MISTRAL SE03
MISTRAL 350 WS	43551	Wireless doorbell set
		Colour: White
		12-fold Call differentiation
		Incl. wireless bell button MISTRAL SE03
MISTRAL 350E SW	43558	Wireless doorbell
		Colour: Black / White
		12-fold Call differentiation
MISTRAL 350E WS	43559	Wireless doorbell
		Colour: White
		12-fold Call differentiation

Wireless doorbells MISTRAL 600 - Product overview / MISTRAL 200M / 300M



MISTRAL 200M

Functions:

- 17 polyphone Ring Tones
- Independent activation/deactivation of sound and light function
- Variable volume control max. 86 dB(A)
- Alarm Setting: Emergency Tone
- Central call: one wireless bell button is linked with several wireless doorbells
- Individual call: several wireless bell buttons are linked with one wireless doorbell
- Matrix call: several wireless bell buttons are linked to several wireless doorbells
- Optic and acoustic LowBatt- Display
- 20 wireless bell button combination
- Individual call tone for wireless bell buttons
- 17-fold call differentiation

Technical Information:

Power supply

Wireless doorbell:

Batteries 4 x 1.5 V LR14/C (not included) or 8–12 V AC/DC Wireless bell button MISTRAL SE03:

Batteries 2 x 15 V LR03 / AA (included) or 8–12 V DC Motion Sensor MISTRAL BM03:

Lithium battery CR123A (included) or 8-12 V DC/AC

- Frequency: 868.35 MHz
- Operating range: 500 m open area
- Dimensions

Wireless doorbell: 180 x 140 x 50 mm

Wireless bell button MISTRAL SE03: 36 x 100 x 17 mm

Motion sensor BM03: 69 x 124 x 54 mm

Model	Order no.		
MISTRAL 600	43400	Deluxe wireless doorbell Set 12 design selections LED-Flash	• Incl. wireless bell button MISTRAL SE03
MISTRAL 600ws	43410	Deluxe wireless doorbell Set	
		• 12 design selections	• LED-Flash
		Casing/ White	• Incl. wireless bell button MISTRAL SE03
MISTRAL 300M	43300	Wireless doorbell Set • Colour: White • LED Flash	• Incl. wireless bell button MISTRAL SE03
MISTRAL 300M ws	43142	Wireless doorbell Set	
		Acrylic cover: Colour: White LED Flash	• Incl. wireless bell button MISTRAL SE03
MISTRAL 300M sw	43143	Wireless doorbell Set	• Incl. Wireless bell button MISTRALSE03
MISTRAL 300M si	43144	Wireless doorbell set • Acrylic cover: Silver • LED Flash	• Incl. Wireless bell button MISTRAL SE03
MISTRAL 300M rt	43145	Wireless doorbell Set • Acrylic cover: Red • LED Flash	• Incl. Wireless bell button MISTRAL SE03
MISTRAL 300M gn	43146	Wireless doorbell Set	
		Acrylic cover: Green LED Flash	• Incl. Wireless bell button MISTRAL SE03
MISTRAL 300M ws/si	43372	Wireless doorbell Set • Acrylic cover: White/Silver • LED Flash	• Incl. Wireless bell button MISTRAL SE03
MISTRAL 300M BM	43315	Wireless doorbell Set • Door colour: White/Silver • LED Flash	Incl: Wireless motions sensor MISTRAL BM03
MISTRAL 200M	43305	Wireless doorbell Set Door colour: White/Silver Incl: Wireless bell button MISTRAL SE03	External power supply unavailable
MISTRAL 200M ws	43182	Wireless doorbell Set • Acrylic colour: White • Incl: Wireless bell button MISTRAL SE03	• External power supply unavailable
MISTRAL 200M sw	43183	Wireless doorbell Set • Acrylic door cover: Black • Incl: Wireless bell button MISTRAL SE03	• External power supply unavailable
MISTRAL 200M si	43184	Wireless doorbell Set • Acrylic door colour: Silver • Incl: Wireless bell button MISTRAL SE03	• External power supply unavailable
MISTRAL 200M rt	43185	Wireless doorbell Set • Acrylic door: Red • Incl: Wireless bell button MISTRAL SE03	• External power supply unavailable
MISTRAL 200M gn	43186	Wireless doorbell Set • Acrylic door colour: Green • Incl: Wireless bell button MISTRAL SE03	External power supply unavailable
MISTRAL 200M ws-si	43371	Wireless doorbell Set • Acrylic door colour: White/Silver • Incl: Wireless bell button MISTRAL SE03	External power supply unavailable

Please note: walls, doors, metal components etc. may considerably reduce operating range

Wireless doorbell MISTRAL 210 M / 300M E / 400M / 600E / SE03 / BM03

Set

Model	Order no.	Description
MISTRAL 210M	43303	Wireless doorbell Set Cover colour: Grey External power supply unavailable Incl. wireless door bell MISTRAL SE03

Wireless doorbells

Model	Order no.	Description	
MISTRAL 600E	43401	Deluxe Wireless doorbell	
		12 interchangeable designsCasing: Silver	• LED-Flash
MISTRAL 600E ws	43411	Deluxe Wireless doorbell 12 interchangeable designs Casing: White	• LED-Flash
MISTRAL 300M E	43301	Wireless doorbell Colour White/Silver	• LED-Flash

Plugin wireless doorbells (Set / Single)

Functions:

- 17 polyphone Ring Tones
- Slide switch for function mode selection (Flash / Melody / Melody + Flash / Mute)
- Variable volume control max. 80 dB(A)
- Alarm setting: Emergency tone
- LED-Flash
- Central call: one wireless bell button is linked with several wireless doorbells
- Individual call: several wireless bell buttons are linked with one wireless doorbell
- Matrix call: several wireless bell buttons are linked to several wireless doorbells
- 20 wireless bell button combination

- Individual call tone for senders
- 17-fold call differentiation
- Call forwarding on wireless bell button MISTRAL SE03

Technical Information:

- Power Supply
- Wireles doorbell: 230 V AC / 50 Hz,
- Wireless bell button MISTRAL SE03:
- Batteries 2 x 1.5 V LR03 / AA (incl.) or 8-12 V DC
- Frequency: 868.35 MHz
- Operating range: 500 m open area
- Dimensions
- Wireless doorbell: 127 x 62 x 78 mm
- Wireless bell button SE03: 36 x 100 x 17 mm

Model	Order no.	Description	
MISTRAL 400M	43310	Plug-in wireless doorbell Set ■ 230 V Euro socket ■ LED-Flash	• Incl. wireless bell button MISTRAL SE03
MISTRAL 400M E	43311	Plug-in wireless doorbell ■ 230 V Euro socket	• LED-Flash
MISTRAL 400M UK	43314	Plug-in wireless doorbell Set • 230 V UK socket • LED-Flash	• Incl. wireless bell button MISTRAL SE03
MISTRAL 400M UK S	43318	Plug-in wireless doorbell • 230 V UK socket	●LED-Flash

Wireless bell buttons / motion sensor

Model	Order no.	Description	
MISTRAL SE03-s	43440	Wireless bell button	
		 Colour: Silver/Anthracite finish 	 LED Function control
		• All MISTRAL, ECHO M, CALIMA Chimes	• Incl. Batteries 2 x 1,5 V
		• 868.35 MHz	(Typ LR03/AAA Alkaline)
		 500 m Operating range-open area 	Long life
		 Call forwarding 	• −15 to +50 °C
		 Degree of protection IP54 	 External power 8–12 V DC
MISTRAL SE03	43441	Wireless bell button	
		Colour: White	 LED Function control
		 All MISTRAL, ECHO M, CALIMA Doorbell 	s ●Incl. Batteries 2 x 1,5 V
		• 868.35 MHz	(Typ LR03/AAA Alkaline)
		 500 m Operating range open area 	Long life
		 Call forwarding 	• −15 to +50 °C
		 Degree of protection IP54 	 External power 8–12 V DC
MISTRAL BM03	43445	Wireless motion sensor	
		Colour: White	 Incl. Lithium battery 3 V
		 All MISTRAL, ECHO M, CALIMA Doorbell 	s (Type CR123A)
		• 868.35 MHz	 External power 8–12 V AC/DC
		 500 m Operating range-open area 	 Degree of protection IP20
		 Max. monitoring range 108°/15 m 	• −15 to +50 °C
		operating range	 Dimensions 69 x 124 x 54 mm
		 Motion tested LED Display 	 Mounting hinge
		 Adjustable delay time 3–60 s 	
Diago nata Malla Dago	n Matal samus	Adjustable delay time 3–60 s Adjustable delay time 3–60 s	

Please note: Walls, Doors, Metal components etc. may considerably reduce operating range





MISTRAL 600E interchangeable design



MISTRAL 300M E



MISTRAL 400M







MISTRAL SE 03



MISTRAL BM 03

POLO 100 / MISTRAL RB, MK, WR, 800 Mobile / NA / AL





MISTRAL RB Set



MISTRAL MK



MISTRAL WR



MISTRAL MOBILE 800 SET SW



MISTRAL 800 MOBILE



MISTRAL MOBILE ws





AL 1057/614

Accessories

Model	Order no.	Description	
MISTRAL RB	43385	MISTRAL Relaisbox • Suitable for MISTRAL Series • Electric consumer switch • Switch contact: 203 V, 10 A • Timer 1–1000 s • 16 wireless bell button combination • Power supply 8–12 V AC/DC or 3 V Lithium Battery CR123A (not included)	 Frequency 868 MHz Operating range open area 500 m Operating temperature –5 to +40 °C Degree of protection IP66 Dimensions: 110 x 110 x 70 mm Colour: Grey
MISTRAL RB Set	43386	MISTRAL Relaisbox Set • All features of 43385 as Set with wireles	ss bell button MISTRAL SE03
MISTRAL MK	43394	MISTRAL Magnetic contact Activates MISTRAL wireless bell button or electronic doorbells Compatible with: MISTRAL wireless bell button SE03 ECHO, CROMA 50 CROMA 100 und 150 und 250 FM-Doorbell 120 (DC power supply)	• 2 m connection cable • Dimensions: 60 x 17 x 11 mm • Colour: White
MISTRAL WR	43480	MISTRAL Repeater Suitable for MISTRAL Series 500m operating range increase on MISTRAL wireless bell buttons 20 wireless bell button combination Power supply 8 – 12 V AC/DC Batteries (2 x 1,5 V LR6/AA) not included.	• Frequency: 868.35 MHz • Operating range: 500 m open area • Protection: IP20 • Dimensions: 83 x 85 x 30 mm • Colour: White
MISTRAL 800 Mobile SW	43380	MISTRAL Mobile MISTRAL Wireless doorbell Suitable for MISTRAL Series Portable/Belt clip Optic/acoustic signal Vibration 4 Call tones 4-fold Call differentiation Battery life span ECO mode approx. 5 years Normal usage approx. 2 years	 Frequency: 868.35 MHz Operating range: 500 m open area Degree of protection: IP20 Dimensions 80 x 60 x 30 mm Colour: Black/White Missed call display 15 wireless bell button combination Power supply 9 V Block battery (not included)
MISTRAL 800 Mobile SW Set	43382	MISTRAL Mobile Set • All features of 43380 as Set with MISTR	AL SE03 wireless bell button 43441
MISTRAL 800 Mobile WS	43381	MISTRAL Mobile • Features of 43380/White casing	
NA 9V-GPE	43399	Net Adapter Suitable for MISTRAL 600, 300 and wire Incl. suitable plug/socket Wireless bell button/Relay box and repe separate plug and plug directly to termi Power supply 9 V DC, maximum 0,5 A (4,	ater usage: nal
AL 1057/614	39013	Lithium battery 3 V CR123 A • Suitable for motion sensor MISTRAL BM	l und Relaisbox

Wireless doorbells POLO 100

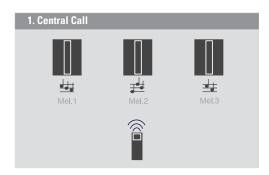
Model	Order no.	Description	
POLO 100 W/W	43251	Wireless doorbell set (white)	 LED indication
		16 melodies 80 db (A), adjustable Mute function Batteries wireless bell button AAA LR03 1.5 V (not incl.)	 250 m range (free field) Frequency 868.35 MHz Batteries wireless doorbell AA 1,5 V (not incl.) Incompatible with Mistral
POLO 100 W/S	43252	• like 43251 but black colour	• Incompatible with Mistral

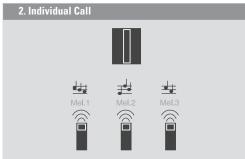


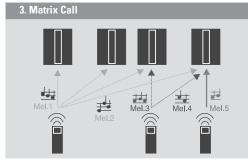
Please note: Walls, doors, metal components etc. may considerably reduce operating range To increase the range in difficult conditions, use MISTRAL WR (order No. 43480);

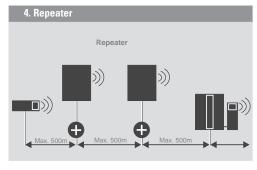
Wireless doorbells MISTRAL- Circuit overview

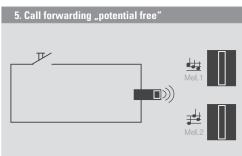
The figures show some of the possible combinations. Among other things, each wireless doorbell can be activated individually or centrally.

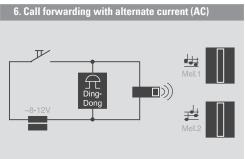












Central call

One wireless bell button can activate any number of wireless chimes:
One wireless bell button is coupled with several wireless chimes in different rooms.

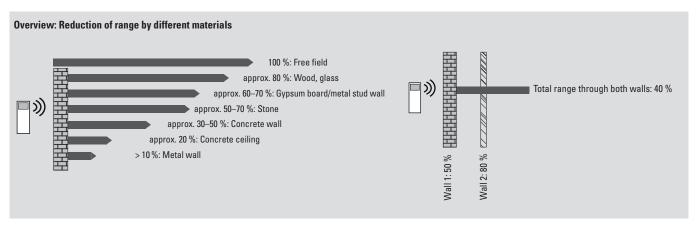
Individual call

Up to 11 wireless bell buttons can activate 1 wireless chime: Several wireless bell buttons at different doors/gates are coupled with one wireless chime in one room.

Matrix call

Several wireless chimes can be activated individually. Several wireless bell buttons at different doors/gates are coupled with several wireless chimes in different rooms – including with multiple coupling.

Note: Walls, doors, metal parts, etc. can reduce the range significantly.



Electronic doorbells - CROMA Series / ECHO 120 / 230





- o User-friendly *easyTIP* control unit
- o Optimal pre-assembly
- Multi-volt operation
- MUTE function

Electronic doorbells in the CROMA Series offer a large choice of melodies/tunes to announce guests. The integrated easy-TIP-unit behind the design element allows for simple changes to the Ring Tone, Alarm Function and the Silent function (Mute button).

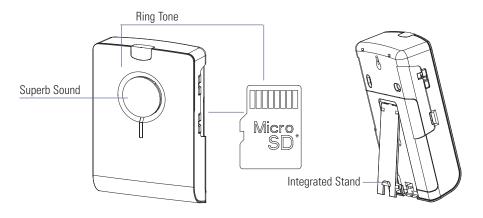
The 230 Volt-Doorbell with its integrated Transformer is ideal for mixed installation and renovations. For instance, by using the existing 230 V-supply in the corridor.

CROMA 100A CROMA 250



CROMA 50 - New with a stylish and coloured acrylic front





Electronic doorbells ECHO 120 / 230

Feature / Operations / Functions

- · Gloss Finish
- Superb Sound
- Bright LED-Flash
- Independent activation/deactivation sound and light function
- Variable volume control max. 86 dB(A)
- Optic and acoustic LowBatt- Display
- 2 Button connection
- Individual ring tone for wireless bell buttons
- 2-fold Call differentiation
- Call tone transmission by Micro-SD-Card*
- Up to 90 seconds total playing time of Ring Tones
- Incl. Software for compilation of Ring Tones
- Pre-installed Melodies

Technical information

• Dimensions: 180 x 120 x 50 mm

Model	Order no.	Description
ECHO 120 SW	43530	HiFi-Doorbell
		Colour: Black / White
		Power supply
		Batteries 4 x 1,5 V LR14/C (not included)
		or 8 - 12 V AC/DC
ECHO 120 WS	43531	HiFi-Doorbell
		Colour: White
		Power supply
		Batteries 4 x 1,5 V LR14/C (not included)
		or 8 - 12 V AC/DC
ECHO 230 SW	43540	HiFi-Doorbell
		Colour: Black / White
		Power supply
		230 V / 50 Hz (VDE Power supply board)
		or 8 - 12 V AC/DC
ECHO 230 WS	43541	HiFi-Doorbell
		Colour: White
		Power supply
		230 V / 50 Hz (VDE power supply board)
		or 8 - 12 V AC/DC

^{*}MicroSD-Card not included.



ECHO 120 SW



ECHO 120 WS



ECHO 230 SW



ECHO 230 WS

Electronic doorbells CROMA 150 / 250



CROMA 150 SW



CROMA 150 WS



CROMA 250 SW



CROMA 250 WS

Feature / Operations / Functions

- Gloss finish
- 12 polyphone Ring tones
- Bright LED-Flash
- Independent activation/deactivation sound and light function
- Variable Volume Control max. 86 dB(A)
 Adjustable Mute function/time limit setting
- 2 Button connection
 Individual Ring Tone for Buttons
- 2-fold Call Differentiation

• Dimensions: 180 x 120 x 50 mm

Model	Order no.	Description
CROMA 150 SW	43554	Wireless doorbell Set
		Colour: Black / White
		Power supply:
		Batteries 4 x 1,5 V LR14/C
		or 8 – 10 V AC/DC
CROMA 150 WS	43555	Wireless doorbell Set
		Colour: White
		Power supply:
		Batteries 4 x 1,5 V Model LR14/C
		or 8 – 10 V AC/DC
CROMA 250 SW	43556	Wireless doorbell Set
		Colour: Black / White
		Power supply:
		230 V / 50 Hz
		or 8 – 10 V AC/DC
CROMA 250 WS	43557	Wireless doorbell Set
		Colour: White
		Power supply:
		230 V / 50 Hz
		or 8 – 10 V AC/DC

CROMA 100A



The designer chime with a large selection of melodies and additional ALARM function – a "jewel" in any room!

Functions

- 17 brilliant polyphone sounds (2/3 tone, Westminster, pop, special tone seq. for people with hearing difficulties, classical etc.)
- Switchable from melody to ALARM tone (optimal for use in combination with motion sensors in a shop, for example, when a melody should sound during the day and an ALARM tone at night)
- Volume adjustable up to max. 86 dB(A)
- 2 different paging signals for optimum access control
- SILENCE function (one-button mute function) with LED indicator
- User-friendly *easyTIP* control unit for all functions (fold-up cover)

Installation

- Operated with 4 x 1.5 V batteries (model LR14/C, alkaline baby cell, not incl. in delivery) or 8–12 V AC/DC (250 mA)
- \bullet Safe ring tone activation with potential-free contact or with $8{-}12\,\text{V AC/DC}$
- · Can also be used for mixed installations and renovation (e.g.

- existing 8 V power supply from a customer-supplied bell transformer and triggering with a potential-free contact)
- Optimum pre-assembly (screw distances correspond to flushmounting box diameter)
- Parallel circuit to further CROMA chimes or to electromechanical chimes possible

Technical data

- Voltages/Currents: see above (minimal standby losses for long battery life — in normal use approx. 3 years incl. LowBatt display)
- Max. 86 dB(A)
- 191 x 163 x 51 mm
- Temperature range +5 °C to +40 °C
- VDE-tested (DE)
- Frosted semi-transparent 4 mm perspex pane; high-grade silver or grey-painted ABS plastic
- IP range IP40

Model	Order no.	Description	
CROMA 100A	43170	Electronic doorbell Silver/Grey	
CROMA 100A ws/ws	43172	Electronic doorbell • White/White	
CROMA 100A ws/si	43173	Electronic doorbell • White/Silver	
CROMA 100A ws/sw	43174	Electronic doorbell • White/Black	
NA 9V-GPE	43399	Mains adapter Black Disconnect angled plug and put 9 V directly to input terminal	(without illustration) 9 V DC Max. 0.5 A (4.5 W) With 1.75 m lead

CROMA 230 / 231A



CROMA 230A



CROMA 230A-a/w



CROMA 231A



CROMA 231A ws/ws



CROMA 231A ws/si



CROMA 231A ws/sw

Deluxe electronic doorbell with a large selection of melodies and additional ALARM function — multi-volt operation up to 230 V makes it particularly attractive

Functions

- 17 brilliant polyphone sounds (2/3 tone, Westminster, pop, special tone sequence for people with hearing difficulties, classical etc.)
- Switchable from melody to ALARM tone (optimal for use in combination with movement detectors in a shop, for example, when a melody should sound during the day and an ALARM tone at night)
- Volume adjustable up to max. 86 dB(A)
- 2 different paging signals for optimum access control
- SILENCE function (one-button mute function) with LED indicator
- User-friendly *easyTIP* control unit for all functions (fold-up cover)

Installations

- Multi-volt operation with 8–12 V AC/DC (250 mA) or 230 V AC (15 mA)
- Safe ring tone activation with potential-free contact or with 8–12 V AC/DC or 230 V AC (opto-coupler input for max. safety)
- Thanks to integrated transformer, can also be used for mixed installations and renovation (e.g. 230 V power supply and triggering over 8 V of an existing bell transformer)
- Optimum pre-assembly (screw distances correspond to flushmounting box diameter)
- Parallel circuit to further CROMA chimes or to electromecha-

nical chimes possible

Technical data

- Voltages/Currents: see above (ecologically sound operation due to minimal standby losses)
- Max. 86 dB(A)
- Dimension 150 x 115 x 45 mm
- Temperature range +5°C to +40°C
- VDE-tested
- High-grade, stable ABS plastic; white with silver-painted design
- Degree of protection IP40

Note

- If supplied with 230 V AC power, in accordance with the standard, an all-pole mains control switch must be provided in the building electrical installation!
- The integrated transformer is not suitable for this and is not designed for the operation of electrical door openers. If necessary, an additional transformer (e.g. GT 3148) must be supplied by the customer.
- When triggering with 230 V, use only suitable 230V buttons!

Model	Order no.	Description	
CROMA 230A	43175	Electronic doorbell	
		White/Silver	• 150 x 115 x 45 mm
CROMA 230A-a/w	43190	Electronic doorbell	
		White/Silver	• 150 x 115 x 45 mm
CROMA 231A	43177	Electronic doorbell	
		Silver/Grey	• 191 x 163 x 51 mm
CROMA 231A ws/ws	43195	Electronic doorbell	
		White/White	• 191 x 163 x 51 mm
CROMA 231A ws/si	43196	Electronic doorbell	
		White/Silver	• 191 x 163 x 51 mm
CROMA 231A ws/sw	43197	Electronic doorbell	
		White/Black	• 191 x 163 x 51 mm

Electronic doorbells CROMA 50 / 225A

Inexpensive battery-operated electronic chime with standard functions

Functions

- 3 sounds (2/3 tone, Westminster)
- Volume adjustable up to max. 83 dB(A)
- 3 different paging signals
- Continuous tone only in the case of continuous non-isolated impulse

Installation

- Operated with 4 x 1.5 V batteries (model LR14/C, alkaline baby cell, not incl. in delivery)
- Safe ring tone activation with potential-free contact or with 8–12 V AC/DC
- Optimum pre-assembly (screw distances correspond to flush-mounting box diameter)
- Parallel circuit to further CROMA chimes or to electromechanical chimes possible

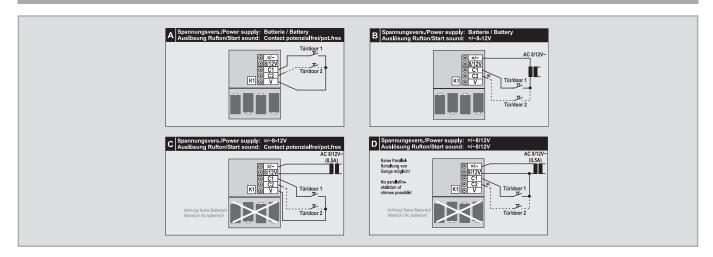
Technical data

- Voltages/Currents: see above (minimal standby losses for long battery life in normal use approx. 3 years)
- Max. 83 dB(A)
- Temperature range +5°C to +40°C

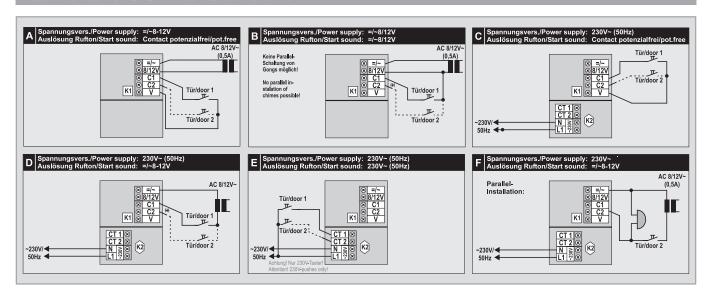
Model	Order no.	Description	
CROMA 50	43150	Electronic doorbell White ABS plastic with silver-grey design	• 150 x 115 x 40 mm
CHIME 225A	43225	• Timeless design (ABS plastic cover)	• 160 x 160 x 65 mm
CROMA 50 ws	43152	• like CROMA 50	acrylic door color white
CROMA 50 sw	43153	Electronic doorbell • like CROMA 50	acrylic door color black
CROMA 50 si	43154	Electronic doorbell • like CROMA 50	acrylic door color silver
CROMA 50 rt	43155	Electronic doorbell • like CROMA 50	acrylic door color red
CROMA 50 gn	43156	Electronic doorbell • like CROMA 50	• acrylic door color green



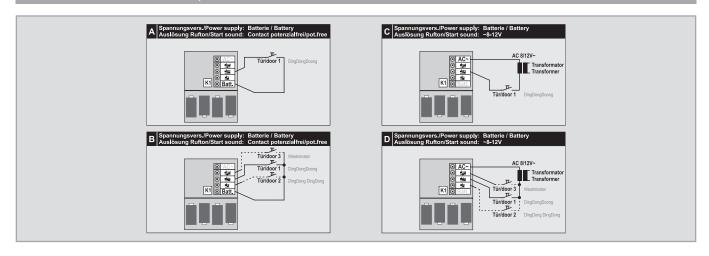
Electronic doorbells CROMA 100 - Circuit overview



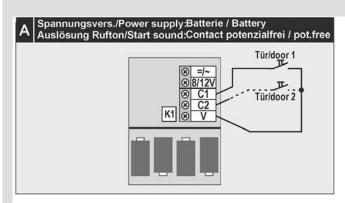
Electronic doorbell CROMA 230 - Circuit overview

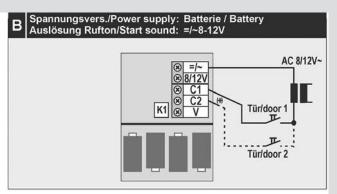


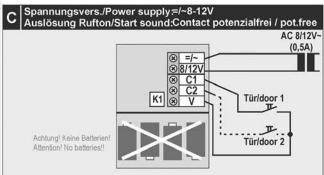
Electronic doorbells CROMA 50 / 225A - Circuit overview

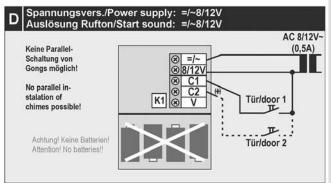


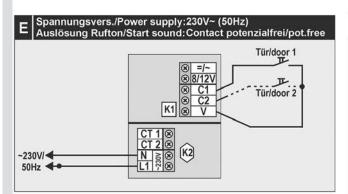
Electronic doorbell ECHO - Circuit overview

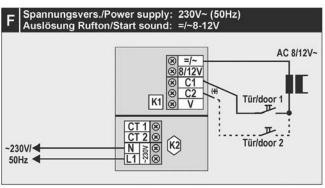


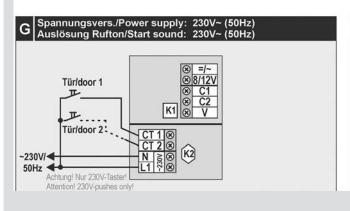


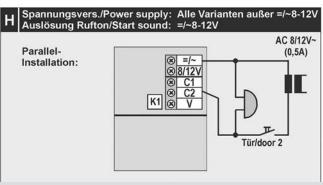




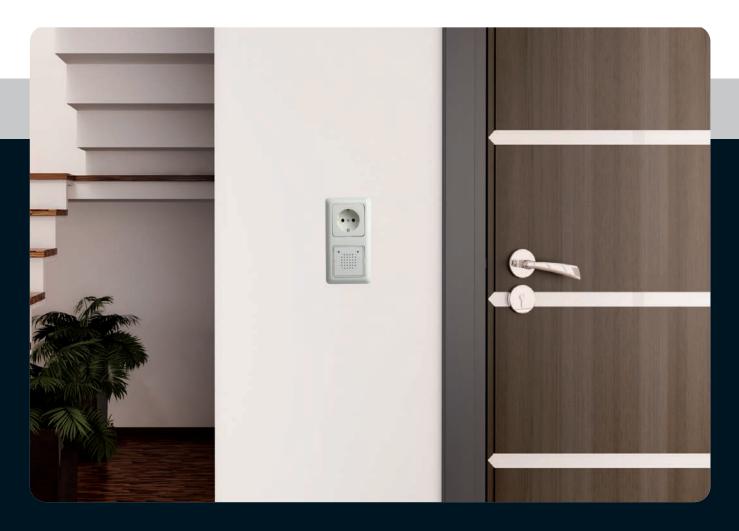








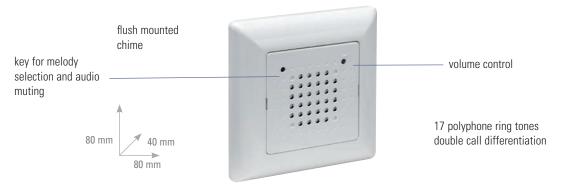
Flush mounted Series



- o Installed in a flush mounted unit
- o Integration in switch product ranges
- Series with flush mounted chime, bell and buzzer
- 8–12 V AC/DC, 230 V (permanent voltage)

The simple design of the flush mounted series doorbell, bell and buzzer can be integrated discretely with numerous products from leading manufacturers. Simply integrate flexibly on site.

With 17 polyphonic melodies, a volume of 83dB(A), double call differentiation as well as muting and melody selection on the front of the unit, the electronic flush mounted doorbell is a true sound and technological wonder. Everything that a doorbell should be — only in comact size.



Flush-type electronic chimes / bells / buzzers

Flush-type signalling:

Series consisting of flush-type chime, flush-type bell mechanism and flush-type buzzer as single unit or for integration in standard switch product ranges (50x50 mm adapter frame of the switch manufacturer)

Product features (chime)

- 17 polyphone ring tones
- Integration in switch product range possible

Functions

- Double call differentiation
- Mute
- Continuous volume adjustment

Installation

- Installation in flush-type box
- Removable terminal makes installation easier

Technical data

- 80 x 80 x 40 mm (BXHXD)
- Chime volume up to 83 dB(A)
- volume LTW / SU up to 80 dB(A)

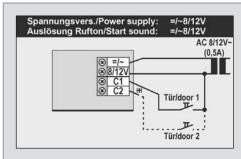
Note

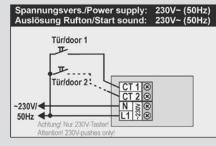
- Recommendation: Use switch branching boxes (depth 60mm)
- Supplied including mounting plate and frame

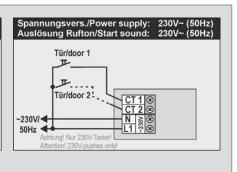
Model	Order no.	Description	
UP CHIME 120ws	43701	Flush-type electronic chime	
		17 polyphone ring tones	• 8-12 AC/DC (0.280 A)
		Mute function	 up to 83 db(A)
		cont. volume adjustment	• 80 x 80 x 40 mm
		incl. mounting plate & frame	 Colour: white
		mounting depth 31 mm	 permanent voltage
UP CHIME 230ws	43706	Flush-type electronic chime	
		• as 43701	 but: 230V AC , 50Hz (0.080 A)
		mounting depth 31 mm	 permanent voltage
UP-LTW 120 ws	43711	Flush-type bell mechanism	_
		Small bell	• 8-12 V AC (0.320 A)
		• up to 80 db(A)	• 80 x 80 x 40 mm
		incl. mounting plate & frame	Colour: white
		shout time operation 5/55 sec	mounting depth 31 mm
UP-LTW 230 ws	43716	Flush-type bell mechanism	
		• as 43711	 but: 230V AC , 50Hz / 0.045 A
		shout time operation 5/55 sec	 mounting depth 31 mm
UP-SU 120 ws	43721	Flush-type buzzer	
		Small bell	• 8-12 V AC (0.210 A)
		• up to 80 db(A)	• 80 x 80 x 40 mm
		incl. mounting plate & frame	Colour: white
		shout time operation 5/55 sec	 mounting depth 31 mm
UP-SU 230 ws	43726	Flush-type buzzer	
		• as 43721	 but: 230V AC , 50Hz / 0.036 A/
		shout time operation 5/55 sec	 mounting depth 31 mm

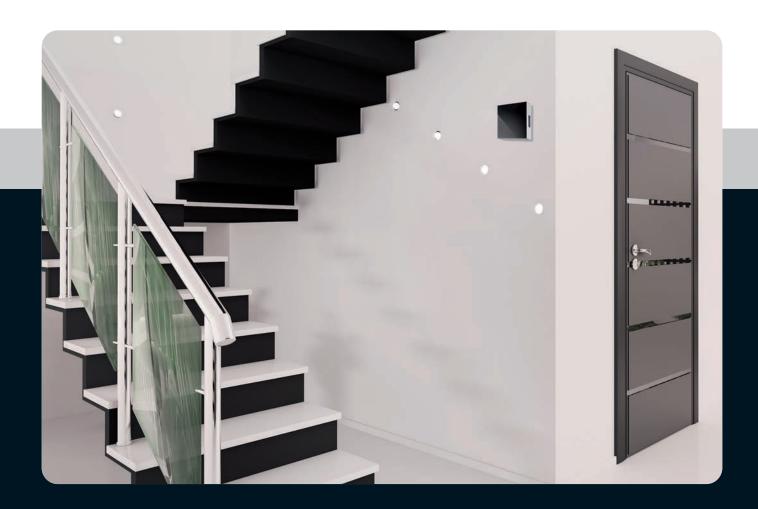


Flush-type Chime FT— Circuit overview

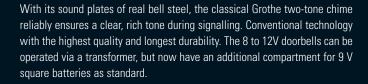








- o Dual-Tone
- o Bell steel sound plates
- o External transformer operation
- Battery casing for a 9 V square battery (depends on model)



The 230 volt variations contain an additional transformer in order to save time during installation.



Electromechanical chimes

Order no.	Description		
44065	Chime • Casing White, Front silver stainless steel effect • 8 –12 AC (12 VA)		
	Operation with external transformator possible		
	• Short time load 5/15 s	• Dimensions: 136 x 150 x 50 mm	
44165	Chime		
	Casing White	• 8 –12 AC (12 VA)	
		or 9 V DC (LR 6LR61 Alkaline	
	• Max. 80 db(A)		
	Short time load 5/15 s	• Dimensions: 118 x 118 x 47 mm	
44169		0.401/40/22/21	
		•8-12 V AC (12 VA)	
		•ur 4 x 1.5 v battery Typ C	
	. ,	• Dimensions: 169 x 104 x 49 mm	
ΔΔ171		- Dimononio. 103 X 104 X 43 IIIII	
441/1		•8- 12 V AC (12 VA)	
		- Dual tone / continuous tone	
	Cycle frequency approx. 2–3 Hz	• Dimensions: 169 x 104 x 49 mm	
44172	Chime		
	Casing White	• 8–12 V AC (12 VA)	
	Operation with integrated transformer	• or prim. 230 V AC	
	• Max. 80 dB(A)	• Dimensions: 169 x 104 x 49 mm	
44265	Chime		
	Casing White	• 8 V - 12 AC (12 VA)	
	1 '	• or 9 V DC (LR 6LR61 Alkaline)	
	• Max. 80 dB(A)		
	Short time load 5/15 s	• Dimensions: 118 x 118 x 38 mm	
44465	Chime		
	Casing White, Front Black	• 8 V - 12 AC (12 VA)	
	1 '	• or 9 V DC (LR 6LR61 Alkaline)	
		- Dimension 440 442 47	
44400		• Dimensions: 118 x 118 x 47 mm	
44466		- 0 12 AC (12 VA)	
		• 8 – 12 AC (12 VA)	
	1 '	■ OI A N DC (TH PTHP I UNIU6	
		• Dimensions: 118 x 118 x 47 mm	
44475		SIONORONO. TTO A TTO A TT HIIII	
77773		• 230 V AC	
		200 1710	
	• Max. 80 db(A)	• Dimensions: 118 x 118 x 47 mm	
44476	1		
	Casing Colour: white, Front: white	• 230 V AC)	
	• Max. 80 db(A)	·	
	Short time load 5/15 s	• Dimensions: 118 x 118 x 47 mm	
44565	Chime		
	Casing White	• 8–12 AC (12 VA)	
	• Max. 80 dB(A)		
	Short time load 5/15 s	• Dimensions: 136 x 150 x 50 mm	
44569	Chime		
	Casing White	• 8–12 V AC (12 VA)	
	Operation with external transformator possible	●or 4 x 1.5 V battery Typ C	
	• Max. 80 dB(A)		
	Short time load 5/15 s	• Dimensions: 171 x 109 x 46 mm	
44179	Chime		
	Casing White, base: black	• 230 V (0.06 A)	
	Short time load 5/15 s		
	• Max. 80 dB(A)	• Dimensions: 170 x 105 x 50 mm	
44665	Chime		
	Casing White	• 8 V - 12 AC (12 VA)	
	Operation with external transformator possible		
	• Max. 80 dB(A)		
	Short time load 5/15 s	• Dimensions: 136 x 150 x 50 mm	
	Short time load 5/15 s	• Dimensions: 136 x 150 x 50 mm	
	Short time load 5/15 s	• Dimensions: 136 x 150 x 50 mm	
	44165 44169 44171 44172 44265 44466 44475 44476 44476 44479	Casing White, Front silver stainless steel effect Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 db(A) Cycle frequency approx. 2–3 Hz Chime Casing White Operation with integrated transformer Max. 80 db(A) Chime Casing White Operation with integrated transformer Max. 80 db(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing White, Front Black Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing Colour: white, Front: white Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing Colour: white, Front: black Short time load 5/15 s Chime Casing Colour: white, Front: white Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing Colour: white, Front: white Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 db(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s Chime Casing White Operation with external transformator possible Max. 80 dB(A) Short time load 5/15 s	

CHIME 065 CHIME 165 CHIME 169 CHIME 169A CHIME 265 CHIME 465A CHIME 565 CHIME 569 CHIME 569 230V CHIME 665

Note: Batteries are not included in the delivery