DOOR COMMUNICATOR

Fores Slim

User manual v 1.2

Compatibility of Fores Slim with Brave NUDV series

- Same dimensions and design
- the same *USB cable Slim* can be used for programming
- the new ForesSet setup software also supports the Brave series
- the same configuration file as the Brave series
- Simplified set of commands
- Tone selection only
- Potentiometer for adjusting the volume
- Potentiometer for adjusting microphone sensitivity

Version 1.1
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Content

1 Basic description

1.1 Properties

- Tone dialing (pulse dialing is no longer supported)
- Two phone numbers for each button, two numbers in series or Day/Night mode
- Switching Day/Night by DTMF Code
- Extend a call by selecting * or #
- Optional call ticking for call resolution
- Baby call in conjunction with PBX function
- Two codes to hang up the door communicator from the phone
- End the call by pressing the same button again

- One relay powered from an external 12 V source with a changeover contact e.g. for opening the door
- 6 relay modes can be used (e.g. additional bell, lighting)
- 2 codes for the relay to open the door from the telephone being called
- Up to 6 codes for the relay to open the door with a code from the outside
- Optional acoustic relay switching signaling (for silent locks)

- Selectable number of rings before picking up an incoming call
- Adjustable tone dialing parameters
- Adjustable acoustic signaling parameters
- Adjustable Tone Detector Parameters

- Multiple levels of factory settings
- programming via DTMF or via a special USB cable from a personal computer
- Integrated heating for outdoor installation
- Name tag illumination

The manufacturer continuously improves the firmware of the product. The latest firmware version from http://www.alphatech.cz can be loaded into the door communicator using the ForesSet program and a special USB cable.

1.2 Fores Slim versions

The **Fores Slim** door communicator is available in three versions:

Fores Slim - 01 - 1 button
Fores Slim - 02 - 2 buttons
Fores Slim - 04 - 4 buttons

1 button

2 buttons

4 buttons

Canopy

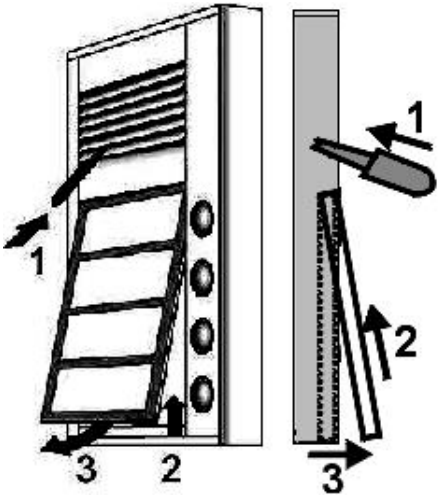
2 Instalation

The Fores Slim door communicator is mounted on the wall using two screws. The lower and upper fronts are glued with a special sealant during production, so please pay special attention to disassembly and assembly..

2.1 Assembly, connection and adjustment

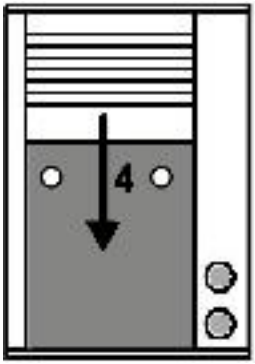
2.1.1 Removing name tags

1. A special tool is included in the package to press the locking spring. Press the tool as far as possible as shown in the picture.
2. While doing so, slide the name tag panel in the direction shown in the picture.
3. The name tag panel will move away from the bottom of the door communicator in the direction shown in the picture. Now remove it.



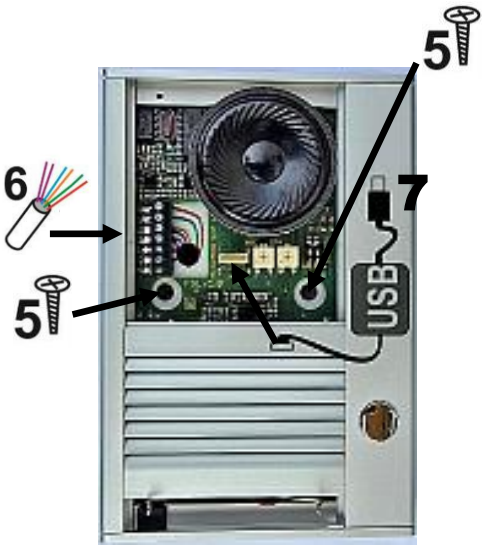
2.1.2 Removing the control cover

4. Slide the metal cover above the speaker downwards (as shown in the picture), it slides in the side rails.



2.1.3 Wall mounting and cable connection

5. **Wall mounting** is done with two screws, depending on the substrate. Into the wall, concrete and stone it is done using 6mm or 8mm dowels, if the substrate is wood or sheet metal, then the screws intended for this purpose are used. If the wall is made of metal, then it is necessary to cut a thread into the drilled holes. For easy installation, there is a guide at the end of these instructions (pg.**Chyba! Záložka není definována.**) **drilling template**.
6. **The cables** pass through the third (larger) hole and are connected to the screw terminals.



ATTENTION! It is strictly forbidden to enlarge or create new holes in any wall of the door communicator! Violation will result in loss of warranty!

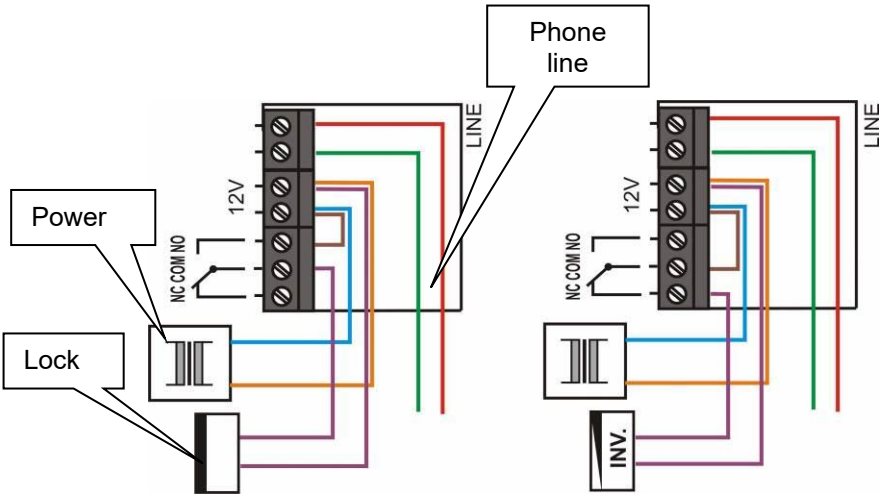
Note: when mounting on other materials such as wood or metal, use screws designed for these materials.

For the basic function, it is enough to connect a telephone line - the terminal (above) marked "**LINE**". It is connected in the same way as any telephone to any branch of the exchange. The door communicator is powered from the telephone line, so for voice communication it is no longer necessary to connect anything else.

If you need to use a relay, it is necessary to connect an external power 10V AC to 18V AC or a 12V DC to 24V DC to the "**12V**" terminal.

The load of this source depends on the connected electric lock (0.5A - 1.0A). If the board heating is turned on, this current increases by 150mA. Usually a power supply of 12V/1A AC or 12V/1A DC is sufficient.

The relay contact connection is shown in the figure. The designation "**NO**" means a normally open contact, "**COM**" means a common terminal (middle) and "**NC**" means a normally closed contact. The relay contacts are galvanically isolated from the other circuits of the door communicator. The lock connection options are shown in the figure.



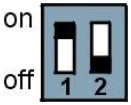
Connecting a standard and inverse lock.

Under no circumstances should the mains voltage of 120V or 230V be switched directly!!! The need to control mains appliances must be solved using a contactor (power relay).

2.1.4

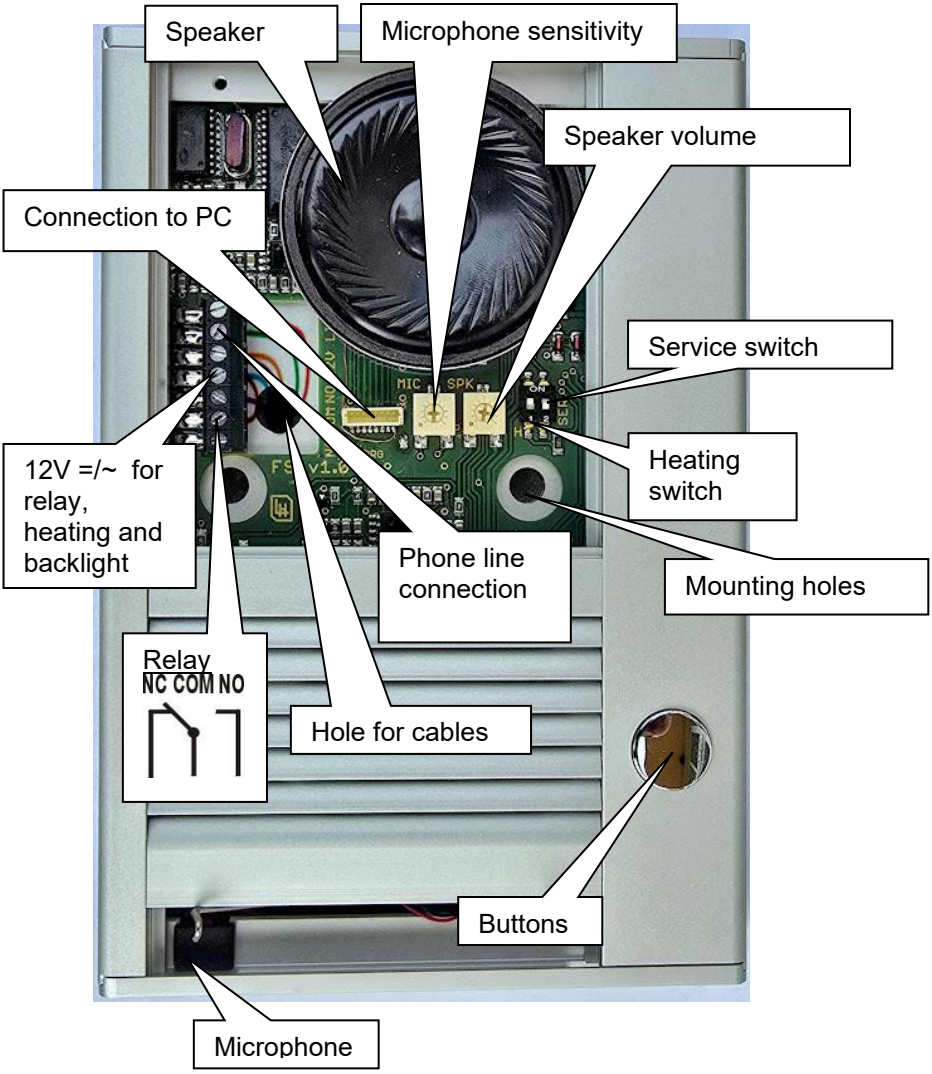
7. The **HEAT** switch turns on the **heating** of the Fores Slim board, thus preventing moisture condensation and continuous drying. This function is only available after connecting a 12V power supply.

8. The **SERVICE** switch allows you to program Fores Slim using a DTMF telephone even if you have **lost your password.**

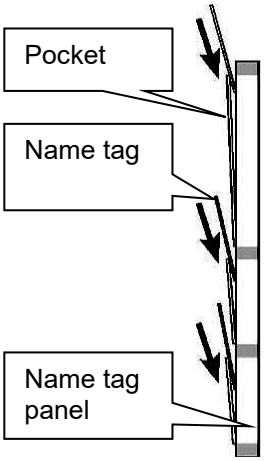


2.2 Location of functional parts of Fores Slim

All mounting, control and adjustment elements are located under the speaker cover.



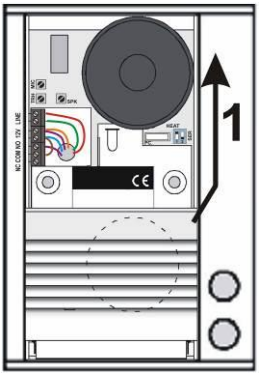
The name tag panel (see 2.1.1 on page PAGEREF _Ref130260305 \h 77) has a space for name tag on the back. These are "pockets" that are open at the top and a name tag is inserted into the space between the front panel and this pocket - see picture.



2.3 Closing the Fores Slim

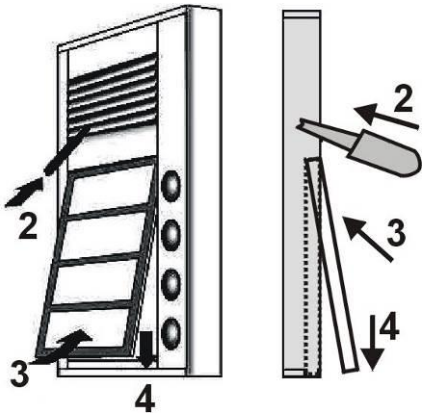
2.3.1 Covering the controls

1. Slide the metal cover up over the speaker (as shown in the picture), sliding it in the side rails. Pay attention to the speaker overlap, apply slight pressure to the metal edge of the speaker to allow for easy insertion.



2.3.2 Returning the name tag panel

2. Use a special tool to push the locking spring. Push the tool as deep as possible as shown in the picture
3. Slide the name tag panel in the direction shown in the picture
4. Slide the name tag panel under the protrusion in the lower part of the door communicator in the direction shown in the picture.



2.5 Other accessories

2.5.1 Power supply 12V AC

As an option, the Fores Slim comes with a 12 V/1 A AC power supply. It's not included, it must be ordered separately. You can find more about power supplies and electric locks at www.alphatech.cz.

2.5.2 Power supply 12V DC

As an option, the Fores Slim comes with a 12 V/1 A DC power supply. It's not included, it must be ordered separately. You can find more about power supplies and electric locks at www.alphatech.cz.

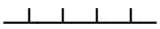
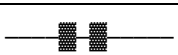
2.5.3 USB programming cable

The *USB Cable Slim* is the same as for the Brave SlimDP intercoms, the USB driver is on the website www.alphatech.cz. The driver is not electronically signed and therefore it is necessary to install it according to the instructions at www.alphatech.cz.

3 Operation of the Fores Slim

3.1 Signaling overview

The Fores Slim door communicator acoustically signals conditions that may occur during operation. For easier recognition, it‘s usually used one tone combination of different lengths as in Morse code.

Status	Signaling	Comment
Connecting to a Line (Reset)		Morse "K"
Line pick up (OFF HOOK) type 1		Morse "A"
Line hang up (ON HOOK) type 1		Morse "N"
Line pick up (OFF HOOK) type 2		Morse "U"
Line hang up (ON HOOK) type 2		Morse "D"
Memory empty (no number programmed)		Morse "H"
Knocking into a call		Very short beeps
Call end notification		Morse "S"
Programming mode entered		4 commas (Morse Ch)
Programming mode prompt		Two modulated beeps
Command or parameter accepted		Very long comma
Command or parameter rejected		Morse "5"
Line connection (Reset)		Modulated signal

The activity of the device can be analyzed by the tones it plays. This can be useful for installation problems or failure behavior analysis. Sound signaling can be set using parameters 61, 62 and 63.

3.2 Outgoing call

After pressing the button, the door communicator picks up the line, plays the line pick-up signal (unless disabled by par. **62**) and dials the subscriber's telephone number assigned to the button. A ringing tone is heard from the loudspeaker. As soon as the callee picks up, he can talk to the visitor at the door. If an electric lock is connected to the door communicator, the callee can open the door for the visitor by dialing the DTMF code on his telephone. If he hangs up the telephone, the door communicator will also hang up after detecting a busy tone. If the call lasts longer than the set limit (parameter **52**), 15 seconds before hanging up, the door communicator will send a signal notifying the approaching end of the call. If the callee dials ***** or **#** on his telephone according to the settings (parameter **42**), the call will be extended again by the time set by parameter **52**.

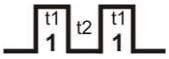
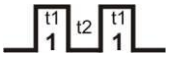
The dialed number differs depending on the dialing mode set (parameter **47**):

- **Day/Night mode** = if the door communicator is in Day mode, it always dials the number set in parameter **1xx**, if it is in Night mode, it always dials the number set in parameter **2xx**. Switching modes manually is set by parameters **45, 46**.
- **Two groups of numbers mode** = first press of the button – it always dials the number set in parameter **1xx**, when the same button is pressed again, or when a busy tone is detected 10 seconds after dialing, or after the set number of rings (parameter **56**) has elapsed, the door communicator dials a number from the second group (parameter **2xx**). When the same button is pressed again, the number from the first group is dialed again, etc. (after detecting a busy tone after dialing a number from the 2nd group, the repetition ends)

If the visitor presses the button after picking up the door communicator, the door communicator hangs up for the time specified by parameter **54**, picks up the line again and dials a new number. The number is dialed using tone dialing (DTMF). The call on the door communicator side can be ended prematurely by pressing the same button again, if this is set (parameter **4***).

Using door communicator‘s buttons, it's possible to control the relay (i.e. **unlock the locks).** If the visitor at the door presses the buttons one after the other so that the combination corresponds to the programmed external code (parameter **32-34**) and the time between pressing the individual buttons is not greater than the set time (parameter **53**), the door communicator will pick up, switch on the relay (if set in mode m=1) for the time given by parameter **37** or **30**. And finally hang up again.
The relay, according to the control code, can switch one pulse or two pulses with the time between pulses set by parameter 30, see Tab. 1, pg.16.11

3.3 Relay Modes

Mode m = 1	*(parameter 3111)*		
Events	**Note**	**Parameter**	**Relay**
External code entered from buttons	Always valid	3211-3215	
	According to setting DAY/NIGHT	3311-3315	
		3411-3415	
		3421-3425	
	Always valid	321*	
	According to setting DAY/NIGHT	331*	
		341*	
Internal code entered on the phone	You can choose 1 or 2 digits of the code The 2-digit code is basic and can be abbreviated by using * in the first place of the code when programming	351	
		361	

Mode m = 4	*(parameter 3114)*		
Events	**Note**	**Parameter**	**Relay**
Pressing a button	any button except the button set by 311*	3114	
	button set by parameter 311*	3114	

Mode m = 6	*(parameter 3116)*		
Events	**Note**	**Parameter**	**Relay**
Pressing a button	any button except the button set by 311*	3116	-
	button set by parameter 311*	3116	

Note: T1 – relay switching time *(parameter 371)*
T2 – Time between relay pulses *(parameter 301)*

Tab. 1 Relay control table

3.4 Incoming call

An incoming call is a call to the door communicator (initiated by a person inside the building). After dialing the number of the branch where the door communicator is connected, the door communicator line will ring and after the set number of rings (*parameter **51***), the door communicator will pick up and it is possible to talk. The options are similar to those for an outgoing call, with the following exceptions:

- During the first 10 seconds, it is possible to enter the combination "**# and service password**" (*parameter **44***), the door communicator then enters the programming mode.

- When the DIP1 switch ("SERVICE") is switched to the ON position, the door communicator goes straight into programming mode without entering the service password after picking up the line
- An incoming call may be prohibited from controlling the relay (parameter 381).

4 Parameter programming

4.1 Programming with your phone

4.1.1 Entry into programming

The Fores Slim is put into programming mode in two ways:

1. **using a password** – Incoming call only! – pick up the phone and dial the number where the door communicator is connected *(either the branch number if you are connected to the PBX, or the number of the state line to the building where the door communicator is located and be transferred to the branch where the door communicator is connected)*. The door communicator picks up (you can hear the pick-up signal – see chapter) up to 10 sec dial **#xxxx**, where xxxx is the service password for accessing programming ***(by default, xxxx=0000).*** If the password is correct, the door communicator switches to programming mode – a switch signal is heard and is immediately heard *Programming mode prompt* (see chapter 3.1 Pg.14).
2. **using DIP** "SERVICE" – incoming call only! – you make the connection with the door communicator in the same way as in point 1, but if the DIP switch “SERVICE“ is switched to the "ON" position, the door communicator goes straight to the programming mode after picking up – you hear the pick-up signal, the signaling of switching to the programming mode and then you can hear the *Programming mode prompt* (see chapter 3.1 Pg.14).
   When you have finished programming, do not forget to return DIP switch “SERVICE“ to the OFF position!

4.1.2 Parameter programming

The default state for programming is announced *by Programming mode prompt.* The door communicator returns to this state every time (5 seconds) no matter what you start programming.

The programming mode distinguishes two kinds of parameters. One group are **parameters with a fixed length** – there are most of them. The parameter is always stored immediately after reaching the obligatory length and the programming is confirmed by the signal *Command or parameter accepted*. The second group are **parameters with variable length** (*parameter 1xx, 2xx, 32, 33, 34*), then the parameter is **confirmed** and written only after the idle time has elapsed (5 sec). The parameter is immediately entered when the maximum number of characters (numbers) to be written is fulfilled – for *parameters 1 and 2* (phone numbers) the maximum is 24, for *parameters 32, 33, 34* (external codes) the maximum length is 6.

If you enter a number (character) that is not inadmissible during programming, the door communicator immediately sends **an error signal** *(Command or parameter rejected)*, the parameter is not written or changed, the door communicator returns to the state in which it expects parameters to be

entered and it is possible to repeat the parameter setting or program another parameter.

The door communicator remains in programming mode, if no DTMF tone is received for the time specified by parameter 52, then it will automatically hang up. With each DTMF tone received, the time until automatic hang up is set again to 2 minutes. You can exit the programming mode either by hanging up or by selecting *parameter 9*.

4.2 Programming from a PC – ForesSet

To set up the door communicator using a personal computer (PC), it is necessary to have a special *USB Cable Slim* and the ForesSet program, and the door communicator must also be connected to a telephone line.

Procedure:

- Connect the door communicator to the line
- Connect the door communicator and the PC with a USB cable. The door communicator picks up the line and within 3 seconds there is a tone to switch to programming mode (see chapter 3.1 Pg. 14).
- Run the ForesSet program. During the operation (start-up) of the ForesSet program, the door communicator is in programming mode and until the USB cable is disconnected from the door communicator, it does not perform any other activity. If the connection is lost, it is necessary to disconnect the cable from the door communicator and reconnect it – the door communicator will pick it up.
- Establishing a connection between the door communicator and the PC program is indicated by displaying the firmware version and the number of restarts at the bottom of the status bar.
- For easy orientation, the parameters in the ForesSet program are marked with the same codes as when programming from a phone. This makes it easier to orient yourself and also understand which parameter means what.
- For details on how to set up, see the program's help and the www.alphatech.cz manufacturer's website.
- *USB Cable Slim* is a special cable with galvanic isolation and a level converter. Galvanic isolation is necessary because the telephone line must not be grounded and the PC is usually grounded.

5 Description of configuration parameters

Parameters always start with a fixed, mandatory part (parameter number) and end with a variable part – the parameter value. No special prefix or postfix characters are entered before or after the parameter. After the parameter is completely entered and written to memory, a confirmation will be heard, if the wrong value is entered, an error signal will be heard immediately.

5.1 Direct selection of numbers – memories

Parameter	Value	Meaning	Default
1	**tt nn...**	Phone number **nn** assigned to the **tt** button	-

tt – button number, always entered as two digits [01-04]
nn – phone number of up to 24 digits The assignment specified in the table is used to store additional selection flags.
After entering each digit, the next one must e entered in 5 seconds otherwise the phone number is considered finished and is written to memory.
The numbers stored in parameter 1 are the **numbers of the first group**, or the numbers of the **Day mode.**
Factory setting 8## does not change or delete these numbers.

Meaning	Input
0–9	0–9
#	#
*	**
Pause	*0

Parameter	Value	Meaning	Default
2	**tt nn...**	Phone number **nn** assigned to the **tt** button	-

tt – button number, always entered as two digits [01-04]
nn – phone number of up to 24 digits The assignment specified in the table is used to store additional selection flags.
After entering each digit, the next one must e entered in 5 seconds otherwise the phone number is considered finished and is written to memory.
The numbers stored in parameter 2 are the **numbers of the second group**, or the numbers of the **Night mode.**
Factory setting 8## does not change or delete these numbers.

Meaning	Input
0–9	0–9
#	#
*	**
Pause	*0

Note 1: the Day/Night mode settings remains set even after the line is disconnected

Examples of settings:

Button 1 (i.e. 01) is supposed to dial the number 358 during the day and '0 Pause 603441296' at night, then it is programmed for day **101358** and you wait 5sec for confirmation ♫, then for the night **2010*0603441296** and you wait 5sec for confirmation ♫

Button 2 (i.e. 02) is supposed to dial 123#1*23 day and night, then it is programmed for day **102123#1**23** and you wait 5sec for confirmation ♫, then for night **202123#1**23** and wait 5sec for confirmation ♫

Note: if you do not use the 2 groups of numbers mode, or Day/Night switching, it is recommended to set the Day-Night/TwoGroups mode *(parameter 47),* to *Day-Night* (*see parameter 45*) and then set the same code for Day/Night switching *(parameters 45 and 46).* This will guarantee that the door communicator will always be in Day mode and you only need to program phone numbers to Day mode *(parameter 1).*

5.2 Relays

Parameter	Value	Meaning	Default
31	**r m**	Relay **r** operates in **m** mode (1,1-4,6)	11

r – relay number [1]
m – Relay Mode [1-4,6]
Modes **m=1,4,6** are explained in detail in Tab. 1 on pg. 16

m=1 Mode **Switch** – activates by command (internal code) or password (external code) 1 pulse for the time T1 (used for electric locks) or 2 pulses when it switches on for the time T1, opens for the time T2 and switches on for the time T1 (opening the mobile gate)

m=2 switched on for the duration of line pick-up (**camera)** - by picking up the door communicator and switches off by hang-up

m=3 switched on for the duration of line pick-up, and for T1 after hanging up (**lighting)** - Switches on when the door communicator picks up and is closed for T1 after hanging up the (during this time the line is occupied)

m=4 Mode **button** – switched on for T1 period when any button is pressed (used e.g. to connect an external doorbell or siren)

m=6 It is switched on when the button set by parameter 311* is pressed. There can be only one button assigned to relay. The relay is activated for the T1 period. This mode serves as a replacement for the doorbell connected to the Fores Slim system.

Parameter	Value	Meaning	Default
31	**r*tt**	The **tt** button triggers the relay **r** to be switched on when it is in mode M=6 (01-04)	01

r – relay number [1]
tt – button number (memory), always entered as two digits [01-04]
This parameter is applied only if the relay **r** is in the m=6 mode. The value of **tt** determines which button triggers the relay **r** to be switched on for the time t1.

Parameter	Value	Meaning	Default
32	**rp hh...**	in **DAY + NIGHT mode,** password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and **p**=* for 2 pulses (00-444444)	-
33	**rp hh...**	in **DAY mode** password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and p=* for 2 pulses (00-444444)	-
34	**rp hh...**	in **NOC mode,** the password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and **p**=* for 2 pulses (00-444444)	-

r – relay number [1]

p – order=[1 to 5] Up to 5 passwords (external codes) are available to switch on the relay with one pulse

p – order = *, there is one password (external code) to switch on the relay with two pulses

hh... – password (external code) to control the relay by buttons or keypad. The password can be up to 6 digits; the minimum is 2 digits. The characters * and # and digits 5-9 and 0 are not allowed because they cannot be entered. Buttons 1-4 are entered like digits 1-4.

The DAY+NIGHT set (parameter 32) is always valid, the DAY set (parameter 33) is valid only when the door communicator is in DAY mode, analogously the NIGHT set (parameter 34) is valid only when it is in NIGHT mode. When the mode **Two groups of numbers**, is used (parameter 47) the door communicator behaves as if it were in DAY mode in terms of the operation of external codes. The relay must be set in m=1 mode by parameter 31.

To choose a password, you need to follow a few rules:

- Choose the password so that during frequent use it is not possible to observe from the wear and tear of certain buttons what numbers it is composed of
- Be careful about the coincidence of the beginning of the digits of the password, when one password starts the same as the other, e.g. one password is 123 and second password is 1234, then always after pressing button 3, relay is equipped, and password 1234 never gets to be used.
-

Note 1: *Switching to Day/Night mode remains set even after the line is disconnected*
Note 2: *In Fores Slim door communicator, the numbers 0,5,6,7,8,9 and characters * and # cannot be used because they can't be entered.*

Parameter	Value	Meaning	Default
35	**r aa**	**aa** command from the phone to turn on relay **r** 1 pulse (00-99,*0-*9)	155

r – relay number [1]
aa – Command (internal code) from the phone to turn on the relay [2 places][1]
It is useful to set the same command for switching on the relay and for hanging the door communicator (see *parameter 43*)

[1]) - The command is always programmed as two digits, but if you want to control the relay from the phone keypad with a single **digit**, enter ***a** where **a** is the digit that causes the relay to be switched on.
For example: Relay 1 - switching with internal code 48 – programming: **35148** ♫
Relay 1 - switching with internal code 8 – programming: **351*8** ♫

Parameter	Value	Meaning	Default
36	**r cc**	**aa** command from the phone to switch on relay **r** 2 pulses (00-99,*0-*9)	150

r – relay number [1]
cc – Command (internal code) from the phone to turn on the relay [2 places][1]
The same command can be used for both relays, then both relays are activated at the same time.

[1]) - The command is always set as two digits, but if you want to control the relay with a single digit, enter ***a** where **a** is the digit that should switch the relay to on. Switching on the relay with 2 impulses can be used, for example, at a mobile gate, which thus replaces the gate for the entry of people.
Example: We want to control the switching of relay 1 with one pulse, e.g. with the digit **8**, the hang-up also with the digit **8** and the switching on relay 1 with two pulses, e.g. with the digit **9:**
Programming: **351*8** ♫ , **431*8** ♫ , **361*9** ♫ .
When talking to the door communicator, you execute the command to open the gate (2 pulses) 9, the first impulse sets the gate in motion, the second impulse stops the gate, the size of the gate opening for people to enter is given by the time between impulses (*parameter 30*). After people enter, dial **8**, then the door communicator makes one impulse and hangs up, the gate closes.

Parameter	Value	Meaning	Default
37	**r ss**	**ss** time [sec] relay **r** switching on for T1 time (01-99)	105

r – relay number [1]
ss – Time T1 for which relay is switched on [2 places 01-99]

Parameter	Value	Meaning	Default
38	**r p**	**r** relay control **p** for incoming call (0/1)	11

r – relay number [1]

p – parameter whether it is enabled **p=1** or disabled **p=0** control the relay when an incoming call occurs.

It makes sense to disable control when an incoming call is used, e.g. relay in mode 1 controls the opening of the garage door, when the electronics open the door and it closes when the vehicle passes. Then the control from the phone could cause the door to open unintentionally permanently (it does not close – the vehicle has not passed).

Parameter	Value	Meaning	Default
30	**r zz**	Time **zz** [sec] between pulses when relay **r** is switched on with two pulses - time T2 (01-99)	105

r – relay number [1]

zz – T2 time between the first and second impulse for switching on relay [2 places 01-99]

5.3 Basic parameters

Parameter 41 for switching between tone (DTMF)/pulse dialing is ignored. Only tone dialing is supported.

Parameter	Value	Meaning	Default
42	**z**	Call prolongation character (* / #)	*

z – Call prolongation character ***** or **#** (About 15 seconds before the end of the call, the communicator sends a notification (see chapter **Chyba! Nenalezen zdroj odkazů.**, pg. 14.), then the call can be prolonged)

Parameter	Value	Meaning	Default
43	**g bb**	Command to hang up the door communicator from the phone (00-99,*0-*9)	155

g – command order [1]
bb – command to hang the door communicator from the phone [2 digits][1]
It is recommended to set the same command for switching on the relay *(parameter 35.36)* and the command for hanging up.

[1]) - The command is always programmed as two digits, but if you want to control the relay from the phone keypad with a single digit, enter ***a** where **a** is the digit that causes the relay to be switched on. *(Example for parameter 35.36)*

Parameter	Value	Meaning	Default
44	**xxxx**	Service Password (0000-9999)	0000

xxxx – Service password to enter programming mode


If you forget your password, then the following procedure is recommended:

- Open the door communicator cover
- Switch “SERVICE“ to the ON position
- Call the door communicator
- After picking up the line, the door communicator is in programming mode. In this mode, the password can be changed 44xxxx
- return “SERVICE“ to the OFF position
- Close the door communicator cover

Parameter	Value	Meaning	Default
45	**dd**	Command to switch to **DAY** (00-99,*0-*9)	11
46	**nn**	Command to switch to **NIGHT** (00-99,*0-*9)	11

dd – Command to switch to mode **DAY** [2 digits][1]
nn – Command to switch to mode **NIGHT** [2 digits][1]

*[1]) - The command is always programmed as two digits, but if you want to control the relay from the phone keypad with a single digit, enter ***a** where **a** is the digit that causes the relay to be switched on. (Example for parameter 35.36)*
Note 1: The DAY/NIGHT mode status remains set even after the line is disconnected
Note.. 2: In the default settings, both commands are set the same to prevent accidental switching to NIGHT mode.

⚠ ***ATTENTION !!*** If the door communicator is in a different mode (e.g. NIGHT) than the one for which you are setting the phone numbers (DAY, i.e. 1xx), it will dial the numbers of the mode in which it is switched (NGHT, i.e. 2xx) when you press a button! Therefore, it may dial different numbers than you expect or even signal an empty memory!

Parameter	Value	Meaning	Default
47	**e**	Day-Night/TwoGroups Mode (0/1)	1

e – Number selection mode **e=0** door communicator dials numbers from 1st and 2nd group sequentially, **e=1** door communicator dials numbers according to the door communicator mode **Day/Night** (parameters 45/46)

⚠ ***ATTENTION !!*** In combination with parameters 45, 46, it may happen that the door communicator behaves unexpectedly – see the explanation above.

Parameter	Value	Meaning	Default
4*	**k**	Hanging the line by pressing the same button again (0/1)	1

k – hang up by pressing the same button:
k=0 pressing the button again causes the number to be dialed again
k=1 pressing the button again causes hang up

⚠ ***ATTENTION !!*** Setting this parameter will significantly affect the dialing of numbers.

5.4 Time parameters

Parameter	Value	Meaning	Default
51	**q**	Number of rings before the door communicator picks up an incoming call (1-9)	2

q – Number of rings **q** before the door communicator picks up an incoming call. The number can be set from 1 to 9.

Parameter	Value	Meaning	Default
52	**d**	Maximum call duration (0-9,*,#)	2

d – The maximum amount of time a call can last. The call can be extended during the call by dialing a character from the phone (* or # - *Parameter 42*). The time is entered according to the table.

Time [min]	Input
0,5	0
1–9	1–9
15	*
30	#

Parameter	Value	Meaning	Default
53	**w**	Time between button presses (1-9)	2

w – Maximum time [sec] between button presses [range 1-9]
- **external code** – if the time between pressing two consecutive buttons is greater than the time **w**, the code will not be evaluated correctly
- **number selection** – if the button pressed is same as the first digit of the external code, then dialing is delayed by the time **w,** because it is not known yet whether it is a part of the code or a phone memory number

Parameter	Value	Meaning	Default
54	**z**	Hangup time during redial (1-5)	2

z – The time [sec] for which the door communicator hangs up before picking up again to repeat the dial (used when line is busy or button was pressed during a call) [range 1-5].

Parameter	Value	Meaning	Default
55	**r**	Delay before the dialing starts (1-5)	1

r – the time [sec] after picking up before the door communicator starts dialing phone number [range 1-5].

This time is different for each phone system / PBX, but as a rule, most phone systems / PBXs can process the dial within 2 seconds after picking up the line.

Parameter	Value	Meaning	Default
56	**hh**	Number of ringtones before hang-up (04-99)	12

hh – number of rings heard from line after the end of the dial before door communicator hangs up because no one picked up. [range 04-99]. The dial is repeated if the two group dial mode (parameter 47) is set.

Parameter	Value	Meaning		Default
500	**x**	Tone detector mid frequency	(1-0)	3 (375-475Hz)
501	**y**	Number of busy tones to hang up	(2-0)	4
502	**z**	Continuous tone duration	(1-5)	3 (3s)

x – medium frequency of the tone detector – set in the case of non-standard signaling the phone system / PBX – see table

y – minimum number of busy tones required for detection [2-0], where 0 means 10 busy tones

z – minimum duration of continuous tone (for detection of dial tone on PBX) [1-5 sec]

frequency [Hz]	x – choice
275-375	1
325-425	2
375-475	3
425-525	4
475-575	5
525-625	6
575-675	7
625-725	8
675-775	9
725-825	0

Parameter	Value	Meaning		Default
503	**tt**	DTMF tone duration	(04..16)	10 (100ms)
504	**mm**	DTMF space duration	(04-16)	10 (100ms)
506	**pp**	Pause duration	(1-0)	4 (800ms)

tt – The duration of the DTMF tone is determined by the formula:
number entered x 10 = tone duration [ms] - [04-16 i.e. 40-160ms]

mm – The duration of the space between the DTMF tones is determined by the formula:
number entered x 10 = space duration [ms] - [04-16 i.e. 40-160ms]

pp – The duration of the pause is determined according to the formula:
number entered x 100 + 400 = pause duration [ms]
[range 1-0 i.e. 500-1400ms]

5.5 System parameters

Parameter	Value	Meaning	Default
61	**z**	Acoustic signaling (acknowledgment, error, empty memory, end of call...) (0/1)	1

By default, the status of the door communicator is signaled acoustically.

z=0 – signaling is off
z=1 – the signaling is on

Parameter	Value	Meaning	Default
62	**v**	Acoustic signaling pick up/hang up (0/1/2)	1

By default, the pick-up and hang-up of the line is acoustically signaled, but this may cause false dialing or a change in the operating mode for some types of phone system / PBX.

v=0 – pick-up and hang-up signaling off
v=1 – pick-up and hang-up signaling on (Type1)
v=2 – pick-up and hang-up signaling on (Type2)

See chapter **Chyba! Nenalezen zdroj odkazů.**, pg. 14.

Parameter	Value	Meaning	Default
63	**u**	Acoustic signaling of ticking into a call (0/1)	0

By default, ticking into a call is turned off. By turning on this signaling, it is possible to distinguish a call from the door communicator by a regular ticking in the call.

u=0 – Ticking into the call is off
u=1 – Ticking into a call is on

See chapter **Chyba! Nenalezen zdroj odkazů.**, pg. 14.

Parameter	Value	Meaning	Default
65	**z**	Acoustic signaling of relay switching (0/1)	0

By default, the relay switching signal is switched off **z=0**. Some locks do not "buzz" when the door is opened, and it is then not obvious to the person who comes that they can already open the door.

When **z=1** is switched on, a sound simulating the sound of the lock is heard from the door communicator speaker for the duration of the relay switching.

*Note 1: This function is only available for relay modes **m=1***
Note 2 :Even when the relay is switched on by two pulses, the acoustic signaling is switched on only when the relay is switched on, not in the gap between as in the previous generation of door communicators.

Parameter	Value	Meaning	Default
67	**b**	BabyCall – call without the need to program a phone number (0/1)	0

By default**, b=0** is off. Turning on the **b=1** disables the acoustic signaling of an empty memory and after pressing the button with empty memory, only a beep (confirmation) is heard and the call is made as if a number had been dialed.
Attention: The tone detector is not active for the first 10 seconds of the call (waiting for the phone system / PBX to react and dial the number by the phone system / PBX).

Parameter	Value	Meaning	Default
68	**m**	Silence of the line when the lock is closed (0/1)	0

By default**, m=0** is off. Activating the **m=1 function** silences the acoustic path when the relay is switched on in the "electric lock" mode=1. This function is there because if the code lock function is used, the tone of the exchange can be heard for the duration of switching the lock. For some customers, this can be distracting.

Parameter	Value	Meaning	Default
6#	**s**	Set the number of buttons (0/1/2)	2

This constant is used to determine the position of button No. 1. The number has to reflect number of buttons visible on the module front panel. In this case is the button number 1 the first one.

number of buttons on module	**s - choice**
1	1
2	2
4	4

⚠ ***ATTENTION !!*** Setting this parameter will significantly affect the dialing of numbers.

Parameter	Value	Meaning	Default
6*	**t**	Delayed start for PBX with line test (Siemens..) (0/1)	0

By default**, t=0** is off. By turning on **t=1 ,** the door communicator immediately goes to sleep after connecting the line and only after 5 sec the initialization will the door communicator complete the initialization. This will delay the pick-up of the line after the voltage is connected – the moment when the phone system / PBX is restarting or switched on.

5.6 HandsFree Setup

The speaker volume and microphone sensitivity are adjusted using potentiometers – see chapter 2.2, pg. 11.

5.7 Basic settings and deletion

Parameter	Value	Meaning	Default
8#	**#**	Set door communicator to default settings	only 3..-6..

These settings do not affect the parameters of groups **1** and **2** (stored phone numbers) it works as the execution of commands 83-86 at the same time.

Parameter	Value	Meaning	Default
81		Delete all numbers in Group 1((Day mode)	-
82		Delete all numbers in Group 2 (Night mode)	-
83		Set default settings for 3x parameters only	only 3..
84		Set default settings for 3x parameters only	only 4..
85		Set default settings for 3x parameters only	only 5..
86		Set default settings for 3x parameters only	only 6..

Parameters 81 and 82 will delete all phone numbers.
Parameters 83 – 86 will perform selective default settings only for parameters starting with 3, 4, 5, 6. The default values of the settings are listed for each parameter on the right – in the "Default" column.

⚠ ***CAUTION !!*** Deletion or setting to default is irreversible. Then the door communicator must be re-programmed as needed.

5.8 End of programming

Parameter	Value	Meaning	Default
9		Exit programming mode	-

The door communicator immediately hangs up.

5.9 Overview of parameters

Parameter	Value	Meaning	Default
1	**tt nn...**	Phone number **nn** assigned to the **tt** button	-
2	**tt nn...**	Phone number **nn** assigned to the **tt** button	-
31	**r m**	Relay **r** operates in **m** mode (1-4,6)	11
31	**r*tt**	The **tt** button triggers the relay **r** to be switched on when it is in mode M=6 (01-04)	01
32	**rp hh...**	in **DAY + NIGHT mode,** password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and **p**=* for 2 pulses (00-444444)	-
33	**rp hh...**	in **DAY mode** password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and p=* for 2 pulses (00-444444)	-
34	**rp hh...**	in **NOC mode,** the password **hh...** for relay **r,** in the order **p**=1-5, for 1 pulse and **p**=* for 2 pulses (00-444444)	-
35	**r aa**	**aa** command from the phone to turn on relay **r** 1 pulse (00-99,*0-*9)	155
36	**r aa**	**aa** command from the phone to turn on relay **r** 2 pulses (00-99,*0-*9)	150
37	**r ss**	**ss** time [sec] relay **r** switching on for T1 time (01-99)	105
38	**r p**	**r** relay control p for incoming call (0/1)	11
30	**r zz**	Time **zz** [sec] between pulses when relay **r** is switched on with two pulses - time T2 (01-99)	105
42	**z**	Call prolongation character (* / #)	*
43	**g bb**	Command to hang up the door communicator from the phone (00-99,*0-*9)	155
44	**xxxx**	Service Password (0000-9999)	0000
45	**dd**	Command to switch to **DAY** (00-99,*0-*9)	11
46	**nn**	Command to switch to **NIGHT** (00-99,*0-*9)	11[1]
47	**e**	Day-Night/Two groups mode (0/1)	1
4*	**k**	Hanging the line by pressing the same button again (0/1)	1

1*: By default, parameters 45 and 46 are set to the same value to prevent accidental switching to NIGHT mode. If you will use DAY/NIGHT switching set 10 for parameter 46.*

51	**q**	Number of rings before the door communicator picks up an incoming call (1-9)	2
52	**d**	Maximum call duration (0-9,*,#)	2
53	**w**	Time between button presses (1-9)	2
54	**z**	Hang-up time during redial (1-5)	2
55	**z**	Delay before the dialing starts (1-5)	1
56	**hh**	Number of ringtones before hang-up (04-99)	12
500	**x**	Tone detector mid frequency (1-0)	3 (375-475Hz)
501	**y**	Number of busy tones to hang up (2-0)	4
502	**z**	Continuous tone duration (1-5)	3 (3s)
503	**tt**	DTMF tone duration (04..16)	10 (100ms)
504	**mm**	DTMF space duration (04-16)	10 (100ms)
506	**p**	Pause duration (1-0)	4 (800ms)
61	**z**	Acoustic signaling (acknowledgment, error, empty memory, end of call...) (0/1)	1
62	**v**	Acoustic signaling pick up/hang up (0/1/2)	1
63	**u**	Acoustic signaling of ticking into a call (0/1)	0
65	**z**	Acoustic signaling of relay switching (0/1)	0
67	**b**	BabyCall – call without the need to program a phone number (0/1)	0
68	**m**	Silence of the line when the lock is closed (0/1)	0
6#	**s**	Set the number of buttons (1/2/4)	2
6*	**t**	Delayed start for PBX with line test (Siemens..) (0/1)	0
8#	**#**	Set door communicator to default settings	Only 3..-6..
81		Delete all numbers in Group 1((Day mode)	-
82		Delete all numbers in Group 2 (Night mode)	-
83		Set default settings for 3x parameters only	only 3.
84		Set default settings for 3x parameters only	only 4.
85		Set default settings for 3x parameters only	only 5.
86		Set default settings for 3x parameters only	only 6.
9		Exit programming mode	-

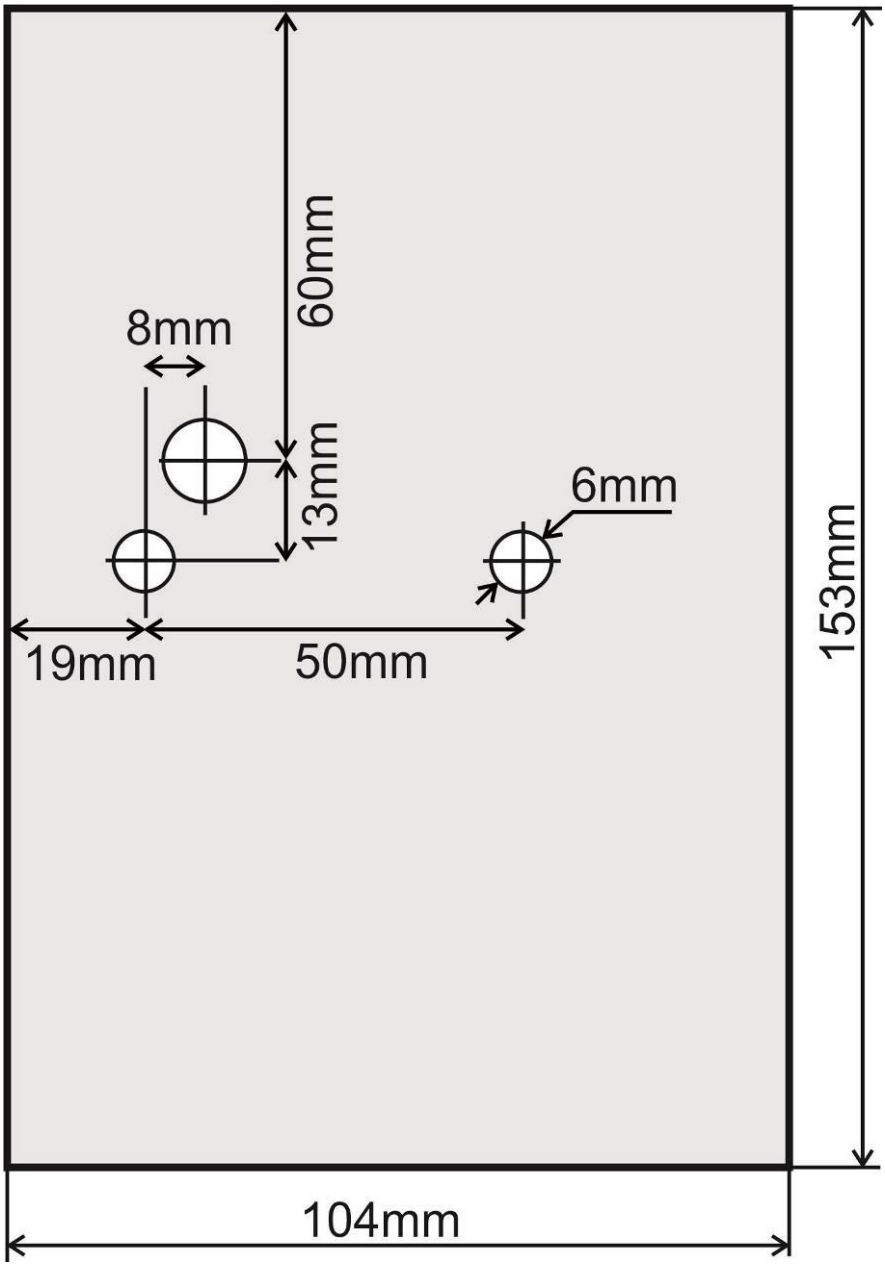
5.10 Electrical Parameters

Parameter	Value	Terms and Conditions
Minimum line current	25 mA	Pick up
Minimum line voltage	18 V	Hang up
Voltage on the line when picked up	<12 V	I = 25 mA
Bandwidth	300 Hz – 3400 Hz	20–60 mA
Ringer detector sensitivity	min. 10–25 V	
Power supply for lighting, switches and heaters	12 V DC (11-24 V), 12 V AC (10-18 V)	
Max lighting and heating consumption	250 mA	12 V DC
Max. relay contact voltage	48 V	at I <1 A
Max. relay contact current	1.5 A	at U <30 V
Operating temperature	- 20 až + 60 °C	
Coverage	IP44	

5.11 Mechanical dimensions

Size WxHxT	104mm x 153mm x 16mm
Weight (by number of buttons) on average	360g
Body material	anodized aluminium profile
Name tag material	acryl

6 Drilling template



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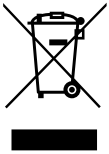

Do not contaminate the environment, make sure that the packing material will be disposed in accordance with applicable laws and regulations. At the end of the service life, It is necessary to ensure the environment-friendly disposal, it is recommended to recycle separate parts. The components to be recycled are marked with a symbol of recycling and symbol of a specific material.

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