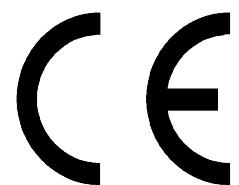


QUICK USER GUIDE

HELPY 2W-TL

Emergency call system
EN 81:28 (2022)
for top lift
installation



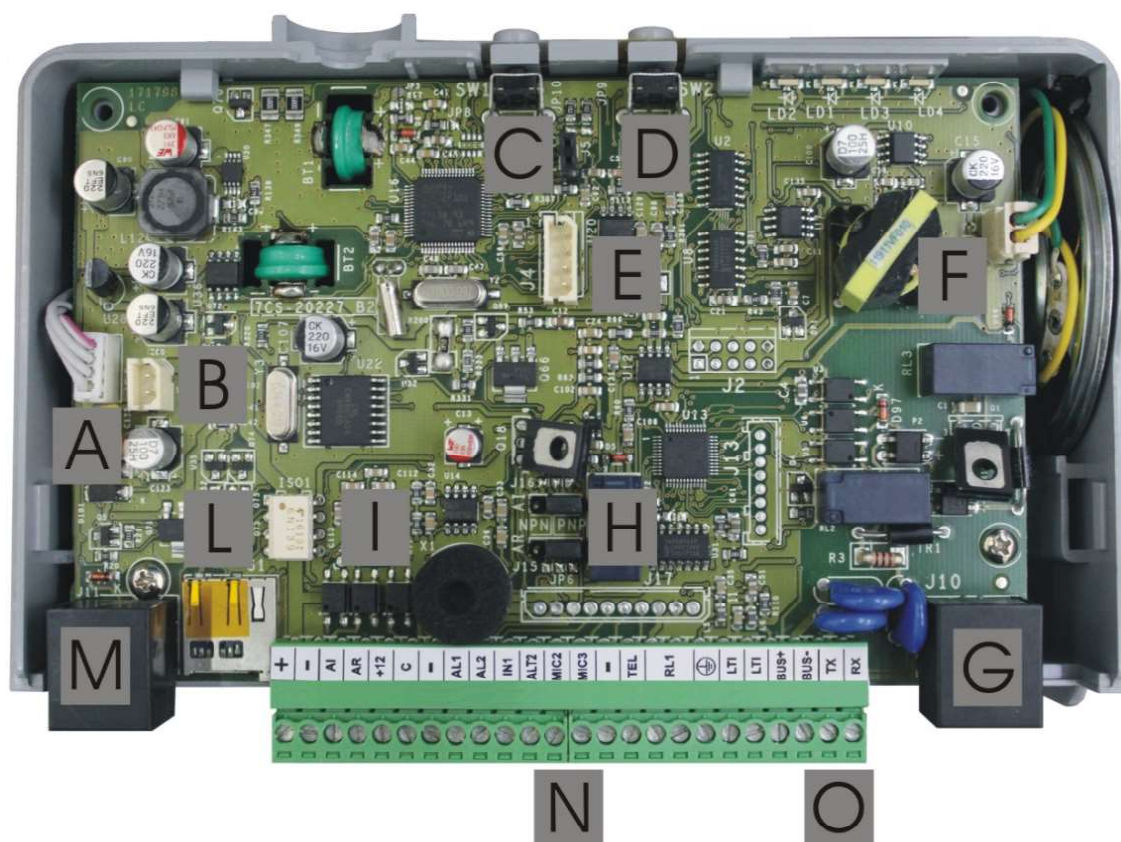
 **ROCOM**

Table of contents

Overview	4
Installation location.....	5
Security advice	5
Installation	5
Connection of the external power supply.....	5
Battery	6
Reset button	6
Screw connector	7
Connection for alarm button	8
Connection of external pictograms	9
General connection plan	10
Programming	11
Activate programming mode	11
Deactivate programming mode.....	11
Telephone numbers	12
Check the programmed telephone numbers	13
Recording identification message.....	13
Delete identification message	13
Listen to the identification message.....	13
ID code programming.....	13
Check the programmed ID code.....	14
Test call	14
Check test call programming.....	14
Test alarms	15
Acknowledgement procedure	15
Check acknowledgement procedure	16
Speech connection	16
Check speech connection activation.....	16
Emergency button filtering	17
Check emergency button filtering time	17
Time setting	17
Check internal clock time setting.....	17
Date setting	18
Check actual date setting	18
Volume setting.....	19
Check the volume setting.....	19
Change the password	19
Change language	19
Second and third tranquillization message	20
Emergency call button	21
Programming using a SD micro memory card.....	21
Reset to factory default.....	21
HOW TO USE (alarm call receiving).....	22
Alarm call to a alarm receiver (ESSETI, P100).....	22
Emergency call to a telephone (DTMF)	22
Ending the alarm.....	23

Red LED for device status 24
Yellow LED for alarm status..... 25
Green LED for GSM200-C mobile network signal strenght..... 25
Blue LED for power supply status..... 26
Gelbe und grüne LED (Piktogramme) 26
Yellow and green LED (pictograms)..... 27

Overview



- A Plug for internal power supply (must be removed when using external 12V supply!)
- B Plug for internal battery
- C Reset button
- D Call button
- E Serial interface for connection to PC
- F Plug for internal loudspeaker
- G RJ11 plug for machine room telephone
- H Jumper J16 for operating mode yellow pictogram
Jumper J15 for operating mode green pictogram
- I Internal microphone
- L Micro SD card holder
- M Connector for GSM200C gateway
- N Screw terminal connector
- O Battery compartment

Helpy 2W-TL

Installation location

The installation location of the device must:

- be in a dry room;
- be free from dust, heat and direct sunlight;
- be free from liquids or chemically aggressive substances.

Before installation, please note the following:

- The device may only be supplied with the voltage specified on the rating plate.
- If liquid should get into the device, immediately remove the plug from the socket. The device may only be repaired by trained specialists.
- Static discharges can damage the device. Therefore, before you continue working, make sure that any static charges have been discharged by appropriate grounding.

Security advice

Please read these operating instructions carefully before using the device. Observe the safety instructions. Failure to follow these rules could violate applicable law or create a dangerous situation.



Please note!

Think about your own safety when installing the emergency call system. Never work in an open elevator shaft without a safety line. Be careful and cut the current when connecting voltages of 230 - 400 V in the machine room of the elevator shaft. Before touching or connecting cables, always make sure they are powerless.

Installation

The Helpy 2W-TL is intended for installation on the car top or machine room of the elevator. When installing on the elevator car, an external microphone may be required for the car in addition to the emergency call button. When installing in the engine room, appropriate active 2W intercoms must be provided for the cabin, pit, etc. These are connected to the central Helpy 2W-TL unit via a 2-wire bus system. Up to 16 intercom units can be connected.

Connection of the external power supply

The device is designed for statical installation and external power supply with 230 VAC. If required also a 12 VDC power voltage can be used. The device has an internal NiMH battery for emergency power supply if external power is missing. The external power supply and battery status is show by the blue LED (see also *LED indicators*).



PLEASE NOTE!

While you are handling with the 230 VAC power be aware to fullfill all national and international security standards as required.

If you need to switch off the device it is not enough to unplug the external power supply, as in this case it will be still powered by the internal battery. To complete switch off the unit you have to unplug the external power and the internal battery.

Battery

The build in NiMH battery is continuously tested by the Helpy 2W-TL. If it will be deinstalled or fail the device will rise an appropriate alarm. A battery error is also showed by the blue LED. Furthermore this status is also indicated by a special dial tone. Every 30 seconds the device will check if the battery is connected or not. Also the battery capacity is tested by a discharging procedure. The first time this procedure will take place 15 days after first activation. During the procedure the battery will be discharged over a load for 3 hours. If after the test the battery capacity will be below a defined level an appropriate alarm is raised. The discharging test will not take place or will be interrupted if the device is missing the external power supply. Furthermore the battery is protected against deep discharge. The battery should be changed anyway every 2 to 4 years depending on the installation environment and usage. In case of substitution only the same or a equivalent battery must be used to avoid damage on the product.

Reset button

The reset button H (see image on page 3) has two functions:


Short press

The current emergency call is reset.

Long press (10 seconds)

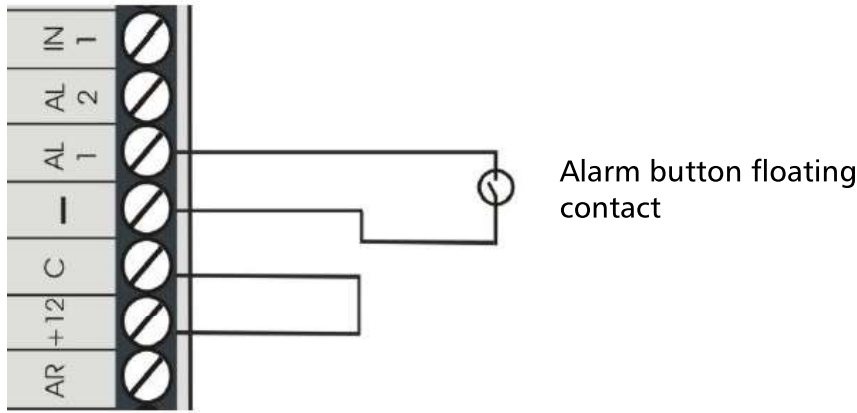
The device will be completely reset and restarted. The saved data are retained.

Screw connector

Designation	Description
+	External power input + 12 Vdc (remove plug A before use)
-	Extrenal power input -
AI	Output yellow pictogram driver "call activated" (12Vdc)
AR	Output green pictogram driver "call answered" (12Vdc)
+12	Power supply output (max. 100mA)
C	Common power supply for alarm buttons (AL and IN)
-	Ground
AL1	Emergency call button input (NO or NC)
AL2	Second emergency call/technical alarm/end of alarm input (NO or NC)
IN1	Input for alarm filter/end of alarm (NO or NC, dry contact)
ALT2	Output for external loudspeaker or passive speaker unit
MIC2	Input for external microphone or passive speaker unit
MIC3	Input for external microphone or passive speaker unit
-	Ground
TEL	Machine room phone (alternative to the RJ11 plug)
RL1	Relay contact (NO)
RL1	Relay contact (NO)
	Ground for telephone line overvoltage protection
LTI	Analogue telephone line a wire (or 2G/4G/VOIP gateway)
LTI	Analogue telephone line b wire (or 2G/4G/VOIP gateway)
BUS+	Bus line for active 2W speaker units +
BUS-	Bus line for active 2W speaker units -

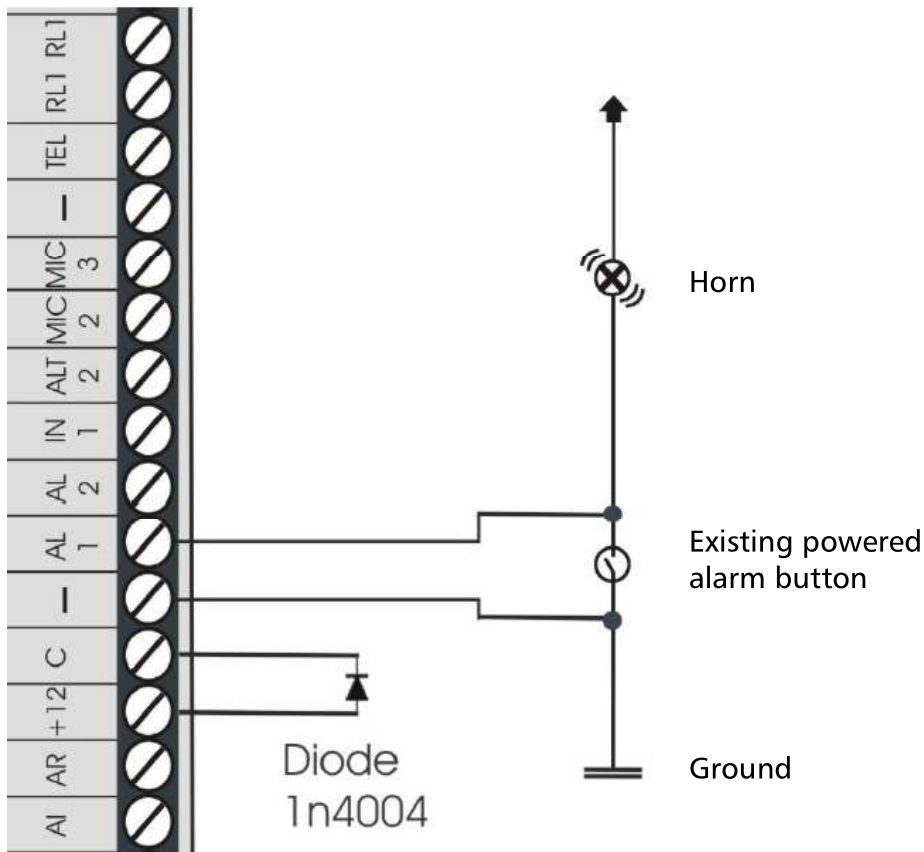
Helpy 2W-TL screw connector description

Connection for alarm button



Helpy 2W-TL connection of a floating alarm button or driver contact (NC or NO)

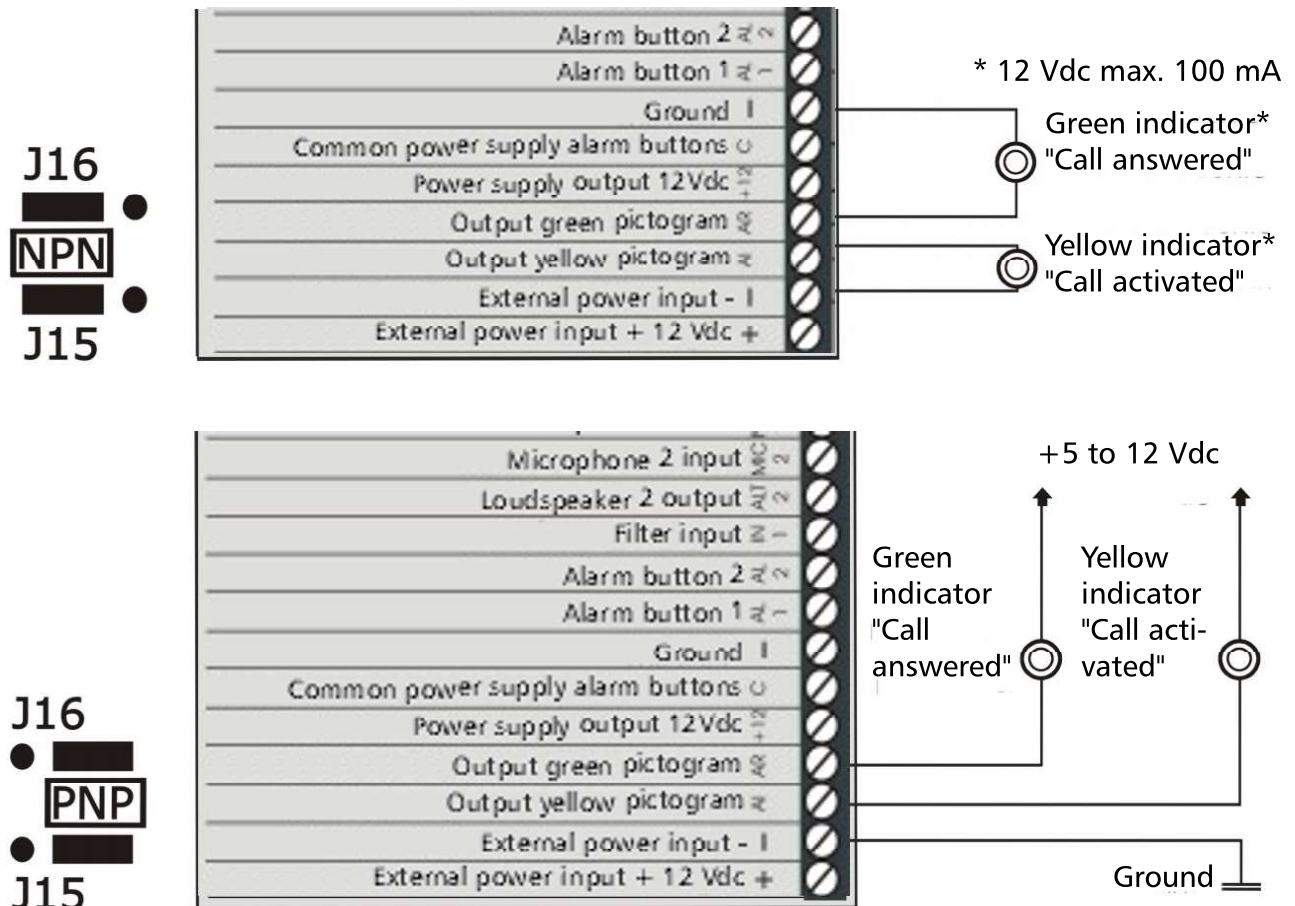
+12 to 24 Vdc



Helpy 2W-TL connection to an existing button with power (NO)

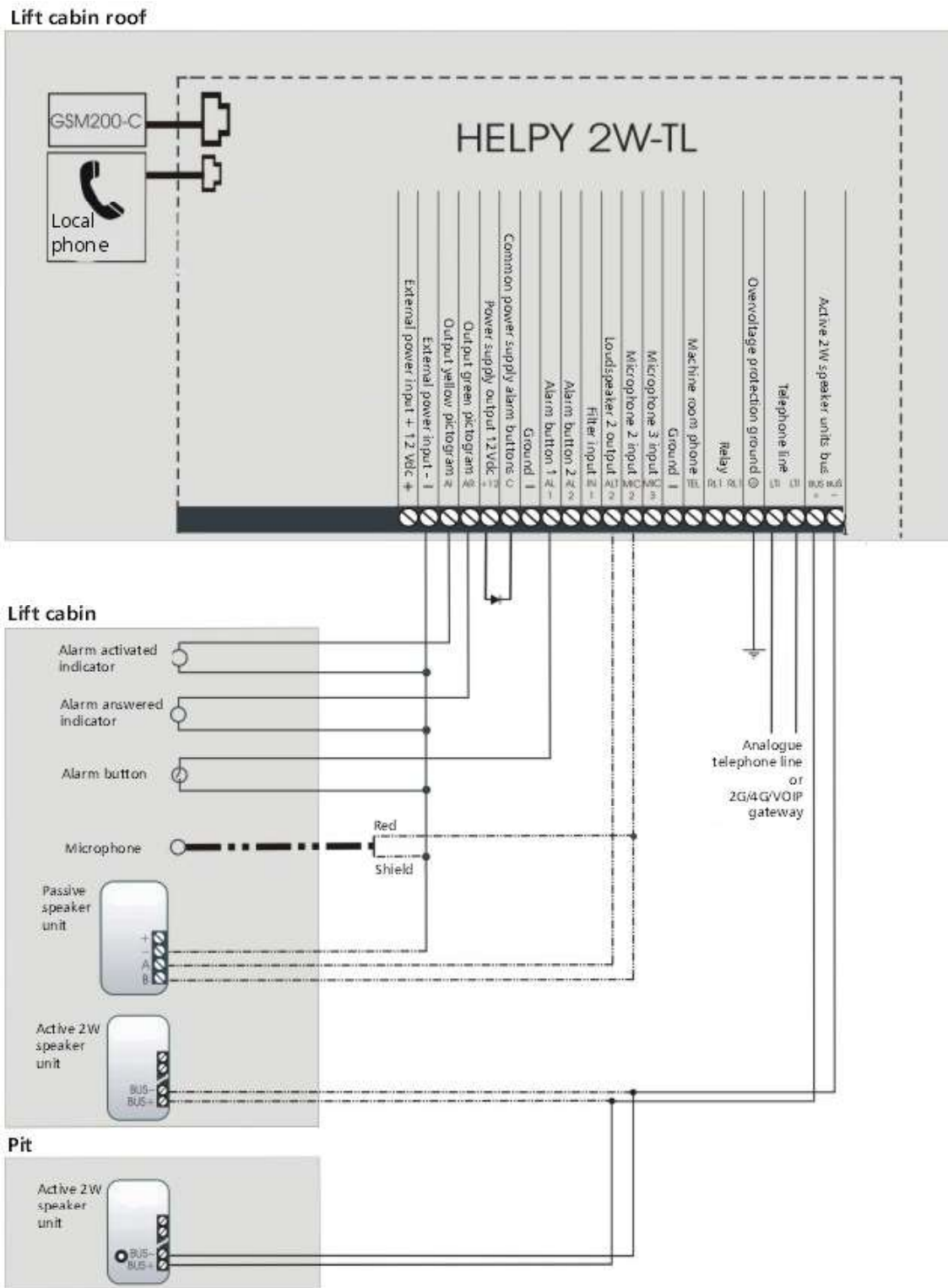
Connection of external pictograms

The external pictograms can be connected with common minus or common plus. In order to determine the operating mode, the jumper plugs J16 and J15 (see also H figure on page 4) must be used accordingly.



Helpy 2W-TL connection of external pictograms

General connection plan



Helpy 2W-TL general connetcion plan

Programming

Programming is done with the help of a DTMF telephone, via the serial interface with a PC or via a micro SD card. A programming tool ("Estant") is available for programming via PC and SD card (see www.rocom-gmbh.de for download).



Please note!

During programming, no more than 10 seconds should elapse between entering one digit and the next. After 10 seconds without entering a number, a warning tone sounds and you have to hang up.

These operating instructions are a short version with the most important settings. For a complete description use the programming tool Estant.

Activate programming mode

Programming mode must be activated for programming via DTMF telephone.

DTMF

* <Password (default "0")> #

Example DTMF (ex works)

* 0 #



Please note!

As long as the programming mode is switched on, incoming calls will not be answered.

Programming mode cannot be switched on when the alarm is active. This entry clears the active alarm.

Deactivate programming mode

To switch off the programming mode again:

DTMF

* <Password (default "0")> #

Example DTMF (default)

* 0 #



Please note!

With the same input it is possible to delete a triggered emergency call.

Telephone numbers

It is possible to program up to 12 different telephone numbers for emergency calls, routine calls and technical alarms. A corresponding reception protocol can be specified for each phone number. Each phone number can have up to 20 digits.

MFV

2**1**<position> <alarm type> <protocol> <telephone no.> **#**

Whereby:

<position> can have the value **0****1** to **1****2** for position 1 to 12.

<alarm type> can have the following values:

- **1** for **emergency call**
- **2** for **battery alarm*** (GSM500 Gateway)
- **3** for **test call***
- **4** for **speaker unit connection failure**
- **6** for **diagnostic alarm*** (microphone/loudspeaker failure)
- **7** for **power failure** (only with Rocom external power supply unit)
- **8** for **general technical alarm**
- **9** for **end of alarm**

<protocol> can have the following values:

- **2** for **DTMF phone** (acknowledgment using DTMF tones)
- **3** for **Esseti protocol**
- **4** for **CLIP call** (call without answer, only technical alarms)
- **6** for **P100 protocol**

<call number> is the call number of the recipient (max. 20 digits).

* When programming these phone numbers, this type of alarm is automatically switched on.

Example

You want to program two phone numbers (06106646042) for the emergency call and routine call with P100 protocol:

DTMF

2**1****0****1****1****6****0****6****1****0****6****6****4****6****0****4****2****#**
2**1****0****2****3****6****0****6****1****0****6****6****4****6****0****4****2****#**



Please note!

The CLIP protocol cannot be set for the "emergency call" alarm type, as these do not have a voice function. For the Esseti and P100 protocols, a corresponding ID code (see ID code programming) must also be set.

Check the programmed telephone numbers

You can check the programmed telephone number by dialing:

DTMF

21<position>*****

Recording identification message

If an emergency or technical alarm call is sent to a normal phone instead of a proper call center you can identify the calling lift using its own telephone number and an identification message. This message can be heard with both incoming and outgoing calls.

DTMF

7101 "Record identification message (max. 1 minute)" **#0**

Delete identification message

To delete the identification message:

MFV

7401

Listen to the identification message

You can hear the recorded identification message by dialing:

MFV

7201

ID code programming

If the emergency call, or also a technical alarm, has to be sent to a call center equipped with Esseti or P100 alarm receiver an ID code must be programmed to identify the calling lift.

DTMF

222<ESSETI ID code always 10 digits long>**#**

223<P100 ID code always 8 digits long>**#**

Example

You want to program a Sie P100 ID code (12345678):

DTMF

2 2 3 1 2 3 4 5 6 7 8 #

Check the programmed ID code

You can check the programmed ID code by dialing:

DTMF

2 2 2 * (ESSETI ID code)

2 2 3 * (P100 ID code)

Test call

As default the test call is set to be send every 3 days at 4:00 am. You can change this values:

DTMF

3 1 <days between test calls 1- 9>

3 2 <daytime HHMM; von 0000 bis 2359> (24 h mode)

Example

You to send a test call every day at 2:00 am:

DTMF

3 1 1

3 2 0 2 0 0

**PLEASE NOTE!**

The test call is activated only after you have programmed a proper telephone number for the receiver (see also *Telephone numbers*)

Check test call programming

You can check the programmed test call settings by dialing:

DTMF

3 1 * (days)

3**2******* (hour)

Test alarms

You can test the single programmed test and alarm calls by dialing

DTMF

9**0****0****9****9** <type>

Whereby <type> can have the following values:

- **①** for **speech emergency call**
- **②** for **battery alarm**
- **③** for **test call**
- **④** for **speaker unit connection failure**
- **⑥** for **diagnostic alarm**
- **⑦** for **power failure**
- **⑧** for **general technical alarm**
- **⑨** for **end of alarm**

Acknowledgement procedure

If the emergency call is to be received via DTMF dial, i.e. it is not connected to an emergency call center, it is possible to implement this with or without an acknowledgment procedure. With acknowledgment, the emergency call is only ended

completely after receiving the code number **0** (end). This means that the search process is ended. Without acknowledgment, the emergency call is ended by hanging up the receiver on the far end. Furthermore, it is possible to set the device so that the emergency call is only ended on site or after successful rescue (this corresponds to the specifications of the new EN81.28 (2022) standard). See also end alarm. The acknowledgment procedure is switched on ex works. To turn these off:

DTMF

7**7****0**

To reactivate the acknowledgement procedure:

DTMF

7**7****1**

To activate the acknowledgment procedure with local end of alarm:

DTMF**772**

Check acknowledgement procedure

You can check the programmed acknowledgement procedure settings by dialing:

DTMF**77***

Speech connection

You can define when a speech connection must be established (microphone activation) after a call answer.

- Only after sending the acknowledgement digit **4**
- Automatically after hearing the identification message
- Immediately after the call is activate

As default the speech connection will be activated after sending the acknowledgement digit **4**. To change this please dial:

DTMF

Automatically after identification message

781

Immediately after call activation

782

To set back to default setting:

DTMF**780**

Check speech connection activation

You can check the programmed speech connection activation settings by dialing:

DTMF**78***

Emergency button filtering

To avoid unneeded emergency calls the emergency call button is filtered. That means you have to press the button a specific time long before the alarm call will be activated. As default this time is set to 5 seconds. To change this time:

DTMF

4 2 <Filtering time for emergency call button 2 to 9 seconds>

Check emergency button filtering time

You can check the programmed emergency button filtering time settings by dialing:

DTMF

4 2 *

Time setting

To ensure that the test call will be sent at the required hour the real time clock inside the device must be set to the proper time.

DTMF

3 5 <actual time HHMM 24 h time format>

Example

You want to set the time at 5:30 pm:

DTMF

3 5 1 7 3 0



PLEASE NOTE!

The internal real time clock is powered by its own battery and will work completely independent from the external power supply.

The time setting must be in a 24 h format.

Legal time will switch automatically if the right date has been programmed (see also *date setting*).

Check internal clock time setting

You can check the programmed time setting by dialing:

DTMF

3 5 *

Date setting

To ensure that the clock will switch between summer and winter time as well that the log entries have the right date, the actual date must be set.

DTMF

3 6 <actual date with day of the week, day, month and year WDDMMYY>

Whereby the day of the week is set by using the following numerical values:

0	sunday
1	monday
2	tuesday
3	wednesday
4	thursday
5	friday
6	saturday

Example

you want to set the date sonnday the 30.october 2016:

DTMF

3 6 0 3 0 1 0 1 6



PLEASE NOTE!

The year must be set always with two digits, that means 16 for the year 2016.

It is important to set the actual date to ensure that the log entries have the right date and for the proper legal time switch.

Check actual date setting

You can check the actual date setting by dialing:

DTMF

3 6 *

Volume setting

The volume of loudspeaker and microphone can be set individually. The factory default values are: Loudspeaker 3, Microphone 5. To change these values:

DTMF

8**0** <speaker unit 01-16> <loudspeaker 1-9> <microphone 1-9> **#**

Example

You want to increase the master station loudspeaker volume from 3 to 9:

DTMF

8**0****0****1****9****5****#**

Check the volume setting

You can check the actual volume setting by dialing:

DTMF

8**0** <speaker unit 01-16> *****

Change the password

As default the password is set to "0". To change this:

DTMF

9**1** <old password> ***** <new password max. 4 digits> ***** <new password max. 4 digits> *****

Example

You want to change the password from "0" to "1234":

DTMF

9**1****0*********1****2****3****4*********1****2****3****4*******



PLEASE NOTE!

It is very important that you note the new password. If the password is lost the device can be set back only in the factory!

Change language

As default the german language is selected for all messages. To change the language:

DTMF**7 9** <language>

Whereby:

<language> can have the following value:

- **0 0** for **italian**
- **0 1** for **english**
- **0 2** for **german**
- **0 3** for **french**
- **0 4** for **polnish**
- **0 5** for **portuguese**
- **0 6** for **russian**
- **0 7** for **spanish**

Second and third tranquillization message

It is possible to activate a second and a third tranquillization message in a different language as the first one. As default this feature is deactivated. To activate this function:

DTMF**8 9** <second message language> <third message language> **#**

Whereby:

<second/third message language> can have the following value:

- **0 0** for **italian**
- **0 1** for **english**
- **0 2** for **german**
- **0 3** for **french**
- **0 4** for **polnish**
- **0 5** for **portuguese**
- **0 6** for **russian**
- **0 7** for **spanish**

To deactivate the feature:

DTMF**8 9 #**

Emergency call button

The emergency call buttons AL1 and AL2 are set as default as normally open buttons. These can be reprogrammed to openers if required. To program the emergency call buttons:

DTMF

4 1 <AL1> <AL2>

Whereby:

<AL1> and <AL2> can have the following values:

- **0** für opener (NC)
- **1** für closer (NO)

Programming using a SD micro memory card

With the Estant program, it is possible to carry out all the necessary programming for the emergency call device on a PC and then save it on a micro SD memory card. This data can then be transferred to the device. After the SD memory card has been inserted in the slot provided, switch the device off and on again, or press the reset button for 10 seconds. The red status LED now flashes quickly as long as the data is being transferred. At the end you will hear the announcement "Correct" again. The device is now programmed.

Reset to factory default

You can all time reset the device to factory default by dialling:

DTMF

9 9 * <password (default "0")> **#**



PLEASE NOTE!

The telephone number and ID code will not be cancelled. To delete this entries just overwrite them with an empty entry.

HOW TO USE (alarm call receiving)

Alarm call to a alarm receiver (ESSETI, P100)

The emergency phone should send a call to an always busy call center as defined by the EN81.1-2 standard for lift emergency call systems. As alternative also normale phone or mobile phone can be used to receive the alarm calls. A list with all the call centers provided with a proper alarm receiving equipmente can be found on www.rocom-gmbh.de.

Emergency call to a telephone (DTMF)

The instructions on the following pages are to receive alarm calls using a phone capable with DTMF dial functionality. In this case the dial pad is used to comand the connection and acknowledge the alarm call.



PLEASE NOTE!

All phone used to receive the alarm calls must have a marked dial pad as required. Also they must be clearly identified that they are used to receive emergency calls.

The incoming emergency calls are identified as such by a specific message. This will be played just after answering the call. After hearing to the message the following functions are available:

1. Acknowledge the call by pressing the key **4**. The speech connection will be activated.
2. After the call answer and the message advising the emergency call an identificati-
on message will be played. With the key **1** you can let play this message again.
3. If after the call answer no more keys will be pressed the call will be terminated automatically after 3 minutes. You will get an advice tone 30 seconds before this time expires. Pressing again the key **4**, the call can be prolungated for another 3 minutes.
4. The call can be terminated by pressing the key **0**. This will also terminate the call sequence.
5. As an alternative to the call end by the receiver also a "call end after liberation" can be used. In this case the call will be set on hold by using the key **5**. The alarm status will be now active also after hanging up the phone (yellow LED will lit) until liberation is done. In this status the calling speaker phone can be called any time directly without any further procedure. After liberation this has to be signalized by dialing ***0#0** from the machine room phone. Now a new alarm call is send to the original receiver which can now definitely terminate the call by pressing the key **0**.

If the alarm receiving party doesn't answer the call within 30 seconds, it is busy or does hang up an aswered call without sending the termination code (i.e. if the call is ansered by a answering machine), Helpy will hang up and dial the next tele



phone number in the list.

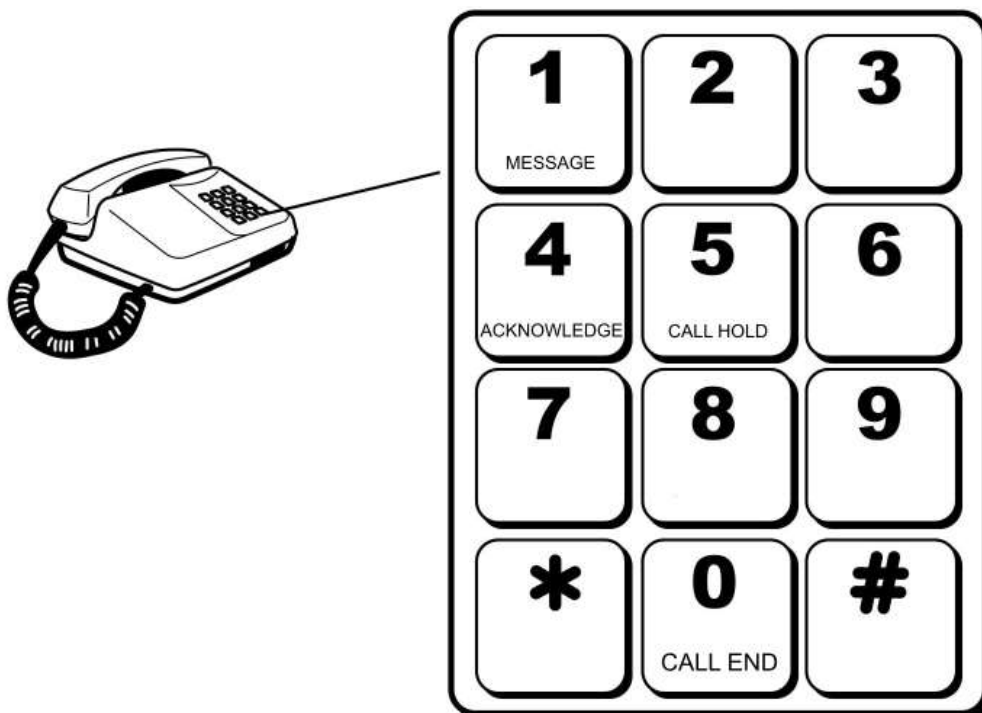
PLEASE NOTE!

All people involved in the alarm call receiving should be instructed in the use of the Helpy emergency phone!



PLEASE NOTE!

The described procedure refer to the the standard DTMF code provided as default. As this codes can be programmed so that the device could use different codes.



Helpy 2W-TL DTMF emergency call receiving. Standard codes.

Ending the alarm

As required by the actual EN81.28 (2022) norm an activ main alarm must be terminated on side after liberation. This function ist not active as default and must be programmed (see also *acknowledgement procedure*).

If the end of alarm is set for local termination it can be ended after liberation dialing:

From the machine room phone:

- Lift the handset and dial ***0##0**.

From remote:

- Call the device and after call answer dial ***0##0**.

Via a corresponding contact (button, key switch, magnetic switch, etc.):

- For this purpose, sensor IN1 (**556** or **557**) must be set for this function.

After ending the alarm the device will send, if required, a specific end of alarm call (see also *telephone numbers* (alarm type 9)).

Red LED for device status

Normal operation (no alarm)



Alarm



Voice connection



Battery disconnected or low battery (max. 1-hour operation in idle state)



2W speaker unit connection error or bus problem



Absence of telephone line



Button failure



Yellow LED for alarm status

Emergency-call alarm



Emergency call alarm suspended



Other alarms - Test call



Green LED for GSM200-C mobile network signal strenght

No signal



Low signal level (2G/3G network; connection not guaranteed)



Medium signal level (2G/3G network)



Good signal level (2G/3G network)



High signal level (2G/3G network)



Blue LED for power supply status

External power supply connected and the battery has max capacity charge



External power supply connected and the battery has good capacity charge



External power supply connected and the battery has medium capacity charge



External power supply connected and the battery has low capacity charge



External power supply connected and the battery is either disconnected or dead



External power supply disconnected and the battery guarantees more than 7-hour operation in idle state



External power supply disconnected and the battery guarantees up to 7-hour operation in idle state



External power supply disconnected and the battery guarantees 2-hour operation in idle state



External power supply disconnected and the battery guarantees 1-hour operation in idle state



Yellow and green LED (pictograms)

Yellow LED on: an emergency call has been activated

Green and yellow LEDs on: the emergency call has been answered

Green LED on: An intercom call is active

Green and yellow LEDs flash: the test call was unsuccessful



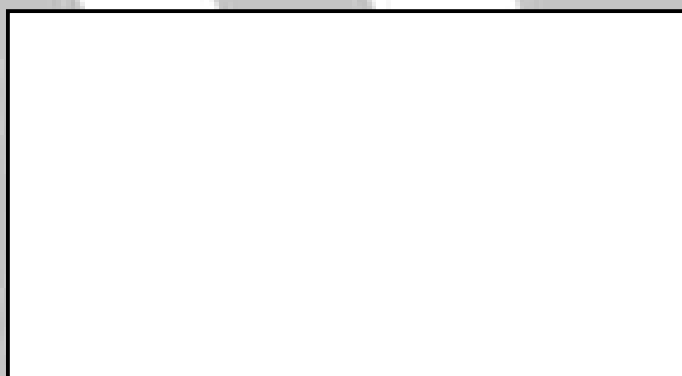
Please note!

If necessary, this latter signaling can be switched off with the programming

code **3****4****3**.

Power supply:	230 Vac max. 16W or 12 Vdc
Battery:	NiMH 12v 800 mAh
Indicators:	Four LED
Dial receiving:	DTMF
Programming:	DTMF, PC, SD memory card, SMS (only with GSM200-C)
Dimensions HxLxD:	62 x 182 x 123 mm
Weight:	706 g
Operating temperatur:	-0° to +40°C
Humidity:	30 to 90% relative humidity no condensing
Case:	ABS
Specifications:	EN62368-1, EN55022, EN55024 , EN12015, EN12016 EN81:1-2, EN81:28(2004), EN81:28(2018), EN81:70, EN81:80
Conformity:	CE, RoHS

Ihr Händler:



 **ROCOM**

Energie- und Kommunikationssysteme GmbH

Lessing Str. 20, 63110 Rodgau, Germany

Hotline +49- (0) 6106 - 646041

E-Mail: info@rocom-gmbh.de

<https://www.rocom-gmbh.de>