

Operating instruction

digimini

High-resolution mini dot matrix 50x50 mm

Status: 28.4.2024



STRACK
LIFT AUTOMATION

Important notice:

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Contents

1	Safety references	5
1.1	Typographic conventions and safety instructions	5
1.2	Product liability and warrantee	5
1.3	Personnel for installation and operation	5
1.4	Risk assessment	5
1.5	Operational reliability	5
2	Intended use	5
3	Scope of features included	6
4	General description.....	7
4.1	Options of indication	7
4.2	Option: direction indicator or travel continuation indicator	7
4.3	Option: display of special text.....	7
5	Version with icall bus connection	8
5.1	Hardware	8
5.1.1	Rear view	8
5.1.2	Front view	8
5.2	Connection assignment of the version with icall bus connection	9
5.2.1	Connection diagram.....	9
5.2.2	Plug connector J13 icall bus	10
	Plug connector J16, supplementary voltage source.....	10
5.3	Definition of bridges.....	10
6	Version with screwed terminals	11
6.1	Hardware	11
6.1.1	Rear view	11
6.1.2	Front view	11
6.2	Connection assignment of the version with screwed terminals.....	12
6.2.1	Connection diagram.....	12
6.2.2	Screwed terminals J15	13
6.3	Definition of bridges.....	13
7	Parameterising	14
7.1	General.....	14
7.2	Parameterising by indicator keys.....	14
7.2.1	Menu assisted parameterising by the keys of the display.....	15
7.3	Parameterising via remote control.....	16
7.3.1	Menu assisted parameterising by remote control	17
8	Parameters and value ranges	18
8.1	Displayable characters of floor position indicator and symbols for symbol indication	18
8.2	Displayable characters of normal texts	18
8.3	Parameters.....	19
8.4	Description of the parameters	21
8.4.1	General: Display mode	21
8.4.2	General: Operation mode	21
8.4.3	General: Display intensity	21
8.4.4	General: Installation floor level.....	21
8.4.5	General: Scrolling speed of text.....	21
8.4.6	General: Scrolling direction of text.....	21
8.4.7	General: Blinking frequency.....	21
8.4.8	General: Travel input	21
8.4.9	General: Inverting of travel input.....	22
8.4.10	General: Switch-over delay of position indicator -> direction indicator	22
8.4.11	General: Infrared interface "access code"	22
8.4.12	Floor position indicator: Number of inputs used	22
8.4.13	Floor position indicator: Inverting of inputs	22
8.4.14	Floor position indicator: Coding	22
8.4.15	Floor position indicator: Scrolling speed "change of floor"	22
8.4.16	Floor position indicator: Scrolling direction "change of floor"	22
8.4.17	Floor position indicator: Blinking	22
8.4.18	Floor position indicator: Contents of text	22
8.4.19	Floor position indicator: Contents of supplementary floor text.....	22
8.4.20	Arrows: Input definition	23
8.4.21	Arrows: Inverting of inputs	23

8.4.22	Arrows: Scrolling speed	23
8.4.23	Arrows: Scrolling direction	23
8.4.24	Arrows: Blinking	23
8.4.25	Arrows: Type of symbol	23
8.4.26	Arrows: No. of symbols	23
8.4.27	Special inputs: Input definition	23
8.4.28	Special inputs: Inverting	23
8.4.29	Special inputs: Exclusive indication	23
8.4.30	Special inputs: Blinking	23
8.4.31	Special inputs: Type of indication	23
8.4.32	Special inputs: Contents of text	24
9	Annex.....	25
9.1	General Gray code table	25
9.2	Cut-out of the front panel.....	25

1 Safety references

1.1 Typographic conventions and safety instructions

For this document the typographic conventions stated below shall apply.

Table 1:
typographic
conventions

Type style / symbol	Meaning
 Information	Includes special information and useful tips for working with the product
 Important	This warning label refers to dangers. There is a risk of accidents with bodily injuries or material damage if the respective precautions are not taken.

1.2 Product liability and warrantee

STRACK LIFT AUTOMATION GmbH reserves the right to modify the product from time to time without notice and to make changes. Application of this product in the USA and in countries under similar law is not permitted. Otherwise, the General Terms of Trade and Delivery of STRACK LIFT AUTOMATION GmbH shall apply.

1.3 Personnel for installation and operation

All chapters of this operating instruction include important information referring to the intended use of the product. These chapters are addressed to technically qualified persons especially trained for the installation, repair, maintenance and commissioning of lift installations to be erected in compliance with the relevant lift regulations. It is to be observed that all activities are carried out according to the respective legislation for occupational safety. Observe the relevant accident prevention rules and the regulations for safety measures upon installation and maintenance of lifts.

1.4 Risk assessment

Awareness and technical putting into practice of the safety instructions included in this documentation is prerequisite for a fault-free product. This documentation however cannot consider all possible details in all possible cases of installation. Therefore, like in any other case, an element of risk remains, particularly owing to human error. This documentation shall contribute to reduce the residual risk to a minimum.

1.5 Operational reliability

In order to guarantee the fault-free operation of the product the information in the plans supplied along with the material and the remarks in the operating instructions regarding electro-magnetic compatibility are to be observed strictly.

2 Intended use

The digital indicator “digidot” is intended exclusively for the signalisation of operating states of passenger and goods lifts or to other standards stated in the respective order. The purchase contract (order form, order acknowledgement, circuit diagrams etc.) is decisive for the definition of the intended use. All chapters of this operating instruction include important information for the intended use of this product.

3 Scope of features included

- ☺ power supply 24VDC with controller for low consumption and high EMC
- ☺ activation in the gray, binary or 1-out-of- n code
- ☺ common anode or cathode, adjustable by soldering jumpers
- ☺ 210 red image spots with 2 mm diameter each
- ☺ image area W x H (mm): 39 x 36
- ☺ menu-assisted, can be parameterised in built-in condition by 3 keys on the indicator or by infra-red remote control with RC5 code
- ☺ floor indicator with up to 3 characters
- ☺ overload indicator and out-of-service indicator integrated
- ☺ any adjustable texts or predefined symbols displayable via 4 special inputs
- ☺ intelligent travel continuation indicator
-> per each direction only one output at the control is required
- ☺ 4 different types of arrows for direction and travel continuation can be adjusted
- ☺ for any floor an additional text with up to 32 characters can be programmed
- ☺ arrangement of floor indicator, direction arrows and floor-related supplementary texts can be selected on the display
- ☺ scrolling and blinking speed can be adjusted
- ☺ easy snap-in installation

4 General description

The floor indicator **digimini** is a parameterisable, high-resolution dot matrix indicator with an up to 30 mm high floor indication display, floor related supplementary texts (horizontally scrolling), UP-DOWN-directional arrows (vertically scrolling or stationary), overload indicator, etc. The indicators can be used in the car and on the landings.

The following **types of connection** are available:

1. icall bus connection
2. plug-in/screw type terminal

4.1 Options of indication

All direction arrows can be used as indicators of either travelling direction or of travel continuation.

Option	Digits of floor position indicator	Height of characters of position indicator /mm	Supplem. floor related texts /mm	Direction arrows /mm
1	2	30	-	30, supersedes the position indication
2	3	15	-	30, supersedes the position indication
3	3	15, top	15, bottom	30, supersedes the position indication
4	3	15, bottom	15, top	30, supersedes the position indication
5	3	15, top	15, bottom	15, bottom (supersedes the floor related supplementary texts)
6	3	15, bottom	15, top	15, top (supersedes the floor related supplementary texts)

4.2 Option: direction indicator or travel continuation indicator

In the direction indicator mode a direction is indicated always when minimum one direction input is activated. Optionally, on occasion of a change of the floor position, the floor position can also be indicated briefly. For each indicator 2 outputs are needed at the control. The direction arrows can be scrolled over the travel input.

In the travel continuation indicator mode the direction is indicated only when at least one direction input is activated and the actual position of the installed indicator corresponds with the set position. This mode also needs only 2 outputs at the control.

The decision which one of the connected indicators will activate the arrow is taken by the respective indicator itself by means of the set level (parameter of actual position of the installed indicator).

4.3 Option: display of special text

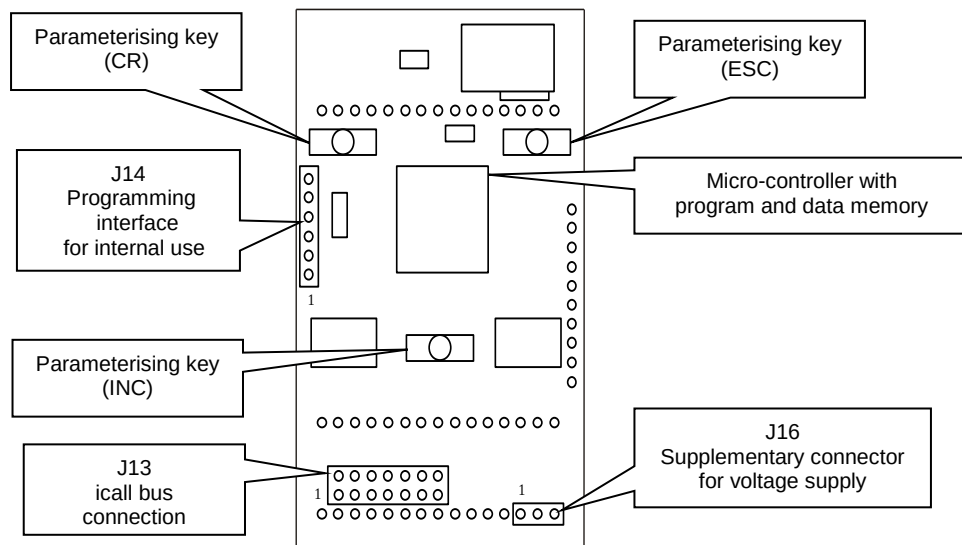
The indicator can display up to four different special texts with a length of max. 32 characters each, like "firemen control" or "fire emergency", via special inputs. If there are several inputs active at the same time, the input with the lower number has priority. The special texts can be displayed in all display modes either alone or with an indication of position instead of the floor related supplementary texts.

5 Version with icall bus connection

5.1 Hardware

5.1.1 Rear view

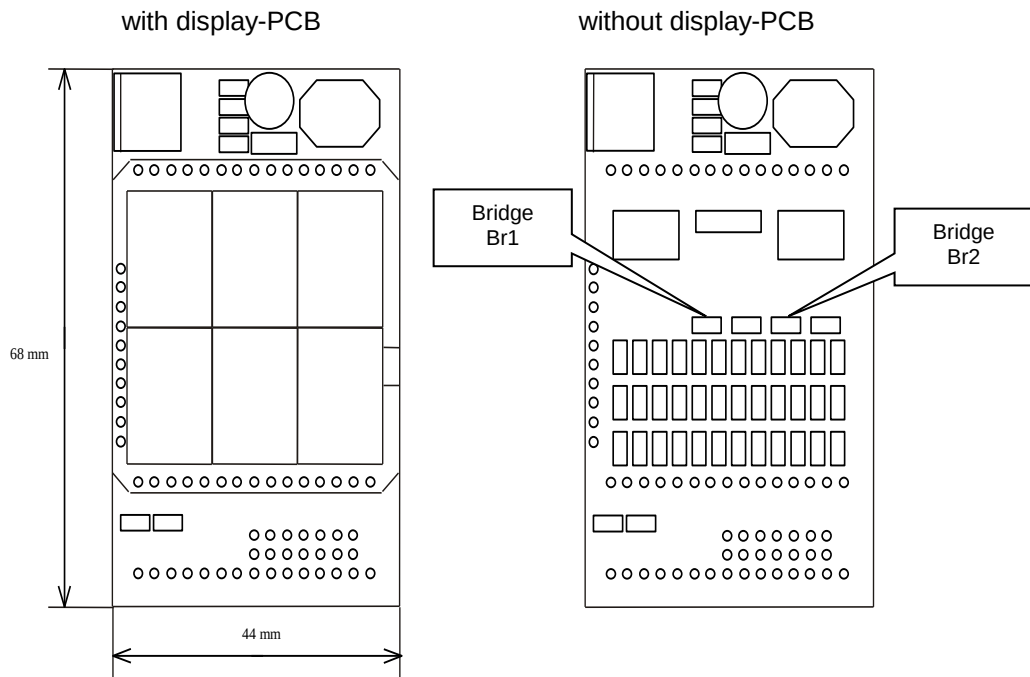
Figure 1:
digimini
icall hardware
rear view



5.1.2 Front view

Depth of the recess for the display with mounting frame = 26 mm.

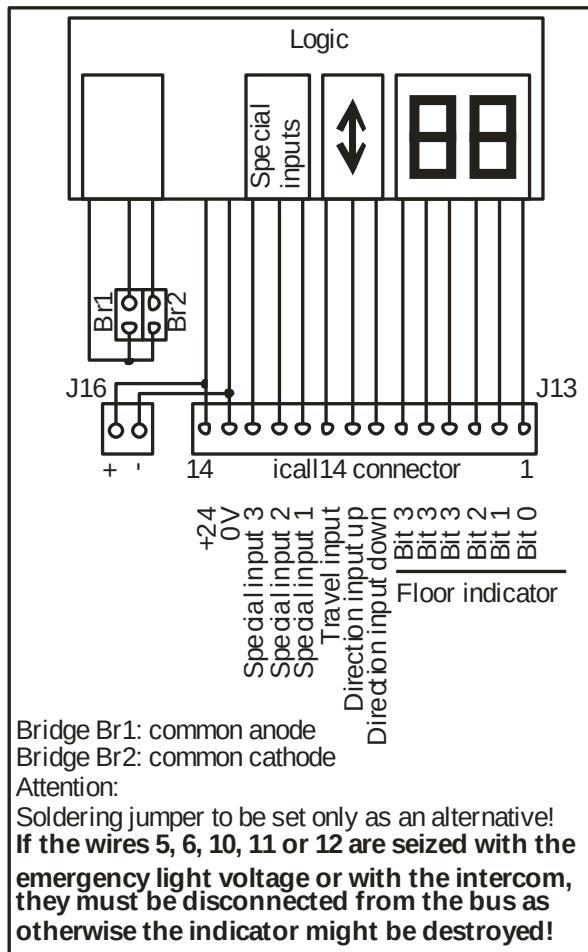
Figure 2a / 2b:
digimini icall
hardware
front view



5.2 Connection assignment of the version with icall bus connection

5.2.1 Connection diagram

Figure 3:
digimini
icall
connection
diagram



Alternatively a digimini with screwed terminals and icall interface module can be used.

Connect J16 only when the voltage drop in the icall bus cable is too high. The voltage drop depends on the length of the conductors, the cross section, the number of indicators and their light intensity, and from the current consumption of the other devices connected to the icall bus.

Generally spoken, the additional feed-in should be activated starting from 6 to 7 digimini indicators on a normal icall bus cable (without additional connected load).

5.2.2 Plug connector J13 icall bus



Table 1:
digimini-icall
plug J13

Important: All particulars given here regarding assignment and function of terminals 1-12 are basic settings and can be changed by changing the parameter settings.

Terminal No.	Activation	Standard assignm. / function	Current consumption mA
14		+ 24V	20-130 in normal operation, mean value 90, depending on the set light intensity and the no. of lit LEDs; Maximum 180 in test operation
13		0V(24)	
12	Parameter 27-31 Index 3	Special input 3	2,0
11	Parameter 27-31 Index 2	Special input 2	2,0
10	Parameter 27-31 Index 1	Special input 1	2,0
9	Parameter 8-9	Travel input	2,0
8	Parameter 20-26	Direction input UP	2,0
7	Parameter 20-26	Direction input DOWN	2,0
6	Parameter 12-19	Floor indication Gray code Bit 5	2,0
5	Parameter 12-19	Floor indication Gray code Bit 4	2,0
4	Parameter 12-19	Floor indication Gray code Bit 3	2,0
3	Parameter 12-19	Floor indication Gray code Bit 2	2,0
2	Parameter 12-19	Floor indication Gray code Bit 1	2,0
1	Parameter 12-19	Floor indication Gray code Bit 0	2,0

Plug connector J16, supplementary voltage source

Table 2:
digimini
connection
J16

Terminal No.	Connection / Activation	Standard assignm. / function	Current consumption mA
2		+ 24V	20-130 in normal operation, mean value 90, depending on the set light intensity and the no. of lit LEDs; Maximum 180 in test operation (The power consumption at term. 14 of plug J13 will decrease accordingly)
1		0V(24)	

5.3 Definition of bridges



Table 3:
digimini bridges
Br1and Br2

Important:
The bridges Br1 and Br2 are located beneath the indicator-PCB on the main PCB and shall never be closed at the same time, owing to a risk of damage for the indicator!

Bridges Br1 and Br2	
Bridge Br1 closed	Bridge Br2 closed
Inputs evaluated with common anode (additionally you must set the parameter 9, 13, 21 and 28 to "1")	Inputs evaluated with common cathode



Common cathode means that a voltage of +12 to +35V is applied to an input, to get it recognized as logic 1. Logic 0 is recognized if the input is open or if an input voltage of 0V to +9V is applied to.

Common anode means that a voltage of 0V to 0,8V is applied to an input, to get it recognized as logic 1. Logic 0 is recognized if the input is open or if an input voltage of +1,1V to +35V is applied to.

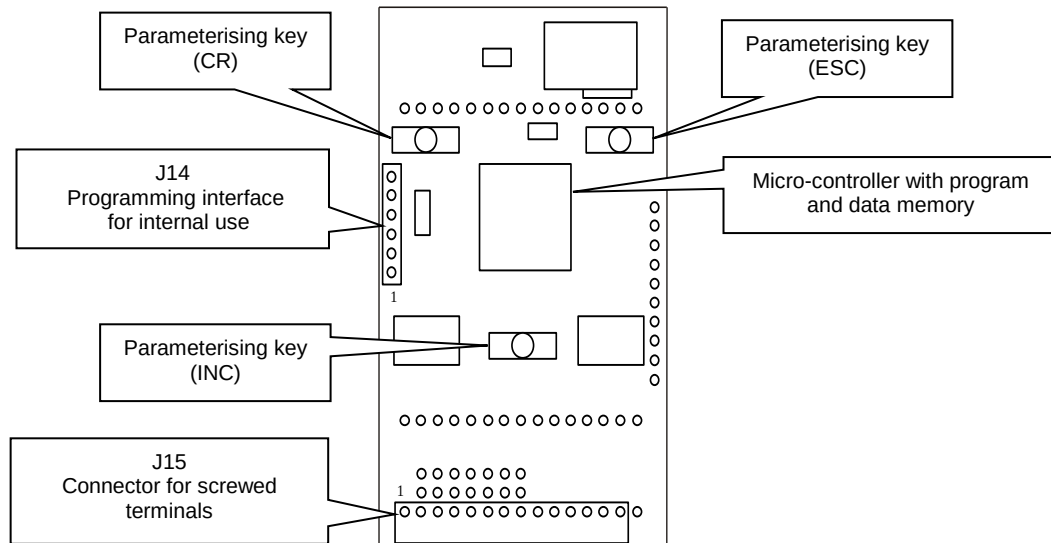
6 Version with screwed terminals

For connection, terminals of the screwed type are used. The connecting cross section is max. 0,5mm² (20 AWG). A screw driver with a 2mm blade is required

6.1 Hardware

6.1.1 Rear view

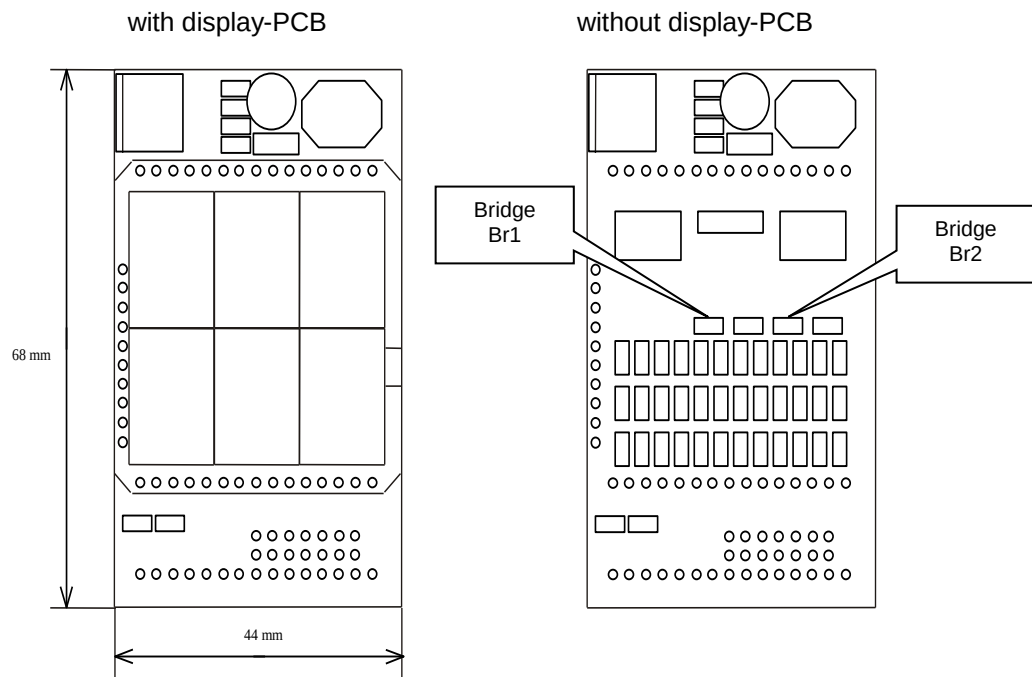
Figure 4:
digimini
hardware
rear view



6.1.2 Front view

Depth of recess for the display with mounting frame is 26 mm.

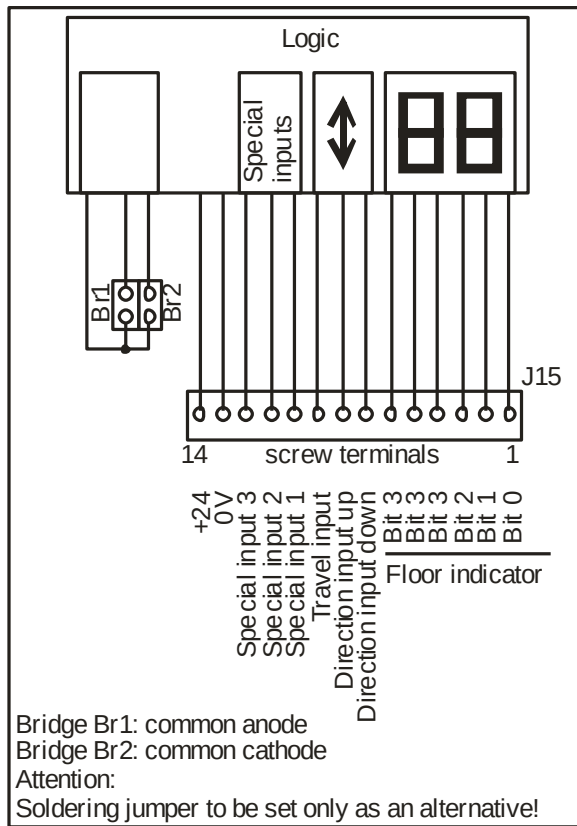
Figure 5a / 5b:
digimini
hardware
front view



6.2 Connection assignment of the version with screwed terminals

6.2.1 Connection diagram

Figure 6:
digimini
connection
diagram



6.2.2 Screwed terminals J15



Important: All particulars given here regarding assignment and function of terminals 1-12 are basic settings and can be changed by changing the parameter settings.

table 4:
digimini
terminal J15

Terminal No.	Activation	Standard assignment / function	Current consumption mA
14		+ 24V	20-130 in normal operation, mean value 90, depending on the set light intensity and the no. of lit LEDs; Maximum 180 in test operation
13		0V(24)	
12	Parameter 27-31 Index 3	Special input 3	2,0
11	Parameter 27-31 Index 2	Special input 2	2,0
10	Parameter 27-31 Index 1	Special input 1	2,0
9	Parameter 8-9	Travel input	2,0
8	Parameter 20-26	Direction input UP	2,0
7	Parameter 20-26	Direction input DOWN	2,0
6	Parameter 12-19	Floor indication Gray code Bit 5	2,0
5	Parameter 12-19	Floor indication Gray code Bit 4	2,0
4	Parameter 12-19	Floor indication Gray code Bit 3	2,0
3	Parameter 12-19	Floor indication Gray code Bit 2	2,0
2	Parameter 12-19	Floor indication Gray code Bit 1	2,0
1	Parameter 12-19	Floor indication Gray code Bit 0	2,0

6.3 Definition of bridges



Important: The bridges Br1 and Br2 are located beneath the indicator-PCB on the main PCB and shall never be closed at the same time, owing to a damaging risk for the indicator!

Table 5:
digimini bridges
Br1and Br2

Bridges Br1 and Br2	
Bridge Br1 closed	Bridge Br2 closed
Inputs evaluated with common anode (additionally you must set the parameter 9, 13, 21 and 28 to "1")	Inputs evaluated with common cathode



Common cathode means that a voltage of +12 to +35V is applied to an input, to get it recognized as logic 1. Logic 0 is recognized if the input is open or if an input voltage of 0V to +9V is applied to.

Common anode means that a voltage of 0V to 0,8V is applied to an input, to get it recognized as logic 1. Logic 0 is recognized if the input is open or if an input voltage of +1,1V to +35V is applied to.

7 Parameterising

7.1 General

The **digimini** indicator can be extensively parameterised directly on the indicator by keys or by a normal IR remote control with RC5 code in the device mode TV (device code 00). In case of changes in the parameters the use of the remote control can indeed offer some advantages, since the indicator can be parameterized in built-in condition. A suitable remote control is available from STRACK as an option and is not a part of the supply of the **digimini** indicator. If remote control is used, a 4-digit number code is to be entered before (see parameter list in paragraph 8.3). Without this access code the indicator can not be influenced.

The parameters are stored in a non-volatile EEPROM data memory. By copying the memory (special equipment needed) the data of a fully parameterised display can be transferred to other displays.

The data input is made by 3 parameterising keys ESC, CR and INC in the rear or by the remote control with keys channel +/- and volume +/- and the key pad. The menu controlled communication with the user is conducted via the normal indicator display.

If now in normal operation of the indicator (display mode) the keys ESC and CR are pressed simultaneously, or the access code is entered via the keypad of the remote control (default 0000), the menu with the parameter settings is entered. All parameters and texts can be changed, now.

The current menu level is indicated on the display.

If INC or "DEC" resp. volume+ or volume- are pressed for a longer time the set value continues to run automatically.

If during parameterising for 2 minutes no input is set, the indicator returns automatically to the display mode.

Special function "test mode"

If during the parameterising the 3 keys are pressed simultaneously or the "power"-key on the remote control is pressed, the indicator goes into the test mode where all dot matrix LEDs will be switched on. This function is for checking the indicator unit. The test mode is ending automatically after about 2 seconds.

7.2 Parameterising by indicator keys

When parameterising by the keys, look from the front onto the display and put 3 fingers on the three parameterising keys ESC, CR and INC at the rear side.

Meaning of the keys:

Key ESC:	ESC	abort
Key CR:	CR	transfer
Key INC:	INC	numerical value +1
Key INC and ESC:	DEC	numerical value -1

- Set the parameter that is to be changed by the keys INC or "DEC" (INC+ESC), then press transfer the key CR.
- Perhaps set the index by the keys INC or „DEC“, then press the transfer key CR.

Numeric parameters:

The actual value is displayed and can be increased or decreased by the keys INC or DEC. If the value arrives at a setting limit it will jump to the next possible value.

Via transfer key CR the changed value is taken over. By pressing key ESC the old value will be maintained. In both cases there will be a jump back to the previous menu level.

- **Text parameters:**

The current text is displayed and terminated with an end-symbol (filled rectangle). The 1st character can now be increased by key INC or decreased by DEC. If the value arrives at a setting limit it will jump to the next possible value. If a character has been set go to the next one with transfer key CR. The text is shifted by one position to the left and the next character to be changed will be in the 1st position. Continue with the procedure until you have entered the required text.

Set the end-symbol at the end of the text (filled rectangle) and confirm again with transfer key CR. Now the text is memorized and you will be on the previous menu level.

7.2.1 Menu assisted parameterising by the keys of the display

Meaning of the abbreviations:

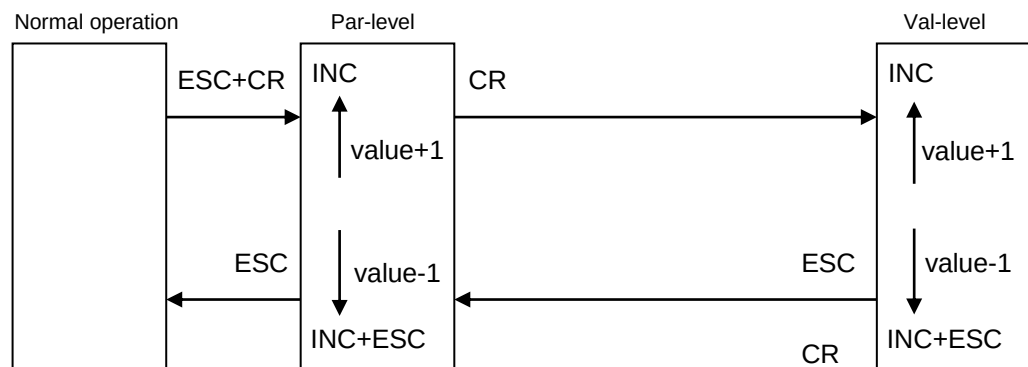
P: "Parameter" means the parameter number

V: "Value" is the value resp. the text associated to the parameter

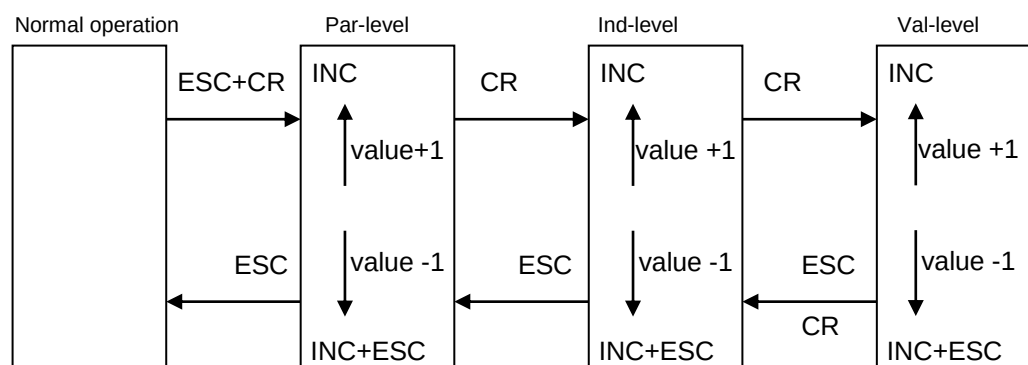
I : "Index" is to be stated only in case of parameters with index

Parameter without index

Figure 7:
menu operation
by keys
on the display



Parameter with index



7.3 Parameterising via remote control

The indicator will be parameterized at the front side via remote control. The panel where the indicator is accommodated does not need to be dismantled.

Meaning of the keys:

Key Channel+	CR	transfer
Key Channel-	ESC	abort
Key Volume+	INC	numeric value +1
Key Volume-	DEC	numeric value -1

- Set the parameter that is to be changed by keys Volume+ or Volume-, then press transfer key Channel+.
- Perhaps set the index by keys Volume+ or Volume-, then press transfer key CR.
- **Numeric parameters:**
The actual value is displayed and can be increased by key Volume+ or decreased by key Volume-. If the value arrives at a setting limit it will jump to the next possible value. Via transfer key Channel+, the changed value is taken over. By pressing the cancel key Channel- the old value will be maintained. In both cases there will be a jump back into the previous menu level.
- **Text parameters:**
The current text is displayed and terminated by an end-symbol (filled rectangle). The 1st character can now be increased by key Volume+ or decreased by Volume-. If the value arrives at a setting limit it will jump to the next possible value. If a character has been set go to the next one with transfer key Channel+. The text is shifted to the left by one position and the next character to be changed will be in the 1st position. Continue with the procedure until you have set the required text.
Set the end-symbol at the end of the text (filled rectangle) and confirm again with transfer key Channel+. Now the text is memorized and you will be on the previous menu level.

7.3.1 Menu assisted parameterising by remote control

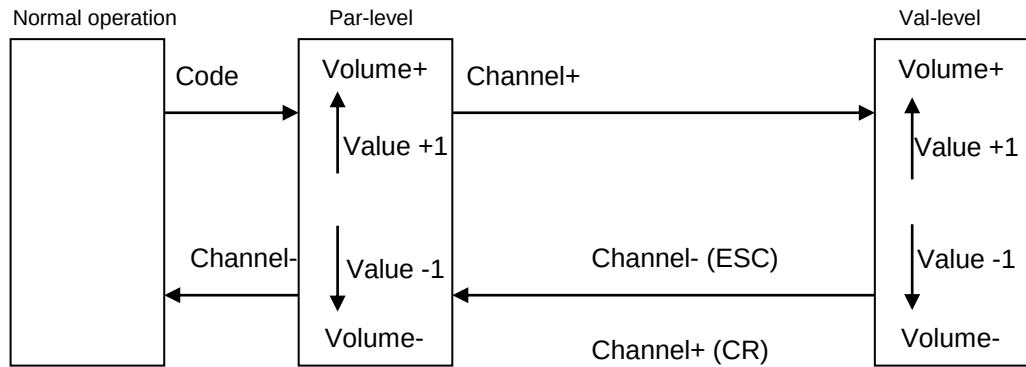
Meaning of the abbreviations:

P: "Parameter" means the parameter number

V: "Value" is the value resp. text associated to the parameter

I: "Index" is to be stated only in case of parameters with index

Parameters without index



Parameters with index

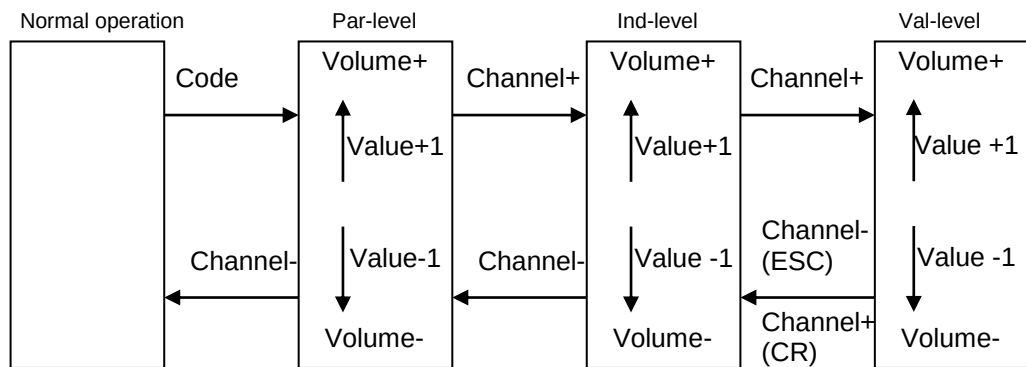


Figure 8:
menu operation
by the keys of
the remote
control

8 Parameters and value ranges



Note: The end-symbol (a rectangle of 4x6 dots) is not visible on the display, it shall only mark the end of the text during the setting. After the end-symbol a possibly existing old text will be cancelled. If the new text is longer than the existing one, just overwrite the end symbol with the desired character and set again the end symbol at the end of the new text.

8.1 Displayable characters of floor position indicator and symbols for symbol indication

The following set of characters is available:

For the floor position the characters in the white table cells, for symbols the characters in the grey table cells.

Some arrows and symbols are combined from two halves. These characters are marked with .../1 and .../2 (e.g., for the overload symbol an "i" and a "j" are to be entered in the text memory).

Table 6:
table of
characters
floor position
and symbols

Code	Character	Code	Character	Code	Character
0	0	F	F	\	(do not use)
1	1	G	G	]	(do not use)
2	2	H	H	^	(do not use)
3	3	I	I		(do not use)
4	4	J	J	`	(do not use)
5	5	K	K	a	(do not use)
6	6	L	L	b	(do not use)
7	7	M	M	c	(do not use)
8	8	N	N	d	(do not use)
9	9	O	O	e	(do not use)
:	blank	P	P	f	(do not use)
;	.	Q	Q	g	No admittance /1
<	-	R	R	h	No admittance /2
=	=	S	S	i	Overload /1
>	+	T	T	j	Overload /2
?	/	U	U	k	Fire /1
@	#	V	V	l	Fire /2
A	A	W	W	m	Ambulance service /1
B	B	X	X	n	Ambulance service /2
C	C	Y	Y	o	Attention /1
D	D	Z	Z	p	Attention /2
E	E	[	(do not use)		

8.2 Displayable characters of normal texts

To display, for example, supplementary texts on the floors or for special inputs the following set of characters is available:

Table 7:
table of
characters
supplementary
texts

blank	0	@	P	Ü	p	End-symbol
!	1	A	Q	a	q	
"	2	B	R	b	r	
#	3	C	S	c	s	
blank 2	4	D	T	d	t	
%	5	E	U	e	u	
&	6	F	V	F	v	
'	7	G	W	G	w	
(	8	H	X	H	x	
)	9	I	Y	I	y	
*	:	J	Z	J	z	
+	;	K	[	K	ä	
,	<	L	\	L	ö	
-	=	M	]	M	ü	
.	>	N	Ä	N	ß	
/	?	O	Ö	O	°	

"Blank" is considered upon calculation of the middle position of the text,
"blank 2" is not. The end-symbol is a filled-in rectangle (see paragraph 7.2)

8.3 Parameters



The maximum no. of characters of all texts is 490. For the calculation of the total no. of characters, to each and any text one character is to be added. Unused texts always consume one character each.

The maximum no. of characters of one text is shown in the table below.

(For further explanations see also the description of the parameters in paragraph 8.4)

Table 8:
parameters

No	Designation	Index area with brief description	Parameter area with brief description
Allgemein			
01	Display mode	-	0: Floor indicator full height 2 digits no supplementary floor text alternatively: direction indicator full height 1: Floor indicator half height 3 digits no supplementary floor text alternatively: direction indicator full height 2: Floor indicator half height 3 digits, bottom with supplementary floor text, top alternatively: direction indicator full height 3: Floor indicator half height 3 digits, top with supplementary floor text, bottom alternatively: direction indicator full height 4: Floor indicator half height 3 digits, bottom with supplementary floor text, top alternat.: direction indicator half height, top 5: Floor indicator half height 3 digits, top with supplementary floor text, bottom alternat.: direction indicator half height, bottom
02	Operation mode	-	0: Direction mode (always indicated, irrespective of the position of indicator or lift) 1: Travel continuation mode (indicated only if the lift is on the same level as the indicator)
03	Display intensity	-	0 ... 8: dark ... light
04	Installation floor level:	-	0: off 1 ... 63: level 1-63 The indicator reacts to direction inputs only in the operation mode "travel continuation", when the current position corresponds with the set level.
05	Scrolling speed of text	-	0 ... 15: quick ... slow
06	Scrolling direction of text	-	0: normal 1: opposite
07	Blinking frequency	-	0 ... 7: quick ... slow
08	Travel input	-	0: Travel input cut off 1-12: No. of input at the connector
09	Inverting of travel input	-	0: logic condition in the controller corresponds to input condition, 0 is 0 and 1 is 1 1: logic condition in the controller inverted input condition, 0 it 1 and 1 is 0
10	Switchover-delay Pos.indicator-> direction indicator	-	0: off 1 ... 63: short ... long 1= 0,5s, 63= 17,5s, width of step about 0,25s This is the min. time in operation mode "direction indication", for which the direction indicator is shielded at a change of position. See also 8.4.10
11	Infrared interface Access code	01-04: Character position	0 ... 9 The code consists of 4 characters, character 01 being the 1 st digit and character 04 the 4th digit Basic default 0000

Floor position indicator			
12	No. of inputs used	-	0 ... 6: none ... 6 for Gray and binary code 0 ... 12: none ... 12 for 1-out-of-n code
13	Inverting of inputs	-	0: logic condition in the controller corresponds to input condition, 0 is 0 and 1 is 1 1: logic condition in the controller inverted input condition, 0 is 1 and 1 is 0
14	Coding	-	0: Gray code 1: Binary code 2: 1-out-of-n code
15	Scrolling speed Change of floors	-	0: jumps 1 ... 15: quick ... slow
16	Scrolling direction Change of floors	-	0: normal 1: opposite
17	Blinking	-	0: off 1: on
18	Contents of text	01-63: level	Display mode 0: max. 2 characters per level Otherwise: max. 3 characters per level (displayable characters see table 8)
19	Contents of text Supplementary floor text	01-63: level	Max. 32 characters per level (displayable characters see table 9)
Arrows			
20	Input definition	-	0: direction inputs off 1-11: no. of the input at the connector of direction down, direction up = direction down +1
21	Inverting of inputs	-	0: logic condition in the controller corresponds to input condition, 0 is 0 and 1 is 1 1: logic condition in the controller inverted input condition, 0 is 1 and 1 is 0
22	Scrolling speed	-	0: off 1 ... 15: quick ... slow
23	Scrolling direction	-	0: normal 1: opposite
24	Blinking	-	0: off 1: on
25	Type of arrow symbol	-	0: filled-in small triangle 1: small arrow 2: large arrow 3: filled-in large triangle Symbols 2 and 3 must not be used in the display mode 4 or 5.
26	No. of symbols	-	0: 1 arrow symbol 1: 2 similar arrow symbols 2 symbols are indicated only if - the type of symbol is not 3 and - only one direction input is set If both direction inputs are set, an up arrow and a down arrow will appear
Special inputs			
27	Input definition	01-04: Special input 1-4	0: Special input off 1-12: No. of the input at the connector
28	Invertierung	01-04: Special input 1-4	0: logic condition in the controller corresponds to input condition, 0 is 0 and 1 is 1 1: logic condition in the controller inverted input condition, 0 is 1 and 1 is 0
29	Exclusive indication	01-04: Special input 1-4	0: on 1: off
30	Blinking	01-04: Special input 1-4 05: Out-of-service	0: off 1: on
31	Type of indication	01-04: Special input 1-4 05: Out-of-service	0: Text display 1: Symbol indication
32	Contents of text	01-04: Special input 1-4 05: Out-of-service	Max. 32 characters per each input (displayable characters see table 9)

8.4 Description of the parameters

8.4.1 General: Display mode

By means of the display mode the appearance of the **digimini** is defined.
The following possibilities of adjustment are available:

Mode	Digits of the floor position indicator	Height of characters of the floor position indicator /mm	Supplem. floor texts /mm	Direction arrows /mm
1	2	30	-	30, supersedes the position indicator
2	3	15	-	30, supersedes the position indicator
3	3	15, top	15, bottom	30, supersedes the position indicator
4	3	15, bottom	15, top	30, supersedes the position indicator
5	3	15, top	15, bottom	15, bottom (supersedes suppl. floor text)
6	3	15, bottom	15, top	15, top (supersedes suppl. floor text)

8.4.2 General: Operation mode

By this parameter can be selected whether the indicator shall run in the direction mode or in the travel continuation mode.

0: Direction mode

The direction is indicated any time a direction input has been entered. If the position changes while a direction is indicated, the position can briefly be indicated in addition via the switch-over delay. If no direction input has been set, the current position is indicated.

1: Travel continuation mode

The direction is always indicated, even when a direction input has been set. If the parameter "Installation floor level" has been set and the set level applies at the position inputs, the corresponding direction of travel continuation is indicated.

8.4.3 General: Display intensity

Here the intensity of the display is adjusted. Since the indicator consists of 210 LEDs it is to be taken into account that the current consumption increases considerable with the intensity of the indication. Mind the admissible current load of power supply and icall bus cable before increasing the intensity. With full intensity and all LEDs switched on the current consumption is 180 mA.

8.4.4 General: Installation floor level

The installation floor level is active only in the travel continuation mode. The direction is indicated when the installation floor level corresponds with the current position.

8.4.5 General: Scrolling speed of text

The parameter is for setting the scrolling speed of the supplementary floor texts and the texts for the special inputs.

8.4.6 General: Scrolling direction of text

Here it is defined whether the normal scrolling direction from the right to the left is desired or the opposite one.

8.4.7 General: Blinking frequency

Adjustment of the blinking frequency of indicators.

All blinking indicators are using this adjustment as the time base for their frequency of blinking.

8.4.8 General: Travel input

By this input the indicator can distinguish whether the lift is stopping or running.

In the direction mode the direction arrow can be made scrolling, while in the travel continuation mode the position indicator is switched on again. The travel input can put to

connection 1-12 of a plug connector, however a double assignment with other inputs should be avoided.

8.4.9 General: Inverting of travel input

Here, the travel input can be inverted logically (not electrically). The definition of the voltage level can be taken from the definition of bridges.

8.4.10 General: Switch-over delay of position indicator -> direction indicator

The switch-over delay is active only in the direction mode, in order to slot in the position briefly during the trip, when the position changes. It is the minimum time for slotting-in the position, it can be extended for various modes of indication by supplementary texts scrolling through the display.

8.4.11 General: Infrared interface "access code"

As the indicator can be parameterized from outside through an infrared interface, thus allowing unauthorized persons to get access to parameterising, a 4-digit access code can be set here. The default is always 0000, this code however should be changed on installation, so that only you will get access to the display. Each digit can be a number from the range of 0 ... 9.

8.4.12 Floor position indicator: Number of inputs used

The maximum number of possible inputs depends on the code. From (fixed) connection 1 upward the further connections will be assigned ("x" = set value).

0 ... 6: none ... 6 for Gray and binary code, no. of displayable levels is $(2^x - 1)$, max. 63

0 ... 12: none ... 12 for 1-out-of-n code, no. of displayable levels is x, maximum 12

8.4.13 Floor position indicator: Inverting of inputs

In this mode the position inputs can be inverted logically (not electrically). The definition of the voltage level can be taken from the definition of the bridges.

8.4.14 Floor position indicator: Coding

Here, the indicator is informed in which code the floor position is provided by the lift control.

0: Gray code, maximum 63 levels with 6 inputs

1: Binary code, maximum 63 levels with 6 inputs

2: 1-out-of-n code, maximum 12 levels with 12 inputs

8.4.15 Floor position indicator: Scrolling speed "change of floor"

This parameter shall adjust the scrolling speed when the floor changes. If 0 is set, the position indicator will not scroll, erratic change of contents.

8.4.16 Floor position indicator: Scrolling direction "change of floor"

Here it is defined whether a normal scrolling direction (lift running upward: position scrolling from the top, lift running downward: position scrolling from below) or an opposite scrolling direction is preferred.

8.4.17 Floor position indicator: Blinking

This parameter works only in the travel continuation mode and indicates, whether the position indicator that is not in the installation floor level shall blink if a direction signal is set.

8.4.18 Floor position indicator: Contents of text

In display mode "0" maximum 2 characters per level, in the other modes maximum 3 characters, vertically scrolling or jumping, can be displayed to indicate the position upon change of position. Each level can contain characters from table 8.

8.4.19 Floor position indicator: Contents of supplementary floor text

The parameter is active in the indicator modes 2-5 only. Here, max. 32 characters per level can be displayed horizontally scrolling as a supplementary position text. Each level can contain characters from table 9.

8.4.20 Arrows: Input definition

The direction input DOWN can be assigned to connection 1-11 of the connector, then the direction input UP is automatically further by one connection. Pay attention to not double-assign with other inputs.

8.4.21 Arrows: Inverting of inputs

Here, you can invert the direction inputs logically (not electrically). The definition of the voltage level is to be taken from the definition of the bridges.

8.4.22 Arrows: Scrolling speed

This parameter is for the adjustment of the scrolling speed during travel.

8.4.23 Arrows: Scrolling direction

Here it is defined whether a normal scrolling direction (lift running upward: position scrolling upward, lift running downward: position scrolling downward) or an opposite scrolling direction is preferred.

8.4.24 Arrows: Blinking

The parameter works in the travel continuation mode on installation level for a visual amplification of the travel continuation mode. It works in the direction mode as an indication for the continuation of the travel if a direction but no travel signal is set.

8.4.25 Arrows: Type of symbol

The arrow symbols 0 and 1 can be set in all display modes, symbols 2 and 3 only in display mode 0-3, owing to their size.

8.4.26 Arrows: No. of symbols

By this parameter you are selecting the no. of symbols which shall appear if one direction input is set. With symbol type 3 however, always only one arrow is indicated. If both direction inputs are set, always only one up and down arrow appears.

8.4.27 Special inputs: Input definition

Any special input 1-4 can be assigned separately to connection 1-12 of a connector, however double assignment with other inputs should be avoided. It is to be observed as well, that special inputs with a lower number have the higher priority than special inputs with higher numbers (Example: special input 2 has priority over special input 3)
All special inputs have priority over the position indicator.
If several special inputs are set at the same time, the input with the highest priority is indicated.

8.4.28 Special inputs: Inverting

Here, any special input 1-4 can be inverted logically (not electrically). The definition of the voltage level can be taken from the definition of the bridges.

8.4.29 Special inputs: Exclusive indication

If the exclusive indication is on, the display still indicates only the symbol or the texts for the respective special input 1-4. If it is switched off, the text of the special input is indicated in parallel to the position of display modes 2-5, instead of the supplementary floor text. A symbol is not available. The adjustment is made separately for each special input.

8.4.30 Special inputs: Blinking

Symbols or texts for each special input 1-4 or out-of-service indication are blinking to increase visibility.

8.4.31 Special inputs: Type of indication

This is for selection whether a scrolling text or a pre-defined symbol shall be indicated upon setting of a special input or in case of out-of-service. If the symbol indication is selected, the

respective 2 characters of table 8 are to be entered as the contents of the text (see the following parameter). For example: characters “ij” for the overload symbol.

8.4.32 Special inputs: Contents of text

For each special input and for the out-of-service indication maximum 32 characters, horizontally scrolling, can be entered here as the displayed text.

For the indication of text please use the characters of table 9.

For the indication of symbols please use the pre-defined symbols of table 8.

9 Annex

9.1 General Gray code table

Table 9:
general
Gray code
table

Level	Gray code	Level	Gray code	Level	Gray code	Level	Gray code
	Bit 5 4 3 2 1 0		Bit 5 4 3 2 1 0		Bit 5 4 3 2 1 0		Bit 5 4 3 2 1 0
63	1 0 0 0 0 0	47	1 1 1 0 0 0	31	0 1 0 0 0 0	15	0 0 1 0 0 0
62	1 0 0 0 0 1	46	1 1 1 0 0 1	30	0 1 0 0 0 1	14	0 0 1 0 0 1
61	1 0 0 0 1 1	45	1 1 1 0 1 1	29	0 1 0 0 1 1	13	0 0 1 0 1 1
60	1 0 0 0 1 0	44	1 1 1 0 1 0	28	0 1 0 0 1 0	12	0 0 1 0 1 0
59	1 0 0 1 1 0	43	1 1 1 1 1 0	27	0 1 0 1 1 0	11	0 0 1 1 1 0
58	1 0 0 1 1 1	42	1 1 1 1 1 1	26	0 1 0 1 1 1	10	0 0 1 1 1 1
57	1 0 0 1 0 1	41	1 1 1 1 0 1	25	0 1 0 1 0 1	9	0 0 1 1 0 1
56	1 0 0 1 0 0	40	1 1 1 1 0 0	24	0 1 0 1 0 0	8	0 0 1 1 0 0
55	1 0 1 1 0 0	39	1 1 0 1 0 0	23	0 1 1 1 0 0	7	0 0 0 1 0 0
54	1 0 1 1 0 1	38	1 1 0 1 0 1	22	0 1 1 1 0 1	6	0 0 0 1 0 1
53	1 0 1 1 1 1	37	1 1 0 1 1 1	21	0 1 1 1 1 1	5	0 0 0 1 1 1
52	1 0 1 1 1 0	36	1 1 0 1 1 0	20	0 1 1 1 1 0	4	0 0 0 1 1 0
51	1 0 1 0 1 0	35	1 1 0 0 1 0	19	0 1 1 0 1 0	3	0 0 0 0 1 0
50	1 0 1 0 1 1	34	1 1 0 0 1 1	18	0 1 1 0 1 1	2	0 0 0 0 1 1
49	1 0 1 0 0 1	33	1 1 0 0 0 1	17	0 1 1 0 0 1	1	0 0 0 0 0 1
48	1 0 1 0 0 0	32	1 1 0 0 0 0	16	0 1 1 0 0 0	-	0 0 0 0 0 0

9.2 Cut-out of the front panel

