

Operating Manual



GEDA[®]

Touch Display HMI

BL2000 / MULTILIFT

Original Operating Manual



Table of contents

1	General information	5
1.1	Information on the operating manual	5
1.2	Identification data	6
1.3	Information about the author and industrial property rights	6
2	Description and operation	7
2.1	Status messages	9
2.2	HOME symbol	11
2.3	Language selection	11
2.4	Operating data/car heating (option)	12
2.5	Current code list	13
2.6	Landing level details	14
2.7	Programming help section	15
2.8	“Liftboy” operating mode (Premium package option)	16
3	CODE table	19

Table of figures

Fig. 1: Touch display (HMI) car 1	7
Fig. 2: Touch display (HMI) car 2	8
Fig. 3: Touch display (HMI) ground station	8
Fig. 4: Touch display – warning	9
Fig. 5: Touch display – malfunction	9
Fig. 6: CODE display (yellow)	10
Fig. 7: CODE display (red)	10
Fig. 8: HOME symbol "A"	11
Fig. 9: Language selection symbol "B"	11
Fig. 10: Language selection	11
Fig. 11: Operating data symbol "C"	12
Fig. 12: Operating data	12
Fig. 13: Code list symbol "D"	13
Fig. 14: Current CODE list	13
Fig. 15: Landing level details symbol "E"	14
Fig. 16: Landing level details for landing level 0 - 9	14
Fig. 17: Help symbol "F"	15
Fig. 18: Help topics	15
Fig. 19: Display of landing level calls	16
Fig. 20: Selecting a driving command	16
Fig. 21: Executing a driving command	17
Fig. 22: Display after the driving command has been processed	17
Fig. 23: Deleting a driving command	17

1 General information

1.1 Information on the operating manual

This operating manual supplements the operating manual for the hoist. It describes operation of the touch display.

You will come across a series of illustrations and symbols while reading this manual. These are intended to help you navigate and understand this manual. The different meanings are explained below.

Text format	Meaning
Bold type	Emphasises particularly important words/sections
• List	Identifies lists level 1
- List	Identifies lists level 2
(brackets)	Item numbers
➤ Task instruction	Task instructions for personnel. Always given in chronological order

Images

The illustrations used refer to a specific machine type. They may only constitute a schematic representation of other machine types. The fundamental function and operation are not affected by this.

1.2 Identification data

The touch display described in this manual is used in various different GEDA hoists.

Depending on the type of hoist or the design of the hoist, the display or the description of functions may vary.

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1.3 Information about the author and industrial property rights

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2 Description and operation

The touch display indicates the position of the car and the direction of travel.

In addition, it is also used for quick and easy identification of the switching statuses for the limit switches and the status of the system.

The text elements in the figures is shown in English. All text elements are displayed on the touch panel in the selected language.

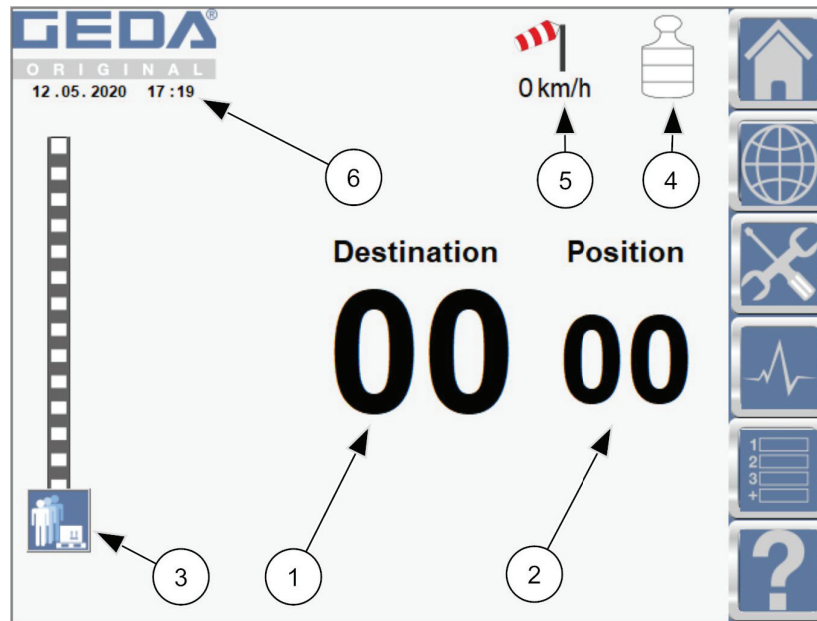


Fig. 1: Touch display (HMI) car 1

1	Destination	4	Load indicator
2	Current car position	5	Wind force (optional)
3	Current position of car on mast	6	Date/time display

After entering the destination (selection of landing level),

- the active travel command is indicated by the flashing grey arrow frame
- the destination (1) is displayed immediately
- the bar indicator (3) moves towards the selected landing level
- the travel direction arrow lights up, pointing towards the destination

The current position (2) of the car is indicated during the journey.



Fig. 2: Touch display (HMI) car 2

- | | | | |
|---|--------------------|---|-----------------------|
| A | HOME | D | Current code list |
| B | Language selection | E | Landing level details |
| C | Operating data | F | Help |

Touch display at the ground station (option)

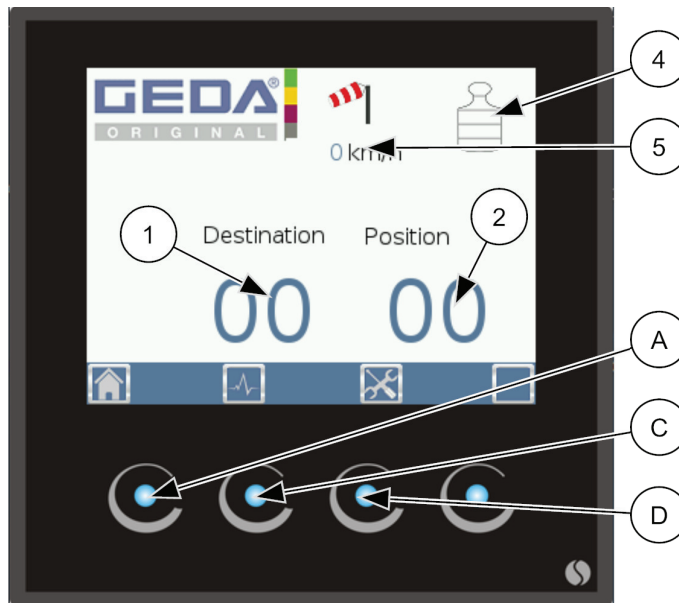


Fig. 3: Touch display (HMI) ground station

- | | | | |
|---|----------------------|---|-------------------|
| 1 | Destination | A | HOME |
| 2 | Current car position | C | Current code list |
| 3 | Load indicator | D | Maintenance |
| 4 | Wind force (option) | | |

2.1 Status messages

Code messages with a yellow background indicate service or maintenance information.



Fig. 4: Touch display – warning



Only the possible status messages and CODE numbers which are relevant for your machine are displayed!

Code messages with a red background indicate information about a malfunction.

The machine/hoist is not ready for operation!



Fig. 5: Touch display – malfunction

Actions for CODE display:

- Identify the **CODE** displayed and change/rectify the status.
- Wait until the control is automatically enabled.



Tap on the HOME symbol to change the touch display to show the operating display.

The CODE number remains displayed in colour.

Operating display with yellow CODE display

With this display, the car can continue to be moved.
The indicated maintenance task can be carried out later.

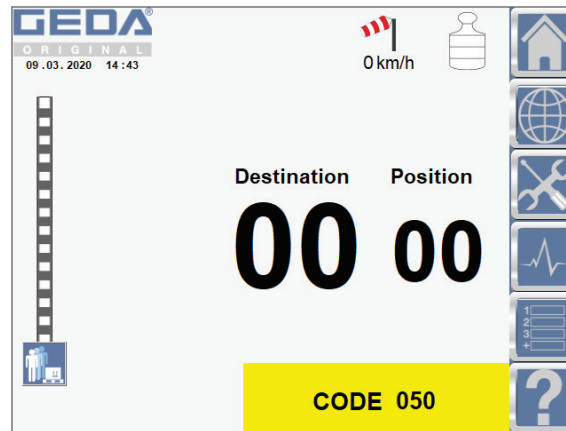


Fig. 6: CODE display (yellow)

Operating display with red CODE display

With this display, the car cannot be moved.
The malfunction must be rectified!

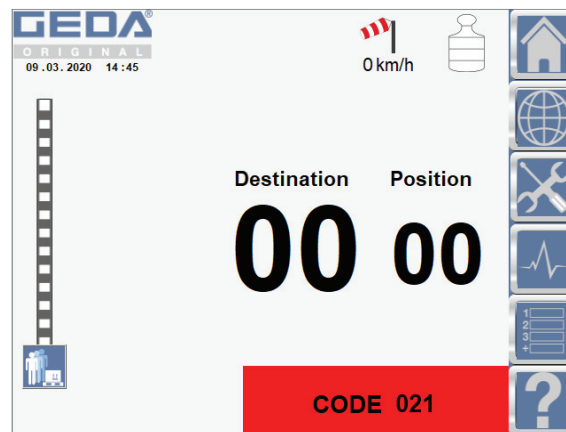


Fig. 7: CODE display (red)

Change to the detail view

- Tap the coloured CODE number.
 - ✓ The touch display changes to the detailed CODE display.

2.2 HOME symbol

- Tap the HOME symbol (A) to return to the start screen from any view.

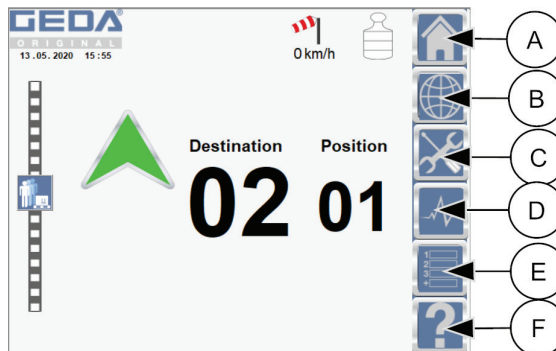


Fig. 8: HOME symbol "A"

2.3 Language selection

Setting the menu language

- Tap the symbol for language selection (B).

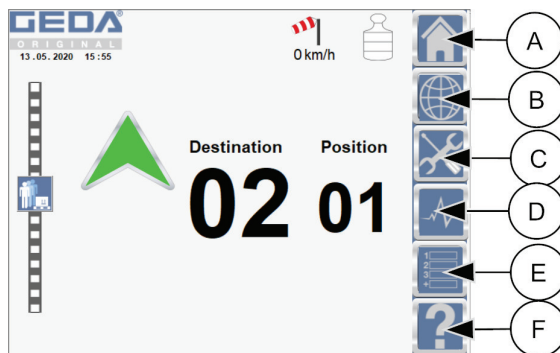


Fig. 9: Language selection symbol "B"

- Tap on the flag for the required country (language).
 - ✓ This changes the touch display to the desired language.

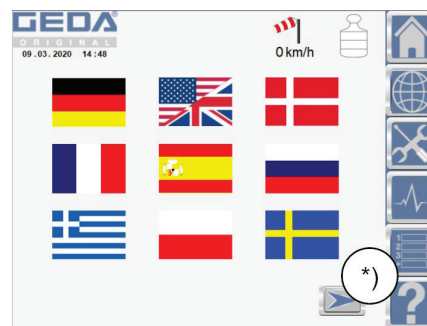


Fig. 10: Language selection

*) more pages available (browse)

2.4 Operating data/car heating (option)

Display of operating data and options (e.g.) switching on the car heating.

- Tap the operating data symbol (C).



Fig. 11: Operating data symbol "C"

- ✓ The operating hours, hours of travel and options are displayed.

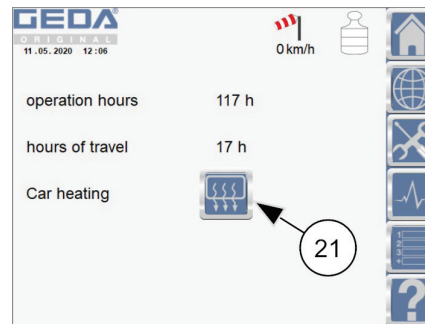


Fig. 12: Operating data

Example: Switch car heating on/off

- Tap the car heating symbol (21).
 - ✓ The car heating is switched on or off.

2.5 Current code list

Display of the current code list

➤ Tap the symbol (D).



Fig. 13: Code list symbol "D"

✓ Only the currently pending codes are displayed.



Fig. 14: Current CODE list

2.6 Landing level details

➤ Tap the landing level details symbol (E).

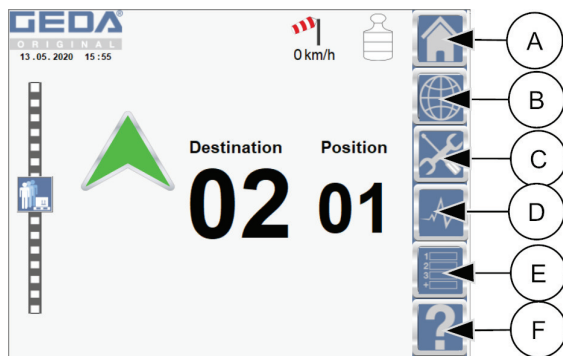


Fig. 15: Landing level details symbol "E"

✓ The information for the first 9 landing levels (if available) is displayed.

Landing level	Position	Offset	Door release	Landing level ID
0	-50 mm	0 mm	A B	101 0 0
1	934 mm	0 mm	A B	0 0 0
2	1948 mm	0 mm	A B	0 0 0
3	2990 mm	0 mm	A B	0 0 0
4	4022 mm	0 mm	A B	0 0 0
5	4999 mm	0 mm	A B	0 0 0
6	6098 mm	0 mm	A B	0 0 0
7	7199 mm	0 mm	A B	0 0 0
8	8112 mm	0 mm	A B	0 0 0
9	9017 mm	0 mm	A B	0 0 0

Position -10 mm

Fig. 16: Landing level details for landing level 0 - 9

*) more pages available (browse)

2.7 Programming help section

- Tap the help symbol (F).

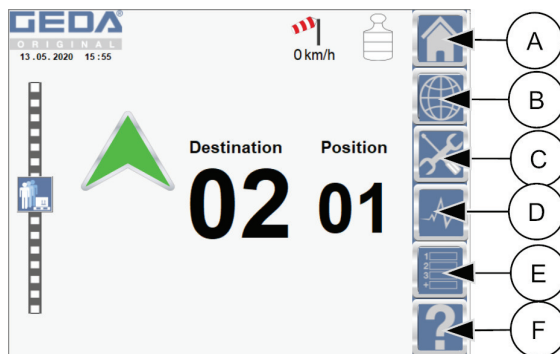


Fig. 17: Help symbol "F"

- A menu overview for which "Help" is available is displayed.
- Tap the field for which you need help.
 - ✓ Programming of the landing levels is described in the assembly manual ML050.

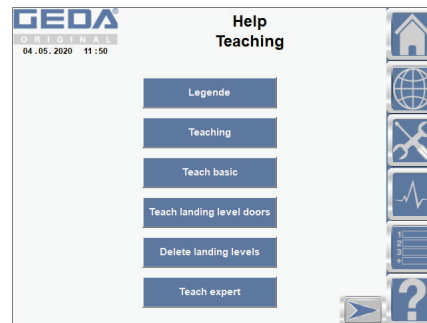


Fig. 18: Help topics

2.8 “Liftboy” operating mode (Premium package option)

“Liftboy” operating mode is an extension of the automatic operating mode (G-SACB).

All landing level calls from the landing levels are not processed, but are only shown to the hoist supervisor (Liftboy) in the car on the touch display.

The hoist supervisor determines the order in which the calls are processed.

Display of landing level calls in the car

Up to 10 landing level calls (1) can be displayed on the touch display.

The driving commands are recorded in the order in which they were received.

Landing level calls remain stored until they are executed or deleted.

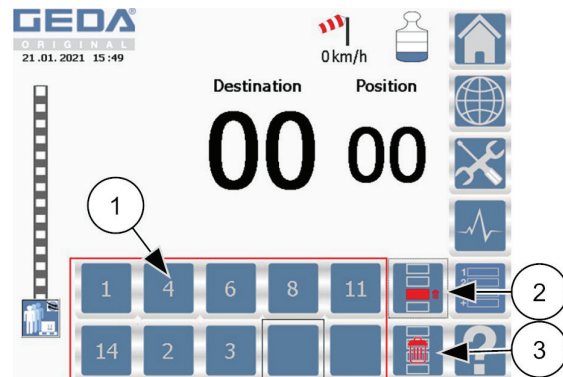


Fig. 19: Display of landing level calls

- 2 Delete a landing level call
- 3 Delete all landing level calls

Display of landing level calls at the landing levels

A landing level call button lights up when the landing level call button at a landing level was pressed and the call accepted.

The landing level call button flashes if there are already 10 landing level calls and no more landing level calls can be accepted.

Selecting and executing a driving command



Only one driving command can be selected and processed at a time.

- Select the driving command to be executed.
 - The selected driving command in the list is highlighted in blue.

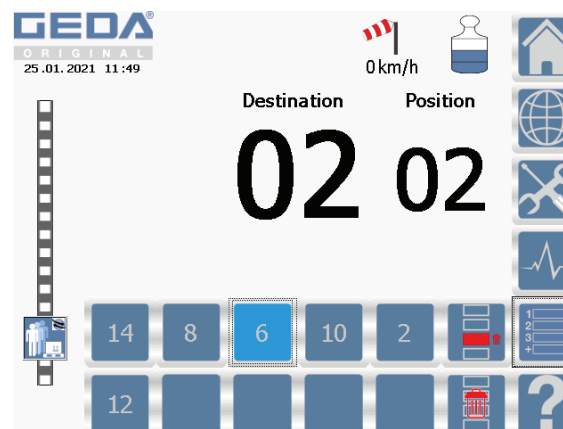


Fig. 20: Selecting a driving command



When operating only via the keypad or rotary/push button, the blue highlighting is omitted.

The selected driving command is shown as a destination number on the touch display.


- Launch the driving command by pressing the  button on the keypad or by pressing the rotary/push button.
 - The selected driving command in the list is now highlighted in green.



Fig. 21: Executing a driving command

- ✓ When the driving command has been executed, it is deleted from the list.



Fig. 22: Display after the driving command has been processed

Deleting a driving command

- Press the button (2) to activate deletion of a driving command.
- Select the driving command to be deleted.
 - The selected driving command in the list is highlighted in red.

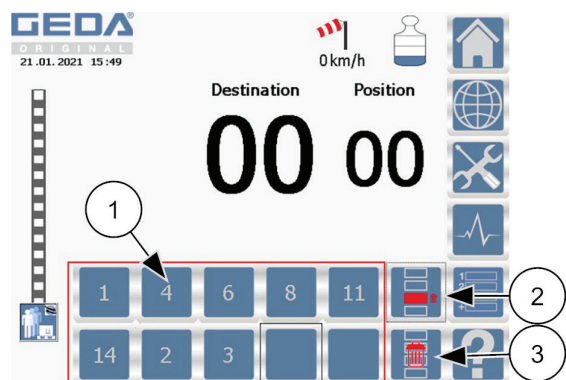


Fig. 23: Deleting a driving command

Deleting multiple driving commands

- Press the button (3) to activate deletion of all driving commands.
- Confirm the displayed confirmation prompt with "yes" if you wish to delete all driving commands.
 - ✓ The list of driving commands is deleted.

3 CODE table

Display	Explanation	Remedial action
CODE 02	Malfunction or defective cable to the ground station	Check connector
Display	Explanation	Remedial action
CODE 03	Door "A" open	Close door on A-side
CODE 04	Door "B" open	Close door / barrier on B-side
CODE 05	Door "C" open	Close door / barrier on C-side
CODE 06	Door "D" / "E" open	Close door / barrier on D-side
CODE 07	Base enclosure door open	Close the door / barrier of the enclosure
CODE 08	Collective message EMERGENCY STOP line of the ground station is interrupted. (EMERGENCY STOP ground station, landing level safety gate control or dummy plug)	Unlock the EMERGENCY STOP button that has been pressed Close the landing level safety gate or insert the dummy plug
CODE 09	EMERGENCY LIMIT	Move the car free of the EMERGENCY LIMIT limit switch. (Refer to Chapter "Rectify malfunctions" in the operating manual)
CODE 10	EMERGENCY LIMIT UP car moved up too far	Free-run the car using the drop test control system. (Refer to Chapter "Rectify malfunctions" in the operating manual)
CODE 11	EMERGENCY LIMIT UP climbing formwork	-
CODE 12	EMERGENCY LIMIT DOWN car moved down too far	Free-run the car using the drop test control system. (Refer to Chapter "Rectify malfunctions" in the operating manual)
CODE 13	EMERGENCY LIMIT DOWN climbing formwork	-
CODE 14	Safety gear has triggered	Refer to the maintenance manual
CODE 15	Roof hatch open	Close and lock the roof hatch
CODE 16	Assembly plank 1 (extended) [Option]	Close assembly plank 1
CODE 17	Assembly plank 2 (extended) [Option]	Close assembly plank 2
CODE 18	Assembly guard 2 (left)	Hook in assembly guard 1 at the top
CODE 19	Assembly guard 2 (right)	Hook in assembly guard 2 at the top

Display	Explanation	Remedial action
CODE 20	EMERGENCY STOP ground station	Unlock the EMERGENCY STOP button at the ground control
CODE 21	EMERGENCY STOP car control	Unlock the EMERGENCY STOP button at the car control
CODE 22	EMERGENCY STOP roof switch box	Unlock the EMERGENCY STOP button on the roof switch box
CODE 23	Dummy plug assembly or drop test control (disconnected)	Insert the dummy plug
CODE 24	EMERGENCY STOP assembly or drop test control	Unlock the EMERGENCY STOP button at assembly or drop test control
CODE 25	EMERGENCY STOP landing levels	Unlock the EMERGENCY STOP button at one of the landing levels
CODE 26	EMERGENCY STOP buffer/dummy plug	Insert the buffer/dummy plug limit switch
CODE 27	EMERGENCY STOP roof dummy plug	Insert dummy plug (roof) or assembly control
CODE 28	EMERGENCY STOP setting mechanism	Pull out the setting mechanism
CODE 29	Max. inclination attained. No travel possible	Distribute the load evenly
CODE 30	Overload attained. No travel possible	Reduce the load (also refer to Chapter "Rectify malfunctions" in the operating manual)
CODE 31	Interlock cam (activating rail is extended)	Retracted again at the next start
CODE 32	Underrun protection for cable trolley (collision car with cable carriage)	Rectify collision of car with cable trolley
CODE 33	Wind sensor (excessive wind)	Move to the ground station and wait until the wind recedes
CODE 34	Cold package (temperature < -20 °C / -4 °F)	Descend and stop working using the car
CODE 35	Excessive motor temperature	Wait until the motors cool down
CODE 36	Temperature braking resistance too high	Ascend to the next landing level and wait until the message disappears
CODE 37	Frequency converter fault	If the code is displayed again, contact the service department
CODE 38	Lack of grease in the lubrication device	Replace the grease cartridge Refer to the maintenance manual
CODE 39	No mains voltage	Re-establish the mains voltage (check main switch, fuses)

Display	Explanation	Remedial action
CODE 40	Battery charging fault	Check the charging device and battery (emergency lighting)
CODE 41	Fuses	Check the fuses (refer to the wiring diagram)
CODE 42	Assembly crane (disconnection open)	Check and disconnect the assembly crane
CODE 43	Tension too great on the trailing cable	Check the trailing cable
CODE 44	Underrun protection 1 car has moved too low [Option]	Check underrun protection 1
CODE 45	Underrun protection 2 car has moved too low [Option]	Check underrun protection 2
CODE 46	Monitoring mast connection	Check the eye bolts of the mast tie
CODE 47	Fault in the lubrication device "Malfunction"	Refer to the maintenance manual
CODE 48	Monitoring motor brake	Check the motor brake(s)
CODE 49	Car control not connected	Connect the car control to the car switch box
CODE 50	Maintenance / Service	Service interval exceeded
CODE 51	Fault in the lubrication device "Travel slowly"	Refer to the maintenance manual
CODE 52	Load limit nearly attained	Do not increase load
CODE 53	Load limit attained. Travel possible	Reduce load
CODE 54	Max. inclination nearly attained	Do not increase one-sided loading
CODE 55	Max. inclination attained. Travel possible	Distribute the load evenly
CODE 56	Mast end, left	Release the motor brake(s)
CODE 57	Mast end, right	Release the motor brake(s)
CODE 58	Cooling unit switch cabinet	Check the cooling unit
CODE 59	Encoder not referenced.	Carry out reference run
CODE 60	EMERGENCY STOP ramp limit switch	Close sliding door with ramp
CODE 61	-	-
CODE 62	Frequency converter warning	If the code is displayed repeatedly/permanently, contact the service department
CODE 63	Motor brake contactors	Contact GEDA service department
CODE 64	No connection to PLC	Check if change to main screen is possible. Check if the PLC is in RUN status.

Display	Explanation	Remedial action
CODE 65	Teaching key switch is set to ON	Set key switch to OFF.
CODE 66	PLC hardware error	Contact GEDA service department
CODE 67	EMERGENCY STOP in the base enclosure	Unlock the EMERGENCY STOP button in the base enclosure



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