Emergency Hand Winding Unit

Description
Contents

1  Introduction ....................................................................................................................... 3
2  Description of the Subassemblies .................................................................................. 4
   2.1  Technical Data .............................................................................................................4
3  Start-Up .............................................................................................................................. 5
   3.1  Connecting Subassemblies...........................................................................................5
   3.2  Installation of the selector ............................................................................................6
   3.3  Initialising the Level Counter .......................................................................................7
4  Position Messages ............................................................................................................. 8
1 Introduction

The <<Emergency Hand Winding Unit>> shows the level, direction of travel and position on the floor level. That provides all information on the position of the car if passengers have to be liberated in an emergency. The <<Emergency Hand Winding Unit>> has a switch in the display unit that:

1. switches on a transducer to be able to issue an acoustic signal at the floor level and
2. interrupts the safety circuit when it is in the <<ON>> position

Visual information is issued constantly (i.e., also during normal operation). The lift functions are independent of the operational state of the lift control system and work self-sufficiently.

This system consists of three units:

- one subassembly for the visual and acoustic display
- one subassembly for recording the magnetic switch signals
- one special magnetic switch selector

These two subassemblies are connected to one another via serial bus.

NOTE

The manufacturer has to pre-initialise the <<Emergency Hand Winding Unit>> and it is adapted to the specific control unit.

It is not possible to locally start up an <<Emergency Hand Winding Unit>> that has not been initialised on the lift.
2 Description of the Subassemblies

The subassembly for the visual and acoustic output is installed in a metallic housing for wall mounting.

You can connect the signal lines and power supply directly on the housing via 4-pole screwed connections.

The connection to the safety circuit is designed as a separate 2-strand cable and it is firmly connected to the housing.

The display shows the information on the car’s level within the floor level in the <<TEXT>> line.

You can find a detailed description of this information in chapter 4.

2.1 Technical Data

<table>
<thead>
<tr>
<th>terminal</th>
<th>bus interfaces</th>
<th>terminal</th>
<th>power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH</td>
<td>connecting network bus-high</td>
<td>0V</td>
<td>earth</td>
</tr>
<tr>
<td>WL</td>
<td>connecting network bus-low</td>
<td>U+</td>
<td>supply voltage 12-24 VDC; 70 mA</td>
</tr>
<tr>
<td>C1</td>
<td>magnetic switch 12a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>magnetic switch 12b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3 Start-Up

3.1 Connecting Subassemblies

The WH and WL terminals link the data between the two subassemblies and power can be supplied via 12 V emergency light unit in the control system.

NOTE

It is necessary to terminate (T) at the end of this data line for non-interference operation.
3.2 Installation of the selector

The selector has the 12a/b and 13a/b switches and the structure below shows the order and arrangement of signals.

Structure:

![Diagram showing the selector structure with signals and settings.](image)

Selector switch:

<table>
<thead>
<tr>
<th>designation</th>
<th>function</th>
</tr>
</thead>
<tbody>
<tr>
<td>13a</td>
<td>correction above</td>
</tr>
<tr>
<td>12a</td>
<td>level upwards</td>
</tr>
<tr>
<td>12b</td>
<td>level downwards</td>
</tr>
<tr>
<td>13b</td>
<td>correction below</td>
</tr>
</tbody>
</table>

NOTE

You can set correction switch 13a to **any** floor. You have to use the jumper field of the subassembly to give the floor of correction switch 13a you selected (please remember it has to be binary).
In the example above, correction switch 13a is on the second floor so that you have to plug the jumper into value 2 of the jumper field.

The examples below specify correction switch 13a on different floors and show the appropriate configurations in the jumper field.

**Jumper settings for correction switch 13a in ...**

<table>
<thead>
<tr>
<th>Floor 2</th>
<th>Floor 3</th>
<th>Floor 8</th>
<th>Floor 14</th>
<th>Floor 20</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Jumper Configuration" /></td>
<td><img src="image2" alt="Jumper Configuration" /></td>
<td><img src="image3" alt="Jumper Configuration" /></td>
<td><img src="image4" alt="Jumper Configuration" /></td>
<td><img src="image5" alt="Jumper Configuration" /></td>
</tr>
</tbody>
</table>

**NOTES**

Make sure the selector signals are within 50 ms as specified above and the floor information in correction switch 13a is set correctly on the jumper field because both settings are needed for no-fault operation of **Emergency Hand Winding Unit**.

### 3.3 Initialising the Level Counter

You have to initialise the internal level counter to complete start up. To do this, start the two correction switches one after another, after which the **Emergency Hand Winding Unit** is ready for operation.

**NOTE**

If the **No Floor Information** text appears in the display after completing start-up, move the carried out into the lowest level or into the level of the 13a correction switch and this trip erases the text.
4 Position Messages

The car is level:
Both arrows appear in the display along with the <<AT>> text alternating with what floor the lift is on. A signal also sounds.

The car is above the level position:
The up-arrow appears in the display along with the <<Above>> text.

The car is below the level position:
The down-arrow appears in the display along with the <<Below>> text.

NOTE
The display alternating between the text and what floor the lift is on including the acoustic signal are only issued in the <<ON>> switch position.