TSG application note Door unlocking via the skate / clutch

Documentation history

No.	Ver.	Version	Editor
1	1.00	22.08.23	AL

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File: 1.20.91520 TSG Applikationshinweis Türentriegelung über das Schwert_V1.0_en.docx Print date: 8/24/2023 11:01:00 AM

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1 About this manual

1.1 General

Before you assemble the described device and/or put it into operation, read this document carefully. Chapter 1.5 Exclusion of any guarantee for changes, conversions or installation of foreign material / page 6 must be universally observed. Keep this document handy for future use.

This document is intended to make it easier for you to assemble and commission the described device or function and its components. This document contains important information on how to safely and properly assemble and commission the device or function described.

Observance of the document helps to avoid dangers, repair costs and downtimes and to increase the reliability and service life of the device or function described.

In addition to this document, the regulations for accident prevention and environmental protection applicable in the country of use and at the place of use must be observed. This document only describes the modules that are supplied by Langer & Laumann Ing.-Büro GmbH. Information on components not manufactured and supplied by Langer & Laumann Ing.-Büro GmbH can be found in the respective user information from the manufacturer or supplier.

For reasons of clarity, this data sheet does not contain all possible detailed information regarding all product variants and cannot consider every conceivable case of installation, operation or maintenance. Should you require further information or should particular problems arise which are not dealt with in sufficient detail in the document, you can obtain the necessary information by telephone: +49 (2552) 92791 0.

1.2 Explanation of symbols



WARNING:

You are advised of a possible impending danger that can lead to serious physical injuries or death.



CAUTION:

You are warned of a possible impending danger that can lead to minor physical injuries. You will also find this signal for warnings of property damage.



NOTE:

You will be informed about applications and other useful information.



1.3 Safety and accident prevention regulations

In addition to the information in this document, also observe the statutory safety and accident prevention regulations. The persons responsible for the safety of the system must ensure the following:

- Only appropriately qualified personnel may work on and with the described device or function.
- All personnel working with the device or function described must be familiar with all warnings and measures specified in this description for the installation, operation and maintenance of the device or function described.
- Unqualified personnel are prohibited from working on the device or function described.
- The personnel must have knowledge of both first aid measures and local rescue facilities.

1.4 Qualified personnel according to VDE 0105

Qualified personnel are those persons who, on the basis of their training, experience, instructions received and knowledge of relevant standards, regulations, accident prevention rules and operating conditions, have been authorised by the person responsible for the safety of the installation to carry out the required activities.

1.5 Exclusion of any guarantee for changes, conversions or installation of foreign material

Before any intervention in the electrical or mechanical part of the system, the device or function described must be disconnected from the mains voltage. Unauthorised changes or conversions or installation of foreign material on or in the described device or function, its components or accessories automatically exclude any warranty. These safety instructions do not claim to be complete. The manufacturer assumes no liability for damage or malfunctions that may result from failure to observe this document.

WARNING:

Unauthorised changes to the described device or function as well as the installation of nonoriginal spare parts exclude the manufacturer's liability for any resulting damage.



WARNING:

We would like to point out that we do not accept any liability for defects from material other than Langer & Laumann Ing. Büro GmbH, in particular motor or encoder cables. By using non-approved cables, the type examination certificate 44780 1309930301 and the certificate of conformity for the manufacturer's devices lapse.

1.6 Further important safety instructions

The purchaser, engineer and/or installer of the described device or function and its components is responsible for its correct and safe use. He must ensure that all state or local laws and regulations regarding the safety of power-operated doors as well as the relevant state health and safety regulations are observed.

Langer & Laumann Ing.-Büro GmbH is not responsible for accidents and/or consequential damage that could arise from the application or use of the described device or function and its components. Our maximum obligation and warranty are limited to reimbursement of the cost of the product sold.

Langer & Laumann Ing.-Büro GmbH makes no specifications or suitability recommendations for specific safety door concepts. The buyer, engineer and/or fitter of the door control unit - TSG - must decide for himself whether the described device or function is suitable for a given application. Langer & Laumann Ing.-Büro GmbH also declines any responsibility for damage or injuries caused by changes to the described device or function, including changes to software parameters. Langer & Laumann Ing.-Büro GmbH employees are not authorised to change these conditions without the written consent and legally binding signature of the responsible authorities.

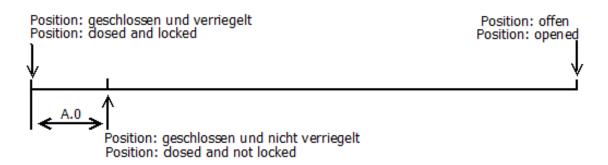
2 Description

The instructions are valid for the TSG door control unit from software version V4.61.31.

When locking the car door via the skate / clutch, the car door has two closed positions.

- Door closed & locked, active during drive through the shaft.
- Door closed & not locked, active in the door unlocking zone.

Türweg / Door way



The TSG V4 supports this operating mode "Door unlocking via the skate / clutch".

2.1 Sequence for activating the operating mode

- Teach-in TSG V4 electronics (see chap. 7.4 in document 1.20.91000_TSG_Betriebsanleitung_V4.18_en).
- 2. determination of the difference between the positions "closed & locked" and "closed & not locked" in <u>mm</u> (measurement directly on the door panel and skate / clutch).
- 3. input of the value in parameter A0 (e.g. 50 for 50mm).
- 4. Set the function of the "Door closed" limit switch using parameter A4:
 - A4=00: The limit switch "Door closed" is deactivated when the position "Door closed & locked" is left.
 - b. A4=01: The limit switch "Door closed" is deactivated when the position "Door closed & not locked" is left, at the latest at approx. 100mm from the position "Door closed & locked".
 - c. A4=01: The limit switch "Door closed" is deactivated when the position "Door closed & not locked" is left, at the latest at 100mm distance from the position "Door closed & locked".

2.2 Description of the mode of operation

- 1. If the door reaches the position "closed & locked" and the signal "close" is omitted, the door drive automatically moves to the position "closed & not locked".
- 2. If the elevator travels through the shaft, the "close" signal is present, and the door is in the "closed & locked" position.



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