Manual

TSG

in

DCSS5 / AT120

Documentation history

No.	Ver.	Status	Processed by
1	1.0	22.07.16	CSA
2	1.1	13.06.17	AL
3	2.0	10.01.18	FH
4	2.1	12.01.21	AL
5	2.2	30.05.22	AL
6	2.3	10.08.22	AL

Fordern Sie die Anleitung auf **Deutsch** an, indem Sie den QR Code einscannen.

Demandez les instructions d´instruction en **français**, en scannant le code QR.

Langer & Laumann Ing.-Büro GmbH
Wilmsberger Weg 8
48565 Steinfurt
Germany

Tel.: +49 (2552) 92791 0

www.lul-ing.de
info@lul-ing.de

file: 1.20.91805_Anleitung_TSG_in_DCSS5_V2.3_en
printing date: 25.08.2022 21:01:00

Content

1 Essential information

1.1 Value of assembly instructions

The product assembly instructions are provided by the manufacturer or supplier to provide the information required by the customer or fitter to ensure proper, safe and reliable assembly. These brief assembly instructions serve to clarify the basic steps of mechanical assembly. The electrical connection, commissioning and settings of the TSG are explicitly not part of these instructions.

1.2 Copyright protection

1.3 Instructions in the assembly manual

All instructions in the assembly manual must be followed without exception.

1.4 Informal activities performed by the fitter

The system fitter is personally responsible for participating in a training course. He or she must inform the manufacturer/supplier without delay of any missing or defective parts in the delivery.

1.5 Requirements for assembly personnel

Persons responsible for installation and maintenance must be instructed regarding generally applicable safety and labour health requirements. They must be familiar with Langer&Laumann products. Installation tools must be fully functional and measuring instruments must be subject to continuous monitoring.

2 Requirement

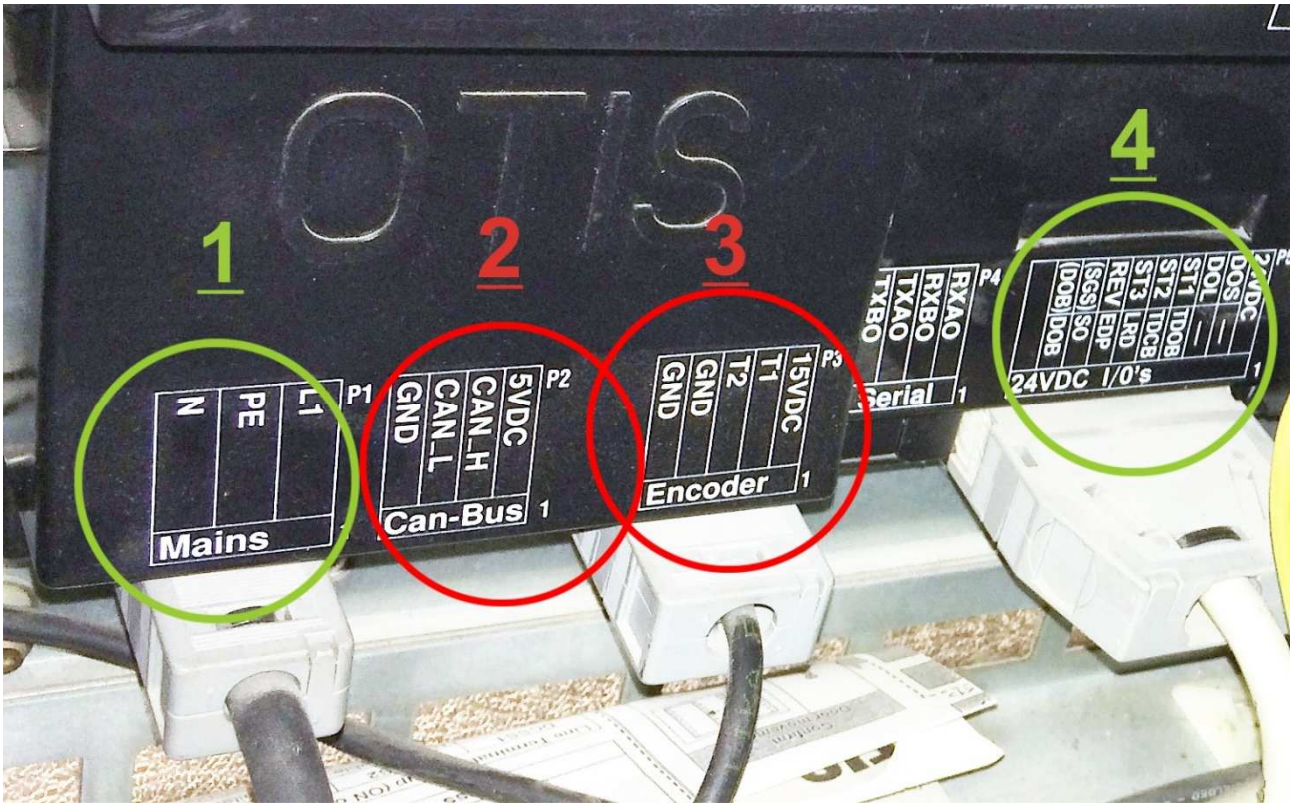

Fig. 1: Otis DCSS5 door control unit

The door control unit Otis DCSS5 will be replaced by TSG door operator.

It has to be required, to use on Otis DCSS5 the clamping strip P1 (power supply, in Fig. 1 the green circle **1**) and the clamping strip P5 (signals, in Fig. 1 the green circle **4**).

The clamping strip P2 can not be used (in Fig. 1 the red circle **2**).

The clamping strip P3 (in Fig. 1 the red circle **3**) is not used anymore, since it is the plug for the encoder of the drive no longer required.

Fig. 2: Otis AT120 door unit

The door control unit Otis AT120 will be replaced by TSG door operator.

It has to be required, to use on Otis AT120 the clamping strip P5 (signals, in Fig. 2 the green circle **1**).

The clamping strips ST1 and ST306 can not be used.

3 Electrical connection

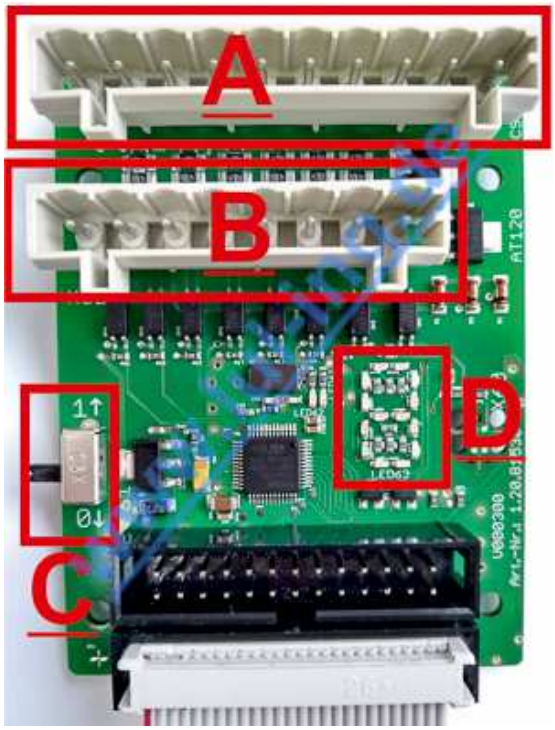

Fig. 3: add on Otis DCSS5 / AT120 controlling

3.1 DCSS5 connection

The Otis DCSS5 door operator has to be switched off.

Unplug P1 on Otis DCSS5. Unplug the single wires from the plug P1.

Connect the three wires of P1 on the TSG: X18, X19 and X20 according to their function (230[VAC] power supply).

Unplug P5 on Otis DCSS5. Dismantle the strain relief and insert the plug into the TSG housing.

The plug P5 is plugged direct on the TSG add on terminal block **A** (in Fig. 3: add on Otis DCSS5 / AT120 controlling - slot **A**).

3.2 AT120 connection

The Otis AT120 door operator has to be switched off.

Connect the three wires of P1 on the TSG: X18, X19 and X20 according to their function (230[VAC] power supply).

Unplug P5 on Otis AT120. Dismantle the strain relief and insert the plug into the TSG housing.

The plug P5 is plugged direct on the TSG add on terminal block **B** (in Fig. 3: add on Otis DCSS5 / AT120 controlling- slot **A**).

4 Adjustment to DOB (Door Open Button)

The switch on the TSG add on Otis DCSS5 has to be adjusted (in Fig. 3: add on Otis DCSS5 / AT120 controlling - switch **C**).

Switch pushed down (🡻): The **DOB** signal (Door Open Button) is direct plugged on the TSG electronic.

Switch pushed up (🡹): The **DOB** signal (Door Open Button) is direct plugged on the lift control unit.

5 Adjustments/Conditions TSG electronic

The TSG V4 electronics must meet these requirements:

- TSG HW version: as of V4.05
- TSG SW version: as of 4.61.28
- TSG extension Otis-DCSS5 HW version: as of V000300
- TSG extension Otis-DCSS5 SW version: as of V3.02

5.1 Activation Extension Interface Otis DCSS5

	TSG V4 & DCSS5/AT120	TSG V4 & DCSS5/AT120 & Sinus drive	TSG V4 & DCSS5/AT120 & FKTV (cabin door lock)	TSG V4 & DCSS5/AT120 & sinus drive & FKTV (cabin door lock)
Parameter hA = 07	X			
Parameter hA = 13		X		
Parameter hA = 29			X	X

5.2 Output signals: DOS and DOL

The output signals are active if at least one of the inputs ST1, ST2 or ST3 is activated. If ST1, ST2 and ST3 are off, the outputs are also switched off. If the output signals are still required in the state, the output signals can be queried directly at the TSG V4.

Output signal DOL: terminals X2.1 & X2.2
Output signal DOS: Terminals X2.7 & X2.9

5.3 Function Obstruction detection

If the door has to be automatic reversing by obstruction in Close direction the parameter b.4 has to be adjusted to the value 01.

6 Description LED

The display is a 7-segment display (in Fig. 3: add on Otis DCSS5 / AT120 controlling - display **D**).

Outputs are displayed as numbers for one second, the inputs are displayed as letters for three seconds. The respective meanings are shown in the tables.

Tabelle 1: display, as TSG outputs

Display	Description
1	Obstacle detected
2	RESERVE
3	Door not completely open
4	Door open

Tabelle 2: Switch pushed down (🡻): TSG evaluates the DOB signal

Display	Description
off	No signals present
b	No signals present
c	Closing, sensor switched off
d	Opening, SGS active
h	Opening, DOB active
n	Closing, sensor switched off
o	Nudging
r	Opening, DOB active
u	Closing
A	Opening, sensor (REV) active
C	Opening, Door-Open-Button (DOB) active
E	Opening, SGS active
F	Closing
H	Opening, REV active
L	Opening, SGS active
P	Opening

Tabelle 3: Switch pushed up (🡹): The lift control unit evaluates the DOB signal

Display	Description
off	No signals present
b	No signals present
c	Closing, sensor switched off
n	Closing, sensor switched off
o	Nudging
u	Closing
A	Opening, sensor (REV) active
F	Closing
P	Opening

7 Contact

Langer & Laumann Ing.-Büro GmbH
Wilmsberger Weg 8
48565 Steinfurt
Germany

Tel.: +49 (2552) 92791 0

www.lul-ing.de
info@lul-ing.de