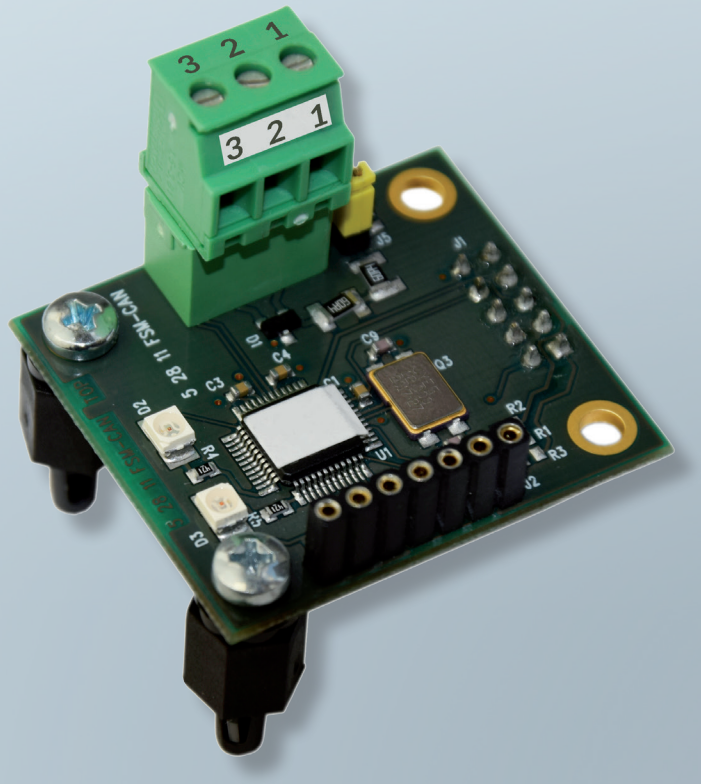
MANUAL

NEWLIFT
NEUE ELEKTRONISCHE WEGE

FSM-CAN MODUL

Installation and Commissioning Manual



Manufacturer	NEW *LIFT* Neue elektronische Wege Steuerungsbau GmbH Lochhamer Schlag 8 82166 Gräfelfing Phone +49 89 – 898 66 – 0 Fax +49 89 – 898 66 – 300 E-mail info@newlift.de www.newlift.de
Service line	Phone +49 89 – 898 66 – 110 E-mail service@newlift.de

First edition	31/01/2019
Author	AL / EP
Last change	14.12.2020 / AME
Release	14.12.2020 AL
Hardware version	V1.1
Software version	V1.0
Doc. no.	hb_FSM CAN Modul_2020-04_2.3._en

Contents

1 General

These instructions describe an optional installation assembly for interference suppression of the safety circuit inputs of the lift control system.

It serves as a supplement to the FST manual and the FST Installation and Commissioning Manual. The manual is limited exclusively to the description of the aspects relevant to the function.

The safety guidelines of the FST manual and the FST Installation and Commissioning manual always apply.

1.1 Abbreviations, characters and symbols used

Symbol / abbreviation	Meaning
FSM	Car top control module
FSM-CAN	CAN module for FSM
FST	Field bus controller
GST	Group controller
ADM	Landing call module
SAM	Speech output module
FPM	Car operating panel module
Menu	Menu integrated in the TFT for editing display settings
▶	**Operational instructions** Perform the tasks that follow this symbol in the specified order.
•	***Action step under the respective operational instruction***
⚠	***Safety information*** This symbol is located in front of safety-relevant information.
ⓘ	***Information notice*** This symbol is located in front of relevant information.

1.2 Notation

Notation	Meaning
Bold	› Designations of switches and actuators › Input values
Italics	› Captions › Cross references › Designations of functions and signals › Product names
Bold italics	› Remarks
LCD font	› System messages of the controller

1.3 Further information

The following documents, among others, are available for the FST controller and its components.

› ADM manual
› EAZ TFT.45.110.210 manual
› EAZ-256 manual
› EN81-20 manual
› FPM manual
› FST-2XT/s manual
› FST-2XT MRL manual
› FST installation and commissioning manual
› GST-XT manual
› LCS manual
› RIO manual
› SAM manual
› UCM-A3 manual
› Update backup analysis manual

These and other current manuals can be found in the download area of our website at https://www.newlift.de/downloads-311.html

1.4 How to contact us

If, after referring to this manual, you still require assistance, our service line is there for you:

Phone +49 89 – 898 66 – 110
E-mail service@newlift.de

Mon. - Thurs.: 8:00 a.m. – 12:00 p.m. and 1:00 p.m. – 5:00 p.m.
Fr: 8:00 a.m. – 3:00 p.m.

2 Safety

All modules of the installation assembly must only be operated in perfect working condition in a proper manner, safely and in compliance with the instructions, the valid accident prevention regulations and the guidelines of the local power company.

The safety guidelines of the FST manual and the FST Installation and Commissioning manual apply for this product.

2.1 Handling electronic assemblies

Electrostatic charging

- ► Keep the electronic assembly in its original packaging until installation to prevent damage.
- ► Before opening the original packaging, a static discharge must be performed!
  To do this, touch a grounded piece of metal.
- ► During work on electronic assemblies, periodically repeat this discharge procedure!
- ► Equip all bus inputs/outputs not in use with a terminal resistor (terminator) to prevent malfunctions.

3 Commissioning the FSM CAN

Connection and settings

▶ Update control software
Update to FST (V2.000-0147) and FSM (V2_V51) or higher

▶ Connect FSM CAN:
Wiring according to figure "Wiring CAN door control device – FSM" (*see page 8*).

▶ Setting the door control device

- AT40 menu:
  › German
  › Total adjustment
  › Special parameters
  »Commands sent via = CAN
  »CANopen node-ID (*see table*)
  »Baudrate = 250 Kbit/s
  »Door number (*see table*)

Door	O	B
Node-ID	7	8
Door number	1	2

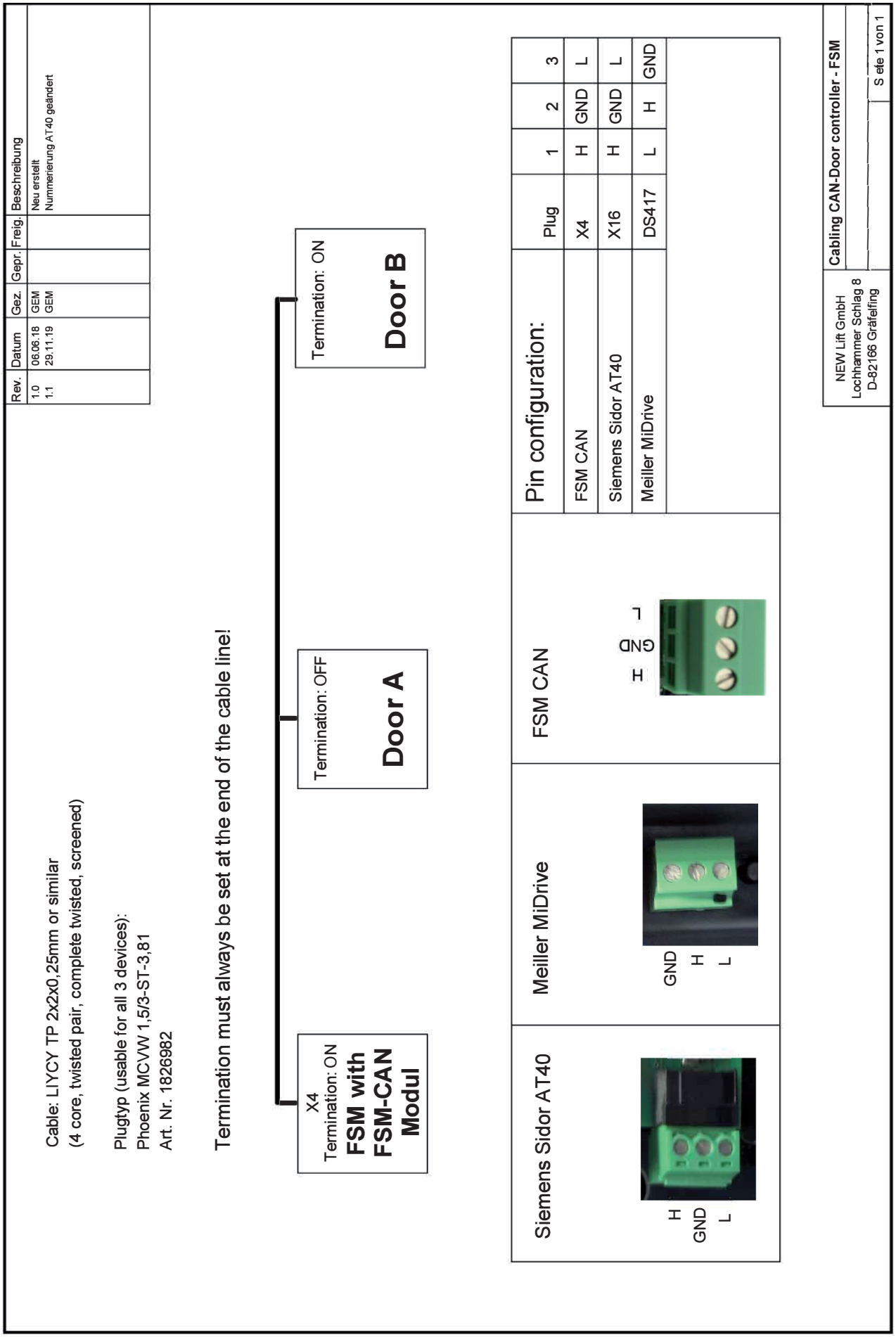
- Set Mi-drive via Meiller app

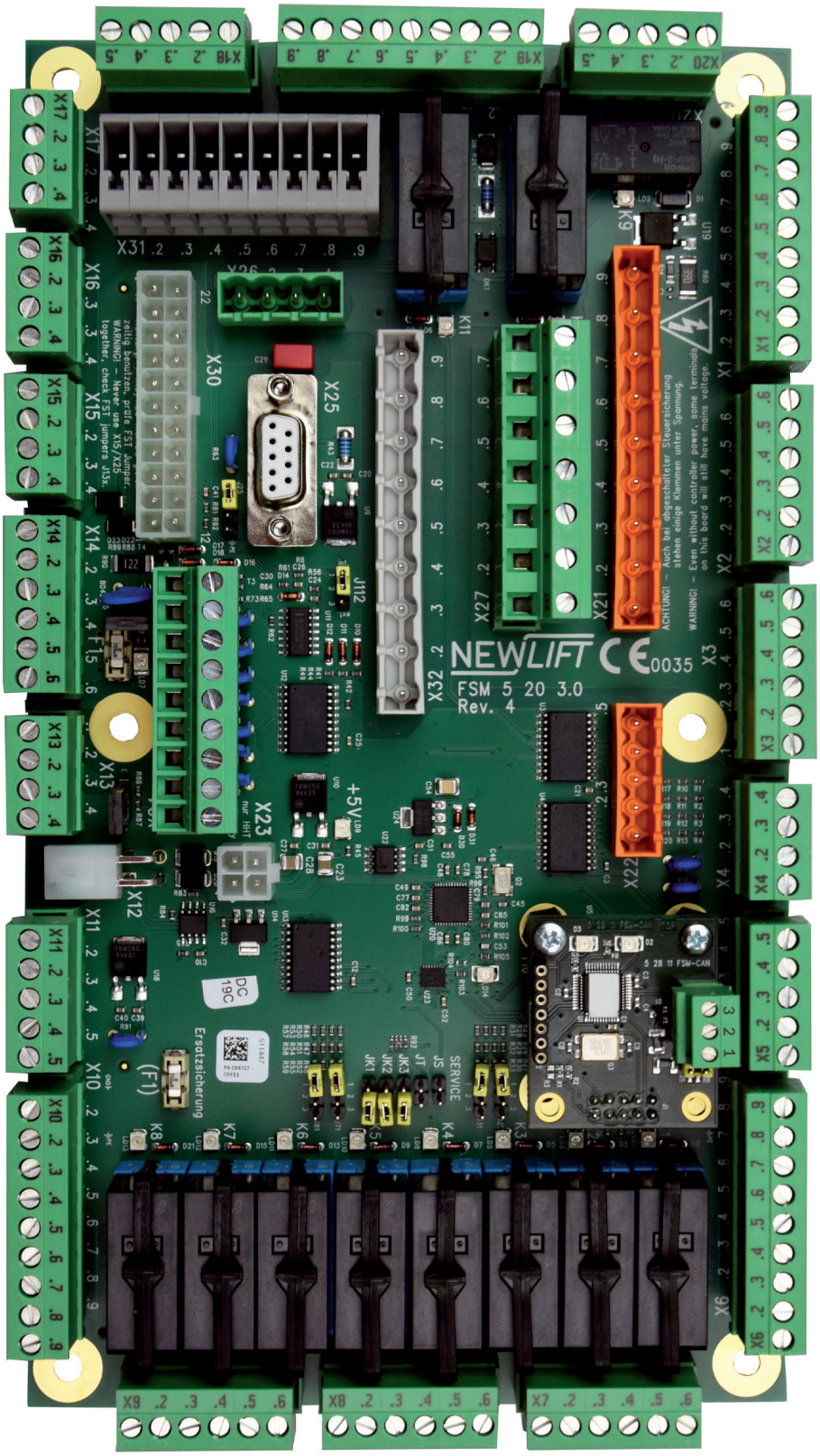
▶ Set FST controller in FST menu

```
>doors
  >Doors-Selective
        >>Type = CAN (for All / A / B)
        >>Endswitches = NO
        >>Deenergize = YES
```

Flash code table

Red LED	Green LED	
ON	OFF	Switch-on state
Flashing	OFF	FST/FSM-CAN connection OK FSM-CAN waiting for connection with door drive
OFF	Flashing	FST/FSM-CAN connection OK FSM-CAN establishing connection with door drive (pre-operational)
OFF	ON	Operational


Rev. Datum Gez. Gepr. Freig. Beschreibung
1.0 06.06.18 GEM Neu erstellt
1.1 29.11.19 GEM Nummerierung AT40 geändert
Cable: LIYCY TP 2x2x0,25mm or similar
(4 core, twisted pair, complete twisted, screened)
Plugtyp (usable for all 3 devices):
Phoenix MCVW 1,5/3-ST-3,81
Art. Nr. 1826982
Termination must always be set at the end of the cable line!
X4
Termination: ON
FSM with
FSM-CAN
Modul
Termination: OFF
Door A
Termination: ON
Door B
Siemens Sidor AT40
H
GND
L
Meiller MiDrive
GND
H
L
FSM CAN
H
GND
L
Pin configuration:
Plug 1 2 3
FSM CAN X4 H GND L
Siemens Sidor AT40 X16 H GND L
Meiller MiDrive DS417 L H GND
NEW Lift GmbH
Lochhammer Schlag 8
D-82166 Gräfelfing
Cabling CAN-Door controller - FSM
Seite 1 von 1



FSM circuit board with CAN module

4 Programming adapter

The controller of the FSM-CAN cannot be programmed via the LON bus. A special programming adapter is needed for this purpose. The programming adapter for the software update can be ordered from NEW*Lift* under the following part number:

› USB ISP programmer for FSM-CAN - Part No. 37-88700

4.1 Connecting the programming adapter

Programming adapter

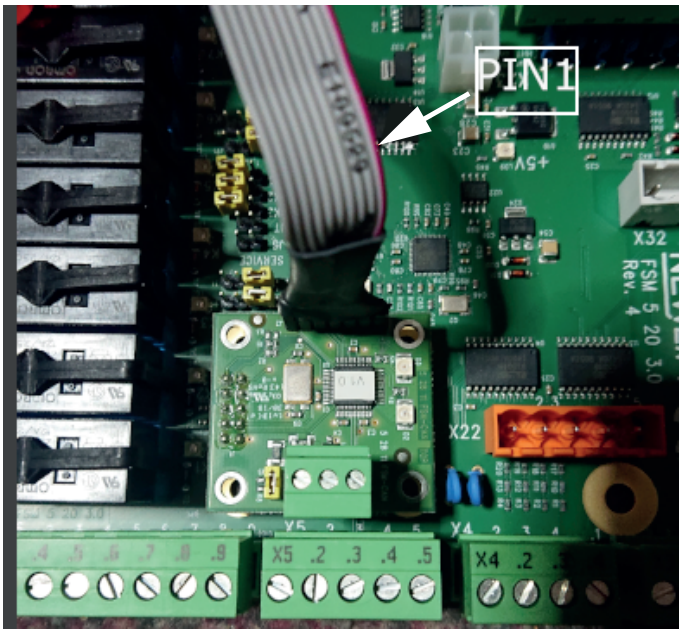
► Set DIP switch **3** to **ON**.

► Use the USB cable to connect the programming adapter to the PC.

► Connect the programming adapter to the FSM-CAN module with the ribbon cable:

- Connect 10-pin box header to the programming adapter.
- Connect 7-pin pin header to **J2** of the FSM-CAN module.

Pay attention to the polarity of the cable!



Connection of FSM-CAN module

► Supply the FSM-CAN module with 24 V via, e.g., **X30**.

4.2 Installing the software

Requirement

› File *FSM-CAN_flasher.zip*

› Runs on Windows XP and newer

› Driver

»No driver necessary beginning with Windows 10

»For older versions of Windows, please check with NEW*Lift*

The software is included in the delivery contents and is provided on a USB stick.

Installation

▶ Use a USB cable to connect the programming adapter to the PC
„4.1 Programmieradapter anschließen“ auf Seite 10.

▶ Extract the ZIP file to a directory of your choice on the PC or USB stick.

▶ In the Windows device manager, select the unknown device with the right mouse button.

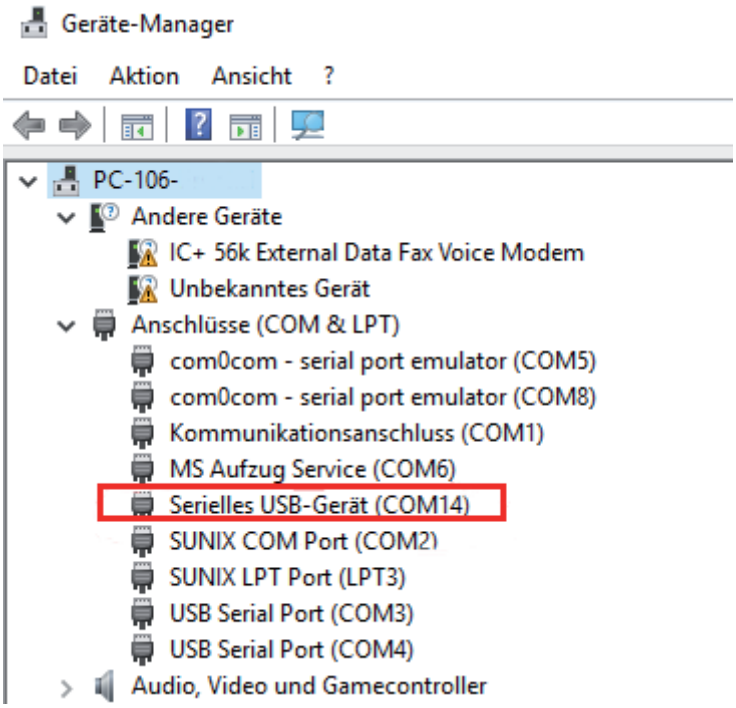
▶ Select the **Update driver software** function and confirm.

▶ In the following window, navigate to the directory containing file *prog-s2-isp.inf*

▶ Start file *prog-s2-isp.inf* .

With Windows 10, no further driver installation is necessary; the programmer automatically registers as a serial USB device.

Note the number of the COM port for your device.



Example for COM port

4.3 Using the software

The application file is contained in file *FSM-CAN_flasher.zip*.

► Enter *progfsm.bat X* via the console

or

► in the extracted *FSM-CAN_flasher* directory, execute the application by double-clicking on one of the *progfsm_COMX.bat* files.

X stands for the COM number of your programming device, e.g., progfsm_COM14.bat.

Normal program execution

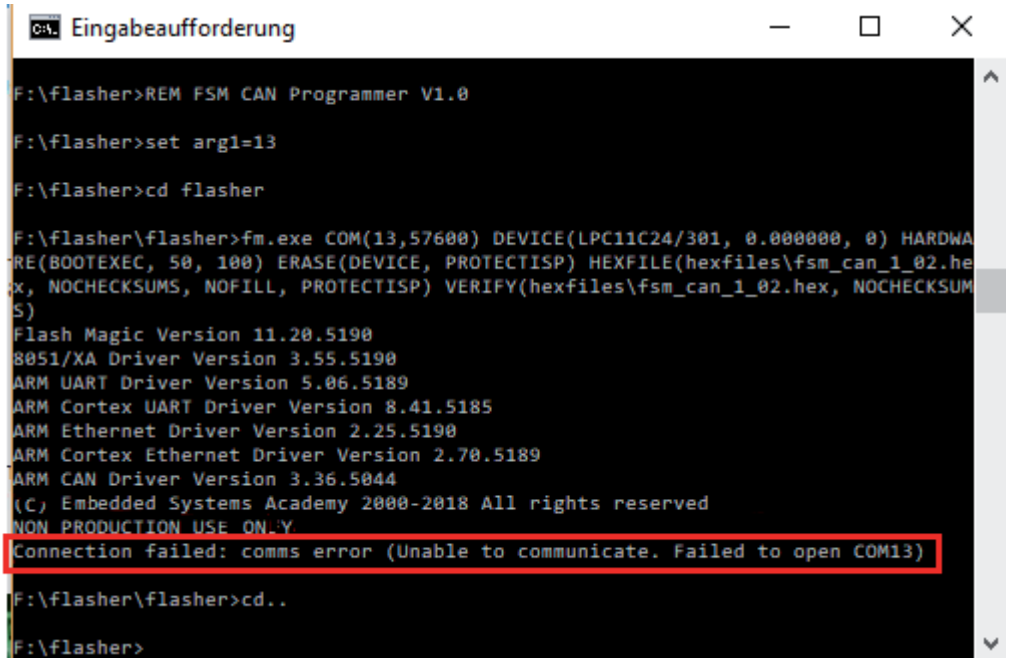
```
Eingabeaufforderung

F:\flasher>cd flasher

F:\flasher\flasher>fm.exe COM(14,57600) DEVICE(LPC11C24/301, 0.000000, 0) HARDWA
RE(BOOTEXEC, 50, 100) ERASE(DEVICE, PROTECTISP) HEXFILE(hexfiles\fsm_can_1_02.he
x, NOCHECKSUMS, NOFILL, PROTECTISP) VERIFY(hexfiles\fsm_can_1_02.hex, NOCHECKSUM
S)
Flash Magic Version 11.20.5190
8051/XA Driver Version 3.55.5190
ARM UART Driver Version 5.06.5189
ARM Cortex UART Driver Version 8.41.5185
ARM Ethernet Driver Version 2.25.5190
ARM Cortex Ethernet Driver Version 2.70.5189
ARM CAN Driver Version 3.36.5044
(C) Embedded Systems Academy 2000-2018 All rights reserved
NON PRODUCTION USE ONLY
Connected
Device selected
Erase complete (DEVICE)
Hex file programming complete (hexfiles\fsm_can_1_02.hex)
Verify passed (hexfiles\fsm_can_1_02.hex)

F:\flasher\flasher>cd..

F:\flasher>
```

Screen display for normal/error-free program execution

Faulty program execution

```
Eingabeaufforderung - progfsm_COM14.bat

F:\flasher>progfsm_COM14.bat

F:\flasher>REM Argument arg1 = COM Port  ist Argument aus Commandozeile

F:\flasher>REM FSM CAN Programmer V1.0

F:\flasher>set arg1=14

F:\flasher>cd flasher

F:\flasher\flasher>fm.exe COM(14,57600) DEVICE(LPC11C24/301, 0.000000, 0) HARDWA
RE(BOOTEXEC, 50, 100) ERASE(DEVICE, PROTECTISP) HEXFILE(hexfiles\fsm_can_1_02.he
x, NOCHECKSUMS, NOFILL, PROTECTISP) VERIFY(hexfiles\fsm_can_1_02.hex, NOCHECKSUM
S)
Flash Magic Version 11.20.5190
8051/XA Driver Version 3.55.5190
ARM UART Driver Version 5.06.5189
ARM Cortex UART Driver Version 8.41.5185
ARM Ethernet Driver Version 2.25.5190
ARM Cortex Ethernet Driver Version 2.70.5189
ARM CAN Driver Version 3.36.5044
(C) Embedded Systems Academy 2000-2018 All rights reserved
NON PRODUCTION USE ONLY
```

Screen display for incorrectly plugged-in ribbon cable or missing 24 V supply



Screen display for incorrectly selected COM interface

NOTES

NOTES

NEWLIFT
NEUE ELEKTRONISCHE WEGE

NEW LIFT Neue Elektronische Wege
Steuerungsbau GmbH
Lochhamer Schlag 8
DE 82166 Gräfelfing

+49 (0) 89 898 66 0
+49 (0) 89 898 66 300
info@newlift.de
www.newlift.de

NEW LIFT
Service Center GmbH
Ruwerstraße 16
DE 54427 Kell am See

+49 (0) 6589 919 540
+49 (0) 6589 919 540 300
info@newlift-sc.de
www.newlift.de