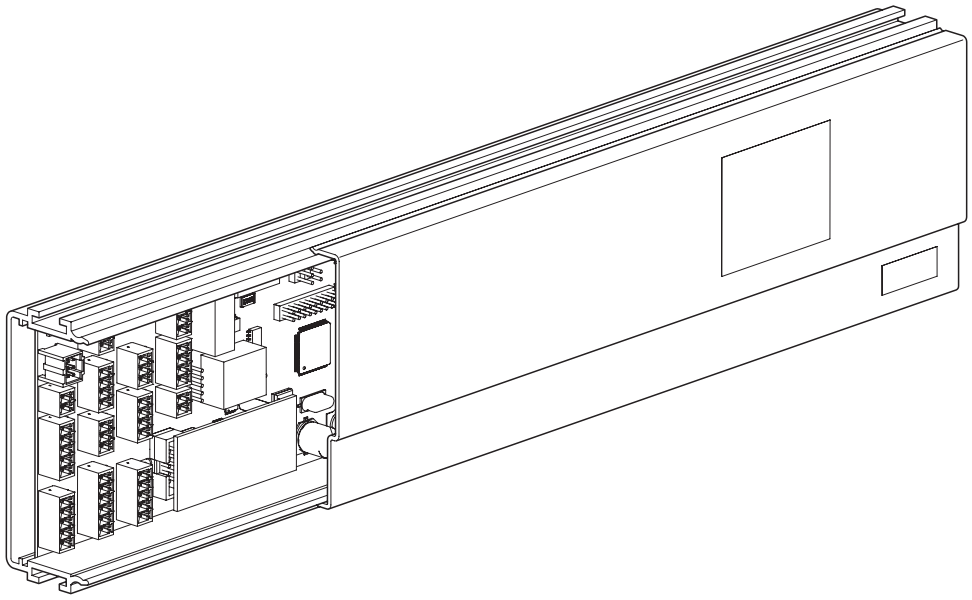


DCU1-NT/ DCU1-2M-NT

Electronic drive unit for automatic sliding doors

EN Faults and corrective measures

187119-01

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1 Introduction

1.1 Symbols and illustrations

Warning notices
In these instructions, warning notices are used to warn against material damage and injuries.
- ▶ Always read and observe these warning notices.
- ▶ Observe all measures marked with the warning symbol and warning word .

Warning symbol	Warning word	Meaning
	**CAUTION**	Danger to persons. Non-compliance can result in minor injuries.

Further symbols and illustrations
Important information and technical notes are highlighted to explain correct operation.

Symbol	Meaning
	means “important note”. Information to prevent property damage, to understand or optimise the operation sequences.
	means “additional Information”
▶	Symbol for an action: This means you have to do something. ▶ If there are several actions to be taken, keep to the given order.

1.2 Validity

Valid for units with
- ▫ Hardware: DCU1-NT Rev. B0, DCU1-2M-NT Rev. B0
- ▫ Firmware: DCU1-NT from V5.0, DCU1-2M-NT from V5.0

1.3 Intended use

This manual is intended for the following group of people:
- ▫ Speakers at training sessions
- ▫ Trained and authorised commissioners
- ▫ Trained and authorised maintenance personnel

1.4 Pre-conditions for eliminating problems

The following tools and documents are required for working on the drives:
- ▫ Wiring diagram in its respectively valid version.
- ▫ Additional information to the wiring diagram for variants of the door control unit.
- ▫ The description of any special firmware used.
- ▫ The valid sensor documents when working on sensors.
- ▫ Tool for mechanical work on the drive unit.
- ▫ Measuring devices for current, voltage and movement forces.
- ▫ For commissioning: DPS, ST220 or GEZEconnects.
- ▫ For advanced troubleshooting: ST220 or GEZEconnects.

2 Safety notices



- ▶ Heed the safety notices in the wiring diagram for automatic sliding doors DCU1-NT/DCU1-2M-NT.

3 Fault messages of the door control unit

3.1 Notes on detecting and indicating faults

- Faults which are detected by the control unit and are thus entered in the fault memory are deleted by the control unit in as far as this is permissible and the cause of the fault has disappeared.
- A fault is only entered in the fault memory once.
- Depending on the safety requirements, weighting of the fault, cause of the fault and drive type, the drive unit continues to run or the door remains open with the fault pending.
- The fault memory is deleted following a power failure.

3.2 Fault memory history

- The fault entries in the “oE” on the DPS, “old faults” on the ST220 or in GEZEconnects do not affect the function of the door control unit. The fault memory history is solely used to provide information about processes in the door control unit. A maximum of 10 faults are stored here. When the number of faults exceeds 10, the oldest ones are overwritten.
- There can be multiple fault entries in this fault memory.
- The fault memory history is not deleted following a power failure.
- The fault memory history must be deleted following work on the system.



▶ Always check the wiring of the control unit for short-circuit, interruption and incorrect terminal assignment to the corresponding assembly group.

“Freezing” the fault memory history
To prevent the fault memory being filled with unnecessary faults when removed, the fault memory can be “frozen”. For this purpose, all PS inputs (AU/LS/DO/NA) must be active at the same time.

3.3 Fault table

No.	Fault	Status of the door system	Cause	Measure
01	24 V	DCU1-NT: Door remains open or moves slowly. DCU1-2M-NT: Door opens (in LS and AU).	▫ Control unit defective ▫ External overload of the 24 V supply ▫ Switching the door control unit on and off	▶ Remove the external overload. ▶ Replace control unit.
02	12 V DCU100	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens slowly (in LS and AU).	▫ Power failure ▫ Control unit defective	▶ Check mains voltage. ▶ Replace control unit.
03	230 V	DCU1-NT: Behaviour of the door in compliance with AC parameter; power failure, not in night operating mode. DCU1-2M-NT: Door opens in rechargeable battery operation (in LS and AU).	▫ Power failure ▫ Safety fuse of the transformer assembly defective ▫ Transformer assembly is defective	▶ Check mains supply. ▶ Replace safety fuse in the transformer assembly. ▶ Replace transformer (see installation instructions).
07	Fire alarm	DCU1-NT: Door closes. DCU1-2M-NT: This function is not available.	▫ Power failure at the fire detector ▫ Fire detector has triggered	▶ Check the voltage supply at the fire detector. ▶ After the fire alarm has been deleted, press the reset switch on DCU104.
08	Smoke alarm	DCU1-NT: Door closes. DCU1-2M-NT: This function is not available.	▫ Power failure smoke detector ▫ Smoke detector has triggered	▶ Check the voltage supply at the fire detector. ▶ After the fire alarm has been deleted, press the exit only push button on the programme switch.
10	Rotary encoder	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens slowly (in LS and AU).	Motor gear unit or door is blocked	▶ Check ease of movement of the door.
	Rotary encoder defective		No signals from the rotary encoder	▶ Check ease of movement of the door. ▶ Replace motor gear unit.
	Rotary encoder asymmetric		One rotary encoder channel defective	▶ Replace motor gear unit. ▶ Replace control unit. ▶ Check motor gear unit wiring.
	Calculation error			▶ Carry out drive reset.
	Rotary encoder overflow		Too many pulses counted	▶ Wrong rotary encoder. ▶ Toothed belt lost. ▶ Opening width too large.
	Rotary encoder short-circuit		Rotary encoder cable defective	▶ Carry out drive reset. ▶ Repeat learning process for drive. ▶ Perform production test. ▶ Replace motor gear unit/control unit.
	Rotary encoder model		▫ Rotary encoder problems ▫ Wrong motor gear unit ▫ Current measurement faulty	
11	DCU100 short-circuit	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens slowly (in LS and AU).	▫ Current through DCU100 too high ▫ Motor gear unit 1 short-circuit ▫ Motor gear unit 1 winding short-circuit	▶ Reduce parameter for the static force. ▶ Check drive for ease of movement. ▶ Use firmware V5.0 or higher. ▶ Replace motor gear unit. ▶ Replace control unit.

No.	Fault	Status of the door system	Cause	Measure
12	DCU100 motor gear unit	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens slowly (in LS and AU).	▫ Toothed belt slipping ▫ Motor gear unit 1 defective	▶ Tension toothed belt. ▶ Carry out control unit self-test again. ▶ Check drive for ease of movement. ▶ Replace motor gear unit. ▶ Replace control unit.
13	SIS1 Terminal 11	Door remains open, closes slowly after 4 min.	▫ SI activation longer than 4 min. ▫ SI interrupted, sensor cannot calibrate ▫ Safety fuse F1 defective ▫ Sensor testing is switched off ▫ Sensor defective ▫ Sensor is not wired correctly	▶ Check function of the safety sensor. ▶ Check safety fuse. ▶ Switch testing on. ▶ Check sensor according to instructions. ▶ Check wiring. ▶ Eliminate the cause of permanent activation, see sensor documentation.
14	MPS	▫ Operation and display do not work on MPS. ▫ Mode of operation last selected remains active.	▫ Safety fuse F1 defective ▫ Broken MPS cable ▫ MPS defective	▶ Measure voltage at PE2. The voltage must be 4 V or a multiple of this.
15	DPS	▫ Operation and display do not work on the display programme switch. ▫ Mode of operation last selected remains active.	▫ Safety fuse F1 defective ▫ Power supply cable without shielding ▫ Display programme switch defective ▫ As long as the communication is interrupted, the display programme switch shows 8.8	▶ Replace safety fuse F1. ▶ Shield connection cable. ▶ Check wiring. ▶ Replace DPS.
16	Lock	Locking mechanism does not lock. Otherwise the door works normally.	▫ Locking mechanism jammed ▫ Locking mechanism defective ▫ Status contact defective ▫ Safety fuse F1 defective	▶ Check wiring. ▶ Check safety fuse F1. ▶ Check locking mechanism. ▶ Set locking mechanism.
17	Unlock	Unlocking mechanism does not unlock. DCU1-NT: When unlocked, normal function. DCU1-2M-NT: When unlocked, the door is opened.	▫ Unlocking mechanism jammed ▫ Unlocking mechanism defective ▫ Status contact defective ▫ Safety fuse F1 defective	▶ Check wiring. ▶ Check safety fuse F1. ▶ Check locking mechanism. ▶ Set locking mechanism.
18	Bar message	DCU1-NT: When unlocked, normal function. DCU1-2M-NT: When unlocked, the door is opened.	Bolt feedback is inconsistent	▶ Check wiring. ▶ Check contact block.
	Both limit switches are active		▫ Limit switch defective ▫ Short-circuit on the PCB	▶ Carry out mechanical and electrical test on the limit switches.
	Value manual unlocking switch		The voltage at PE2 is not in the valid range	▶ Check value at PE2. Must be 8 V or 16 V. ▶ Check switch and contacts.
	Manual limit switch		Unlocking switch unlocked and manual unlocking switch locked	▶ Check limit switch and wiring.
	Manual short-circuit		After three unlocking attempts lock A was not unlocked	▶ Check limit switch and wiring.
	Manual interruption		Door closed, no signal for manual unlocking	▶ Check limit switch and wiring.

No.	Fault	Status of the door system	Cause	Measure
19	SIS2		See fault 13	
25	Open	DCU1-2M-NT: Three further attempts at opening, then the door closes.	▫ The door is prevented opening ▫ Opening speed too high ▫ Acceleration too high ▫ Motor gear unit defective ▫ Folding door: the drive type has not been switched to folding door	▶ Remove the obstacle. ▶ Reduce opening speed. ▶ Reduce acceleration. ▶ Reduce movement forces (see fault 10). ▶ With the folding door, set drive type to folding door.
26	Opening width	Door continues to move and stops in the open and closed position.	Door does not open up to the taught opening width	▶ Move obstacle out of the travel path. ▶ Reduce friction of the drive unit. ▶ Check toothed belt, it may be skipping.
27	SIO	DCU1-NT: SIO: Opening process is aborted, door closes after the hold-open time has passed. Break Out: Door stops during opening and closing. Door only goes back into operation when leaf has been latched back into position. DCU1-2M-NT: Opens up to the reduced opening width. The fault is not entered in the fault memory history.	▫ Safety sensor has triggered ▫ Break Out: a leaf has swung out (see fault 13)	▶ Check sensor field. ▶ Check wiring. ▶ Check sensor. ▶ Latch break-out leaf back into place.
28	DCU100 motor gear unit relay	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens slowly (in LS and AU).	Motor gear unit relay is sticking	▶ Repeat self-test. ▶ Replace control unit.
29	SIO2	DCU1-NT: SIO: After 4 min. the door moves again and opens slowly. Break Out: Door at a standstill. DCU1-2M-NT: Opens up to the reduced opening width.	See fault 13	
32	Sabotage	Activation via KB input is not possible. Door only reacts after a valid push button has been activated on a programme switch or the potential has changed at one of the LS, AU, DO inputs.	▫ Sabotage contact not activated (housing of the key switch is open, spring of the contact is bent, ...) ▫ Contact defective ▫ Safety fuse F1 defective	▶ Activate sabotage contact and switch mode of operation.
33	Interlocking door system, vestibule	DCU1-NT: The door that opened last continues to open.	▫ Connection to the second control unit is faulty ▫ Second control unit defective	▶ Check voltage supply of the 2nd control unit. ▶ Check wiring. ▶ Check configuration of the control units.

No.	Fault	Status of the door system	Cause	Measure
34	TPS	Operation and display do not work on the keypad programme switch. Door functions in the set mode of operation.	▫ Safety fuse F1 defective ▫ Power supply cable defective ▫ Power supply cable without shielding ▫ TPS defective ▫ As long as communication is interrupted, the keypad programme switch indicates “all LEDs on” or the LEDs are frozen.	▶ Replace safety fuse. ▶ Shield connection cable. ▶ Check wiring and repair if necessary. ▶ Replace TPS.
35	Limited opening width	The last state remains in effect.	▫ Activation longer than 4 min. ▫ Contact defective	▶ Remove activation. ▶ Repair contact.
36	Control unit redundancy	DCU1-2M-NT: Door opens (in LS and AU).	Fault while monitoring redundancy of the inside detector(s)	▶ Increase detector holding time. ▶ Reduce opening/closing speed. ▶ Check voltage in line with the type of contact at the terminals. ▫ Electric strike: min. 23 V ▫ Voltage: approx. 2.7 V ▫ Frequency: approx. 12 V ▶ Increase static force open/close. **CAUTION** **Danger of crushing Forces over 150 N** ▶ Only set with additional protection of the danger zones.
37	KI1	DCU1-2M-NT: Door opens (in LS and AU).	▫ Activation longer than 4 min. ▫ Configuration wrong ▫ Safety fuse F1 defective ▫ Sensor defective	▶ Remove activation. ▶ Check configuration. ▶ Replace safety fuse F1. ▶ Check wiring. ▶ Replace sensor.
38	KI2	DCU1-2M-NT: Door opens (in LS and AU).	▫ Safety fuse F1 defective ▫ Sensor defective ▫ Wrong configuration	▶ Replace safety fuse. ▶ Check wiring. ▶ Check configuration.
	Normally closed contact		Activation longer than 4 min.	
	Voltage		Voltage at KI greater than 10 V	▶ Measure voltage.
	Frequency		Frequency signal at KI greater than 200 Hz	▶ Measure frequency. ▶ Measure voltage (approx. 12 V).
39	KA		▫ Activation longer than 4 min. ▫ Configuration wrong ▫ Safety fuse F1 defective ▫ Sensor defective	▶ Remove activation. ▶ Check configuration. ▶ Replace safety fuse F1. ▶ Check wiring. ▶ Replace sensor.

No.	Fault	Status of the door system	Cause	Measure
40	KB	Door remains open.	▫ Activation longer than 4 min. ▫ Sensor defective	▶ Remove activation. ▶ Check wiring. ▶ Replace sensor.
41	SIO1		See faults 29 and 13	
42	Emergency lock	DCU1-NT: Door closes or remains closed and locked.	Input emergency lock to PEx	▶ Check configuration.
			Emergency lock active, push button pressed	▶ Remove push button.
			Push button defective	▶ Check wiring. ▶ Check resistance 20 kOhm. ▶ Check push button.
44	STOP	DCU1-NT: Door stops directly.	▫ Stop input is active on terminal 15 ▫ Input configuration is wrong	▶ Disable input. ▶ Check configuration.
45	Drive Hot DCU100	Door opens and remains open (in LS and AU).	▫ Motor gear unit defective ▫ Too much friction ▫ High traffic ▫ High ambient temperature (direct exposure to sun, ...) ▫ Control unit defective ▫ Door swings back and forward in initial closing	▶ Install fan for the motor gear unit or control unit. ▶ Reduce ambient temperature. ▶ Reduce permanent closing. ▶ Reduce friction. ▶ Increase hold-open time.
46	Motor gear unit temperature sensor	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens (in LS and AU).	Motor gear unit (temperature sensor) defective	▶ Check motor gear unit wiring. ▶ Replace motor gear unit. ▶ Replace control unit.
47	DCU100 temperature sensor	DCU1-NT: Door at a standstill. DCU1-2M-NT: Door opens (in LS and AU).	Control unit (temperature sensor) defective	▶ Replace control unit.
48	DCU100 drive overheated	Door remains open (in LS and AU).	See fault 45	
50	DCU104	DCU1-T30: Door closes.	DCU104 control unit defective	▶ Check jumper and configuration of DCU104. ▶ Check wiring of DCU104. ▶ Replace DCU104 control unit. ▶ Replace DCU100 control unit.
	Test 1 Fail		Testing on the DCU104 does not work	
	Test 2 Fail			
	K1 no switch			
	K2 no switch			
	Motor gear unit brake K1			
	Motor gear unit brake K2			
	Braking circuit defective			
	Motor gear unit defective			

No.	Fault	Status of the door system	Cause	Measure
51	Motor gear unit brake	DCU1-2M-LL: Door opens (LS and AU) DCU1-2M-RWS: Door opens (LS and AU)	The motor gear unit brake does not brake	▶ Check motor gear unit brake, connect directly to 24 V if necessary.
	PA1 defective		The motor gear unit brake does not release	▶ Check force of movement of the drive.
	PA2 defective			
	Emergency push button pressed down			▶ Disable emergency push button.
	Short-circuit PE1-24V		Testing of wiring the emergency push button faulty	▶ Check wiring.
	Short-circuit TST- 24V		Short-circuit between Test and 24V	▶ Check wiring.
52	CAN	DCU1-NT: Door continues to function DCU1-2M-NT: Door continues to function	Problems with CAN communication	▶ Check CAN.
	CAN fault		Short circuit, cable break, wires mixed up in the connection to myGEZE Cloud Link	▶ Check cable connection to myGEZE Cloud Link. ▶ Check terminating resistor at myGEZE Cloud Link.
	CAN inactive		CAN driver is inactive	▶ Check CAN configuration. ▶ Re-start control unit.
53	Manual unlocking	The door is cleared.	With lock A, the locked door was unlocked by hand	▶ Switch to automatic mode of operation.
54	DPS		See fault 15	▶ Replace safety fuse F1. ▶ Shield connection cable. ▶ Check wiring. ▶ Replace DPS-NT.
59	myGEZE Cloud Link	DCU1-NT: Door continues to function DCU1-2M-NT: Door continues to function	▫ Incompatibility between DCU1-NT / DCU1_2M-NT and myGEZE Cloud Link ▫ Faulty product data	▶ Check myGEZE Cloud Link.
	Comm. timeout		▫ No voltage at the myGEZE Cloud Link ▫ No myGEZE Cloud Link recognised	▶ Check wiring and voltage supply.
	Wrong protocol version.		Incompatible protocol versions in IoT module and DCU1	▶ Carry out SW update for the door control unit. ▶ Carry out SW update for the myGEZE Cloud Link.
	IoT internal error		▫ Error in myGEZE Cloud Link ▫ Error with SIM card or NB-IoT module	▶ Replace myGEZE Cloud Link.
	Invalid product serial number		Error in communication, no valid product serial number available	▶ Write or check product serial number in DCU1.
	Invalid product data		Error in communication, product data not available	▶ Configure or check drive type in DCU1. ▶ Use DCU1-NT firmware compatible with myGEZE Cloud Link.

No.	Fault	Status of the door system	Cause	Measure
60	DCU100	DCU1-NT: Door runs slowly. DCU1-2M-NT: Door opens (in LS and AU).	DCU110 control unit	▶ If fault is pending always carry out self-test.
	DCU100 logic voltage		▫ Power failure ▫ Voltage too low ▫ Control unit defective	▶ Check voltage supply. ▶ Check control unit.
	DCU100 power voltage		▫ Voltage too low	▶ Refer also to fault 61: ▫ Check rechargeable battery voltage. ▫ Check the age of the rechargeable battery. ▶ Check safety fuses F2 and replace if necessary. ▶ Check parameter setting: ▫ Reduce static forces open. ▫ Reduce static forces close. ▫ Reduce acceleration. ▫ Reduce opening and closing speed. ▶ If this fault is permanently pending, replace control unit.
	ROM error		Checking the programme memory resulted in a fault	▶ Flash the control unit again. ▶ Replace control unit.
	RAM error		Checking the random access memory resulted in a fault	▶ Replace control unit.
	EEPROM error		Checking the parameter memory resulted in a fault	▶ Delete the control unit and put it into operation again.
	DCU100 K1		Relay for motor gear unit voltage does not switch	▶ If this fault occurs frequently, replace control unit.
	DCU100 K2		▫ Relay for rechargeable battery does not switch ▫ Voltage at terminal 3, the relay cannot be switched	▶ If this fault occurs frequently, replace control unit. ▶ Measure the voltage at terminal 3. Voltage should be < 2.5 V.
	Rechargeable battery diode		Diode for the rechargeable battery is short-circuited	▶ Replace control unit.
	D1 check 1		Diode for the mains is short-circuited	▶ Replace control unit.
	Quartz failure		Clock pulse supply to computer defective	▶ Replace control unit.
	ADC ref		Defect in analogue signal processing	▶ Replace control unit.
	Quartz tolerance		Clock pulse supply to computer defective	▶ Replace control unit.
	VDD Test		Voltage supply to computer defective	▶ Replace control unit.

No.	Fault	Status of the door system	Cause	Measure
61	Rechargeable battery Rechargeable battery missing	DCU1-NT: no reaction DCU1-2M-NT: Door opens (in LS and AU).	▫ The rechargeable battery is missing ▫ The rechargeable battery is deeply discharged ▫ Safety fuse F3 defective ▫ Safety fuse F5 defective	▶ Insert the rechargeable battery. ▶ Wait max. 30 min. ▶ Measure rechargeable battery voltage. ▶ Replace fuses if necessary.
	Rechargeable battery load fault		▫ The rechargeable battery is discharged ▫ The rechargeable battery is too old ▫ The rechargeable battery is not being charged	▶ Wait max. 80 min. until the rechargeable battery is charged. ▶ Check voltage behaviour at the rechargeable battery terminal. ▶ Measure voltages at the control unit. ▶ Measure rechargeable battery charge voltage: ▫ Rechargeable battery removed: 29 V ▫ Rechargeable battery inserted: < 29 V ▫ Rechargeable battery voltage charged: 26 V Rechargeable battery test: ▶ Repeat the test every 2 minutes until the load test has been passed. ▶ Replace the rechargeable battery if necessary.
	Surge		Surge has been detected at the rechargeable battery voltage	▶ Remove external voltage. ▶ Replace control unit.
	Test cycles		▫ Communication problems to DCU101 ▫ KB is activated too often	▶ Check earthing of the control unit. ▶ Check KB function and voltages at KB.
63	SW version	DCU1-2M-NT: Commissioning the drive is not possible.	▫ Firmware versions for computer 1 and computer 2 are not suitable	▶ Check firmware versions of computer 1 and 2 through ST220. ▶ Replace control unit.

No.	Fault	Status of the door system	Cause	Measure
64	Open during testing	DCU1-2M-NT: Door remains open.	Drive requires longer than 3 sec. to reach 80 % of opening width with 1 motor gear unit. Possible causes: ▫ Obstruction ▫ Acceleration too low ▫ Too much friction ▫ Motor gear unit defective ▫ Blockage while opening ▫ Bolt is not unlocked ▫ Folding door: the drive type has not been switched to folding door	▶ Remove obstacle or blockage. ▶ Check ease of movement of the door leaves: ▫ Even force over the complete travel path? ▫ max. 50–70 N movement force. ▫ Obstacles near the floor guide? ▶ Increase acceleration. ▶ Increase static force open. **CAUTION** **Danger of crushing** **Forces over 150 N** ▶ Only set with additional protection of the danger zones. ▶ Check the setting of the locking mechanism. ▶ Check for jamming at the floor guide. ▶ Check the door leaves for tilting. ▶ Check the adhesive points on the door seal profile. ▶ Check the adhesive points on the secondary closing edge. ▶ With the folding door, set drive type to folding door.
65	Programme sequence	DCU1-2M-NT: Door opens (in LS and AU).	EMC problem	All measures see fault 64. ▶ Check earthing of the control units. ▶ Check firmware version through ST220. ▶ Check fuses. ▶ Replace control unit.
	DCU100 time		Computer DCU110 time fault communication	
	No response DCU101		Redundant computer is not responding	

No.	Fault	Status of the door system	Cause	Measure
70	DCU101	DCU1-2M-NT: Door opens (in LS and AU).	DCU 110 control unit redundancy part	▶ Replace control unit. ▶ Replace safety fuse.
	DCU101 logic voltage		Voltage too low	▶ Check voltage supply.
	DCU101 power voltage			▶ Check safety fuses F4 and replace if necessary. If the fault is permanently pending: ▶ Replace control unit. Check parameter setting: ▶ Reduce static forces open. ▶ Reduce static forces close. ▶ Reduce acceleration. ▶ Reduce opening and closing speed.
	DCU101 ROM error		Checking the programme memory resulted in a fault	▶ Flash the control unit again. ▶ Replace control unit.
	DCU101 RAM error		Checking the random access memory resulted in a fault	▶ Replace control unit.
	DCU101 K1		Relay for motor gear unit voltage does not switch	▶ If this fault occurs frequently, replace control unit.
	DCU101 K2		Relay for rechargeable battery does not switch	
	Rechargeable battery diode		Diode for the rechargeable battery is short-circuited	
	DCU101 motor gear unit		Motor gear unit 2 cannot be activated by computer 2	
	DCU101 12V		12 V supply to computer 2 is defective	▶ Check voltage supply. ▶ Replace control unit.
	D3 check		Diode for the mains supply to computer 2 is short-circuited	▶ Replace control unit.
	D4 check			
	DCU101 EEPROM Error		Parameter memory defective	▶ If this fault occurs frequently, replace control unit.
	Quartz tolerance		Clock pulse supply for redundant computer defective	
	VDD Test		Voltage supply to computer defective	
	PWM motor gear unit 2		Current integral through the motor gear units too high	
71	DCU101 short-circuit	DCU1-2M-NT: Door opens (in LS and AU).	▫ Current through DCU101 too high ▫ Motor gear unit 2 short-circuit ▫ Motor gear unit 2 winding short-circuit	▶ Reduce parameter for static force. ▶ Check drive for ease of movement. ▶ Replace motor gear unit. ▶ Replace control unit.
72	DCU101 motor gear unit gear unit	DCU1-2M-NT: Door opens (in LS and AU).	▫ Toothed belt slipping ▫ Motor gear unit 2 defective	▶ Tension toothed belt. ▶ Carry out control unit self-test again. ▶ Check drive for ease of movement. ▶ Replace motor gear unit. ▶ Replace control unit.

No.	Fault	Status of the door system	Cause	Measure
75	Control unit hot DCU101	DCU1-2M-NT: Door remains open after next activation (in LS and AU).	See fault 45	
77	DCU101 temperature sensor	DCU1-2M-NT: Door opens (in LS and AU).	Control unit (temperature sensor) defective	▶ Replace control unit.
78	DCU101 control unit overheated	DCU1-2M-NT: Door opens (in LS and AU).	See fault 45	
79	DCU101 motor gear unit relay	DCU1-2M-NT: Door opens (in LS and AU).	Control unit defective	▶ If this fault occurs frequently, replace control unit.
81	Test fault	DCU1-2M-NT: none	Has been used as a test fault for software development	None
90	Control unit		Time fault during production test	▶ Check pre-conditions for production test. ▶ Re-start production test.
91	Rotary encoder, motor gear unit gear unit		▫ See faults 10 and 12 ▫ The drive unit cannot move freely	▶ Check pre-conditions for production test. ▶ Re-start production test.
x.x	Position	Door opens slowly until the learnt opening width has been moved through once.	▫ Power failure ▫ Slip (toothed belt)	
x x.	Maintenance	Door continues to function.	Maintenance request	▶ Carry out maintenance. ▶ Reset to the maintenance display after maintenance.
EL	Teaching	Door does not go into operation.	Fault during learning. The number of the fault and EL is displayed alternately	▶ Eliminate fault. ▶ Re-start learning.
8.8.	DPS		See fault 15	

3.4 Resetting faults

3.4.1 DPS, TPS

Possibility 1

▶ In the service menu scroll on the 3rd level to display Er.

If CE is shown on the display:

▶ press the ↵ key.

Possibility 2

▶ Switch mode of operation.

All faults are deleted.

Possibility 3

▫ With TPS:

▶ Use key ▲ or ▼ to change to the mode of operation OFF.

▶ Press keys ▲ and ▼ simultaneously for 1 s.

▫ With DPS:

▶ Set mode of operation “Off”.

▶ Activate keys ✣+⇹ simultaneously for 1 s.



The function is not possible with DPS without OFF switch.

3.4.2 Programmable inputs

▶ Configure for reset function and activate input.

3.4.3 ST220

Possibility 1

▶ In the “Diagnosis” service menu navigate to “Fault memory”.

▶ Clear the fault memory.

Possibility 2

▶ Switch mode of operation.

All faults are deleted.

4 General problems

4.1 Door control unit inputs are not working

- ▶ Check contact type and function of the corresponding input in the service menu.
- ▶ Measure voltage at the terminals of the corresponding input.

Check voltage and logical status using service terminal ST220

- ▶ Diagnosis menu → Current values → Choose inputs.

The display of input voltages will appear:

SI1	24 V	*
SI2	0 V	
SI3	0 V	
SI4	0 V	

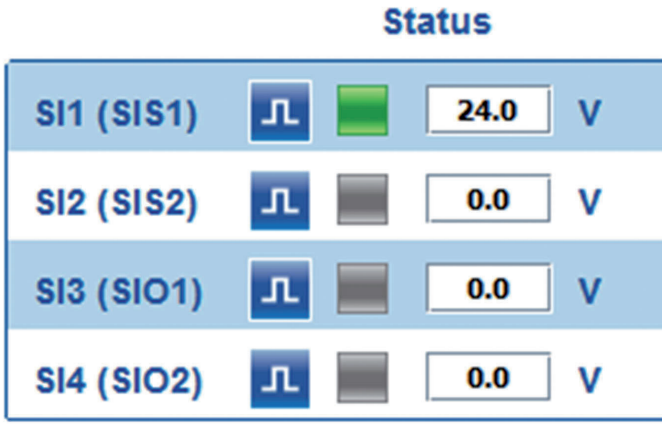
- ▶ Diagnosis menu → Current statuses → Choose inputs.

The display of input statuses will appear:

SI1	on	*
SI2	off	
SI3	off	
SI4	off	

Check voltage and logical status using GEZEconnects

Display of input voltages and statuses:



Other input functions

Problem	Cause	Measure
Safety sensor does not work	▫ Sensor is defective ▫ Sensor is not configured correctly ▫ Input in the control unit is defective	▶ Check safety sensor. ▶ Check contact type of the safety sensor. ▶ Check function of the safety sensor. ▶ Simulate sensor using wire bridges and test the function of the control unit. ℹ The safety sensors of the door have no longer been learnt since version V3.0.
Limited opening width contact sensor is not working	▫ Control unit is not in NA mode of operation ▫ Programmable input is configured wrong	▶ Switch drive to night mode of operation. ▶ Configure programmable inputs to limited opening width.
Input functions for which parameters can be set cannot be selected	▫ Function occupied with control unit variant ▫ Function not permissible with control unit variant ▫ Special firmware function not available	None

4.2 Door control unit outputs are not working

▶ Check contact type and function of the corresponding output in the service menu.
▶ Measure voltage at the terminals of the corresponding output.

Check voltage and logical status using service terminal ST220

▶ Diagnosis menu → Current values → Choose outputs.
The display of output voltages will appear:

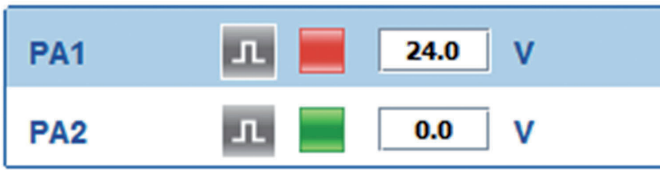
PA1	open	*
PA2	24 V	
Bolt	0 V	
Test	24 V	

▶ Diagnosis menu → Current statuses → Choose outputs.
The display of output statuses will appear:

PA1	off	*
PA2	off	
Bolt	off	
Test	on	

Check voltage and logical status using GEZEconnects

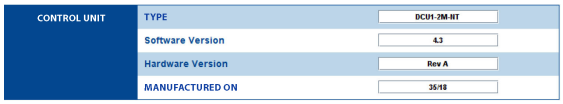
Activation, status display and voltage of the outputs:



Other output functions

Problem	Cause/measure
Output functions for which parameters can be set cannot be selected	▫ Function occupied with control unit variant. ▫ Function not permissible with control unit variant. ▫ Special firmware function not available.

4.3 Operation

Problem	Cause	Measure
No reaction after the drive has been switched on	▫ There is no voltage supply to the control unit ▫ Safety fuse in transformer defective (see wiring diagram)	▶ Check mains voltage. ▶ Measure the voltage at the connector AC IN of the control unit (approx. 33 V AC).
	Safety fuses in the control unit defective (see wiring diagram)	▶ Check whether the green RUN LED of the control unit is lit. ▫ LED on — Function OK ▫ LED flashes 2×/sec. — Control unit learnt with fault ▫ LED flashes every 2nd sec. — Control unit not learnt
DPS ▫ Mode of operation of the drive cannot be changed ▫ When a push button is pressed on the display programme switch, -- appears ▫ Display programme switch is disabled		▶ Connect key switch to display programme switch. ▶ DCU1-NT: Activate key switch. ▶ DCU1-BO: Activate key switch at the same time as display programme switch. ▶ DCU1-2M-NT: Activate key switch at the same time as display programme switch. ▶ Enter password for the programme switch.
Query the firmware version: ▫ DPS ▫ ST220 ▫ GEZEconnects		On the DPS: ▶ Switch DPS on. The firmware version is displayed. or ▶ Request “EP” menu. The firmware version is displayed. On the ST220: The firmware version is displayed on the start screen. GEZEconnects: ▫ Display in the status line  ▫ Display in the door parameter panel 
Mode of operation of the drive cannot be changed. When a push button is pressed on the display programme switch, 00 appears	One of the inputs NA, LS, AU, Off or DO is active	▶ Switch the timer off. ▶ Switch the BMS off. ▶ Remove activation at the PS inputs.
Mode of operation changes without owner-operator action	▫ DPS, TPS defective ▫ Contacts worn out or defective	▶ Replace DPS, TPS.
	▫ Mode of operation is switched via the PS inputs e.g. BMS or timer	▶ Clarify with the owner-operator what is required of the application.
Display shows “nS” when attempt is made to set parameters with the DPS	▫ Service via ST220 or GEZEconnects active	▶ End parameter setting via ST220 or GEZEconnects.
	▫ Parameter setting via DPS blocked	▶ Clarify authorisation for parameter setting.
Rechargeable battery is not being charged	An electrical consumer is connected to terminal 3	See fault 61 ▶ Check wiring of terminal 3 to consumer.

Problem	Cause	Measure
Drive interferes with goods protection system in the 60 Hz range (e.g. Sensomatik)		▶ Use special firmware with modified PWM frequency: ▫ DCU1-NT: Mat. no. 113083 ▫ DCU1-2M-NT: Mat. no. 113084
Drive interferes with goods protection system in the 8 MHz range (e.g. Nedap)		▶ Use motor gear unit DCU1-2M-NT with shielded motor gear unit cable mat. no. 132840.

4.4 Reduced opening width (DCU1-2M-NT)

Problem	Cause/measure
Reduced opening width is not learnt ℹ Heed the mandatory minimum opening width prescribed by building regulations (escape route).	▶ Before learning the reduced opening width, screw wire bridge between 2 and 6.
Reduced opening width is learnt but does not work	▶ After learning, remove the wire bridge between 2 and 6 again. ▶ Switch the drive off and on.
The door opens completely despite winter mode	▫ Control unit has learnt again (without wire bridge). ▫ A safety-related fault is pending. ▫ Activation was via input KB.
Desired reduced opening width cannot be set	The reduced opening width cannot be set to less than 30 % of the opening width.
Desired reduced opening width was not applied	The position was not acknowledged within the learning programme.

4.5 Moving behaviour

Problem	Cause/measure
The bolt locks shortly before the door is closed	▫ The positioning of the drive is faulty. ▫ The toothed belt skips. ▶ Check stiffness before the closed position. ▶ Check alignment of the main closing edge with a post receptor profile. ▶ Check alignment of the main closing edge. ▶ Switch drive on and off. ▶ Repeat learning process for drive. ▶ Replace motor gear unit. ▶ Replace control unit.
Door reverses during closing for no apparent reason	Configuration: ▫ Speed or acceleration has been set too high ▫ Door is does not move smoothly Environment: ▫ Soiling (floor guide, track) ▫ Floor guide ▫ Roller carriage ▫ Wind pressure on the door leaves Sensors: ▫ Safety sensor is triggered (vibration, external light, reflection on the leaf). ▫ Contact sensor is triggered (vibration of drive, reflection on the leaf).
Motor gear unit hums in closing position	**DCU1-NT** DPS: Set parameter CF to “00”. ST220: Set permanent closing parameter to 0 N. **DCU1-CO48** DPS: Set parameter CF to “00”. ST220: Set permanent closing parameter to 0 N. ▶ Set PAx to motor gear unit brake.

Problem	Cause/measure
Door opens for no apparent reason	Contact sensor is triggered (vibration of the drive, movement detector sees rain, tree branches moving in the wind, ...). DCU1-2M-NT: Sliding door opens with safety-related faults (see fault no.).
Leaf jerks in the closing position every 3 sec.	Door is pressed out of the closing position: ▫ by rubber seal on the main closing edge. ▫ due to door being installed crooked (with 1-leaf doors). ▶ Increase closed limit parameter. ▶ Increase permanent closing parameter.
Loud cracking heard during acceleration or braking	Toothed belt skips over the crown gear. ▶ Tension toothed belt.
Hold-open time changes	▫ Dynamic hold-open time extension is active (parameter HF). ▫ Motor gear unit is warm (see fault 45). ▫ A holding time is configured for the activation sensors.
Opening width is too small for pharmacy opening on single leaf doors	▶ Set number of leaves parameter to one-sided closing.
Door moves slowly, the middle point on the display programme switch (unknown position) does not go out	Learned opening width is larger than the actual one. ▶ Repeat learning process for control unit.
Full opening width is not reached	SIO is active. ▶ Repeat learning process for drive. The drive is stiff. ▶ Remove the obstacle.
When the contact sensor KI, KA or KB is activated, the door closes	Input is not configured correctly. ▶ Set type of contact to match the contact sensor used.
Door closes in mode of operation permanently open (DO)	Drive learnt the wrong way round.
Slimdrive SF (folding door) ▫ Fault 25 (folding door) ▫ Opening movement is aborted ▫ Fault 64 (opening test) (folding door)	Drive type has not been switched to folding door.

4.6 Check ease of movement of the door

Fault messages at the door can have different causes which are outputted by the door control unit. Mechanical causes near the door are often the problem. Replacing the control unit usually only solves the fault message briefly, since the reason for the fault has not been eliminated.

4.6.1 Visual inspection

Can anything unusual be seen:
- Track bent?
- Roller carriage jammed or twisted in the track?
- Signs of heavy wear visible on the profiles?
- Continuous floor guide soiled or uneven?
- Obstacles on the travel path?

Are there any temporary obstacles such as chairs, tables, shopping trolleys, display tables etc.?

▶ Check the floors for scratches and soiling (drive marks from forklift trucks etc.).

Check hooking at the floor guide:

▶ Open the door leaves quickly by and at the top edge of the main closing edge.

Check the run-on travel of the door leaf:

▶ Push the door by hand at approx. 50 cm/s and release.
The door should move at least another 5 cm.

▶ If you find anything unusual during the visual inspection, eliminate it.

4.6.2 Check for smooth movement

Movement forces	Status/need for action
≤ 50 N	The door moves easily
50–70 N	▶ Take environmental conditions into consideration. Is the system exposed to increased load due to wind pressure, which can lead to increased friction?
> 70 N	▶ Take measures to reduce the movement forces.

Check ease of movement using a spring scale

▶ Set the system to the "OFF" mode of operation.

▶ Push the door open completely, slowly and evenly in the top third using the spring scale.

The door leaf should be able to be moved with a consistent force over the entire travel path.
If more force is required at a certain point on the travel path, this can indicate an obstacle.

Check ease of movement by hand

As an alternative to the spring scale, ease of movement can also be checked by hand.

▶ Set the system to the "OFF" mode of operation.

▶ Push the door open slowly and evenly in the top third using the fingers of one hand.

The door leaf should be able to be moved with a consistent force over the entire travel path.
If more force is required at a certain point on the travel path, this can indicate an obstacle.