

## Roto Safe Eneo



### Note

Incorrect installation, maintenance or operation can lead to hazardous situations.

This extract is not a replacement for complete documentation. Failure to observe this documentation discharges the hardware manufacturer from their liability.

- ▶ Note the complete installation, maintenance and operating instructions (IMO).

The complete documentation for this extract is as follows:

- Roto Safe Eneo installation instructions:  
C | CC | CF: IMO\_438  
Control Unit: IMO\_288
- Roto Safe Eneo brief instructions:  
Power supply unit specifications (third-party product): SUG\_3  
General information: SUG\_9, SUG\_10
- Connection diagrams  
Roto Safe Eneo: IMO\_310



### DANGER

#### Risk of death caused by electric shock

Current can lead to fatal injuries.

- ▶ Installation and maintenance work may only be carried out by qualified electricians.
- ▶ Observe and comply with the respective national regulations (in Germany VDE 0100 and others).
- ▶ When laying the network connection cable on-site, all-pole safety isolation must be established.
- ▶ Only carry out work when the power supply is disconnected.

### Technical data

Roto Safe Eneo drive	
Voltage	24 V DC (±5%), 2.5 A, SELV output voltage according to EN 60950-1
Continuous current consumption	25 mA
Current consumption	1.5 A (peak 2.3 A)
Relative air humidity	≤ 93%
Temperature	–25 to +60 °C (transport –25 to +70 °C)
Output relay load	Max. 40 mA, flyback diode for inductive load present internally
Standards	EN 60 730-1, EN 50090-2-2 Low Voltage Directive complied with, CE conformity

Cable junction (on the sash side)	
Max. voltage	48 V DC
Max. current	3 A
Line	LIF9Y11Y, six-pole version, Ø 4.9 mm, grey
Line length on the connector side	4 m
Degree of protection in accordance with DIN 40050	IP67 (when inserted)
Temperature when idle	–40 to +75 °C (transport –5 to +50 °C)
Cores	0.34 mm <sup>2</sup> (white, green, brown, yellow, pink, grey)

Power supply unit	
DC voltage	24 V (output)
Rated current	2.5 A (output)
Voltage adjustment range	21.6 to 26.4 A (output)
Voltage range	88 to 264 V AC, 124 to 370 V DC (input)
Frequency range	47 to 63 Hz (input)
Temperature	–20 to +60 °C
Relative air humidity	20% to 93%

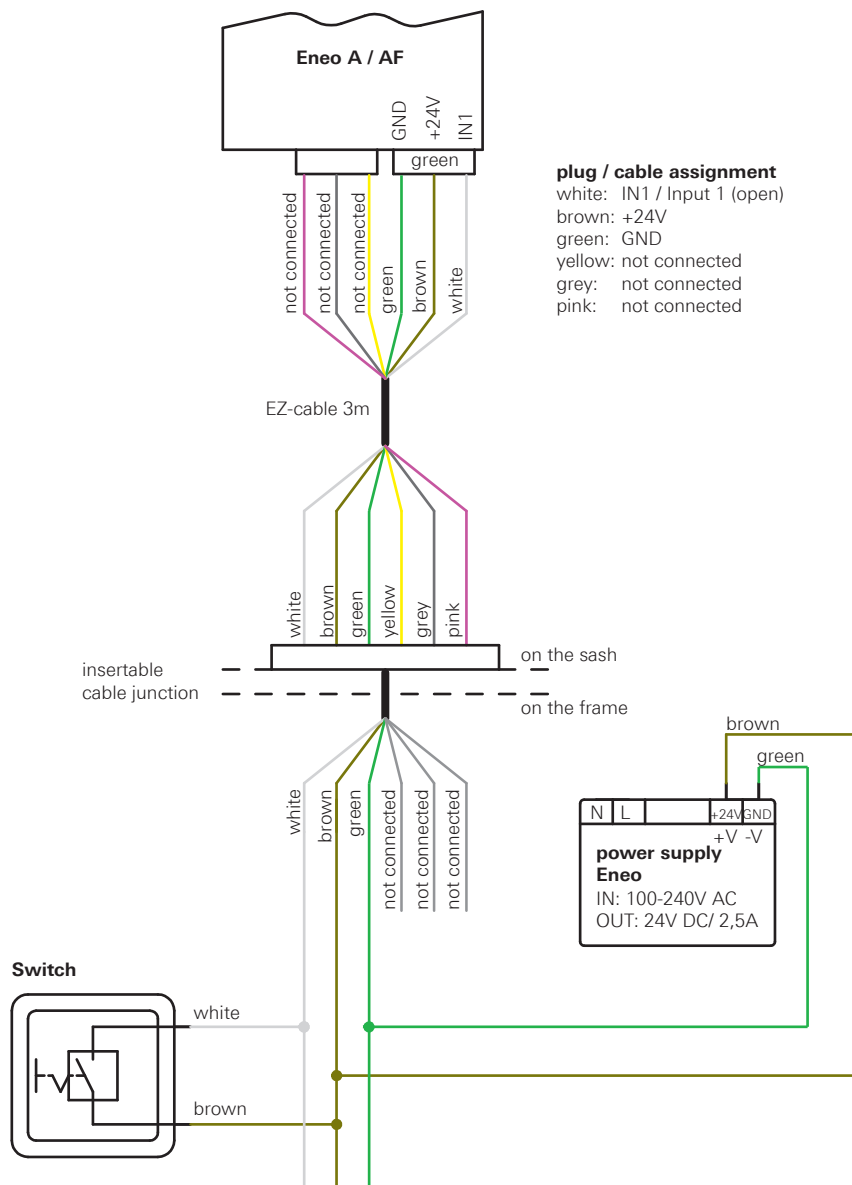


### INFO

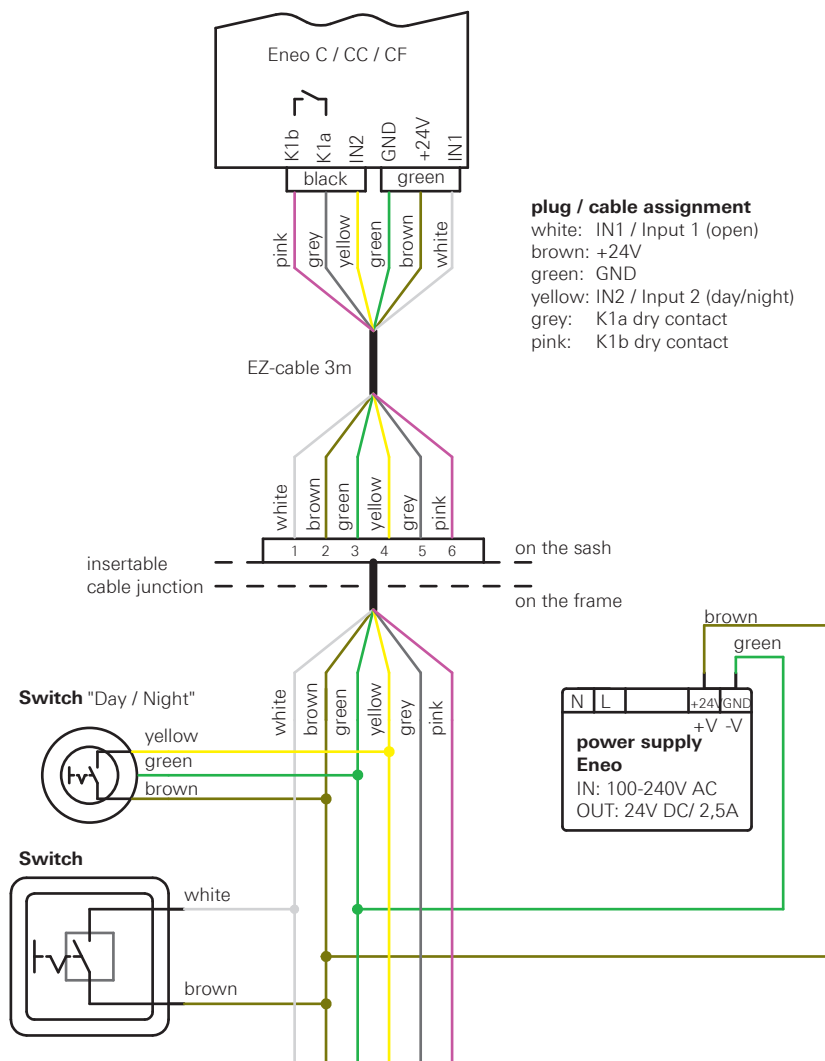
If a different power supply unit is used, ensure that it has 24 V and 2.5 A at the output (see SUG\_3).

## Connection diagram

### Roto Safe Eneo A and AF



## Roto Safe Eneo C, CC and CF



### INFO

If there is +24 V voltage at terminal 4, the lock is in “day operation mode”. If there is no voltage, the lock is in “night operation mode”. This can be used as an option.

Terminals 5 and 6 are connected to one another internally via a relay and a 47 ohm resistor. The maximum load of the contacts is 24 V / 40 mA.

### Maximum line lengths

Eneo cable junction, insertable 180°, incl. 4 m cable with round connector for Eneo Control Unit up to power supply unit.

From Eneo cable junction connector				
Up to 4 m	Up to 10 m	Up to 20 m	Up to 30 m	Up to 50 m
0.34 mm <sup>2</sup>	0.75 mm <sup>2</sup>	1 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>

Eneo cable junction 180° opening, not insertable, with cable for cable junction 7 x 0.5 mm<sup>2</sup>, 10 m.

### From Eneo drive unit

Up to 10 m	Up to 20 m	Up to 30 m	Up to 50 m
0.5 mm <sup>2</sup>	1 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>



### INFO

If a cable junction with built-in power supply unit is used, it must have three poles and a cable cross section of 1.5 mm<sup>2</sup>.



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- ▶ Observe and comply with the respective national regulations (in Germany VDE 0100 and others).
- ▶ When laying the network connection cable on-site, all-pole safety isolation must be established.
- ▶ Only carry out work when the power supply is disconnected.

## Initial operation

Before connecting Roto Safe Eneo to the supply voltage, check that it is working properly, as for a mechanical multipoint locking system. The force required to actuate the lever handle and the cylinder key must not exceed normal manual force.

Perform the following steps when the power supply is disconnected:

### 1. Mechanical performance test

The sash must rest neatly against the frame.

Ease of movement of the hardware and locking components.

Check the clearance (4 –5 mm).

Check that the door opens and closes properly when closed and open using the lever handle and the key.

### 2. Electromechanical performance test

Can be performed with the Eneo Control Unit (see IMO\_288).



## Proper operation

### Roto Safe Eneo C, CC and CF

#### Locking the door from the outside

The Eneo C, CC and CF multipoint locking systems must be in "night operation mode". A reed contact must also be fitted. As soon as the door is closed, all locking systems extend automatically. The locking process is complete after approximately 2 seconds.

#### Unlocking the door from the outside

Depending on the access control system available, unlocking can be triggered by hand-held transmitter, finger scan, Phone & Code, etc.



## INFO

If the deadbolt is locked, the lock cannot be opened electronically.

#### Unlocking the door from the inside

The Eneo C multipoint locking system can only be unlocked using a key or electrical signal (e.g. push-button).

The Eneo CC and CF multipoint locking systems can be unlocked using the lever handle.



## INFO

### Roto Safe Eneo C and CF

A pull handle or rod handle must be fitted to the outside of the door.

### Roto Safe Eneo A and AF

#### Locking the door (automatically)

When closing the door, the two additional locking systems – the automatic bolts – snap into their strikers in the same way as the latch engages in the main lock. These are activated automatically and the door is locked securely at two additional points.

#### Additional locking using the key (night-time locking)

Turn the key 360° once in the cylinder. The door is locked.

#### Unlocking the door from the outside with day operation mode

Depending on the access control system available, unlocking can be triggered by hand-held transmitter, finger scan, Phone & Code, etc.

#### Unlocking the door from the inside with day operation mode

The multipoint locking system can be unlocked using the lever handle.

#### Unlocking the door with night operation mode

Turn the key 360° in the cylinder. The door is unlocked.



## INFO

Manual emergency operation of the door using a key is possible at any time (e.g. in the event of a power failure).



## INFO

The Eneo AF multipoint locking system requires lever handle hardware to be used with a set in a combined knob and lever handle design (see CTL\_86).

The lever handle must be positioned at a height of between 900 mm and 1100 mm. The installation company is responsible for any deviations from this.

## Fault assistance


Fault	Cause	Corrective action
System not functioning.  Roto Safe Eneo does not respond, no beeps.	There is no 230 V voltage at the power supply unit on the primary side.	Have electrical installation work carried out by qualified personnel.
	There is no 24 V voltage on the secondary side of the power supply unit.	Check the terminal contacts on the power supply unit.
	There is no 24 V voltage on the multipoint locking system.	Inspect the supply line between the power supply unit and multipoint locking system and replace if necessary.
	There is 24 V voltage on the multipoint locking system but the polarity is the wrong way round.	Swap round the power supply on the secondary side of the power supply unit.
	The drive is in a final position and does not receive a signal to implement a movement.	Inspect signal lines or modify the distance to the multipoint locking system (distance 1 – 2 m).
	Still not working?	Disconnect the voltage, wait for 10 seconds and restart it. Carry out a test using the Eneo Control Unit. Contact qualified personnel.
Roto Safe Eneo does not lock automatically.	Door is not fully closed.	Close the door fully.
	Multipoint locking system is in day operation mode.	Change over to night operation mode (input 2 must not be set to 24 V for night operation mode).
	Rebate magnet is adjusted incorrectly.	Check the position of the magnet and adjust if necessary. Adjust the door as required.
Roto Safe Eneo does not lock fully (without fault message).	Door or strikers not set correctly.	Adjust the door or strikers.
	Foreign object in striker.	Remove the foreign object.
	Latch does not engage correctly and the door opens again slightly.	Open the door electrically and push it into the latch again. Readjust the electrical opener if necessary.
	Multipoint locking system was actuated by cylinder.	When a door has been unlocked manually, it must also be locked again manually.
Roto Safe Eneo does not lock fully (with fault message).	Door or strikers not set correctly (3x two-tone beeps – fault message: excess current).	Adjust the door or strikers.
	Foreign object in striker (3x two-tone beeps – fault message: excess current).	Remove the foreign object.
Door does not unlock.	No signal at the signal transmitter output or no signal at the multipoint locking system input.	Calibrate the hand-held transmitter (see IMO_438).
		Check settings and access control system.
		Refer to the operation instructions for the access control system

## Acoustic signals


Sound	Message	Meaning	Corrective action
1x beep	Confirmation	Command understood, process completed correctly.	-
3x short beeps	Note	Command understood but cannot be executed because the maximum number of cycles in the time unit has been exceeded.	Multipoint locking system was actuated too often in a short time period. Let the motor cool down for around 2 minutes to prevent damage.
4x short beeps	Note	Calibration push-button was actuated but calibration / clearance is not possible.	Move the lock of the Eneo C multipoint locking system to the correct position and recalibrate.
2x two-tone beeps	Fault	The magnetic contact was interrupted during the locking process. Either the door was opened again during this period or the magnet was not positioned / adjusted correctly.	Lock the door again. Position the magnet correctly and lock the door again.
3x two-tone beeps	Fault	Control unit detected excess current in the motor and stopped.	Remove blocks. If the door is not running smoothly, contact the door manufacturer.
4x two-tone beeps	Fault	The final position of the connecting rod was not reached in the maximum permitted time of 3 seconds.	No movement noises are audible and no movement of the lock is visible, motor faulty. Replace the lock.
5x two-tone beeps	Note	Command from hand-held transmitter is executed but the hand-held transmitter battery will soon be flat.	Replace the battery
7x two-tone beeps	Note	Only for Eneo A multipoint locking system.  Calibration current values have either failed to reach or have exceeded the specified values.	Recalibration required.  Have electrical installation work carried out by qualified personnel.

## Declaration of Conformity

Eneo AF

									
0757 Roto-Frank Austria GmbH Lapp-Finze-Str. 21 A-8401 Kalsdorf bei Graz Austria									
Notausgangverschluss lt. EN179 - E601 <b>LE/DoP-Nr. : KD/Door/E601/Nr. 001/CPR/2013-05-15</b>  EN 179:2008-04 Notausgangverschluss mit Drückerbetätigung, Typ A für Türen in Rettungswegen, für außen und innen öffnende Türen  Fähigkeit zur Freigabe <span style="float: right;">bestanden (≤1sec) (W≤100mm) (A≤70N)</span>  Dauerfunktionstüchtigkeit hinsichtlich der Fähigkeit zur Freigabe gegenüber Alterung und Qualitätsverlust (von Türen in Fluchtwegen) <span style="float: right;">bestanden (96h) (100 000Zyklen)</span>  Kontrolle gefährlicher Stoffe <span style="float: right;">bestanden</span>									
Nutzungs- kategorie	Dauerfunktion	Masse Tür	Feuer-/ Rauchschutz	Sicherheit	Korrosionsverhal- ten	Sicherheit Einbruchschutz	Überstand des Beschlags	Betätigungsart	Anwendungsber- eich
3	6	5	0	1	3	2	2	A	B/D
EG – Konformitätszertifikat Nr. 0757-BPR-229-10-008 erstellt durch ift Rosenheim NB-Nr. 0757									

Eneo CF

									
0757 Roto-Frank Austria GmbH Lapp-Finze-Str. 21 A-8401 Kalsdorf bei Graz Austria									
Notausgangverschluss lt. EN179 - E611 <b>LE/DoP-Nr. : KD/Door/E611/Nr. 001/CPR/2016-05-17</b>  16 EN 179:2008-04 Notausgangverschluss mit Drückerbetätigung, Typ A für Türen in Rettungswegen, für außen und innen öffnende Türen  Fähigkeit zur Freigabe <span style="float: right;">bestanden (≤1sec) (W≤100mm) (A≤70N)</span>  Dauerfunktionstüchtigkeit hinsichtlich der Fähigkeit zur Freigabe gegenüber Alterung und Qualitätsverlust (von Türen in Fluchtwegen) <span style="float: right;">bestanden (96h) (200 000Zyklen)</span>  Kontrolle gefährlicher Stoffe <span style="float: right;">bestanden</span>									
Nutzungs- kategorie	Dauerfunktion	Masse Tür	Feuer-/ Rauchschutz	Sicherheit	Korrosionsverhal- ten	Sicherheit Einbruchschutz	Überstand des Beschlags	Betätigungsart	Anwendungsber- eich
3	7	5	0	1	3	5	2	A	B/D
Zertifikat zur Bescheinigung der Leistungsbeständigkeit Nr. 0757-CPR-229PANIK-7031575-2 erstellt durch ift Rosenheim NB-Nr. 0757									

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