

About this document

Validity

This document describes the product:



Product designation: EntriWorX Unit 92 40
Product code: 9240-K7
Article number: 04079231

Target group

This document is intended for skilled personnel only. The skilled personnel must be trained by the manufacturer.

Contents and purpose

The content is limited to the mounting and installation of the product.

Other valid documents

- Elivate system instructions
- Inspection book of the respective door system
- Declaration of compliance of the approved components

Document storage

This manual must be stored by the natural person or legal entity that operates or owns the unit or has the relevant power of disposal with regard to the technical operation, together with the supplementary documentation for the product's entire service life.

Hand over this document to the facility operator.

Notes

Notes are indicated by an info symbol.

-  Tips and useful information.
These help you make the best use of the product and its functions.

Instructions

The instructions have the following symbols and structure:

- ✓ Prerequisite
- 1. Step 1
 -  Interim result
- 2. Step 2
 -  Result

Conformity

-  You can download the original declaration of conformity in PDF format at www.dormakaba.com/conformity.



This product meets the provisions of the EU directives

- 2011/65/EU – Restriction of Hazardous Substances (RoHS)
- 2014/53/EU – Radio Equipment Directive (RED)

USA

The product fulfils the requirements of:

- UL62368-1:2014-12 (Safety)
- FCC Title 47 CFR Part 15 (EMC/Radio)
- FCC ID: NVI-DKAM9240K7

Canada

The product fulfils the requirements of:

- CAN/CSA-C22.2 No. 62368-1:2014 (Safety)
- ISED Canada RSS-247 and ISED Canada RSS-Gen (EMC/Radio)
- IC: 11038A-DKAM9240K7

Canada RSS-GEN

This device complies with ISED Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) l'appareil ne doit pas produire de brouillage; 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC § 15.105 Class B (Interference Statement)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC § 15.21 (Warning Statement)

[Any] changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

General safety instructions

Designated use

This device is intended for controlling:

- dormakaba emergency exit and escape route system devices
- dormakaba swing door operators
- access control devices

Only the components and assemblies approved by dormakaba may be used.

Proper use includes adherence to all the specifications stated in this document and in the other valid documents. Any other use is considered non-designated use. The manufacturer is not liable for any damage or injury due to non-designated use. The user/facility operator is the sole person to bear risks for non-designated use.

Assembly and installation

Check the device for visible damage caused by transport or incorrect storage. Do not start up any damaged device!

Assembly and installation of the product may only be done by skilled personnel (see chapter 1 Target group).

When installing/inserting the product in end-use equipment all requirements of the mentioned test standards must be fulfilled.

The product should only be installed in locations which fulfil the environmental and technical conditions specified by the manufacturer.

The manufacturer is not liable for damage arising due to improper handling or incorrect installation.

Accessories and spare parts

Accessories and spare parts must meet the manufacturer's technical requirements. This is guaranteed if original dormakaba accessories and spare parts are used.

Electrostatic discharge (ESD)

Electrostatic discharge (ESD) can damage electronic assemblies.

- Before touching the electronic assemblies, dissipate the body's own electrostatic charge by touching earthed metal surfaces.

Disposal

The device must not be disposed of in the household waste.

The device can be returned to the manufacturer, the seller or the public collection points set up for this purpose. Local regulations must be observed.



Technical data

Power supply

The power supply is provided via Power over Ethernet (PoE).

Supported PoE standards:

- **PoE**, in accordance with IEEE802.3af/IEEE802.3at, type 1, grade 0
- **PoE+**, in accordance with IEEE802.3at, type 2, grade 4

Terminals

- Conductor type: single-wire/multi-wire
- Conductor cross-section: 0.14–1.5 mm², AWG 28–16
- Insulation stripping length: 7 m

Ambient conditions

- Ingress protection according to IEC 60529: IP40
- Relative humidity: 5% to 85%, non-condensing
- Ambient temperature:
 - 0 °C – +50 °C (operation)
 - -20 °C – +65 °C (storage)

Dimensions/Weight

- Length: 208 mm
- Width: 208 mm
- Depth: 48 mm
- Weight: approx. 0.6 kg

Output voltages

The power available at the output voltages depends on the supply voltage.

The total of the connected power must not exceed the available power.

PoE max. 5 W	PoE+ max. 15 W
Note: The power reduces if capacitive appliances are connected.	
↓	
• Output OUT1 – 12 V DC → max. 15 W – 24 V DC → max. 12 W • RS-232 interface – 5 V DC → max. 2.5 W • RS-485 interface – 12 V DC → max. 6 W • CAN – 24 V DC → max. 5 W	

Behaviour during overload

The output voltages are secured with two measures.

1 Electronic surveillance

The surveillance depends on the setting of the PoE switch. The electronic surveillance checks whether

- the power is confirmed by the PoE injector/PoE switch.
- the PoE or PoE+ limit is observed.

In the event of overload, the following output voltages are switched off:

- OUT1: 12 V DC/24 V DC
- CAN: 24 V DC

2 Thermal surveillance

The thermal surveillance switches off the respective output voltage in the event of overload.

- RS-232: 5 V DC
- RS-485: 12 V DC

If there is no overload after switching off the output voltages, they are automatically switched back on.

Frequency bands and transmission power

- RFID: 13.56 MHz, max. 345 mW
- Bluetooth: max. 2.5 mW

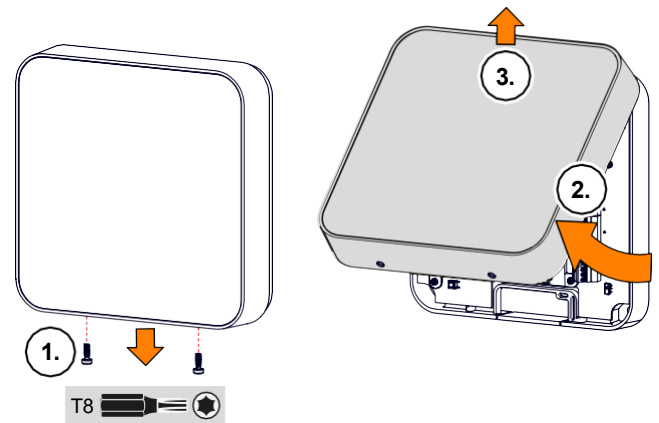
Installation

Installation site

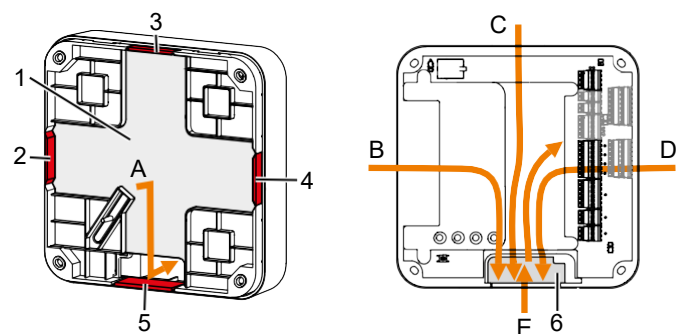
- The device is designed for a fixed installation in buildings. Installing it in vehicles is not permitted.

- Install the device only in rooms that meet its ambient conditions.
- Install the device within the secured range.
- The device must not be installed in an area exposed to strong electromagnetic fields produced by elements such as switching power supply units, electric power lines and phase control modulators!
- The device is designed for wall assembly.

Open device



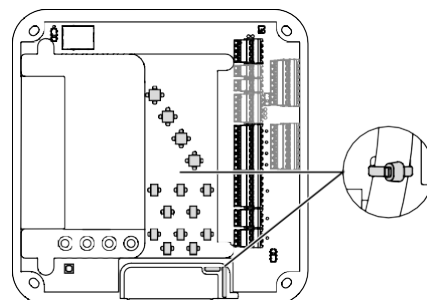
Routing of lines



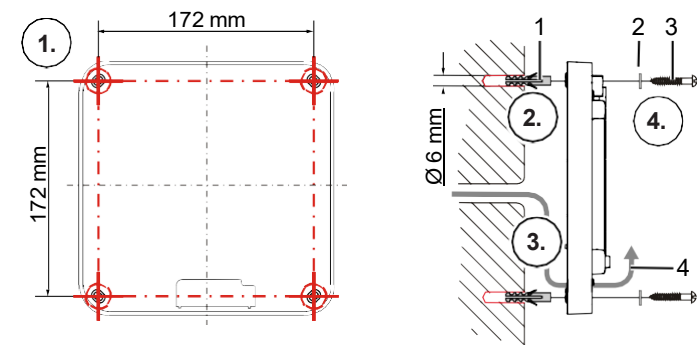
The lines are routed from behind [A] or to the side [B–E].

- In the case of side feed, remove the corresponding breakouts [2–5].
- Route the lines at the rear in a stream [1], through the opening [6] to the connections at the front.

The lines are routed using cable ties. Lugs are available to fasten the cable ties.



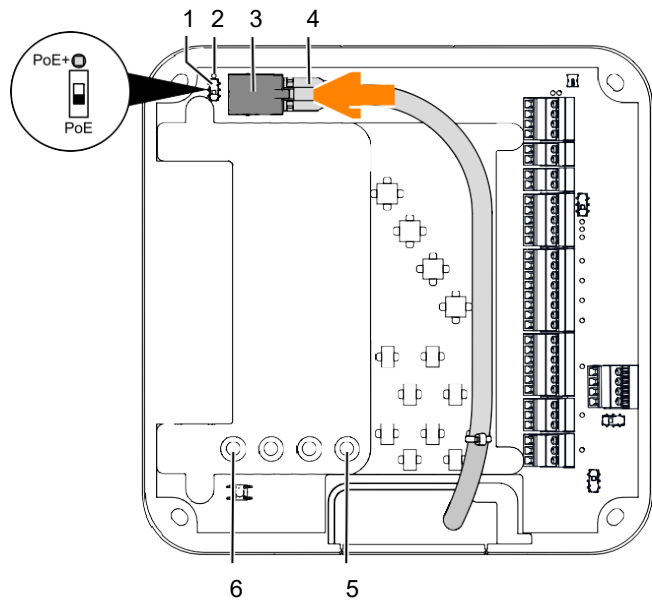
Wall mounting



- ✓ For side cable feed only: Breakouts have been removed.
- 1. Drill 4 holes.
- 2. Insert 4 dowels [1].
- 3. **NOTICE! Do not crimp the lines.** Route the lines [4] in the rear stream.
- 4. Push the washers [2] onto the screws [3].
- 5. Screw the device in place.

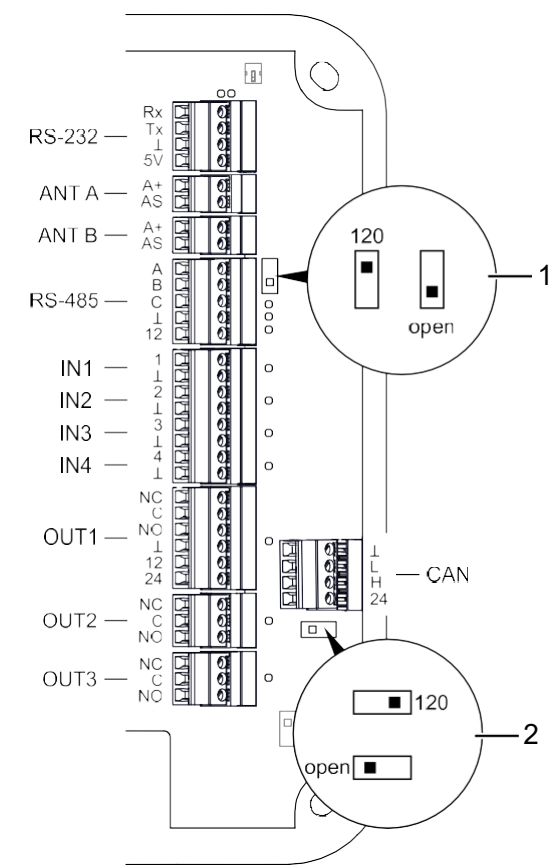
Connections

Ethernet



- ✓ The power supply through a PSE (Power Sourcing Equipment) is ensured.
- 1. Set the power supply **PoE** or **PoE+** using the switch [1].
- 2. Plug in the network cable [4] in the ethernet socket [3].
- LED [2] flashes if PoE+ is available.
- LED [5] flashes green if the power supply is OK.
- LED [6] flashes when data is being transferred.

Overview of connection terminals



Name	Connection for
RS-232	no function
ANT A	no function
ANT B	no function
RS-485	- Compact reader - Remote reader
IN1	no function
IN2	no function
IN3	no function
IN4	no function
OUT1	no function
OUT2	no function
OUT3	no function
CAN	- Emergency exit and escape route system devices - Swing door operators

- 1 Terminal resistance switch for RS-485 bus.
- 2 Terminal resistance switch for CAN bus.

Position of the switch	Usage
120	Bus wiring The device is connected at the end of the bus. Star wiring
open	Bus wiring The device is connected within the bus.

RS-485

Terminal	Assignment
A	RS-485 A
B	RS-485 B
C	RS-485 C (optional) The C conductor serves as additional potential equalisation in the case of potential difference. The potential difference can occur due to the cable length or the different feeding points of the electricity supplier.
	GND power supply
12	12 V DC power supply

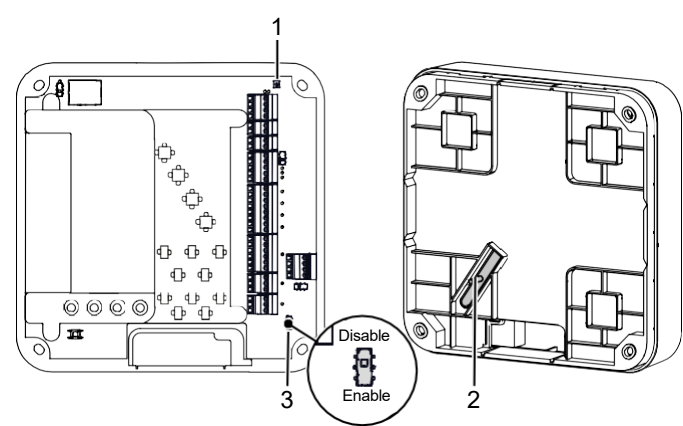
CAN

Terminal	Assignment
	GND power supply
L	CAN low
H	CAN high
24	24 V DC power supply

Tamper switch

The device has two tamper switches.

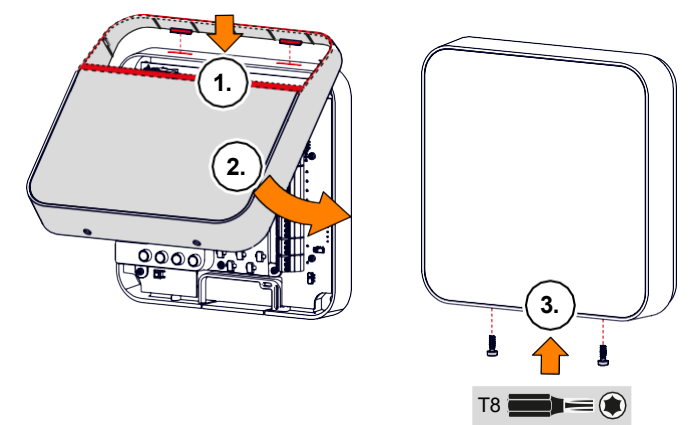
i The function depends on the settings in the system software.



- 1 **Tamper switch Housing**
If the cover is removed, a tampering notification is triggered.
- 2 **Wall tamper switch**
If the device is removed from the wall, a tampering notification is triggered.

To avoid error messages in case of uneven walls, set the switch [3] to **Disable**.
- 3 **Switch for wall tamper switch**
 - Disable: No tampering monitoring
 - Enable: Tampering monitoring enabled

Close device



Commissioning

The **initial commissioning** is done with a smartphone. The **EntriWorX Setup** app must be installed on the smartphone.

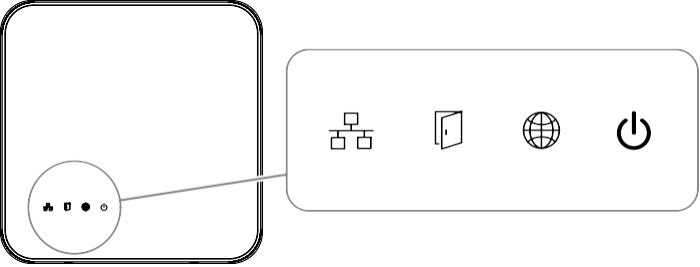
The app is available on:

- Google Play Store (Android)
- Apple App Store (IOS)

The data exchange between the device and the smartphone takes place via Bluetooth®.

The **further commissioning** is done using the **system software**.

Signalling



LED	Status	Signal	Meaning
	Ethernet	Yellow	Data transfer
		Off	No data transfer
	Device	Green	Ready for operation
		Blue	Bluetooth connection
		*	(other signals)
	porthos platform	Green	9300
		Red	No connection
		*	(other signals)
	Power supply	Green	Power supply OK
		Red	Overload OUT1: 12 V/24 V switched off
		Off	No power supply

Uninstallation

Delete the person-related/security-relevant data before the uninstallation.

The uninstallation is done in the reverse order of the installation.