

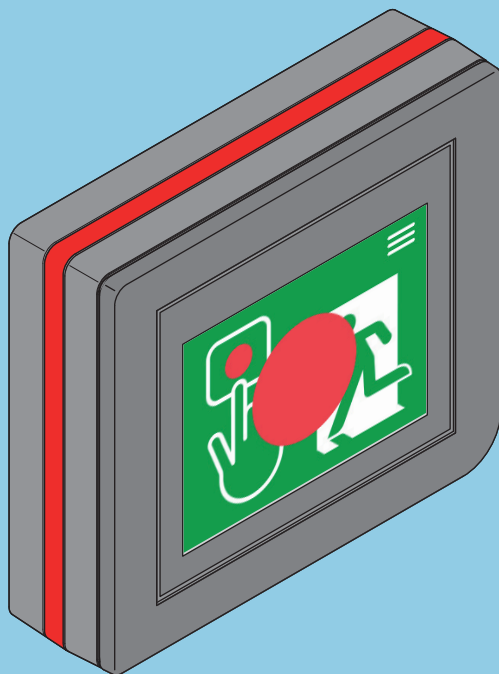
Escape route technology



HI-O TECHNOLOGY™



www.assaabloy.de



ePED® display door terminal 1386D10

effeff
ASSA ABLOY

Installation and Operating Instructions

D0117001

ASSA ABLOY, the global leader
in door opening solutions

Read this manual thoroughly before use and keep it in a safe place for later reference. The manual contains important information about the product, particularly for the intended use, safety, installation, use, maintenance and disposal.

Hand the manual over to the user after installation and pass the manual on to the purchaser together with the product if the product is sold.



HI-O TECHNOLOGY™

Hi-O Technology™

is a registered trademark of the
ASSA ABLOY Group.

ePED®

is a registered trademark of
ASSA ABLOY Sicherheitstechnik GmbH.

Open Source Licenses

ASSA ABLOY Sicherheitstechnik GmbH has the source code of the software used in the scope of Open Source licenses (such as FreeRTOS™, newlib, lwIP) available on request: <http://www.assaabloy.com/com/global/opensourcelicense/>

**1386D Firmware AP
Firmware SW**

Version 3.3.0

Version 0.1.64

**1386S Firmware AP
Firmware SW**

Version 3.3.0

Version 0.1.64



Authorisation codes

Authorisation Code for Control (must be changed)

1 2 3 4

Authorisation Code for Settings (must be changed)

7 7 7 7

Authorisation Code for Installation (must be changed)

7 8 9 0

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About this manual

Target group

The product must be installed and configured by an electrical engineering specialist. Assembly work must be carried out by a specialist in the relevant trade or suitably qualified personnel depending on the type of work.

Meaning of the symbols



Danger!

Safety notice: Failure to observe these warnings will lead to death or serious injury.



Warning!

Safety notice: Failure to observe these warnings can lead to death or serious injury.



Caution!

Safety notice: Failure to observe these warnings can lead to injury.



Attention!

Note: Failure to observe these warnings can lead to property damage and impair the function of the product.



Note!

Note: Additional information on operating the product.

Safety instructions



Warning!

Danger arising from modification of the product: The safety features of this product are an essential requirement for its conformity with EltVTR. No changes which are not described in this manual may be undertaken.

Danger due to missing Emergency Open button on the escape door: If the release of the escape door is centrally controlled, it is no longer possible to independently choose to exit the danger area in the case of danger. This always requires an approval from the responsible inspection authority. Normally, a constantly manned station equipped with a central release mechanism is prerequisite for the approval.

Danger due to faulty commissioning: In order to ensure the safety of the product, commissioning must be performed by a qualified person. ASSA ABLOY *Sicherheitstechnik GmbH* offers training for qualification in the requisite skills.

Danger due to faulty maintenance: The owner is responsible for correct installation and functional inspection of the product and connected components. The safe function must be tested by a trained qualified expert at least once per year. Requirements established by inspection authorities must be complied with. ASSA ABLOY *Sicherheitstechnik GmbH* offers training for qualification in the requisite skills.

Danger arising from tampering or improperly performed repairs: If the *ePED® 1386D10 door terminals* or parts of the device cannot resume normal operation after a fault or alarm message, or damage is present, the device may only be repaired by a qualified person. Please contact the customer service of the installation company or the support department of ASSA ABLOY *Sicherheitstechnik GmbH*.

Danger due to unauthorised tampering: The authorisation codes (Page 2) set at the factory are publically accessible and can be misused. Change the authorisation codes before the *ePED® 1386D10 door terminal* is freely accessible. Always use different codes for the authorisation levels („Authorisation“, page 13) (between four and eight digits). Keep codes that are written down in a safe place.

Intended use

Electrical locking devices of doors along escape routes are intended for use in commercial applications.

The product has been designed for the safeguarding of escape routes and has been tested according to the requirements of EltVTR. Deviating uses or device combinations not described in the approval are not permitted.

ASSA ABLOY Sicherheitstechnik GmbH can provide the necessary planning information for approved solutions and the device combinations required for your application. The usage must be coordinated with the requirements of the inspection authorities. Contact the responsible inspection authority for this purpose.

Compliance with all relevant inspection authority requirements is mandatory for the use, particularly with respect to the

- coordination of the safety concept with the responsible inspection authority and
- modifications of door elements.

The device is suitable for installation, configuration and use, according to these instructions. Any use beyond this is deemed as non-intended use; device combinations which are not described are not permitted.

Fitting

Prerequisites

Plan and install the wiring before the ePED® 1386D10 door terminal has been mounted (manual D01021xx ePED® Hi-O Technology™ bus).



Note!

Protection rating IP30 must be achieved: Switch boxes („Mounting/removing the display“, Seite 10) which achieve a minimum protection rating of IP30 must be used for the installation.

Attention!

Limitation of function with incorrect operating voltage at the components: A mains adapter in accordance with DIN EN 60950-1 SELV must be used. Separate mains adapters must be connected for the supply of devices with power consumption higher than 100 VA. The appropriate mains adapter, cable lengths, and cable cross sections must be chosen according to the local circumstances. Check and ensure that the operating voltage at the connection points is suitable for the components.

Identification of the cable



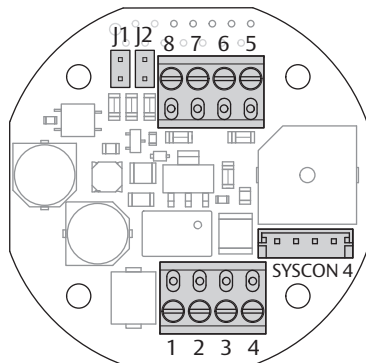
Note!

Choose uniform identification for avoidance of errors: In order to avoid errors and for a clearer overview during installation and maintenance, ASSA ABLOY Sicherheitstechnik recommends uniform identification and colour coding of the cable cores Tab. 1 and Fig. 1.

Tab. 1:
Colour coding for
wiring

	Function	Termi- nal	Colours		Typical CAN bus
			Hi-O	J-Y(ST)Y 4x2	
Hi-O	CAN_H	1	wt	wt/br	✓
	CAN_L	2	br	br	✓
	V _B +	3	gn	gn	
	GND	4	ye	wt/gn	✓

Fig. 1:
Connections



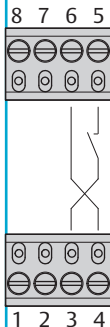
Terminal strips

1	CAN_H	wt
2	CAN_L	br
3	V _B +	gn
4	GND	ye
5	In V _B +	
6	In V _B -	
7	Fire alarm system V _B +	
8	Fire alarm system V _B -	

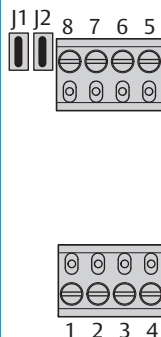
Syscon 4 plug connection

1	GND
2	CAN_H
3	CAN_L
4	V _B +

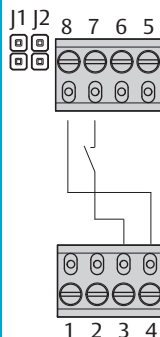
Temporary release



No fire alarm



Fire alarm: local connection



Fire alarm: central connection

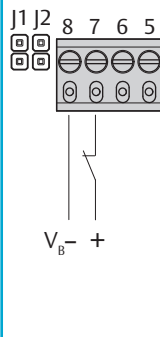
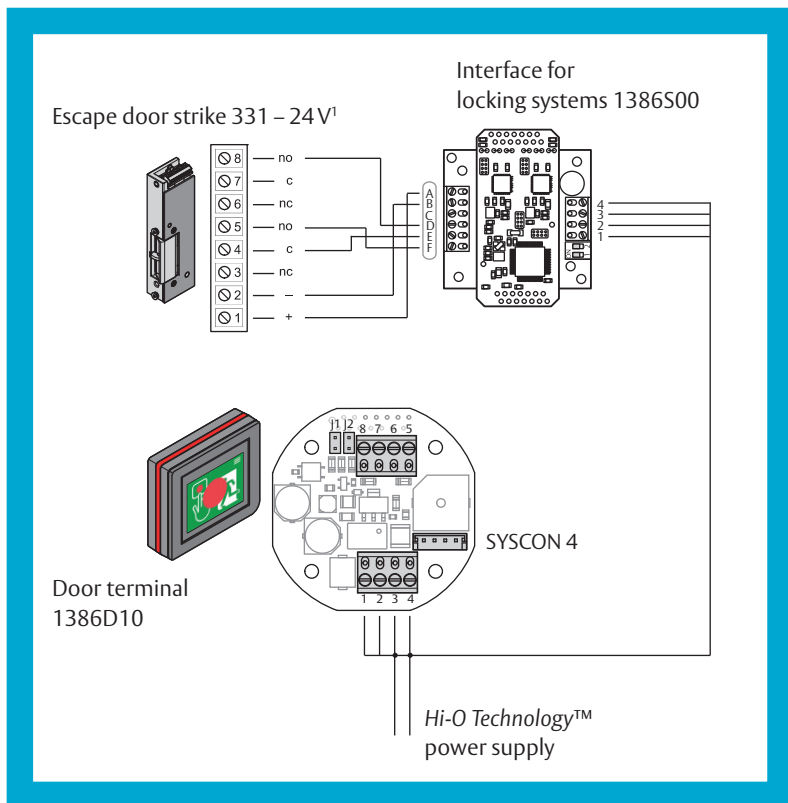
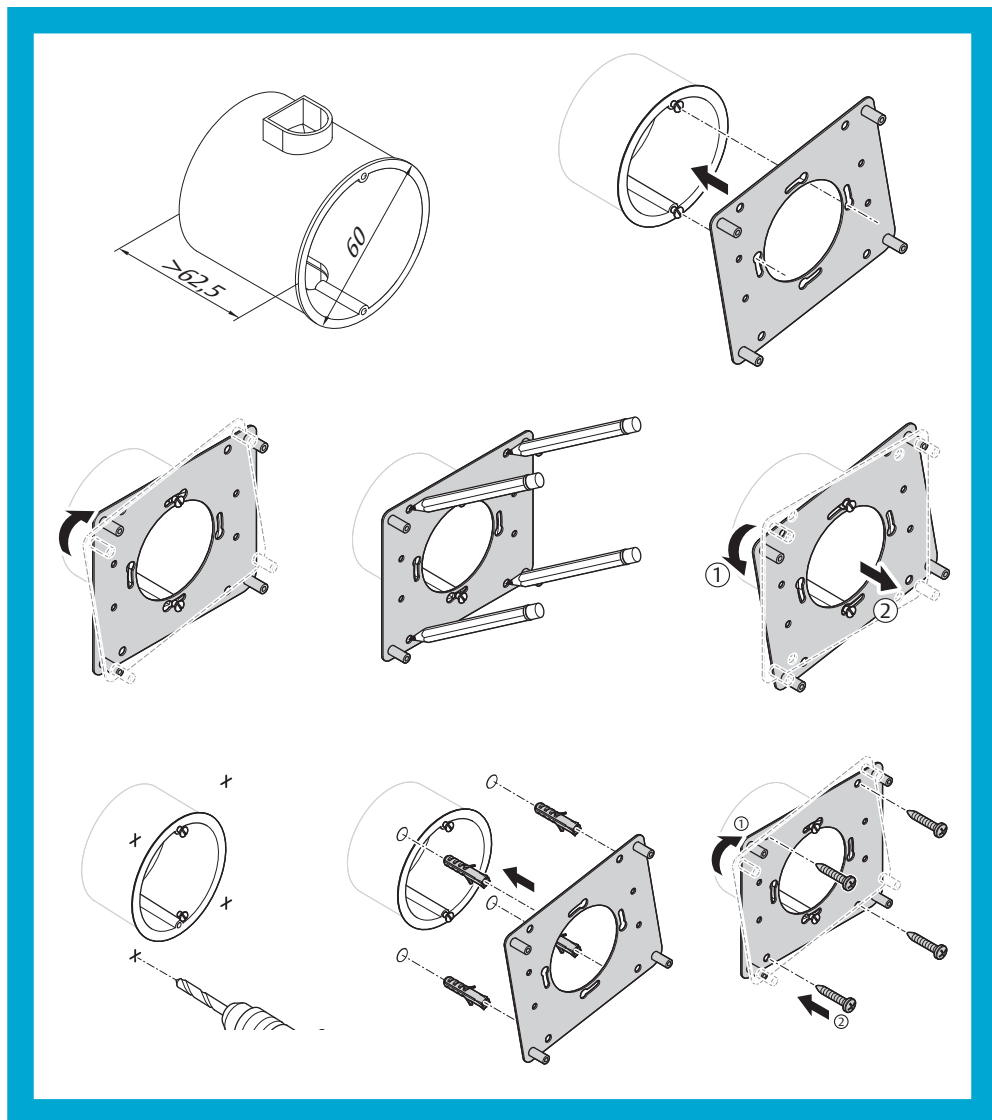


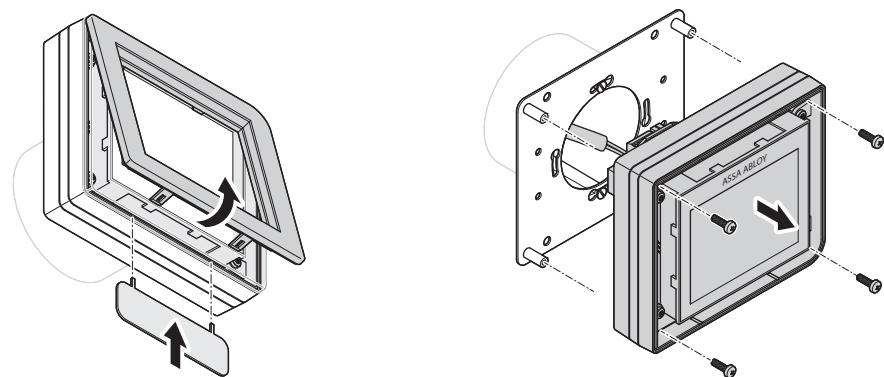
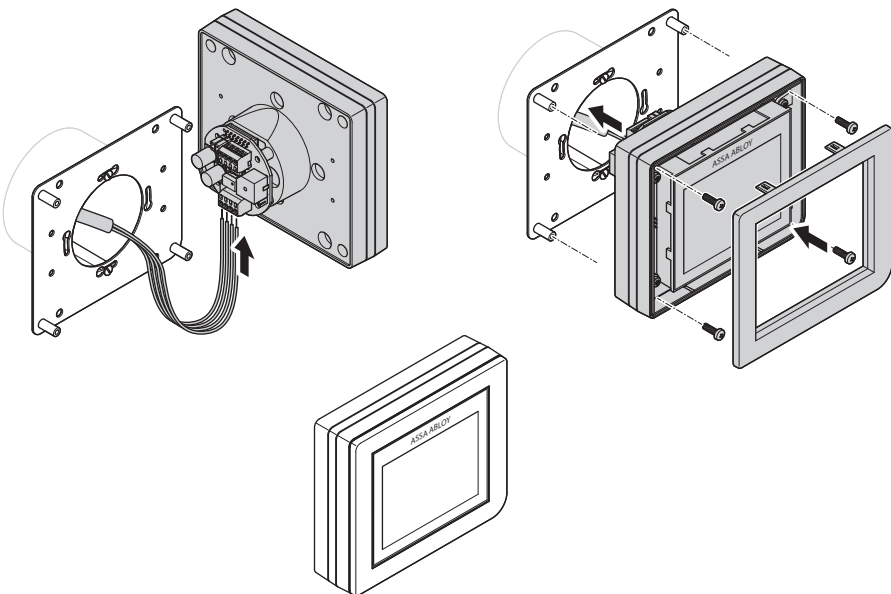
Fig. 2:
Example
connection



¹ Other locking elements can be connected instead of the escape door strike 331 (manual D00470). Only one locking element may be connected.

Mounting/removing the display





Hi-O Technology™ devices



Note!

Untested devices may have differing functionality: Hi-O Technology™ devices not listed in the compatibility list have not been tested in the device combination and may cause different functional processes. This applies especially for activators.

The maximum number of components may not be exceeded: A maximum of four terminals (*Emergency Open module 1386D00*) and eight *interfaces for locking systems 1386S00* can be connected.

The maximum power consumption may not be exceeded: The voltage supply must be sufficient for the power consumption of all connected components.

Limitation of function with incorrect operating voltage at the components: A mains adapter in accordance with requirements SELV must be used. Separate mains adapters must be connected for the supply of devices with power consumption higher than 100 VA. The appropriate mains adapter, cable lengths, and cable cross sections must be chosen according to the local circumstances. Check and ensure that the operating voltage at the connection points is suitable for the components.



Note!

Commissioning: All *Hi-O technology™* devices must be connected to the bus for the configuration. Then the operating voltage is switched on. Subsequently connected devices are only recognised after renewed connection of the operating voltage.

At least one Emergency Open module is always necessary for operation of the RWT locking module.

- 1 Configure the system via the *ePED® Service Software (D01104xx ePED® Service Software)* manual).

Display

Fig. 3:
The display shows
operating symbols
and information
on the door status
or communication



The *display* shows the current system status. Operation takes place interactively via the touchscreen (Fig. 3).

If no input takes place, the display switches back to status display after 15 seconds.

The display shows operating symbols in the header area and information for interactive communication with the user.

The toolbar is not always completely visible. One or two symbols are shown for operation or navigation, a menu heading can be shown in the centre.

Authorisation

There are three authorisation levels:

Tab. 2:
Authorisation
levels

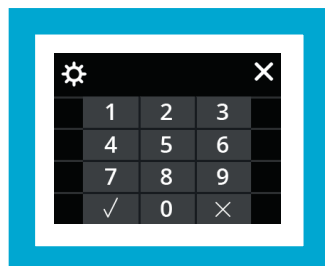
	Control	Authorisation for calling up information
	Settings	Authorisation for calling up information and restricted configuration
	Installation	Authorisation without restrictions

Each authorisation level is assigned a clear authorisation code in the factory. These authorisation codes must be changed for commissioning. Each authorisation level must be assigned a clear authorisation code once again.

Login with authorisation code

Enter authorisation code – lock, unlock, reset

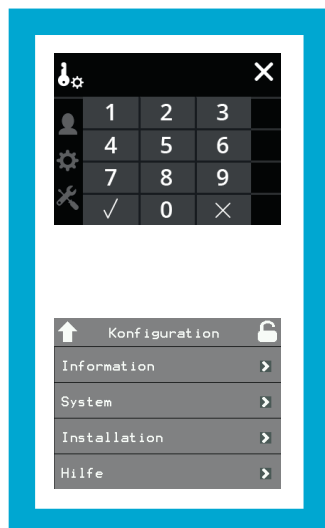
Fig. 4:
Numeric keypad
for entering an
authorisation code



- 1 Press the symbol .
 - 2 Enter an authorisation code.
Delete any numbers entered by mistake with the [✕] key.
 - 3 Confirm the entry with the [✓] key.
- ⇒ After entering a valid authorisation code, you can unlock the door.

Enter an authorisation code – configuration

Fig. 5:
Numeric keypad
for entering an
authorisation code



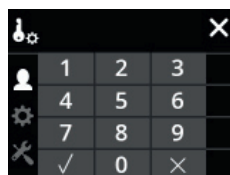
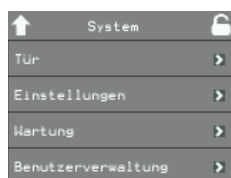
Some menus (such as the Systemmenu) can only be opened with expanded authorisation. An authorisation code for configuration is required for this.

- 1 Press the  symbol.
 - 2 Press the  symbol.
- ⇒ The symbol is no longer shown.
- 3 Press one of the symbols according to an authorisation code (Tab. 2, page 13)
 - 4 Enter an authorisation code.
Delete any numbers entered by mistake with the [✕] key
 - 5 Confirm the entry with the [✓] key.
- ⇒ The menu is displayed after entry of a valid authorisation code.

Change authorisation codes for authorisation levels

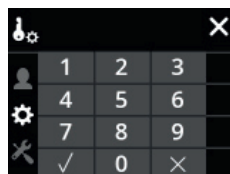
- 1 Press the symbols in the following order:  
- 2 Enter your authorisation code.
- 3 Press the *System* (Fig. 6) menu item.
- 4 Press the *User Administration* menu item.
- ⇒ The keyboard is displayed.
- 5 Press one of the symbols according to an authorisation code (Tab. 2, page 13).
- 6 Assign a new authorisation code.
Delete any numbers entered by mistake with the [✕] key
- 7 Confirm the entry with the [✓] key.
- ⇒ You have changed an authorisation code
- 8 If necessary, repeat from step 5 until all authorization codes have been changed.

Fig. 6:
The
"System–
User Administration"
menu

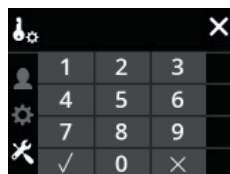


Authorisation
level

Control



Settings



Installation



Warning!

Danger due to faulty commissioning: In order to ensure the safety of the product, commissioning must be performed by a qualified person. ASSA ABLOY Sicherheitstechnik GmbH offers training for qualification in the requisite skills.

Safety requirements during commissioning include:

- The owner has received a confirmation of approval for use from the inspection authorities;
- Conformity of the products with the approval according to EltVTR.
- Mounting according to the installation manual;
- Testing of the unimpeded opening and closing function of the doors with the escape route securing system deactivated;
- Bolting of the doors after activation of the escape route securing system.
- Allows the doors to be opened after actuation of the Emergency Open push-button(s).
- The function must be tested when connected to fire alarm system.
- The commissioning must be documented. ASSA ABLOY Sicherheitstechnik GmbH offers a test log book for this purpose.

Initial commissioning

All devices are connected to the *Hi-O-Technology*™ bus for the initial commissioning, but are not configured yet. If the voltage supply is switched on, the system is in plug and play mode and the devices work with the factory settings.

Interfaces for locking systems cannot work with factory settings, because they must be logically linked to the corresponding Emergency Open push-buttons. The configuration must be completely finished before the *interfaces for locking systems* can be commissioned.

Any changes which are made necessitate re-configuration.

Interface for
locking systems

Installation wizard

The installation wizard is provided for simple configuration and the system test, particularly for the initial commissioning. A sequence of routines is processed automatically.

Once it has been started, the installation wizard dialogue shows a series of confirmation messages and user prompts.

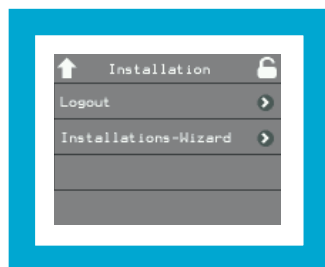


Note!

Process the entire dialogue sequence: If a dialogue is closed via the *Cancel* key or if the displayed action is not carried out, the installation must be started again from the beginning. The RWT system configuration has not taken place and the system cannot be locked.

Using the installation wizard

Fig. 7:
Example of a
prompt for action



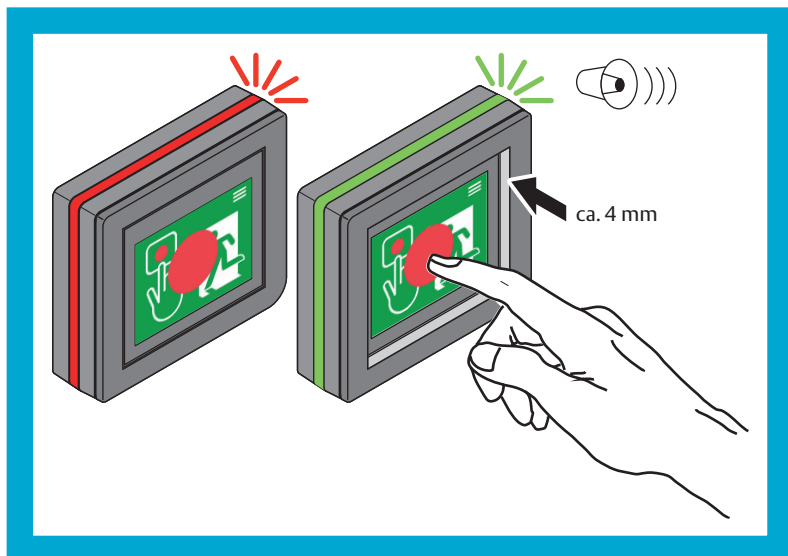
- 1 Press the
 - *Continue* or *OK* button if the entire dialogue message is correct or if you have taken the necessary action,
 - the *Cancel* button if any part of the dialogue message is incorrect or if you have not taken the necessary action.

- ⇒ The installation is finished if you have been able to exit all messages with the *Continue* or *OK* button.
- ⇒ Once the installation is complete, the ePED® 1386D10 door terminal is in *normal operation* status.

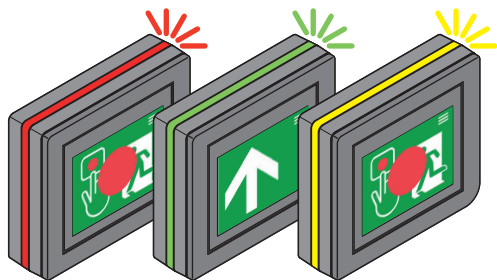
Emergency switch function

Pressing the red area in the centre initiates a release and a pre-alarm is triggered. The emergency switch function is triggered if the display is pressed.

Fig. 8:
Press the
Emergency Open
switch

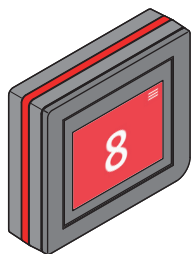


Display



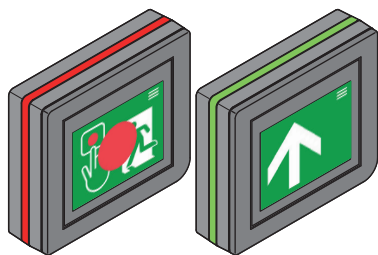
Illuminated ring with status display

The integrated illuminated ring enables easy identification of the current status of the escape door even with a large angle of vision.



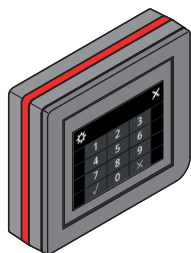
Release delay display (option)

If the release delay is activated, the remaining wait time is displayed in seconds.



Escape route pictogram and status display

The ePED® display door terminal 1386D10 shows the relevant pictogram when the escape door is secured and indicates the correct conduct if the door needs to be operated in the event of an emergency.



Operation and configuration

Authorised users are identified via an authorisation code and are granted access to the configuration and extended operating functions („Configuration“, page 13).

Alarms

Acoustic alarm

There are alarm statuses where an audible signal is activated, such as a pre-alarm. The acoustic alarm takes place for a configured time span and is automatically switched off again, or can be switched off with a control command. If another alarm should occur, the acoustic alarm is restarted.

Pre-alarm and alarm

Pre-alarm

The pre-alarm is triggered if the open door is not closed and locked within a configured time span after the temporary release. The pre-alarm is signalled in multiple ways: via the display of the *ePED® 1386D10 door terminal*, acoustically and via the yellow flashing ring.

The pre-alarm is switched off automatically if the door is closed and locked within the pre-alarm time.

If the door is not closed and locked within the pre-alarm time, a tamper alarm is triggered.

Fire alarm

In the case of a fire alarm, the *Hi-O-Technology™* components are actuated by a fire alarm system. The escape route locking systems are automatically unlocked and retain this status until actuation by the fire alarm system is lifted again.

If the actuation by the fire alarm system is lifted again, the components lock again if no further release commands are issued.

Fire alarm and/or Emergency unlocking

Other *Hi-O-Technology™* locking systems respond according to their respective configuration.

Emergency unlocking

If the Emergency Open push-button is pressed, an Emergency unlocking or release request is issued to the central control. If an Emergency unlock has been triggered with an Emergency Open push-button, the Emergency Open push-button must be unlocked manually, wherein the system is also reset to normal operation.

Messages

Tamper message/fault message

Tamper alarm has
Locked status

The following statuses trigger a tamper message for a locked door:

- The door is open and/or
- the escape route locking system is unlocked.

The door remains in Locked status.

The *tamper* status can be reset centrally or at the door.



Warning!

Danger due to faulty or improperly performed maintenance: The owner is responsible for correct installation and functional inspection of the product and connected components.

- The safe function must be tested by a trained qualified expert **at least once per year**.
- Requirements established by inspection authorities must be complied with. ASSA ABLOY Sicherheitstechnik GmbH offers training for qualification in the requisite skills.

At the time of the
initial
commissioning
For each
scheduled
maintenance

In particular:

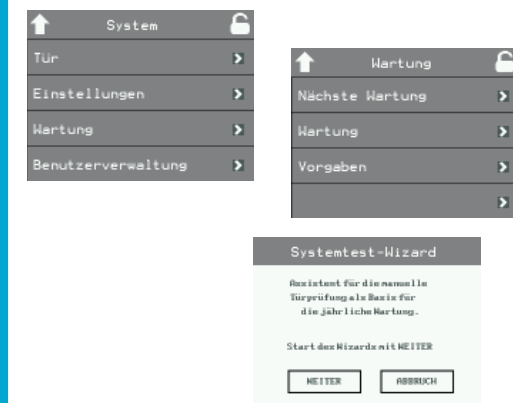
- A test log must be created at the time of the initial commissioning, wherein a description of the installed escape route securing system, configuration parameters, and results of the complete functional testing are recorded.
- All further maintenance must be recorded in a suitable test log book (available from ASSA ABLOY Sicherheitstechnik GmbH).
- If permissible and officially approved modifications of the escape route securing system should take place at a later time, they must be recorded in the same manner as for an initial commissioning.
- Ensure that all opening and closing functions of the escape door function without limitation when the escape route securing system is deactivated.
- Ensure that the escape door is secured after activation of the escape route securing system.
- Ensure that the escape door can be opened after the Emergency Open buttons(s) is (are) pressed.
- Ensure that the escape door is unlocked on actuation by a connected fire alarm system.
- All components of the escape route securing system must be inspected for damage, changes, and secure mounting and the configuration and safe functionality must be assured.
- It must be ensured that there are no relevant deviations from the recorded initial commissioning with respect to condition, configuration, and functionality. If there are deviations, they must be recorded accordingly and subjected to approval by inspection authorities.

Performing maintenance with system test wizard

The system test wizard is used during the annual maintenance. It is a support programme for the manual door check (Fig. 9).

- 1 Press the symbols in the following order:  
- 2 Enter your authorisation code.
- 3 Press the *System* menu item.
- 4 Press the *Maintenance* menu item.
- ⇒ You are in the *Maintenance* menu.
- 5 Press the *Maintenance* menu item.
- ⇒ You have started the system test wizard.
- 6 Follow the instructions shown.
 - 6.1 Press the *Continue* button to continue to test.
 - 6.2 Press the *Cancel* button to cancel the test incomplete.

Fig. 9:
The
"System –
Maintenance –
System test" menu



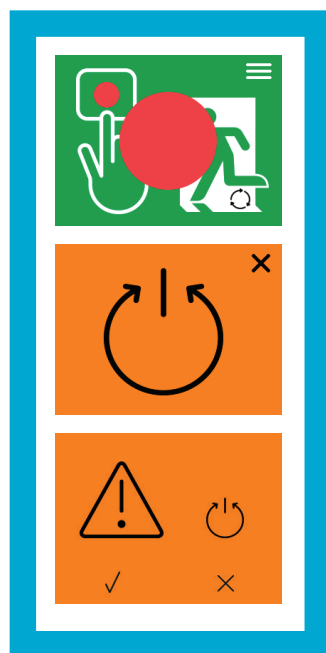
Resetting to factory settings

If reset to factory settings, changes to operating data are lost. The device must then be configured.

Within the first five seconds after switching on the operating voltage, the device can be reset to the factory settings.

Reset to factory settings

Fig. 10:
Resetting



- 1 Switch off the voltage supply for at least 10 seconds.
- 2 Switch the voltage supply on again.
⇒ The symbol  is shown.
- 3 Press the symbol .
- 4 Press the center of the display.
- 5 Answer to the confirmation request.
⇒ After confirming the request the device is ready for use again and must be configured.

Technical data

Tab. 3:
Technical data

Feature	Characteristic
Power supply	via external mains adapter
Power supply V_B	24 V (+/-10%) SELV
Power consumption	200 mA
Maximum release delay after pressing of the Emergency Open button	
• DIN EN 13637	
• with local control	15 s
• with central control	180 s
• without CE certification (EU export)	
• with local control	120 s
• with central control	300 s
Hi-O Technology™	
• Control function	Yes
• Bus addresses	2
Width	113 mm
Height	99 mm
Depth	29 mm
Application site	for use in indoor areas
Protection rating	IP30 (when completely mounted)
Operating temperature	-10 °C – +55 °C
Certification in accordance with	EltVTR DIN EN 13637:2015

Warranty, disposal



www.assaabloy.de

Warranty

The statutory warranty periods and Terms and Conditions of Sale and Delivery of ASSA ABLOY Sicherheitstechnik GmbH apply (www.assaabloy.de).

Updated information

Updated information, such as reports on current fire testing, can be found online at: www.assaabloy.de

Disposal

Dispose of lock in accordance with the EPD (Environmental Product Declaration).

Packaging materials must be recycled.

The product must be disposed of as electronic scrap.

The applicable environmental protection regulations must be observed.



ASSA ABLOY is the global
leader in door opening solutions,
dedicated to satisfying
end-user needs for security,
safety and convenience



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