

Compliant electronically controlled escape

ePED Display Installation Guide

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

This is an installation manual and should be retained by the end user upon completion of the installation.



Hi-O technology

Hi-O is a registered trademark of the ASSA ABLOY Group

ePED

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 upon request.

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

Process

The manual works through the steps required to install, wire and commission the ePED D10 display terminal. To achieve a successful installation each step should be followed carefully and in order.

ALERT! Please consider the below before commencing the installation:

Product Modification

The safety features of this product are an essential requirement for its conformity with EN 13637. Changes that are not described in this manual may not be undertaken.

Emergency Open Button - Not installed

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.

Faulty Commissioning

In order to ensure the safety of the product, commissioning must be performed by a qualified person. ABLOY UK offers training for qualification in the requisite skills.

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. ABLOY UK offers training for qualification in the requisite skills.

Repairs and Tampering

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.

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 EN 13637. Deviating uses or device combinations not described in the approval are not permitted.

ABLOY UK 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.

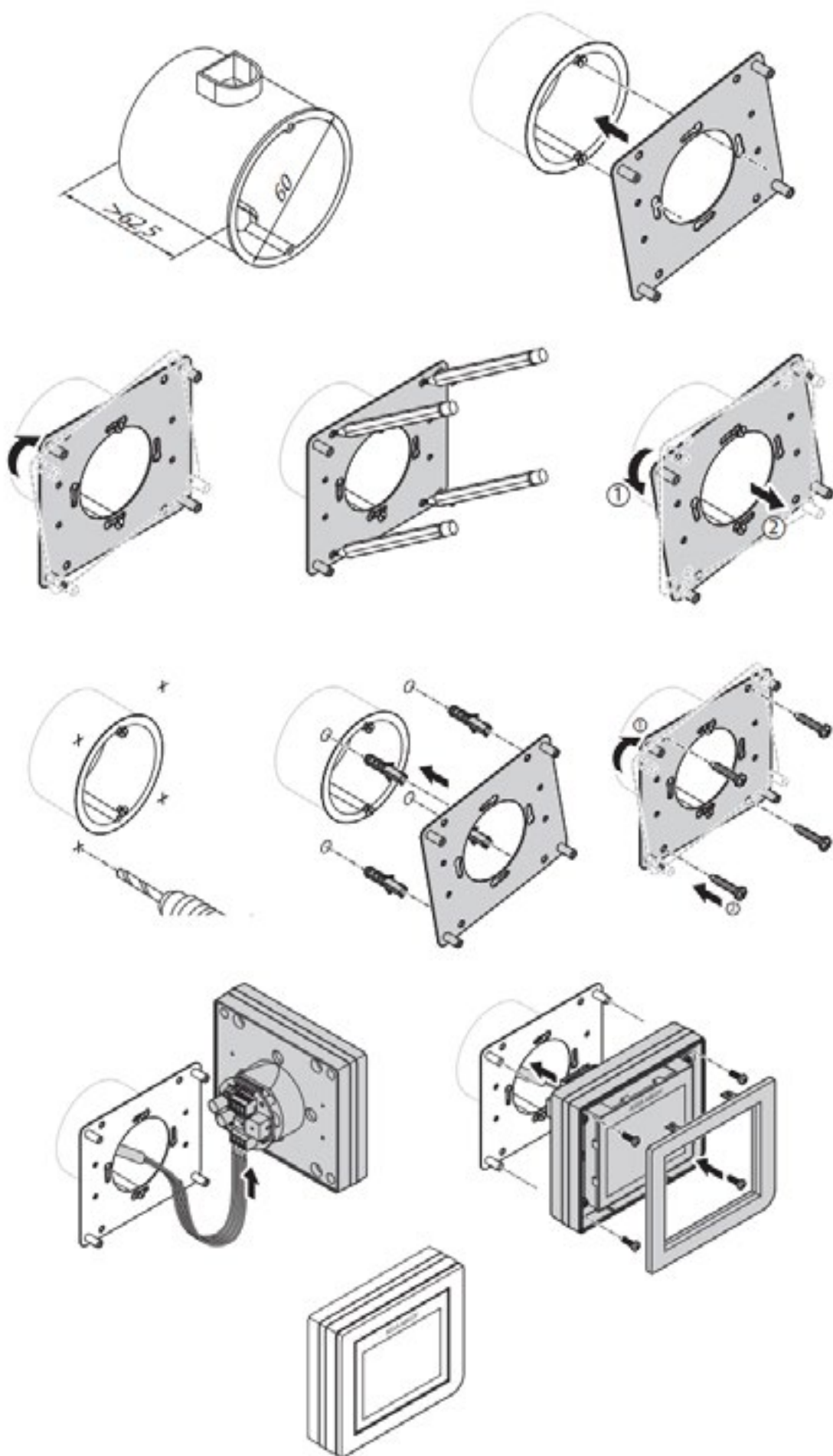
Compliance with all relevant inspection authority requirements is mandatory for the use, particularly with respect to the coordination of the safety concept with the responsible inspection authority and modifications of door elements.

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.

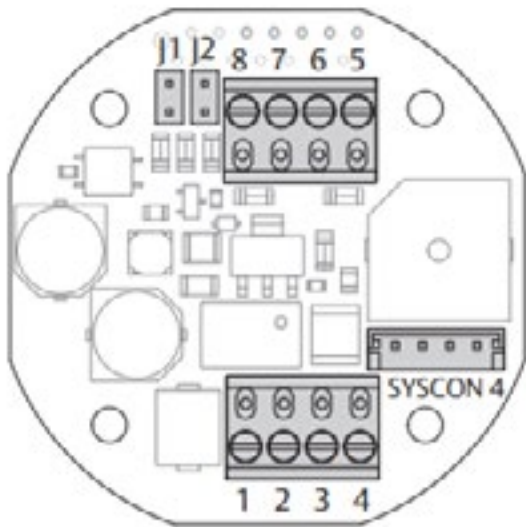
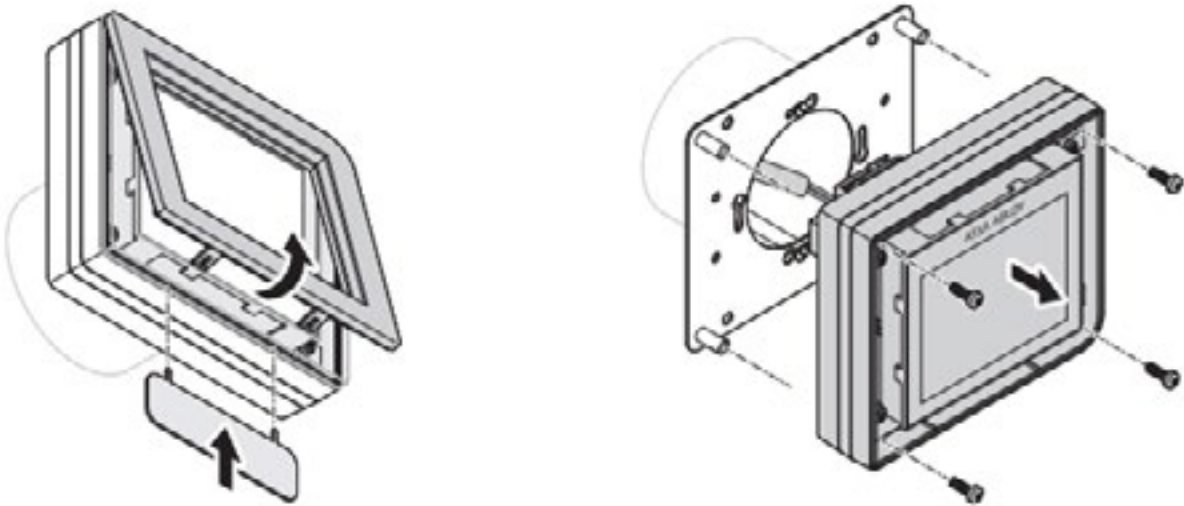
Pre-Installation Checks

The following checks have been identified through test installations and should be considered prior to commencement of the installation work.

Installation Area	Checks
Power Supply	The Power Supply must be 24 vdc and must not exceed 26.4vdc. Many 24v dc PSUs generate higher voltage, often used for battery charging circuits but these must not be used on an EDS installation.
Cable Requirement	Standard security screened cable. The cable shield should be earthed at one end. Alternatively, CAN Bus cable of .34mm is recommended for Hi-O connections. Connection on the Hi-O bus must not exceed 10m in a single leg and 50m across the entire bus. Third party cables such as locking and power supply fall outside these requirements.
Height / Mounting Position	The ePED display terminal should be fitted at a height of between 850mm and 1050mm from the floor to comply with UK equality requirements. It should be fitted 600mm from the leading edge of a single door. On a double door, it should be as close to the edge of the frame as possible. EN 13637 Requirement is 800mm to 1200mm height.
USB Programming Cable	You cannot use a standard USB cable. The USB SIF programming cable has be specifically modified. Use of a standard USB A/B cable may damage the PC/Laptop.
Cable Running	Run the cables too and from the ePED mounting location and to the locking devices before mounting the ePED. However, do not attempt to wire up the ePED until it has been mounted in the desired location.



The bezel removal tool is required to remove the outer face plate and expose the mounting screws.



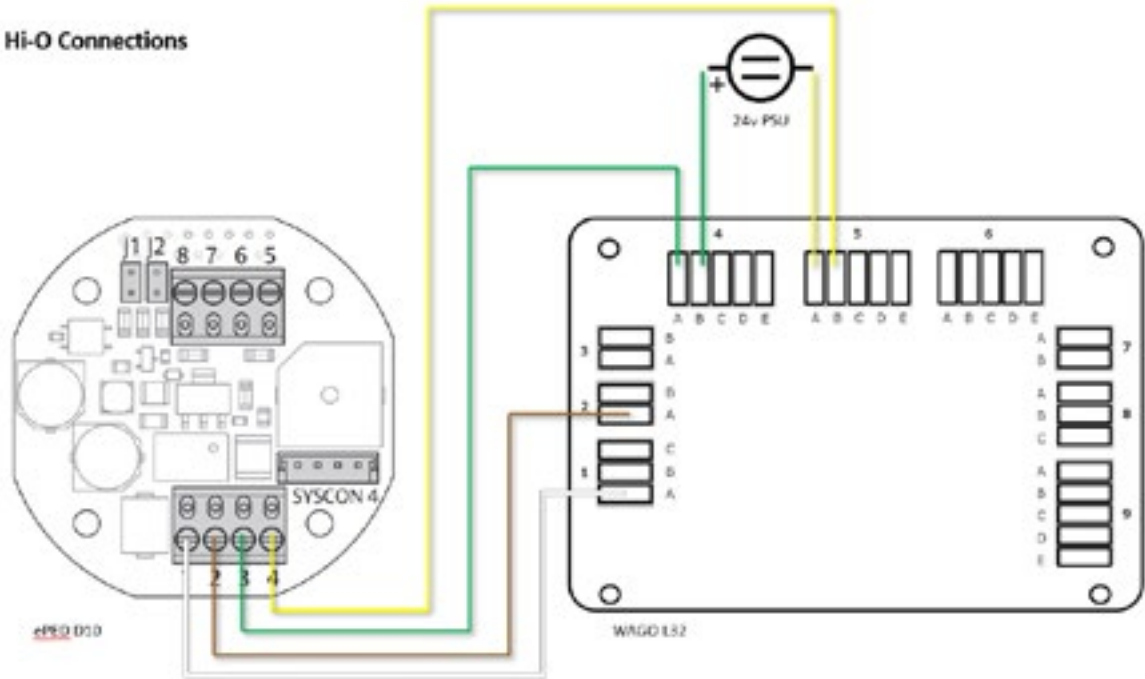
Terminal strips

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 -	

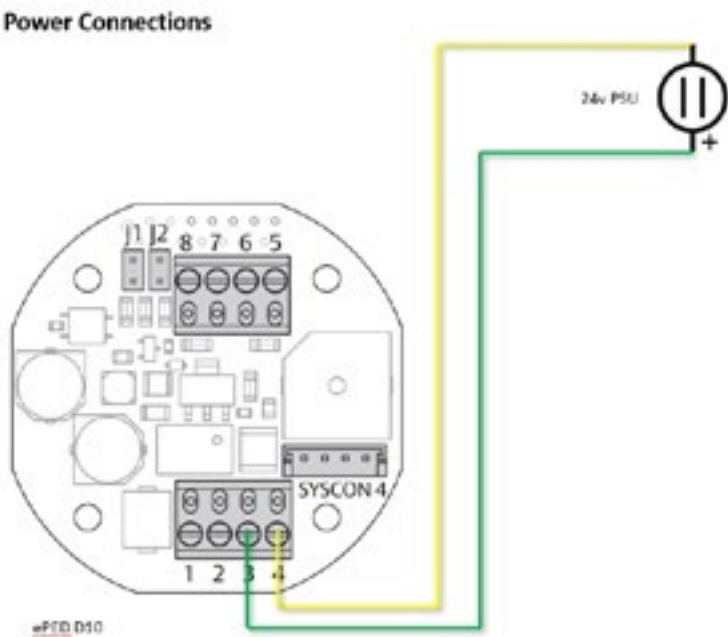
Syscon 4 plug connection

1	GND
2	CAN_H
3	CAN_L
4	V _B +

Using an L32 WAGO Connection box:

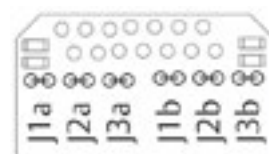


Connecting directly to ePED Display

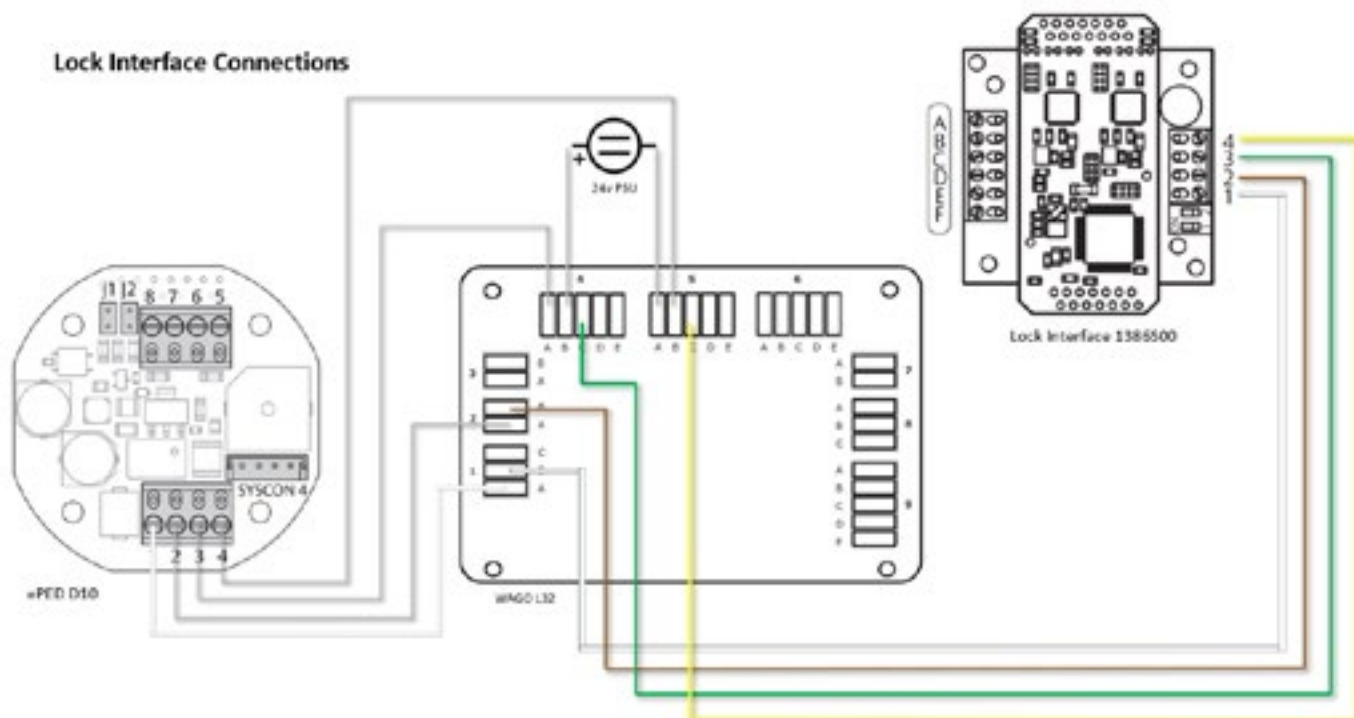


Connecting the Lock interface

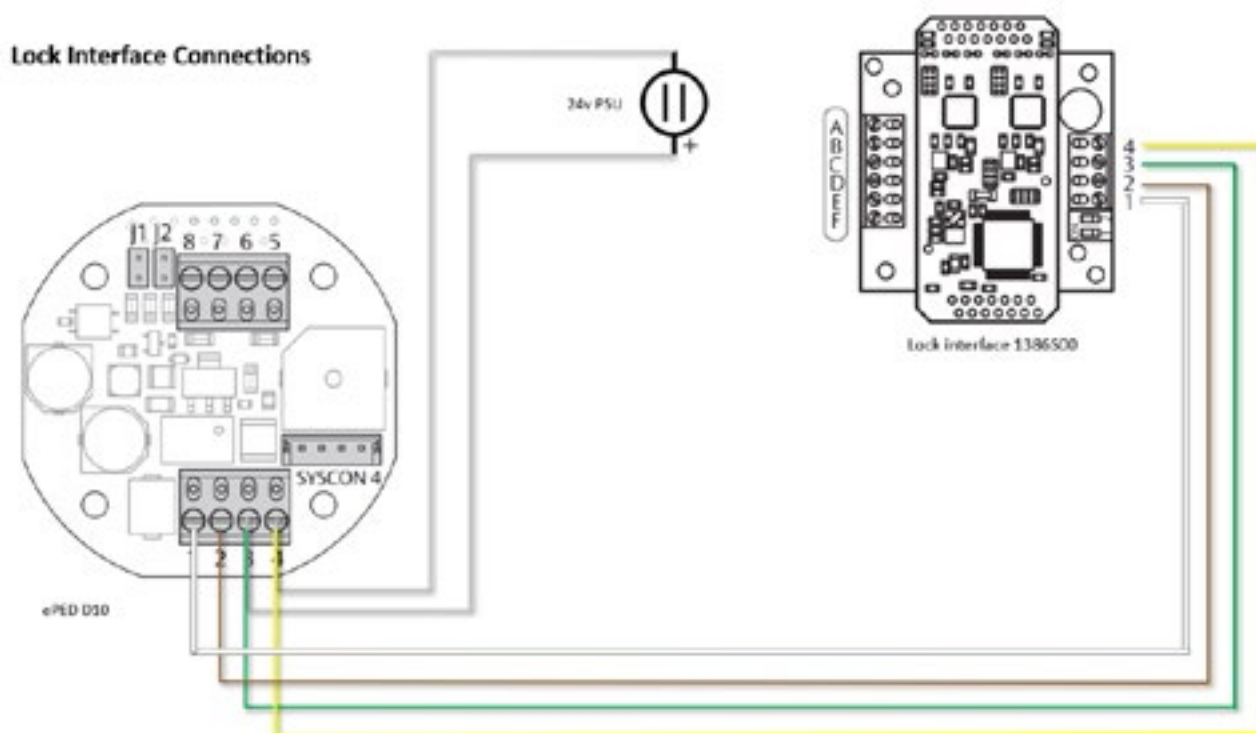
ALERT! If a delay is required (T1 / T2) jumpers 3a and 3b must be cut. This must be done before power is applied. Once cut the configuration is locked in and cannot be changed.



Using an L32 WAGO Connection box:

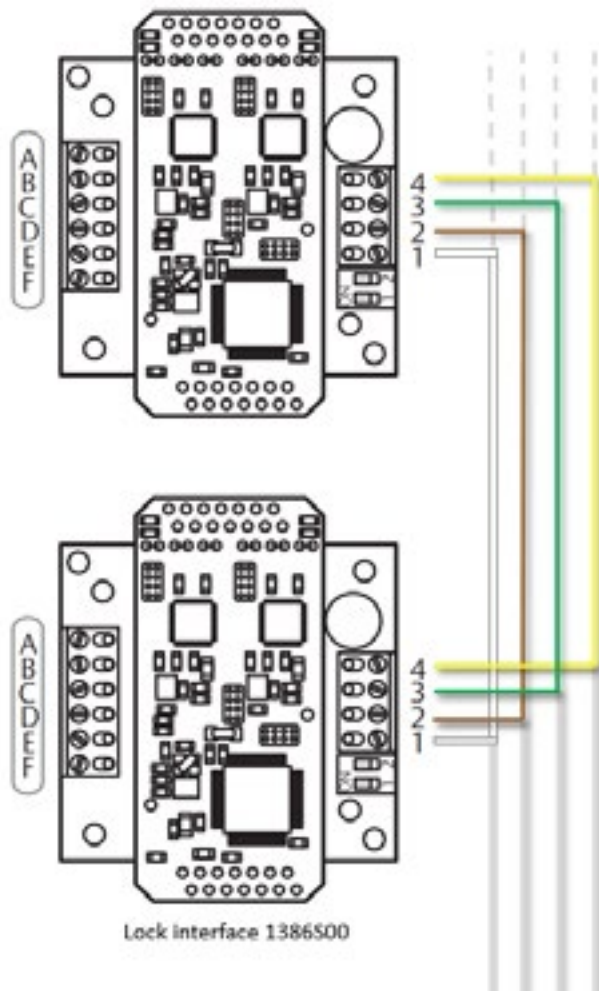


Connecting directly to ePED Display

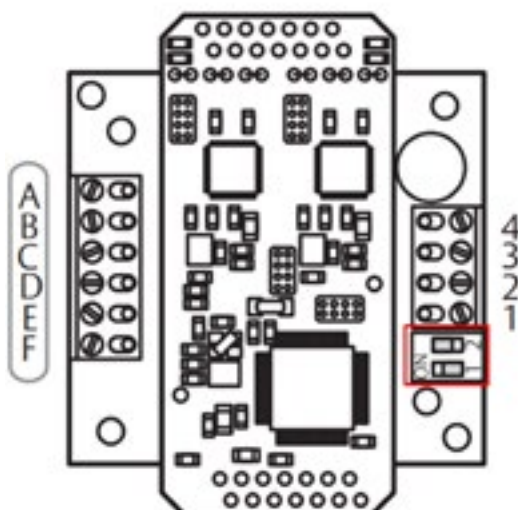


Multiple Door Connections

Up to eight locking devices



DIP Switch Settings



Single Door Installations

Dip Switch 1 should be in the on position

Dip Switch 2 should be in the off position

Multiple Door Installations

Dip Switch 1 should be in the on position - in one lock interface only

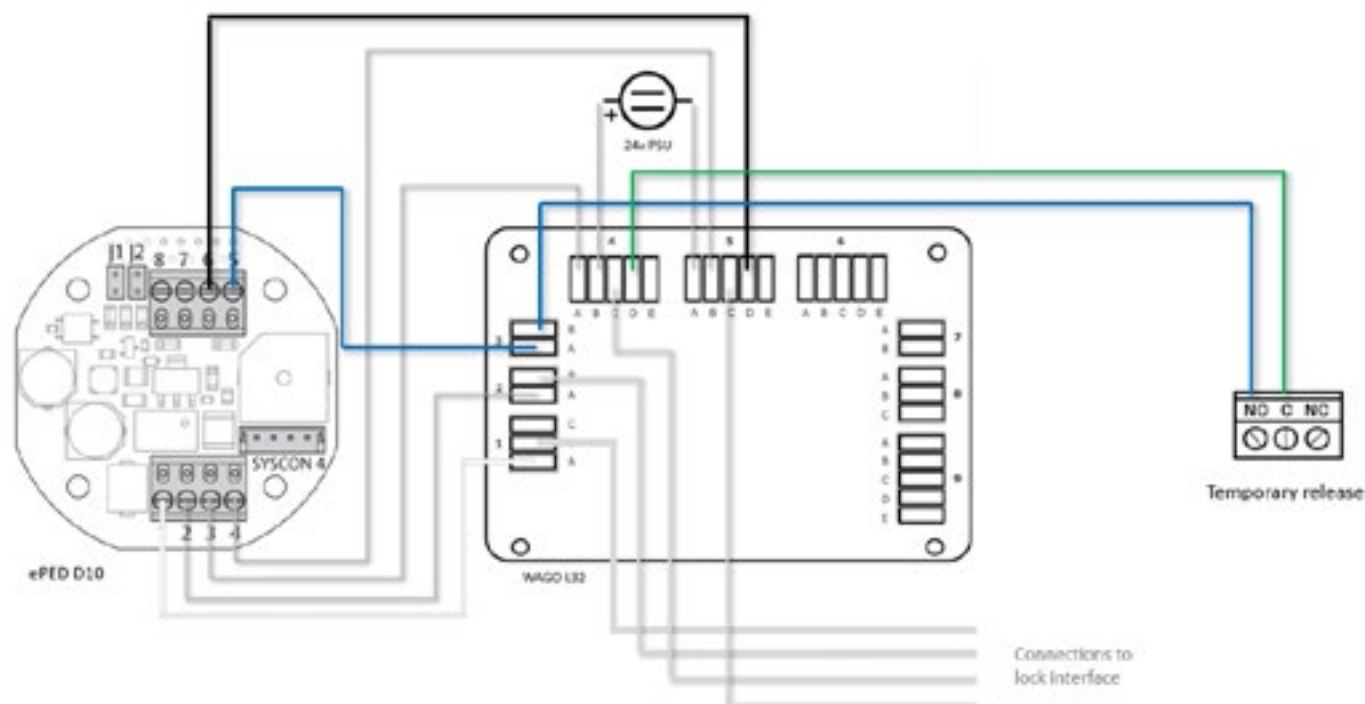
Dip Switch 1 should be off in all other interfaces

Dip Switch 2 should be in the off position

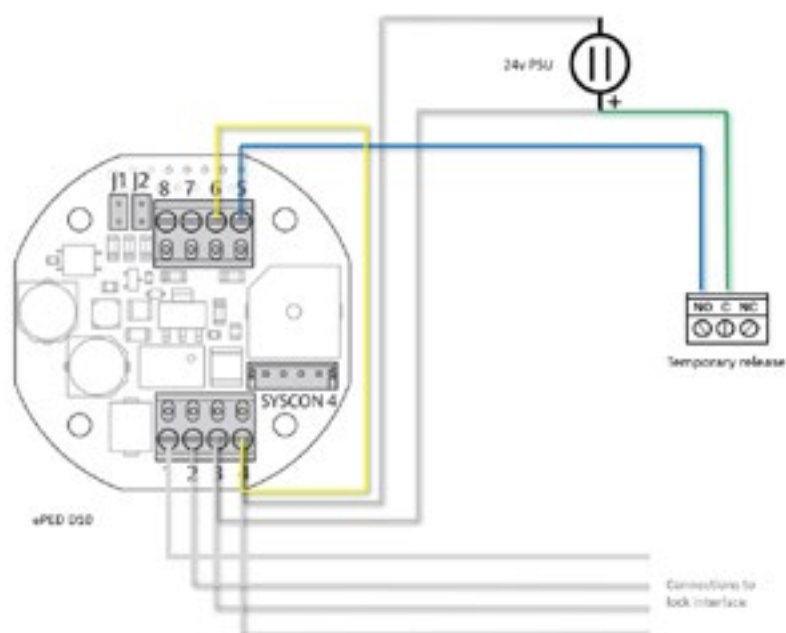
Connecting the Temporary Release

The temporary release is anything that needs to send a signal to the lock to release under 'normal' conditions such as, Access Control reader, Request to Exit button, Key switch etc...

Using an L32 WAGO Connection box:



Connecting directly to ePED Display

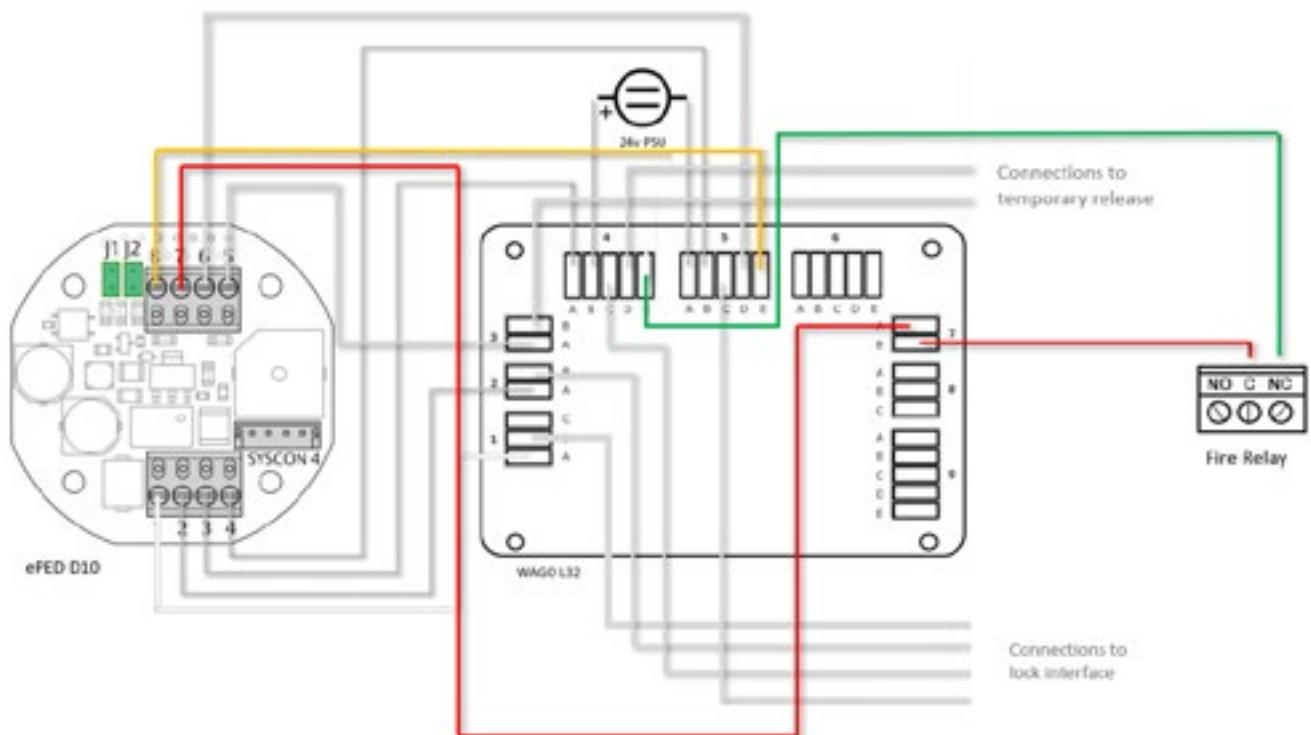


Connecting to the Fire Alarm

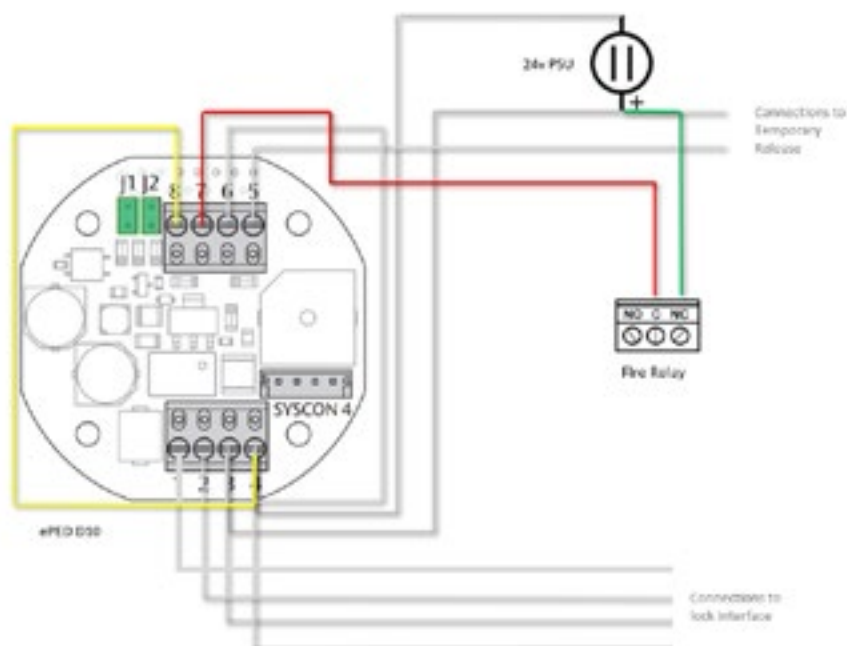
The fire alarm must be a normally closed (N/C) connection.

ALERT! If a fire alarm input is used then the green jumpers on the ePED D10 must be removed.

Using an L32 WAGO Connection box:

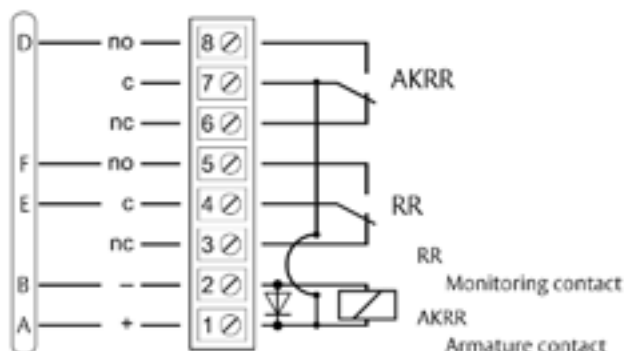


Connecting directly to ePED Display

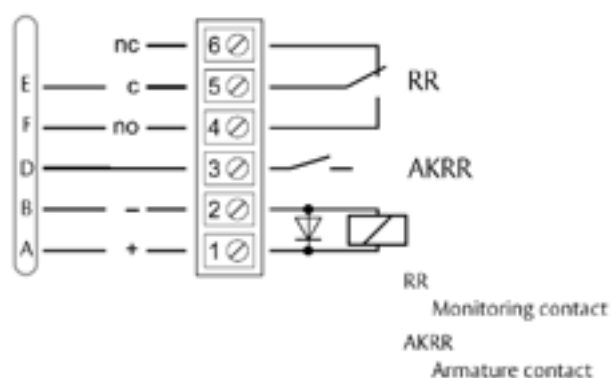


Locking device connections to lock interface

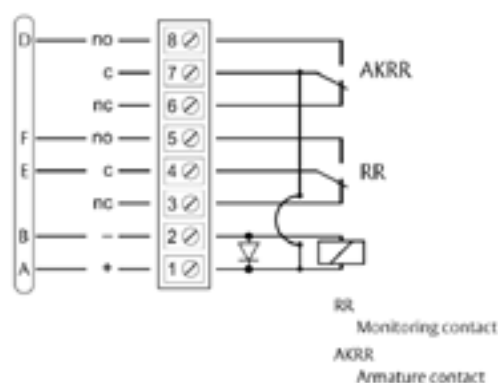
FF331 U80 Strike



FF332.238 Strike / DC700FT Door Closer

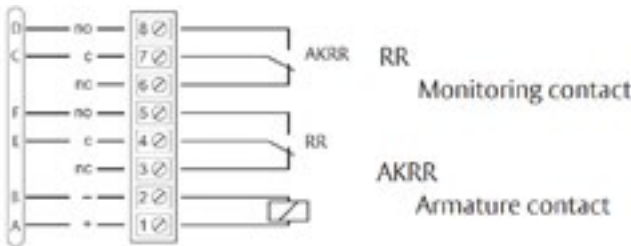


FF351U80 Solenoid Lock

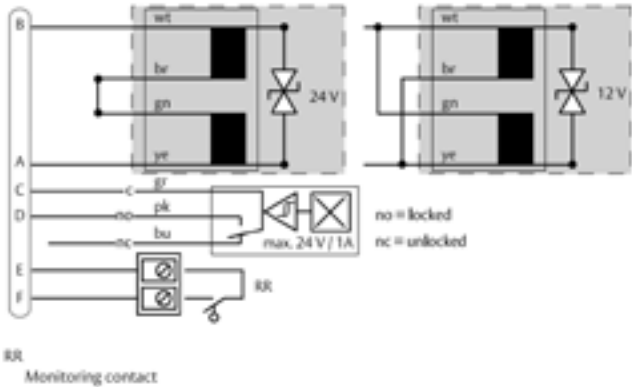


ALERT! When a FF351U80 is used the 'catch function' must be switched off. This is done through the D10 settings.

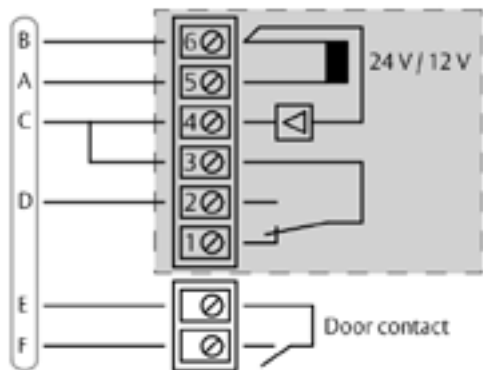
FF352M.80 Motorised Lock



FF827HA / 827A-IP Magnet



FF828 Magnet

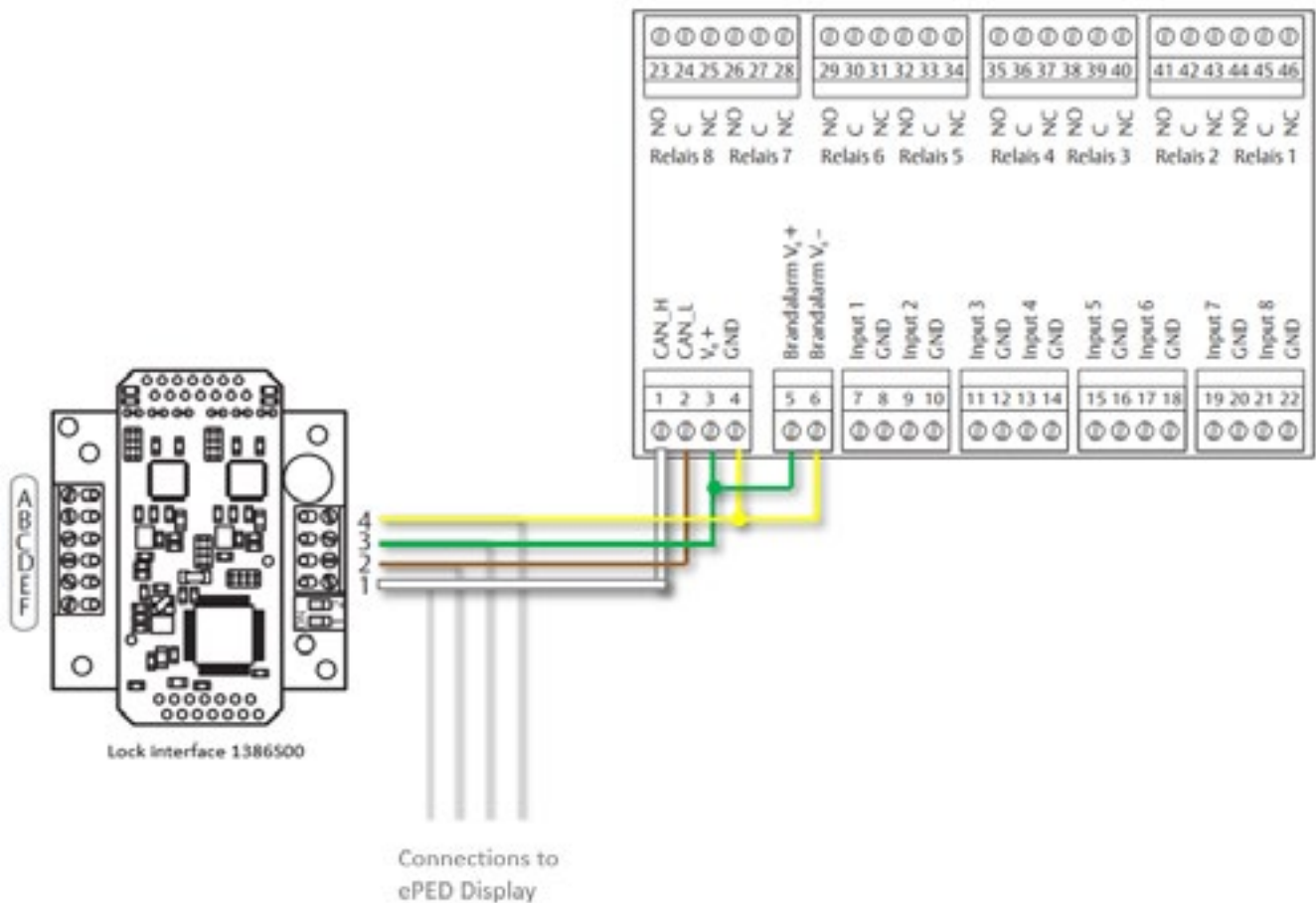


ALERT! When a magnetic locking device is used a separate door contact will be required. This is not included as standard.

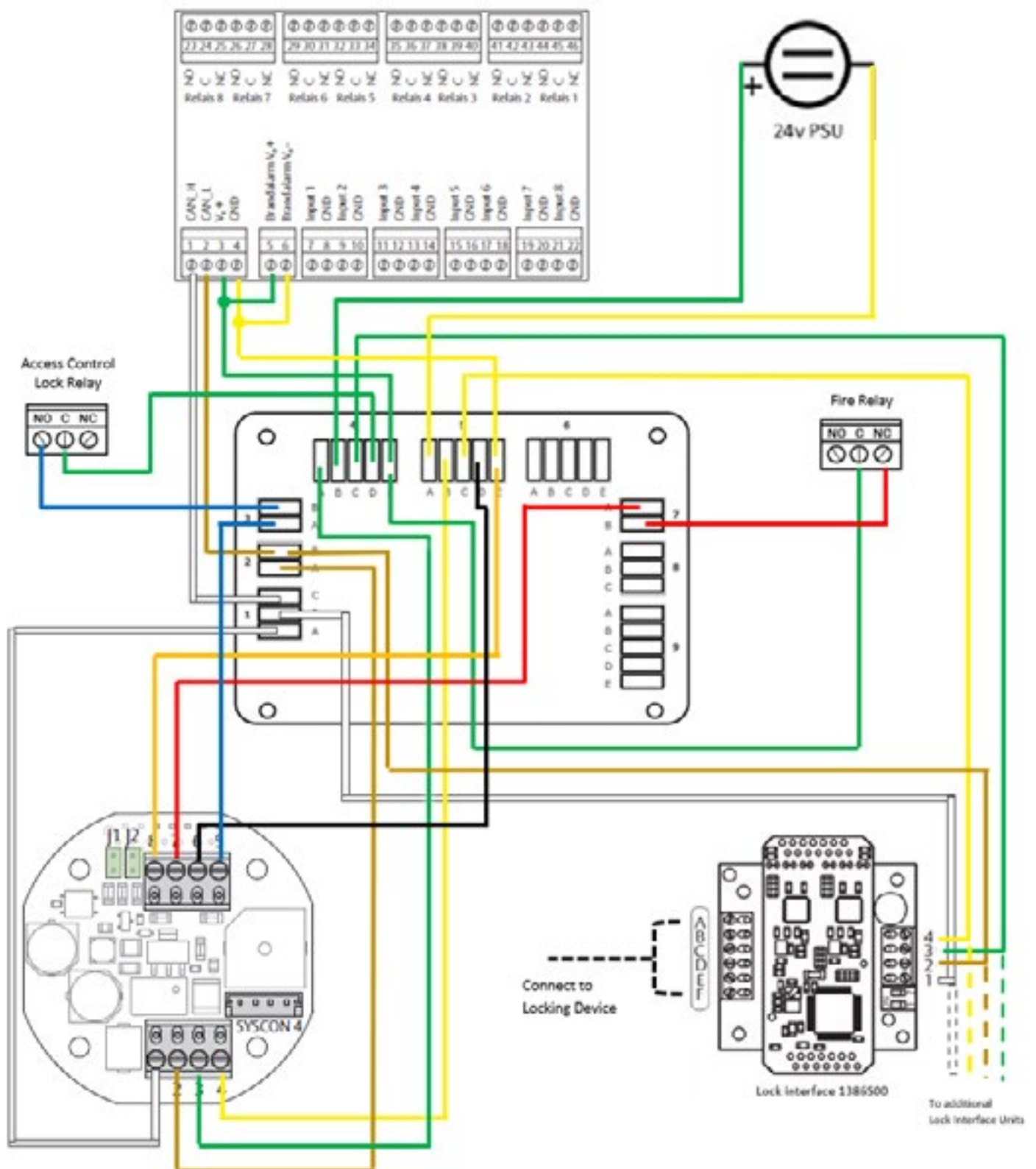
Voltage selection

	J1	J2
24V	① ② ③	① ② ③
12V	① ② ③	① ② ③

Connecting directly with ePED Display:



Final Wiring Diagram



Prerequisites

The ePED display terminal should now be fitted and powered.

The factory access codes are:

User Code: 1234

Maintenance Code: 7777

Installer Code: 7890

These should be changed after installation and can be up to 8 digits long.



The display terminal should now be flashing a red circle and displaying a red LED light.

There may be amber LEDs flashing simultaneously, these can be ignored until installation is complete.

Accessing the Menu Function

The menu is accessed by touching the menu icon in the top right hand corner.



To bring up the settings menu, you then need to touch the settings icon which will then display the three menu areas:



Settings



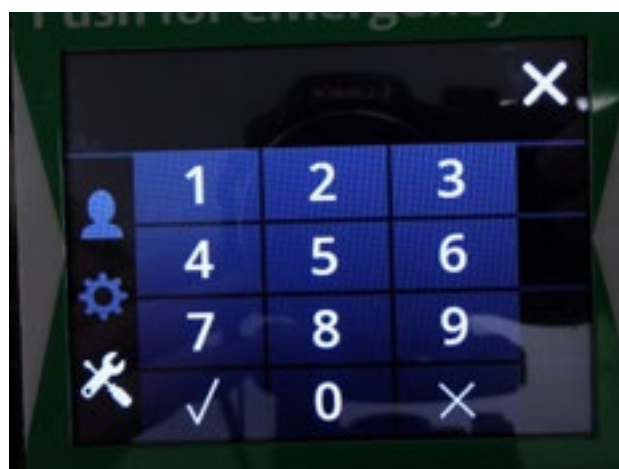
User



Maintenance



Installer



Use the installer menu to start configuration

Starting the installation

Touch into the installation menu.

Select Installation Wizard

Touch start twice to begin the installation.



Press OK to unlock the door.

Release Delay

The release delay settings can only be changed if the unit has been installed for a delay function. This would involve cutting the jumpers on the lock interface(s) as shown on Page (10).

This is the **only** time that these settings can be changed. Once a unit has been installed, to make a change a fresh installation wizard would need to be run.



Continuing the Installation Wizard

Once you move on from the release settings the unit will begin searching for devices and configuring them. The device should display a green square. The LEDs will begin to flash and the device will beep. This will last approximately 60 seconds.

Once complete, the unit will confirm the release delay settings that have been applied.

Click Next.



The device will now ask you to push and hold any 'Emergency OPEN Buttons'

By Emergency OPEN Buttons it means any ePED Display devices.

You need to depress the entire screen for 5 seconds minimum.

You will now see a screen confirming that the emergency buttons are functioning correctly.

If no green squares are present then you need to check the DIP Switch settings.

If red squares are displayed then there is a system fault, restart the installation wizard after checking wiring.



Continuing the Installation Wizard



The door should now be unlocked in the direction of escape.

Check that the door can be opened and touch OK.

The display will now present a system code which may be requested when asking for support.

This is also accessible from the information menu.



The final step of the configuration is to reset the door and alarm.

Close the door and touch END to complete the installation wizard.

You will then need to silence the alarm.



The device will now take 60 seconds to reset.

Door Settings

You now need to re-enter the menu and choose the door settings.

Again, use the installer code to access the installer menu:

Accessing the Menu Function

The menu is accessed by touching the menu icon in the top right hand corner.



To bring up the settings menu, you then need to touch the settings icon which will then display the three menu areas:



Settings



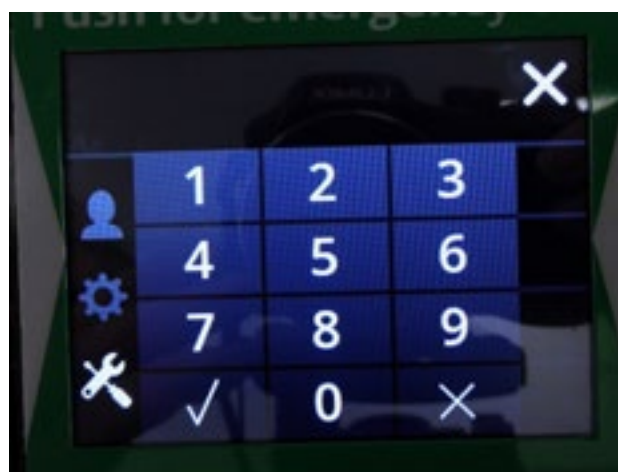
User



Maintenance



Installer



Use the installer menu

In the installer menu you have the "SYSTEM" option.

Touch system to set up the door.



In the door menu, you can configure:

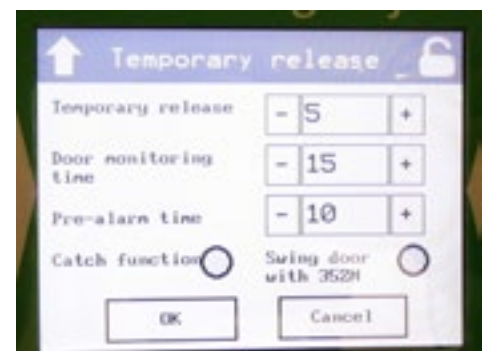
- Temporary Release
- Permanent Unlocking
- Alarm Signal
- Release Delay



The temporary release is the unlock period in seconds via the temporary release (access control).

Door monitoring time is the door left open alarm time in seconds – i.e. after (x) the sounder will activate.

Pre-Alarm time is the number of seconds after the door monitoring alarm before the alarm is escalated to the I/O module if configured.

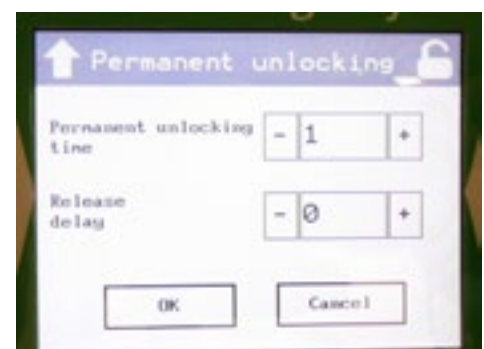


Catch function should be switched on for all locking devices **except the 351U80**. This is the lock on opening the door, switched off it is lock on closing the door.

Swing door with 352M should be on when 352M is installed on a double action or access control door.

Permanent Unlocking Time is in minutes. This is the number of minutes after the unit is put into permanent release before it will relock. If 0 is selected it will not relock until reset manually.

Release delay should be 0.



The Alarm signal menu has two options;

Alarm time is the time in seconds for the alarm/beeping.

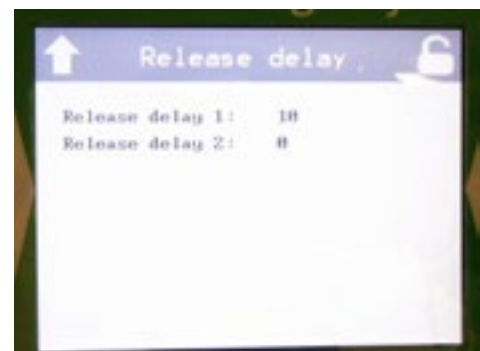
The guidance signal is at the end of the alarm time, it then becomes an 'occasional' alarm for an extended period in seconds. After which the terminal is silent.

The release delay screen is information only. The release delay would have been set up in the main installation wizard.

The settings screen has three options:

- Language
- Door name
- Options

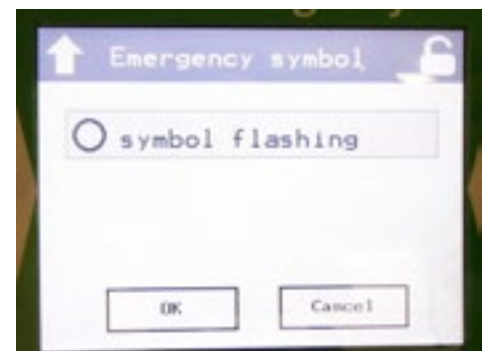
The language can only be set as English or German.



The door name is actually a door number and is only used when the device is configured for T2 / Grade 2 CMC Control.



In options you have the option to enable or disable the flashing red button on the main unit display.



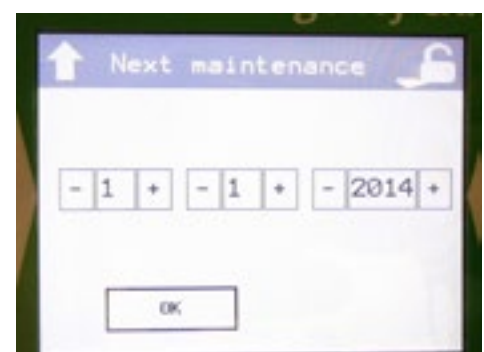
The installation process is now complete. The additional menus that can be used are explained below but are not required as part of the installation process.

Maintenance

The maintenance menu allows you to configure scheduled maintenance date. The maintenance wizard must be run annually.



Next maintenance shows the date of the next required maintenance visit.



The system test wizard (Maintenance) is for testing the unit on a minimum of an annual basis. It will run through several steps.

The system will count emergency button use. After 1024 emergency button uses the unit will stop working until a maintenance has been run.

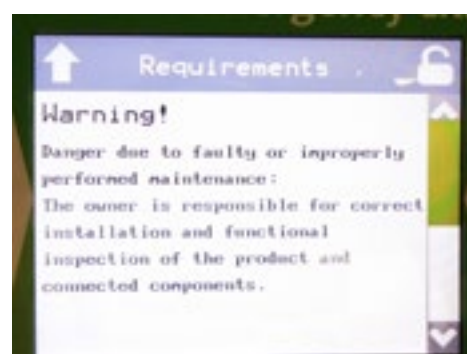
Running maintenance clears the counter.

The requirements screen shows a warning message regarding the maintenance requirements.

Nothing can be configured on this screen.

This shows all devices and can be used for diagnostics when contacting support.

Nothing can be configured on this screen.



User Administration

The next menu item is User Administration.

You can use this to change the user code.

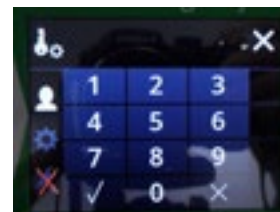
Users can not change codes

Maintenance Users can change maintenance and user codes

Installers can change all codes.

As an example, the maintenance user logged in, in the picture to the right cannot change the installer code.

Select the code you wish to change and enter a new and press the tick. You will then need to enter the code again, followed by the tick.



Navigation



The arrow in the top left hand corner lets you navigate back to the menu item above.

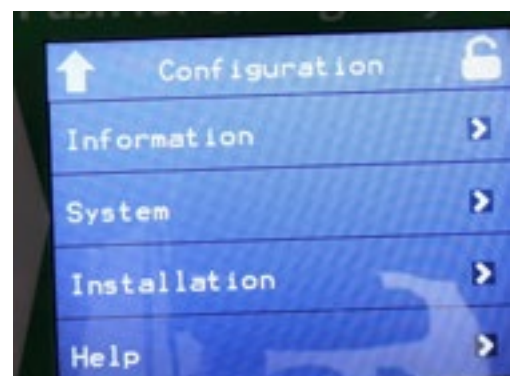


The padlock icon in the top right takes you to the unlock screen for temporary and permanent unlock. Or, silence alarm if the alarm is active.

Other menu items

The remaining menu items are for:

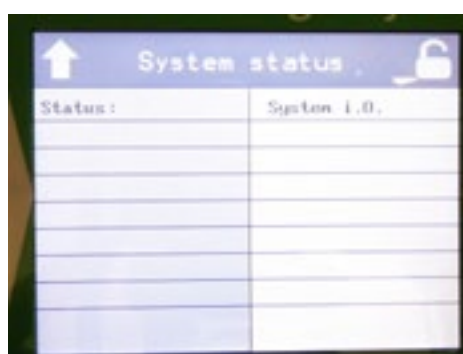
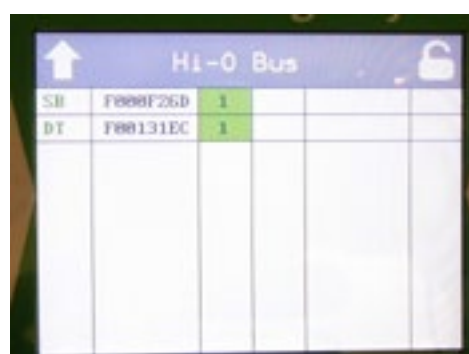
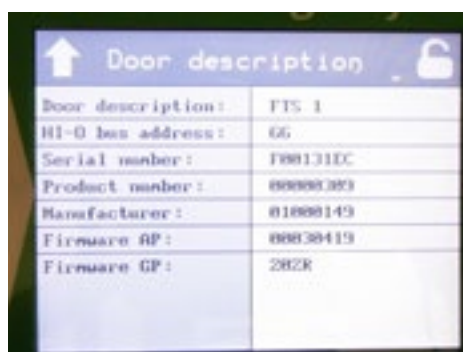
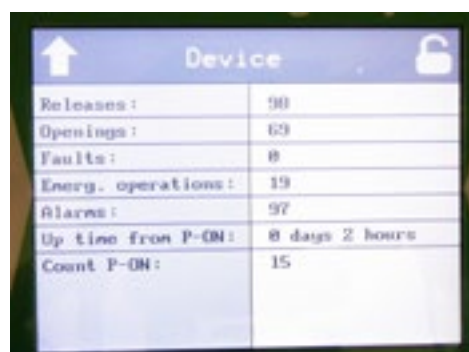
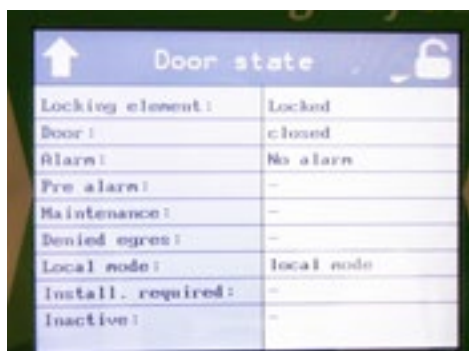
- Information
- Help



Information

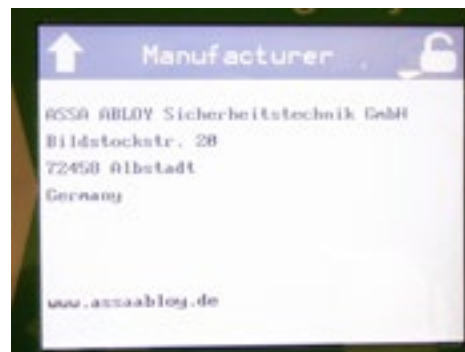
The information screens can be useful for diagnosing faults. The information screens are navigated by touching the screen anywhere to skip to the next page.

The below screens are available:



Help

The help screen shows manufacturer details and a QR code for accessing technical information.



Installation Troubleshooting

Fault Experienced	Likely Cause / Resolution
When entering installation wizard, cannot get to release delay screen.	Check that any one lock interface or IO module in the system has DIP switch 1 on. If you have multiple devices in the system you only need one of them to have DIP switch 1 on. DIP Switch 2 should never be on.
Upon activation the fire alarm does not release the door	Check the green jumpers on the back of the ePED D10 Display terminal have been removed.
The door is not locking when closed and no alarms are active	Check the gap between the locking device strike and latch or alignment of the door. This is suggesting a lock monitoring fault – i.e. the device does not know the door is closed.
Cannot set a release delay during the installation wizard (disabled/grayed out)	Check that the jumpers on the lock interface unit(s) have been cut. This must be done whilst the unit is powered off.
Unable to run installation wizard but I have checked the Dip switches	Wiring issue. This suggests there is a break or a short in the bus network. Check the wiring between each device.
When using an FF351U80 as the locking device I cannot close the door. The lock is locking out of frame.	Check that the catch function has been switched off in the Door -> Temporary Release menu.
When using an FF352M.80 door forced alarms activate when using access control.	Enable swing door with 352M in Door-> Temporary Release menu.
Display unit flashing amber LEDs. Door released and terminal not acting in usual way.	Fault on the data line. Can H/L, should be white and brown wires.

Fault Experienced	Likely Cause / Resolution
When using an I/O module in the installation. The door is released and the terminal is showing an active fire alarm input.	The fire input (connections 5 , 6) on the I/O module require looping into power (3 , 4) or programming out using the USB SIF cable.



THE FUTURE OF COMPLIANT ELECTRONICALLY CONTROLLED ESCAPE DOOR SYSTEMS



ABLOY secures people, property, and
Business operations on land, at sea,
and in the air – in all circumstances.

ASSA ABLOY is the global leader in
Door opening solutions, dedicated
To satisfying end-user needs for
Security, safety and convenience.

Manufacturer:

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