GUIDE- 6 AC-MAX LIFT CONTROL

Description

The AC-MAX CU-8LC Lift Control kit ref. 5222 is composed of the following material and allows the connection of an elevator up to 8 floors (if you have more floors in your elevator you must add the number of expanders and licenses every 8 floors corresponding and request it indicating the MAC of your AC-MAX CU-8LC controller to receive the specific fileor to be able to control more expanders):

Ref. 5222 KIT ELEVATOR AC-MAX-CU-8LC.

-BOX-IP metal box

-PWR4D feeder. 13.8 Vdc/5.4A

-AC-MAX-CU 8LC ELEVATOR Controller.

-Expansor of 8 I/O EXP8-IO. (ref. 5201)

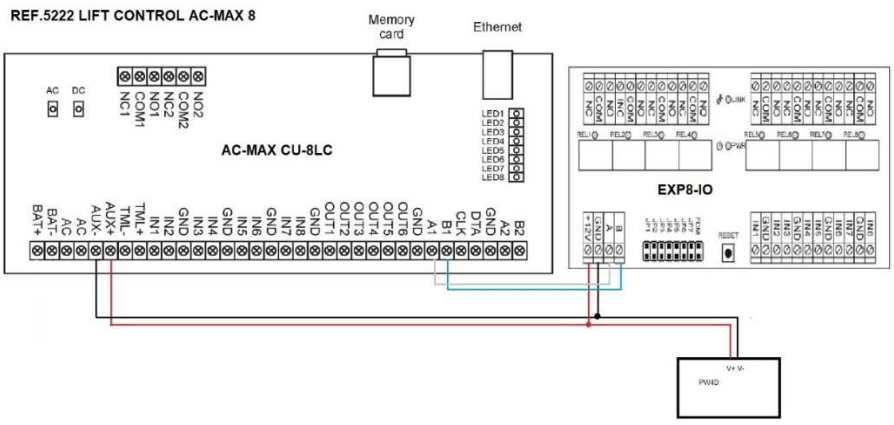
characteristics

- AC-MAX CU-8LC Elevator Control Unit licensed up to 8 floors.
- AC-MAX System I/O Expander
- 8 NO/NC inputs
- 8 relay outputs COM, NO, NC (EXP8-IO) 30Vcc/1.5A
- RS-485 interface for communication with the elevator controller (set by default with ID address 110)
- Strips with screws.
- APWR4D limenter: 13.8Vdc/5.4A rated power 75W
- IP20

Note: The elevator kit comes standard with a license of up to 8 floors if you have been licensed for more than 8 floors you must load it into the microSD memory of the kit controller. See ANNEX 1.

installation.

Internal pre-wiring of the kit.



It is necessary to add the power supply cable and ethernet network of the kit.

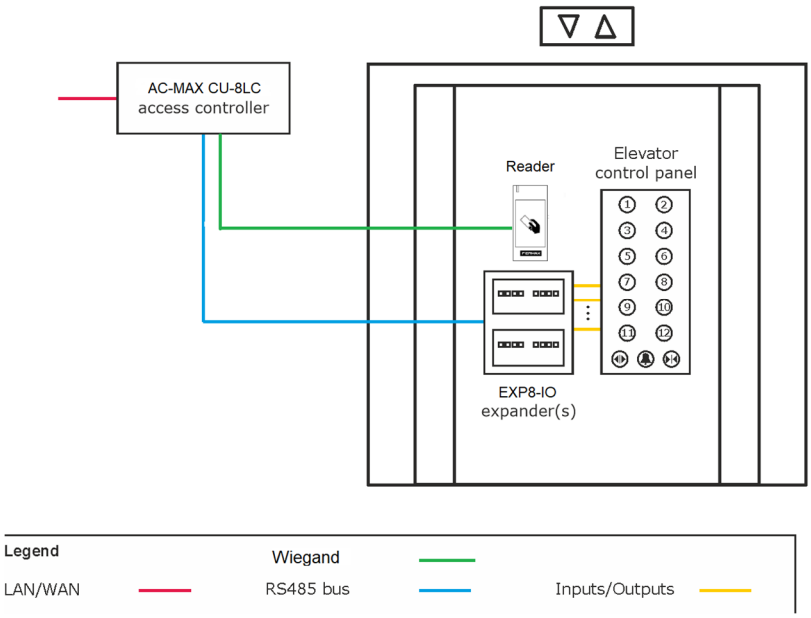


Fig 1 Concept scheme with conventional elevator.

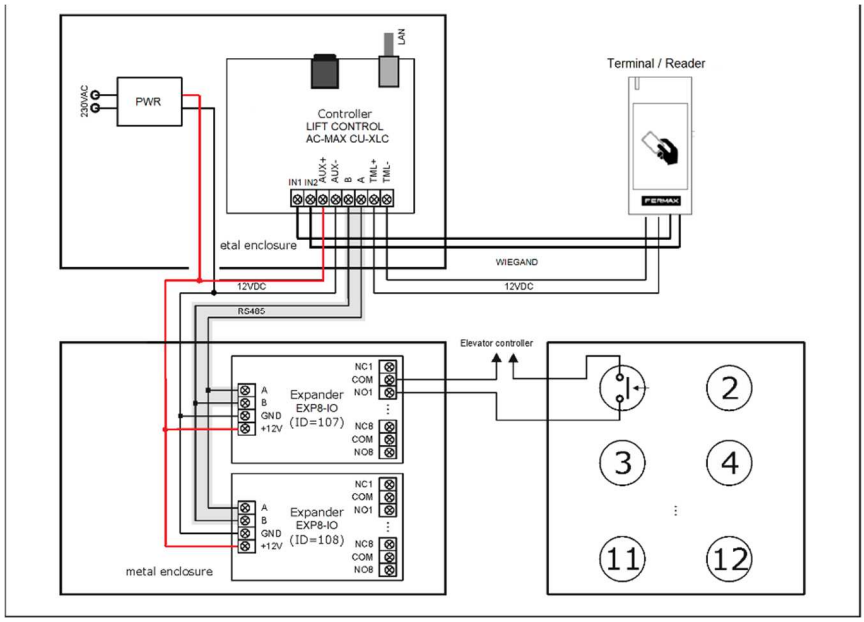


Fig 2. Example of connecting an elevator kit with two EXP8-IO expanders and wiegand reader in conventional elevator.

Lift Control Start-up Steps.

Software setup and commissioning steps.

AC-MAX ST management software uses the following softwares.

AC-MAX ST v2.0 (Standard Software)

AC-MAX CS v2.0 (ServiceActivation Software)

Manuals and software v2.0 available www.fermax.com through the QR code (1) attached,

(1)

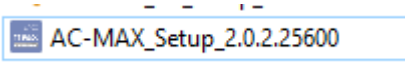
content

Step 1: Install Software – Install AC-MAX ST V2.0.

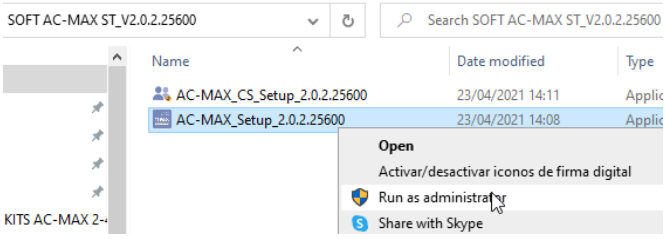
Note: Before starting the installation check that your computer is in the range of the power Floors and readers to be configured. 192.168.0.x.

Confirm that you do not have AC-MAX LT or AC-MAX CS installed. Before installing the software.

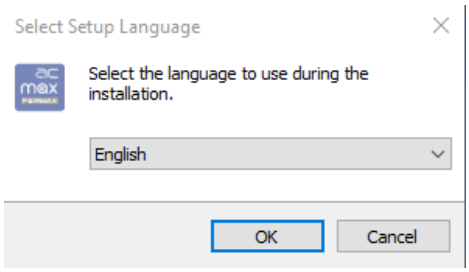
- Download the software from the web or the attached QR link.



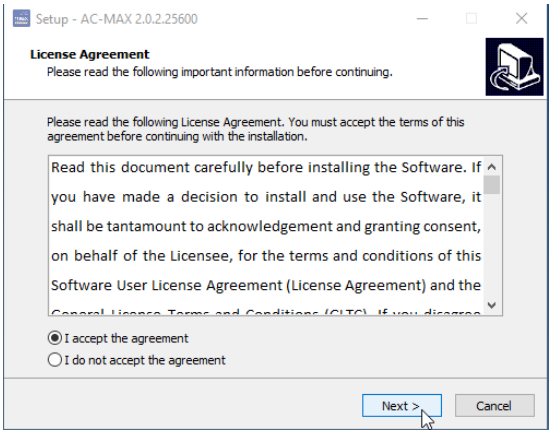
- Install as administrator.



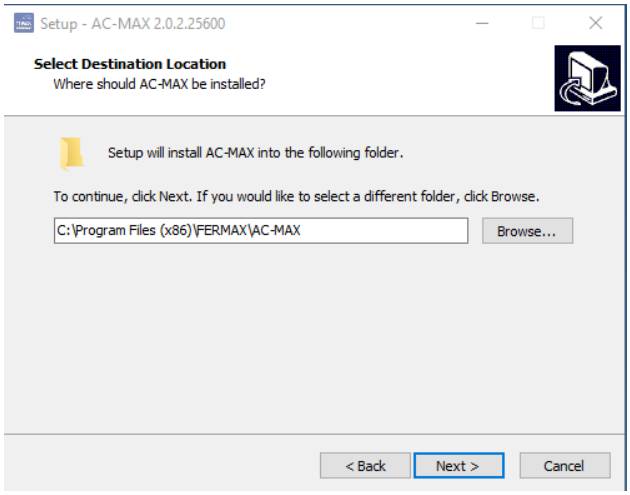
- Select the installation language.



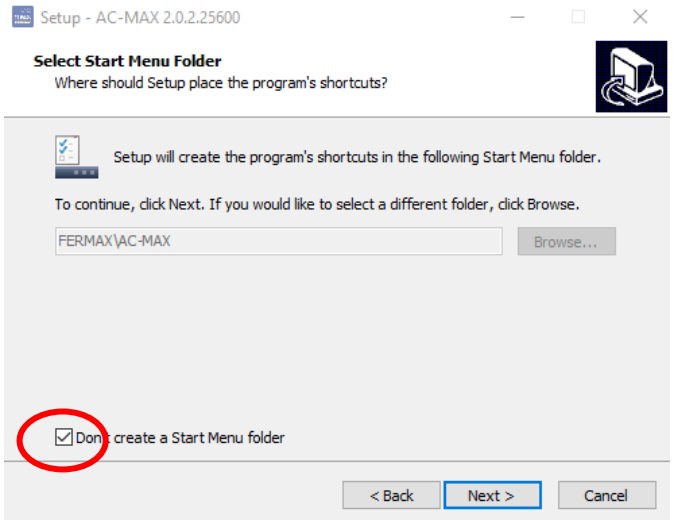
- Accept the license agreement and click Next.



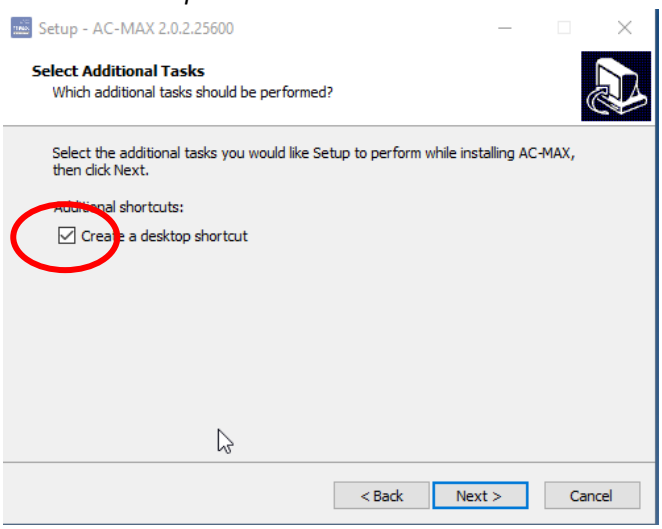
- We see where the software will be installed on pc.



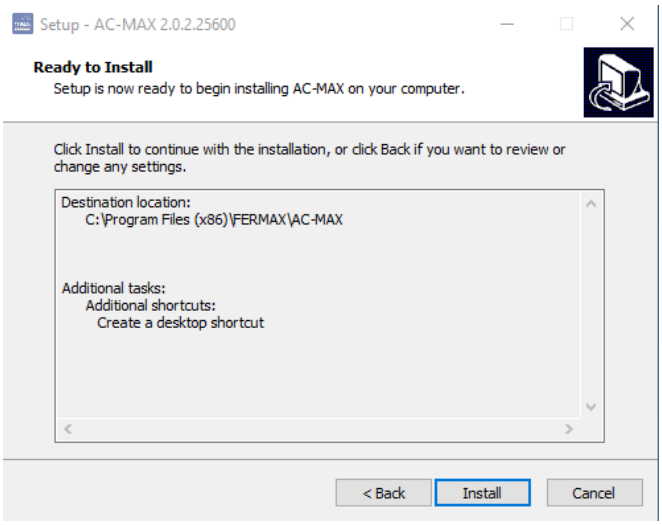
- On the next screen select *Do not create folder from the Start Menu.*



- *Create a shortcut on the desktop.*



- Install AC-MAX ST.
  IMPORTANT: If you have AC-MAX LT or AC-MAX CS installed uninstall it before installing AC-MAX



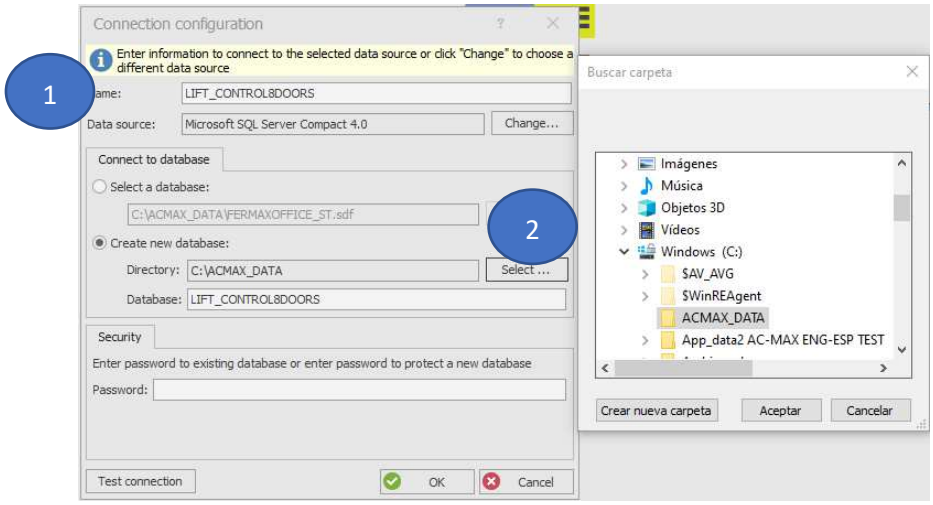
- Once installed type in *Run AC-MAX* and then on *Finish*.

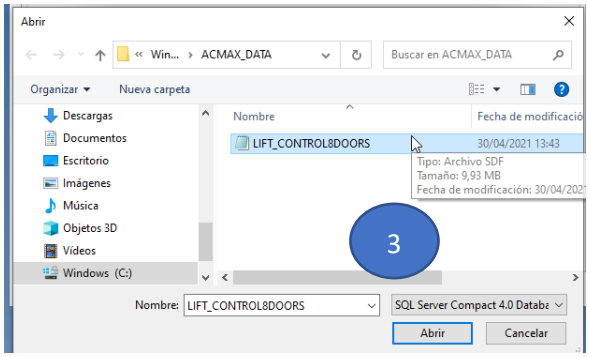
Step 2: Load Elevator database and activate services.

1. Open AC-MAX ST

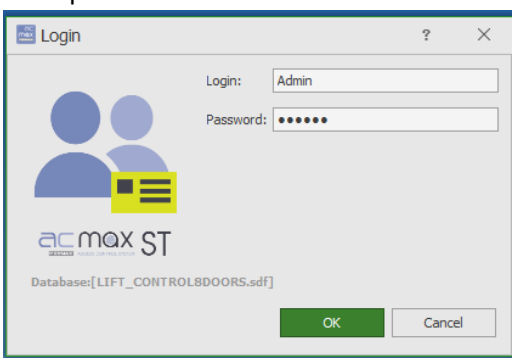
The system can work with a Microsoft SQL Server Compact 4.0 database of local type or with a Microsoft SQL Server 2005 database of centralized type (or higher). The example will use the local type database. Centralized database configuration is explained in another guide.

- In the window below, enter the database name and select the source database that was downloaded next to the ELEVATOR GUIDE called KIT_ASCENSOR_8_FLOORAS.sdf. Click the OK **button.**





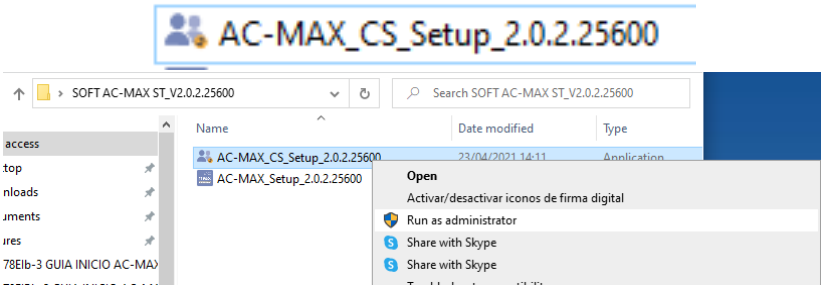
- When the database is opened, the AC-MAX ST software login window is displayed. Starting as Admin, with the password 'fermax'



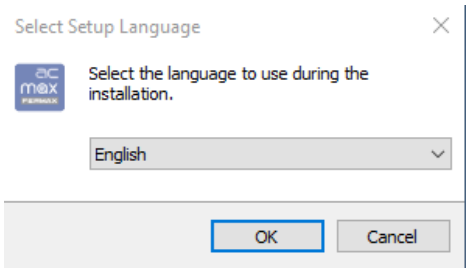
- Click OK to start the AC-MAX ST software.
- Then close the program.

2. Install AC-MAX CS, select the BBDD and activate communication services.

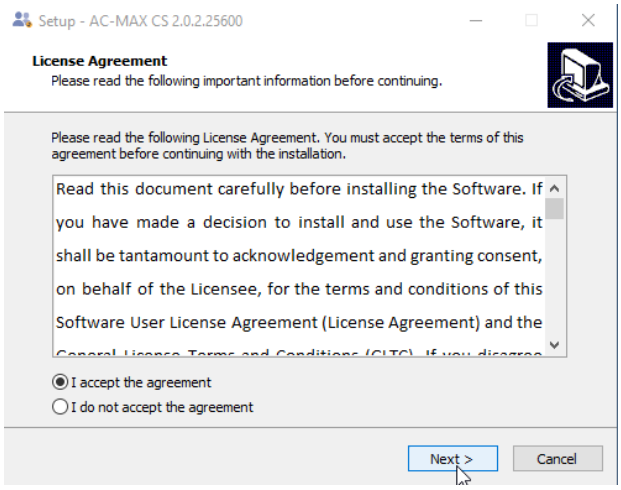
- Install AC-MAX_CS, as an administrator.



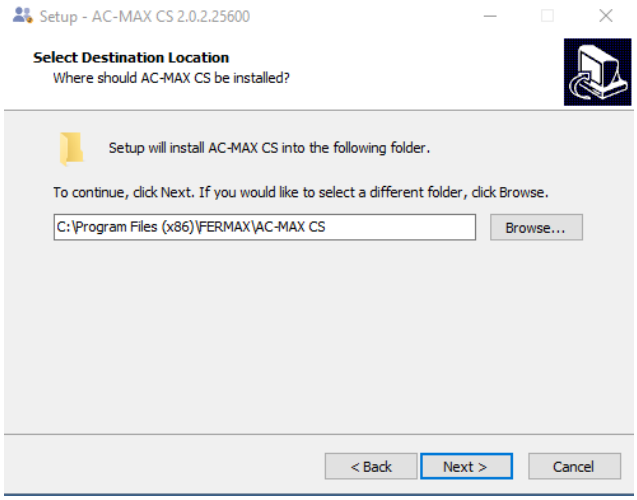
- Select the installation language.



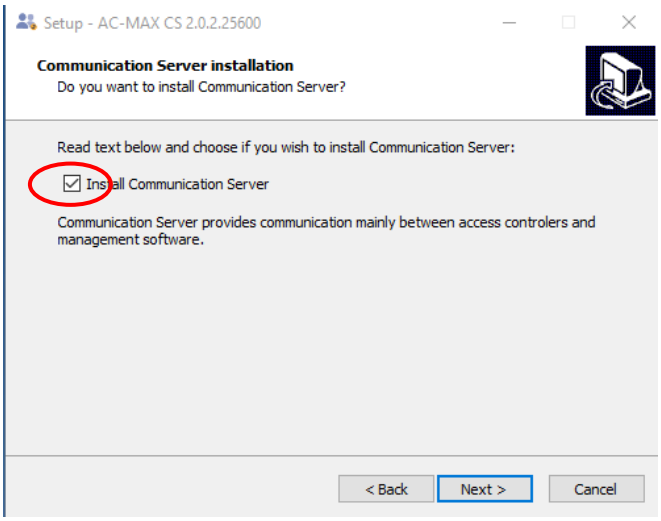
- Accept the license agreement and click Next.



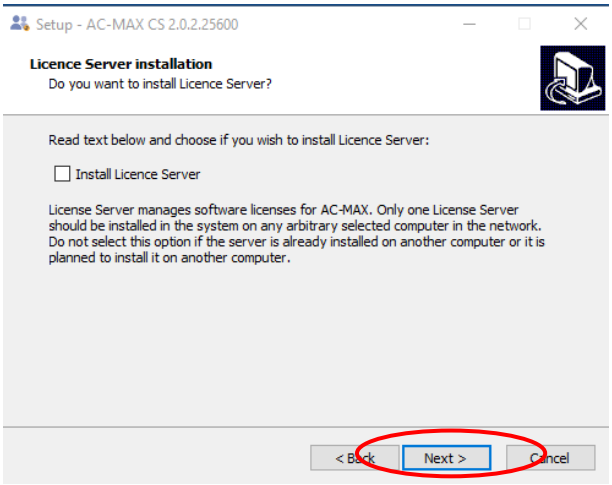
- We see the location where the program will be installed.



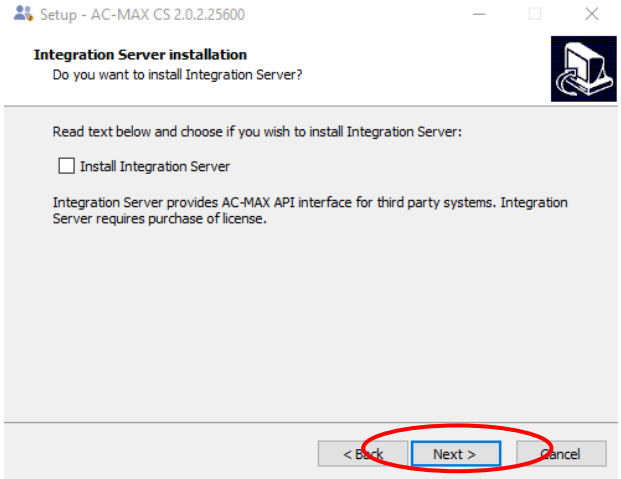
- Type in *Install Communication Service.*



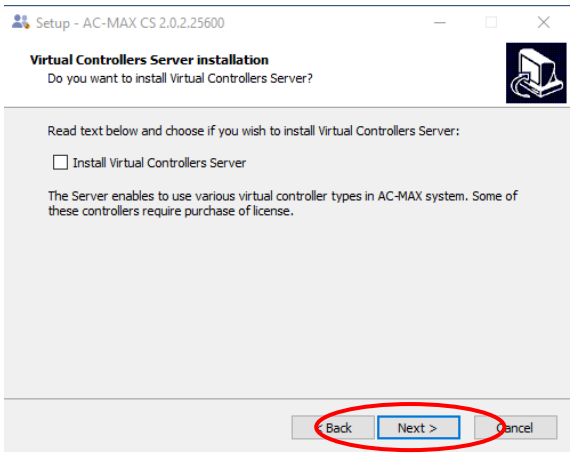
- *Next.*



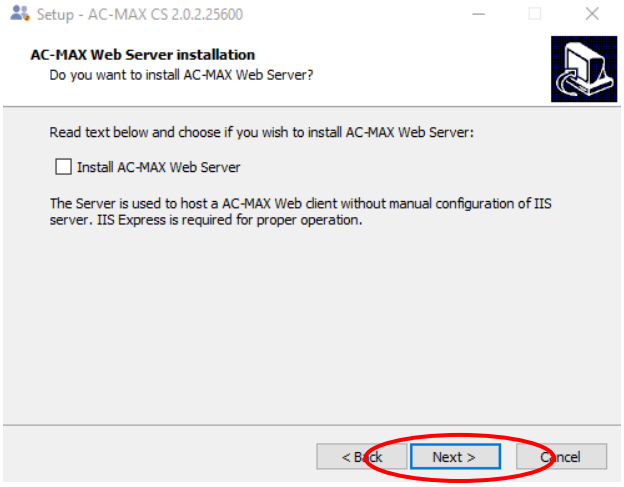
- *Next*



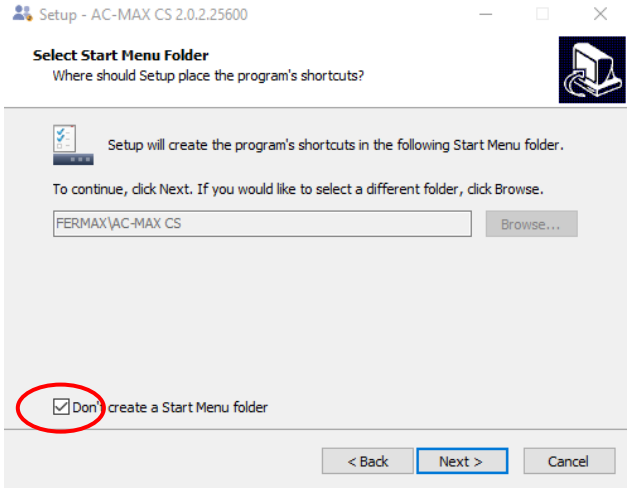
- *Next*



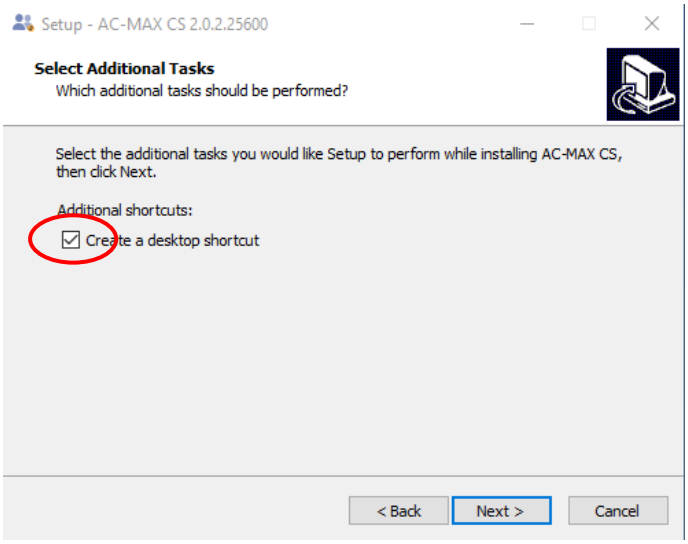
- *Next.*



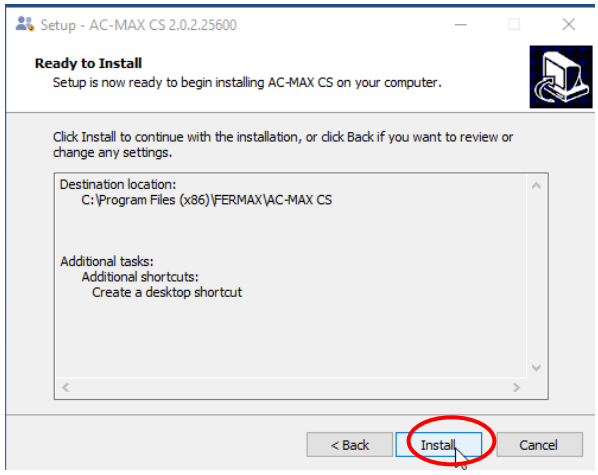
- Type Do *not create a folder in the Start Menu.*



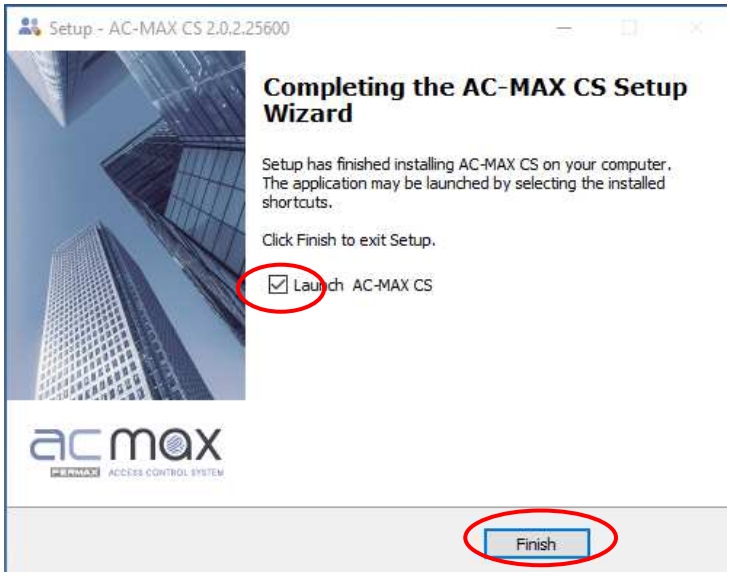
- Click Create *a desktop shortcut.*



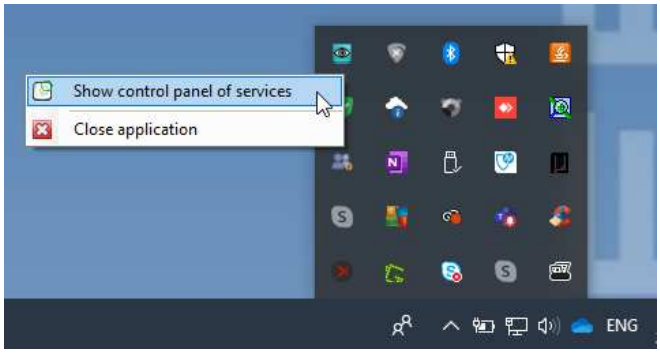
- *Install*



- Type in Run *AC-MAX CS* and *Finish*

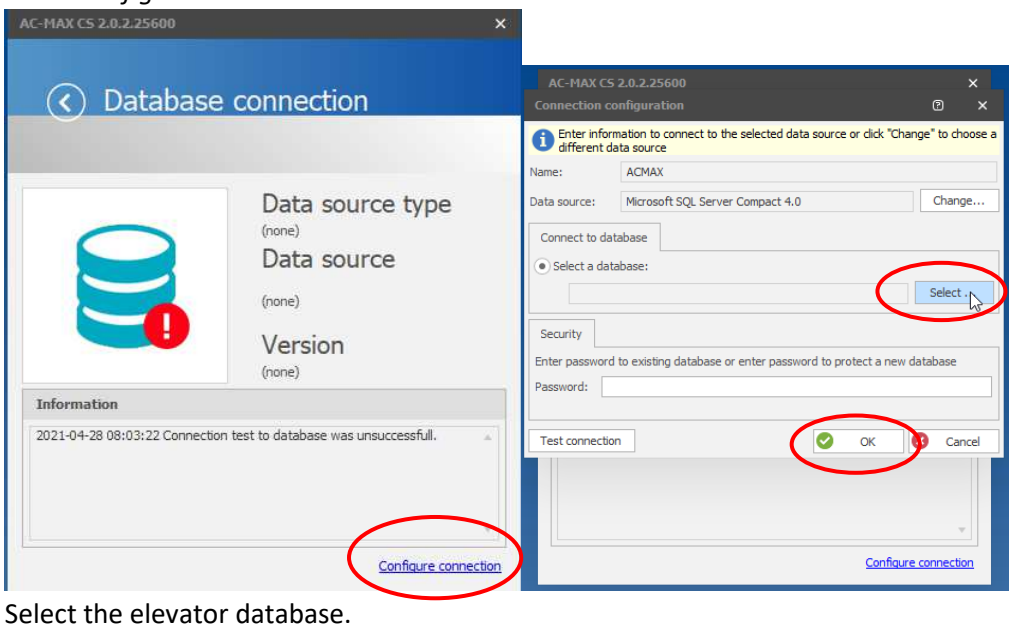


- It will stay in the resident and we must go with the mouse and right-click *type in Show service control panel.*

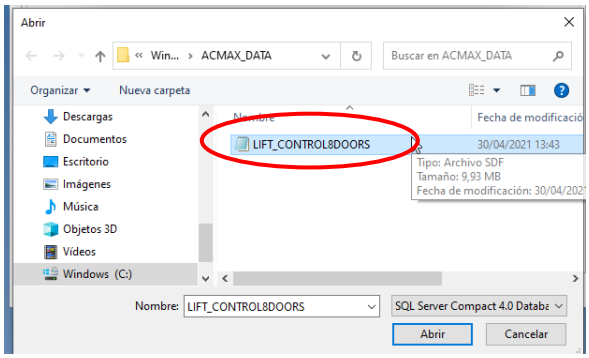


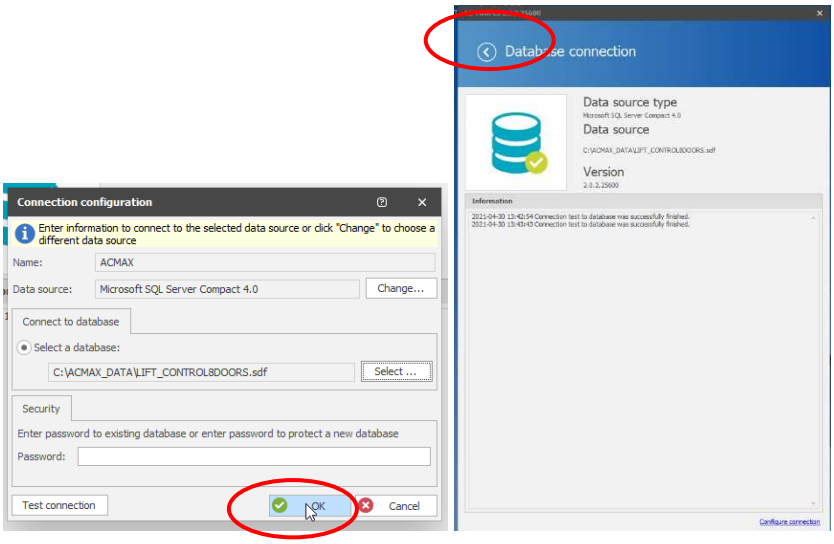
- Then go to Database Connection *to select* the database of the installation we just created.

Go to *Configure Connection.*

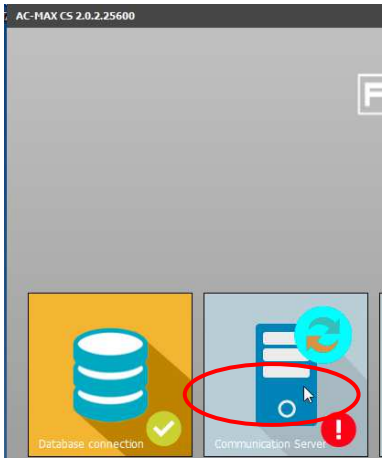


- Select the elevator database.

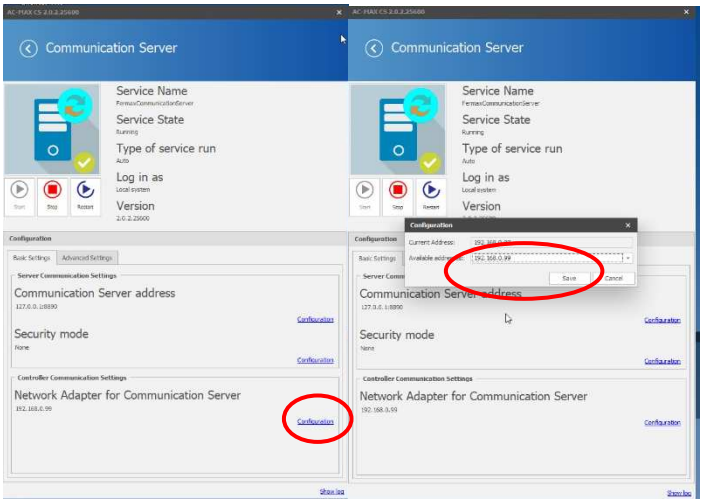




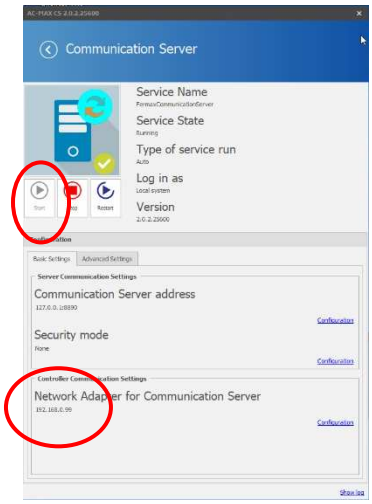
After selecting the local network it should be in the range of the elevator kit that comes factory configured as 192.168.0.213 so our PC will have to be in that range. Example 192.168.0.99



Now open Communication Services to set the IP of **our PC that must be initially in the IP range of the devices to configure 192.168.0.xx.**



Activate Communication Service by starting 'play'



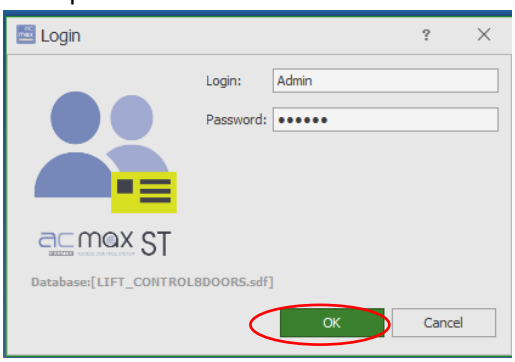
- Until you see in green confirmation that they are active.

Step 3: Configure the installed hardware devices:

The steps to start the elevator will be asfollows:

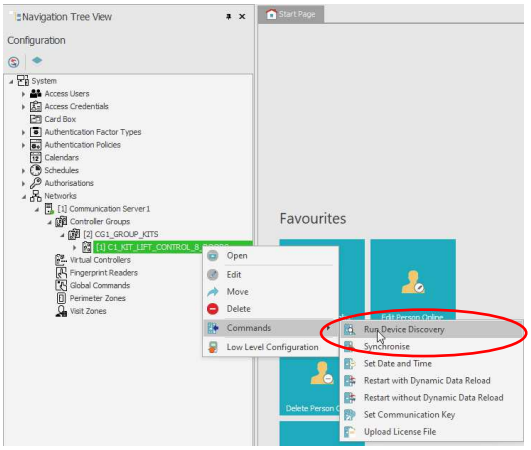
- Open AC-MAX ST v2.0

- Starting as Admin, with the password 'fermax'

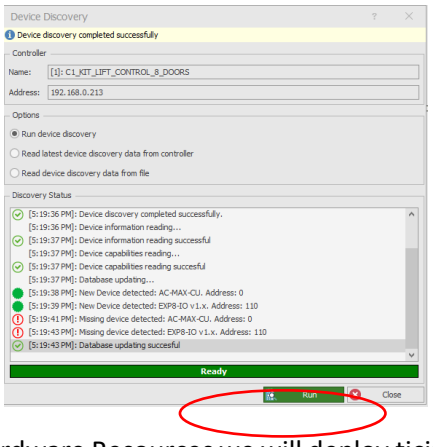


- Click OK to start the AC-MAX ST software.

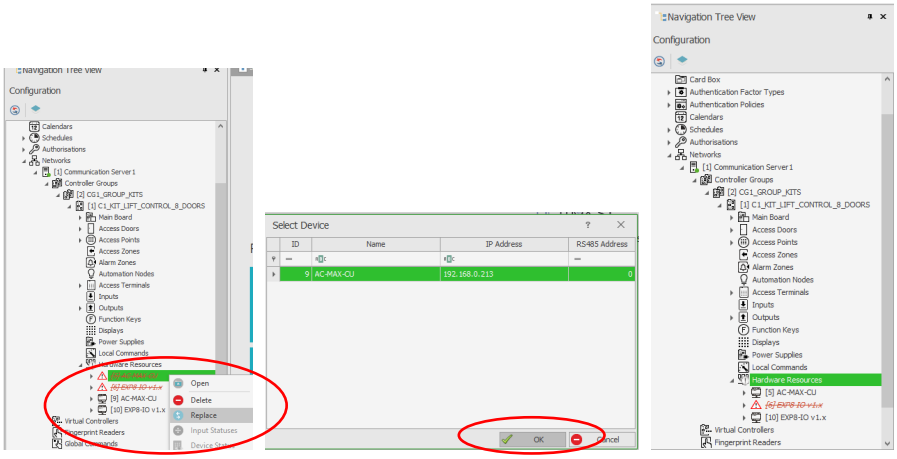
- First deploy the Navigation Tree to the ELEVATOR KIT and right-click →Commands→Run Device Initialization, to detect the installed elevator kit and its 8-storey expander. The kit must have been powered and the network cable connected directly to the PC before.



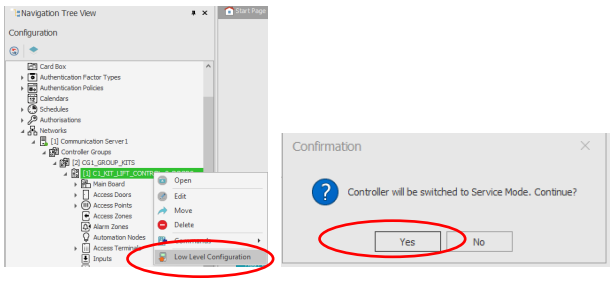
- Run detection and close. We see that you have detected the AC-MAX CU control unit (with the elevator license and the EXP8-IO expander with the address 110 that comes from the factory.

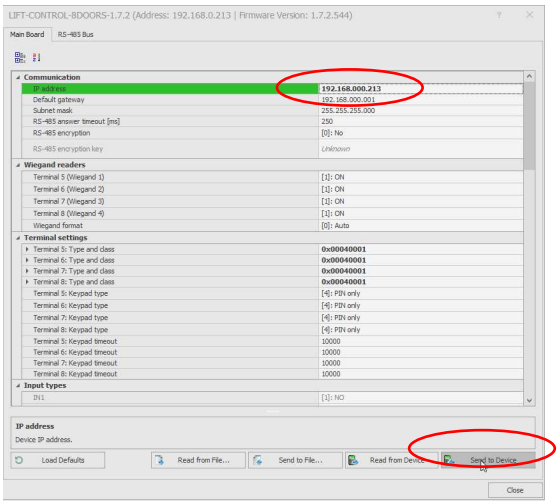


- Then we will go to Hardware Resources we will deploy ticing above the arrow and right-clicking on top of the elevator control unit that was configured but has not detected AC-MAX CU in red and crossed out we will strikethrough in replace and replace with the new driver detected. This same operation will also be done with the expander and any items that need to be replaced in the installation.

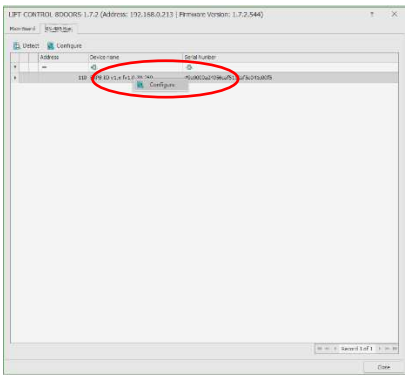


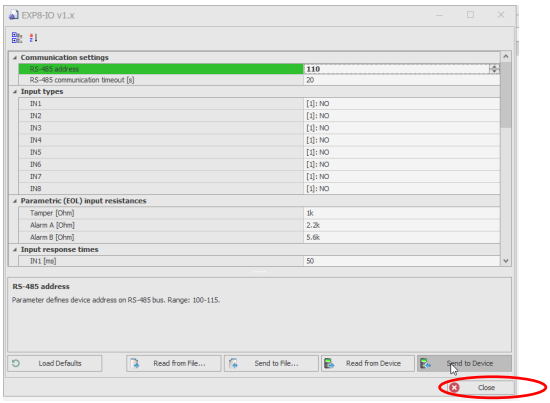
- Once replaced we will configure the devices at a low level to change the IP address of the controller well to get it into the desired range well to change any parameters that are required.



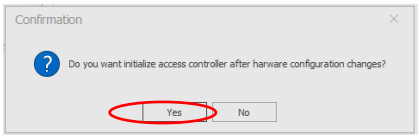


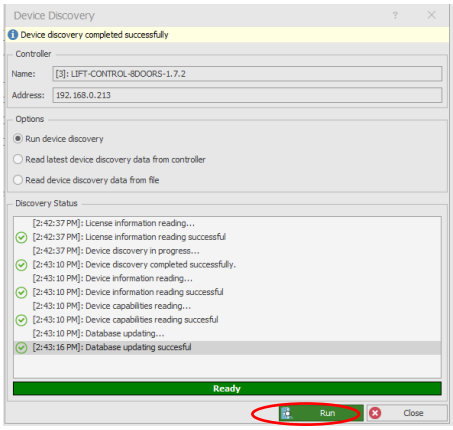
- If any AC-MAX CU parameters are changed, you must first click Send to Device to save all changes to the driver.
- Then we will go to the RS-485 Bus tab to configure the expander if necessary. If not directly close.



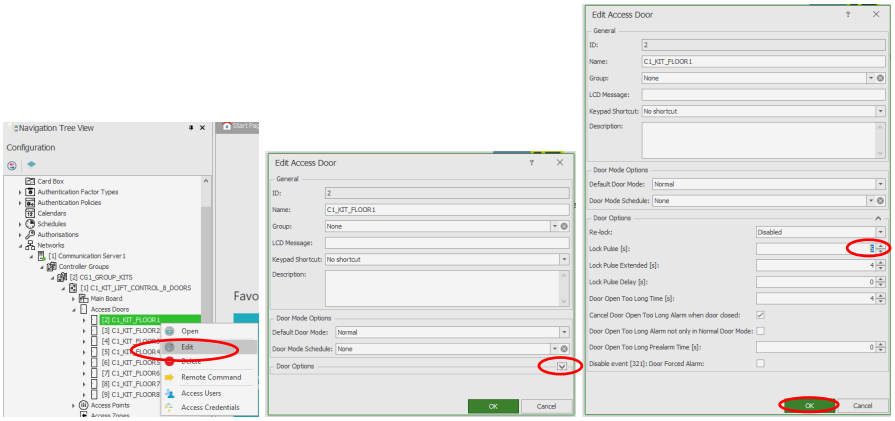


When you close the low-level configuration, you ask us if we want to initialize the detection of the new configuration, we'll say yes.

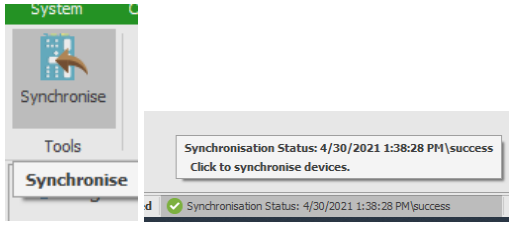


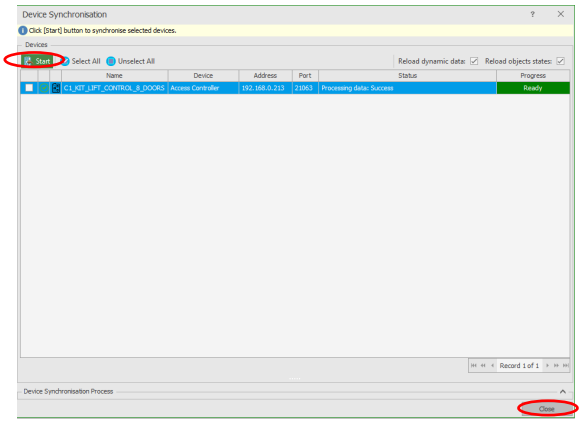


- If it is necessary to change the activation time of the elevator pushbuttons it will be done before synchronizing. Accessing the corresponding door (floor).



- Then synchronize the installation, either by accessing by top panel or by bottom panel.

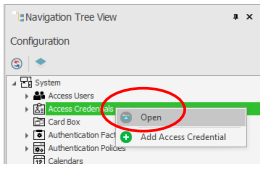




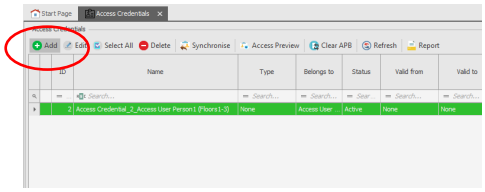
- When you finish you will have already set up your elevator you will need to add the users and assign them the corresponding floor authorizations.

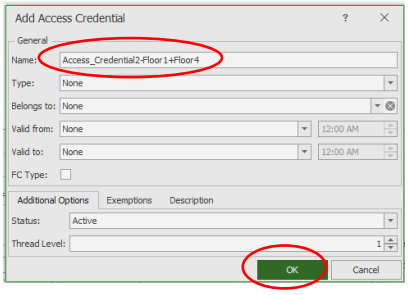
STEP 4: High users with access to certain Floors.

- Open Credentials

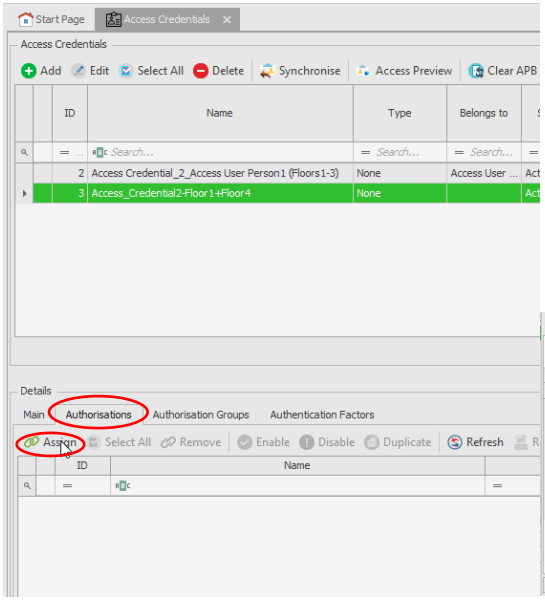


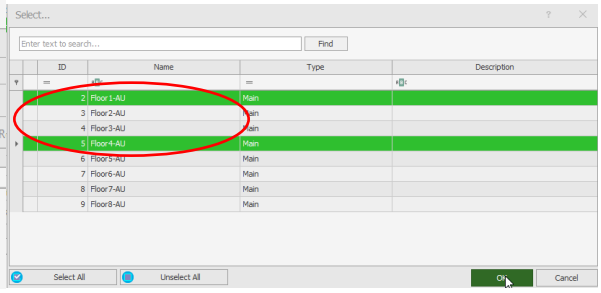
- Add Credential

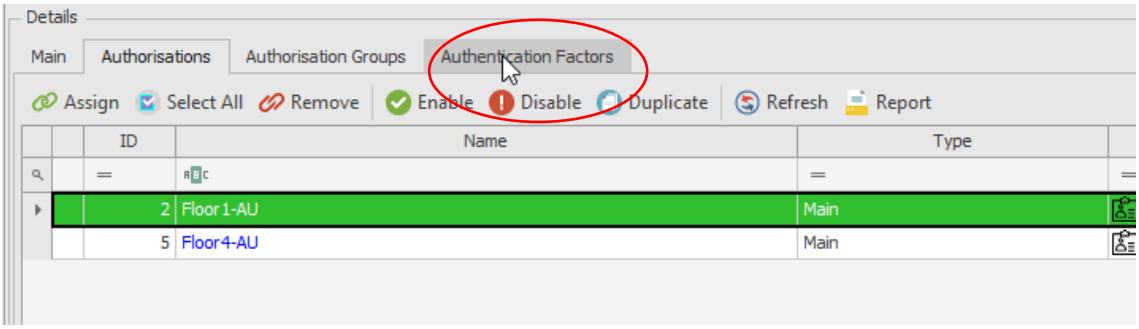




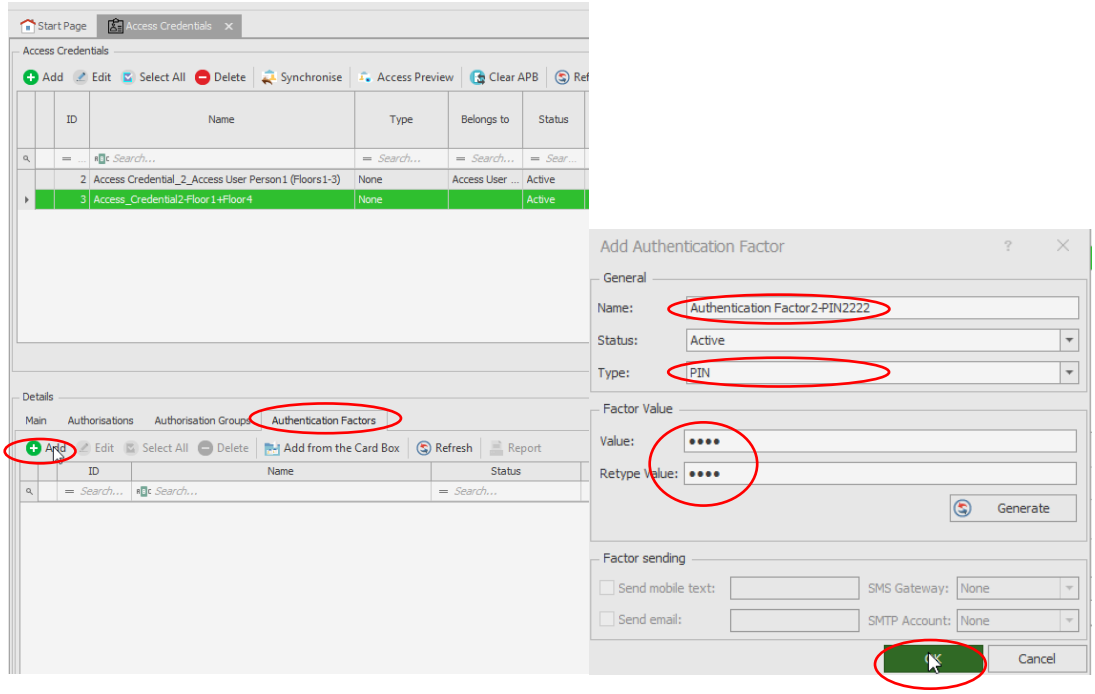
- Assign authorizations to the corresponding Floors 1 and 4.

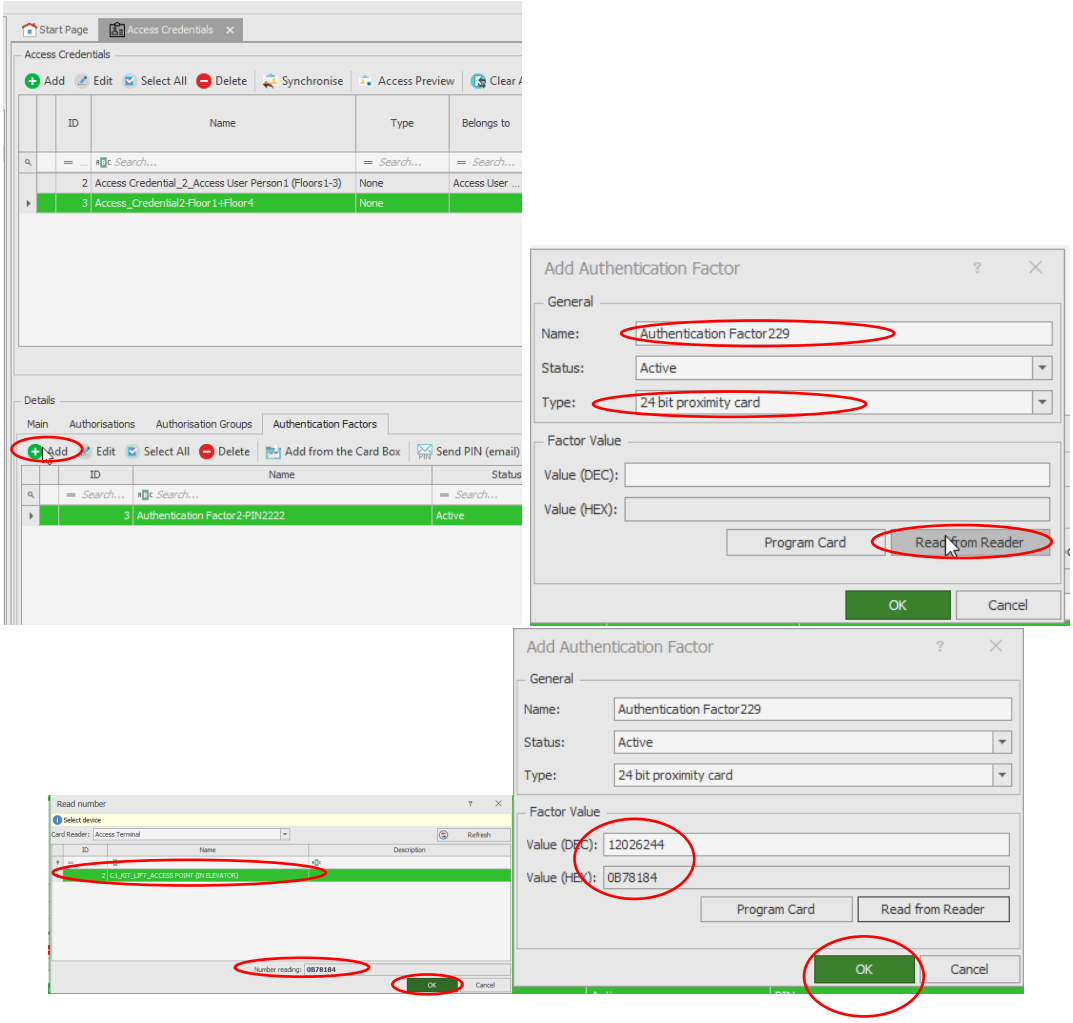




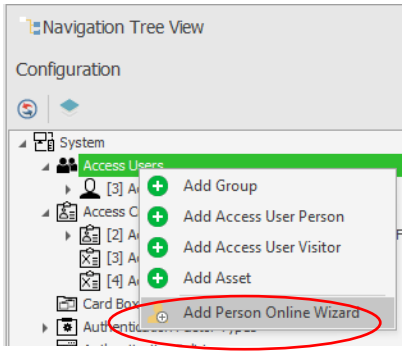


- Then Add Identifier. Example PIN type, but you can also select another type as a card or fingerprint depending on the reader installed in the elevator.

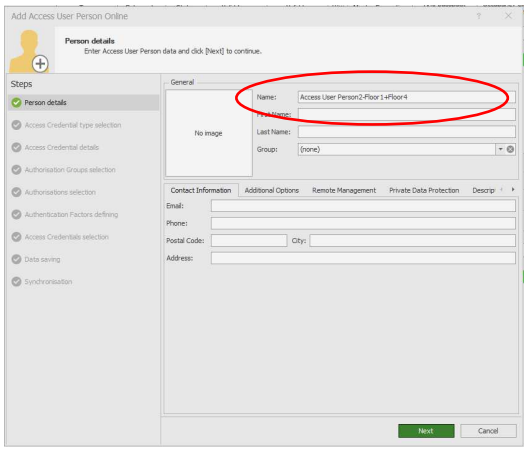


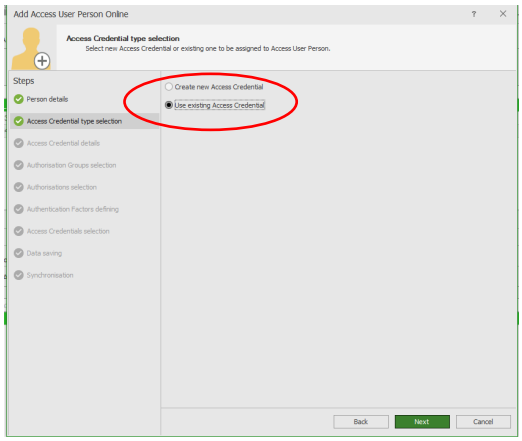


- After the Add Perdon Online Wizard

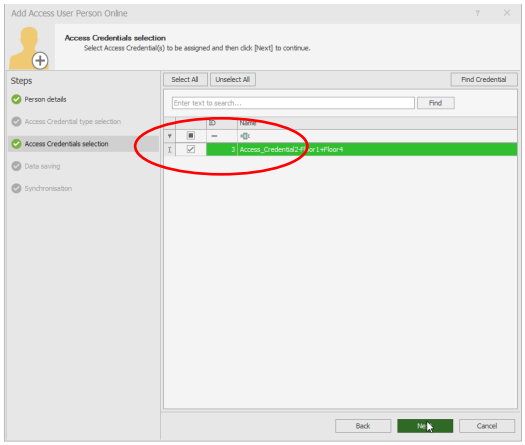


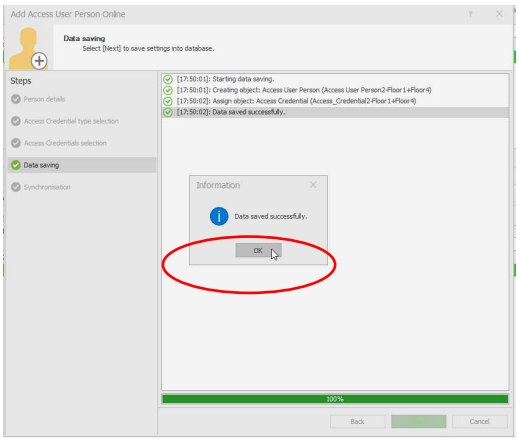
- Modify Next→Name Use→Use existing Credential→Next



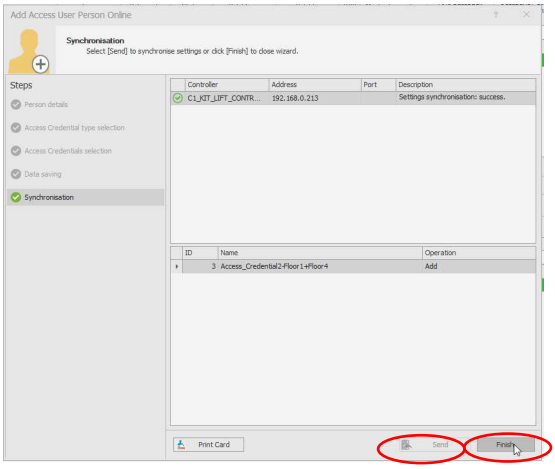


- Select the credential that includes the authorizations for the corresponding Floors and their ideifier.--> Next→OK

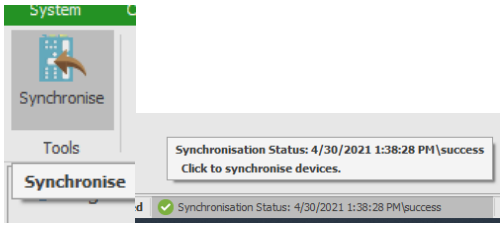


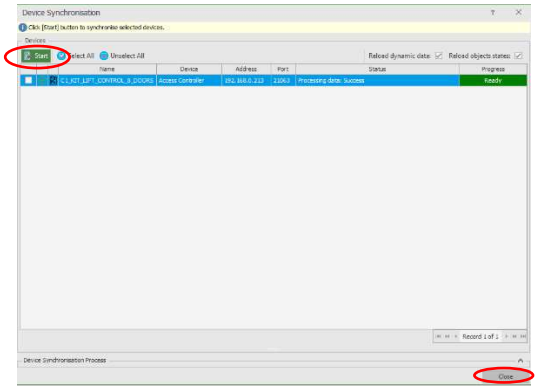


- Send and Finish.

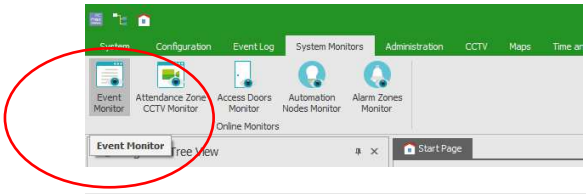


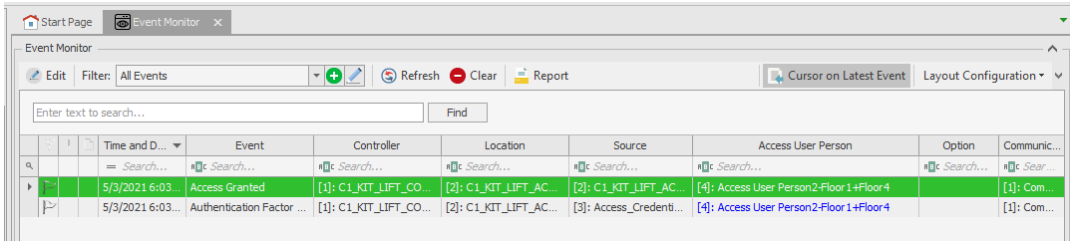
- When you finish synchronizing the installation, either by accessing by top panel or by bottom panel.





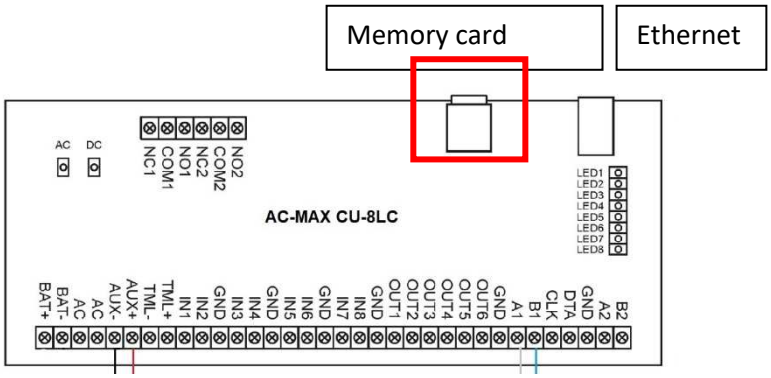
We check the correct functioning



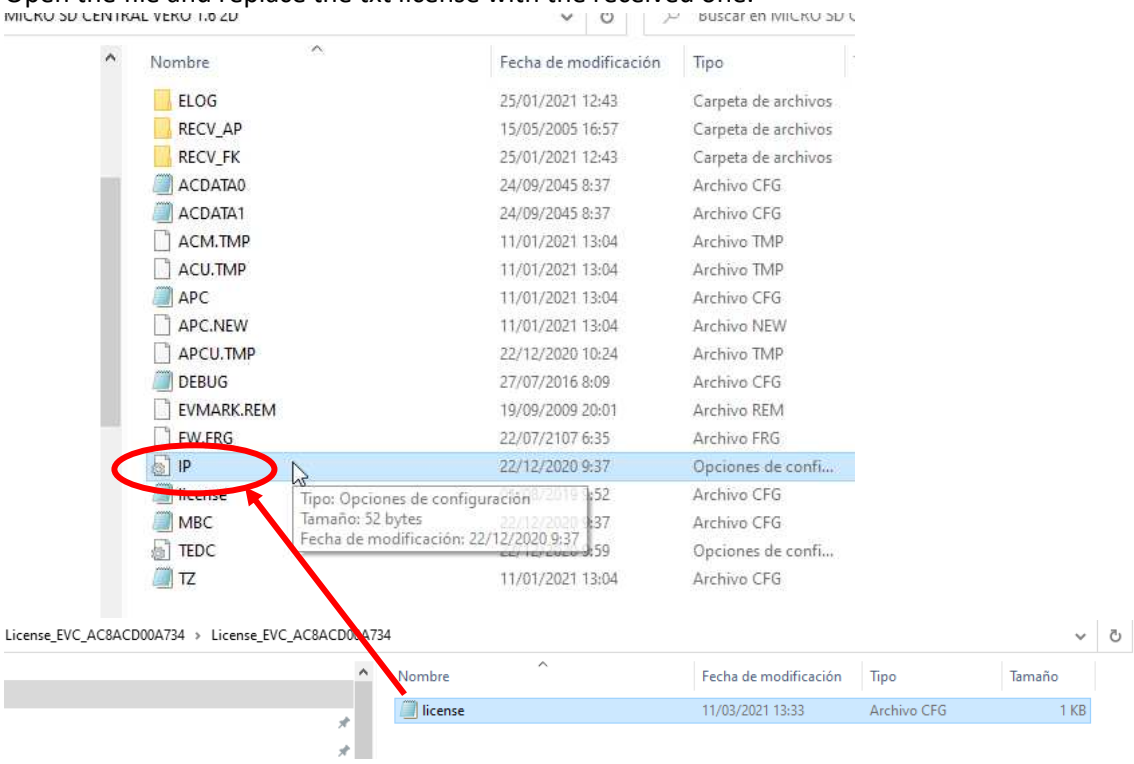


ANNEX 1: HOW TO LOAD LICENSE IN ELEVATOR CONTROLLER. AC-MAX CU

If the elevator to be configured has more than 8 floors, ANNEX 2 must also be followed.



1. Verify that the license you received matches the MAC of your driver.
2. Remove power from the AC-MAX CU controller.
3. Apply a small pressure to the microSD of the control unit until you notice a 'click' where it will release the microSD. **IMPORTANT: It is important not to force it could render your floor useless.**
4. Using a USB interface connect the microSD to the computer.
5. Open the file and replace the txt license with the received one.



6. Re-insert the microSD into the control unit and press a small pressure until you notice a 'click'.
7. Power the controller again.
8. Configure the IP address of the control unit using AC-MAX ST. See guide-3

LOW-LEVEL CONFIGURATION OF EXP8-IO EXPANDERS

Using the JP1 to l JP5 jumpers it is possible to indicatethe RS-485 address of the expander to be installed. It is important that all RS-485 devices connected to the IP control unit have different addresses.

Each Jumper has its own value, which are:

JP5 x 100

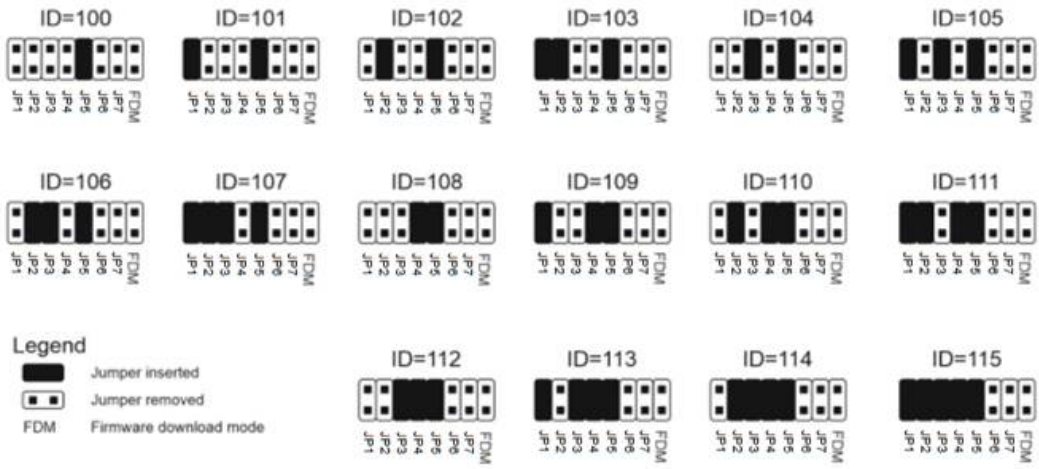
JP4 x +8

JP3 x +4

JP2 x +2

JP1 x +1

If you want to set a different ID address than the default ID-110, you can place the jumpers in the following positions:



Note: Each time the RS-485 address of the hardware is changed, the device must be rebooted.

Low-level configuration from AC-MAX v2.0 software is possible as long as the JP7 jumper is added to the EXP8-IO expander. If you also need to change the RS-485 ID address from your PC, jumpers will need to be removed from JP1 to JP6, so that the software sends the new address to each expander.

ANNEX 2: How to add more floors.

Example of Elevator up to 12 floors. The Elevator kit will have a license loaded up to 16 floors. And with wiegand reader connected inside the elevator.

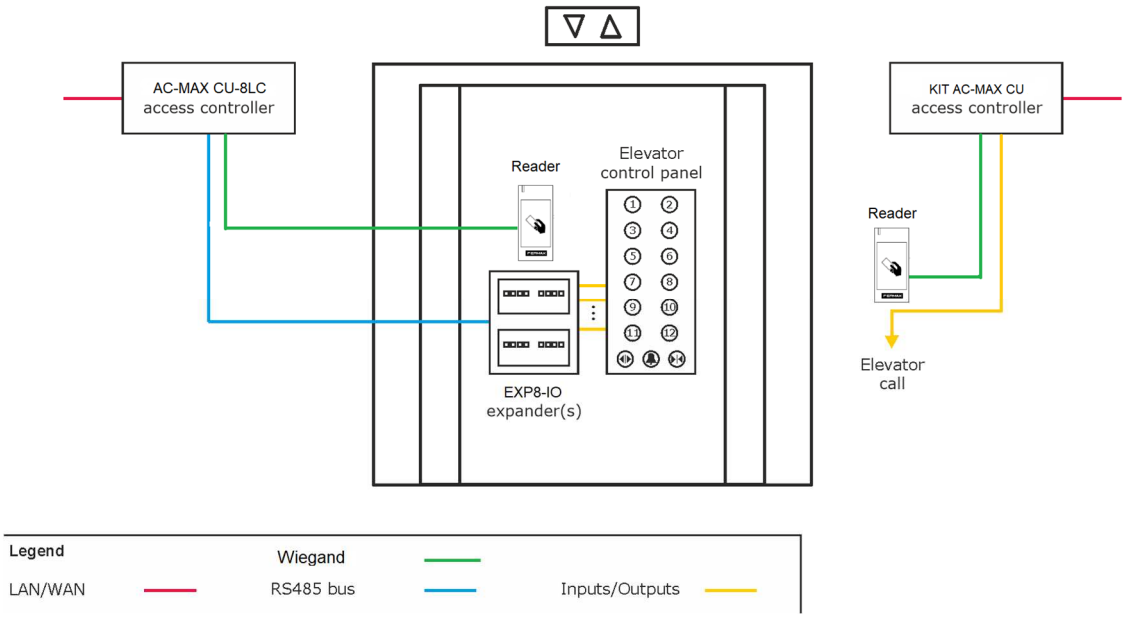
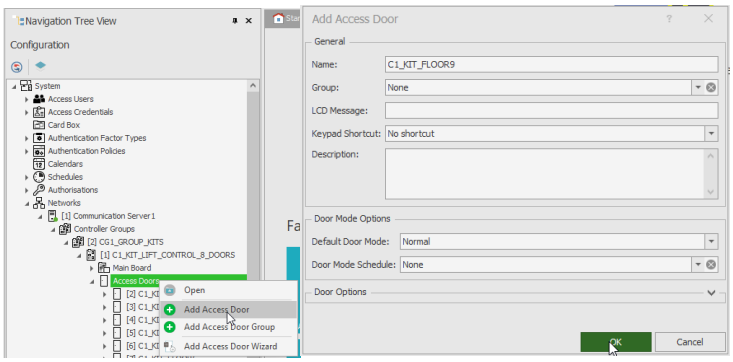


Fig 1 Concept scheme with conventional elevator. Connection of both an elevator kit and a door kit.

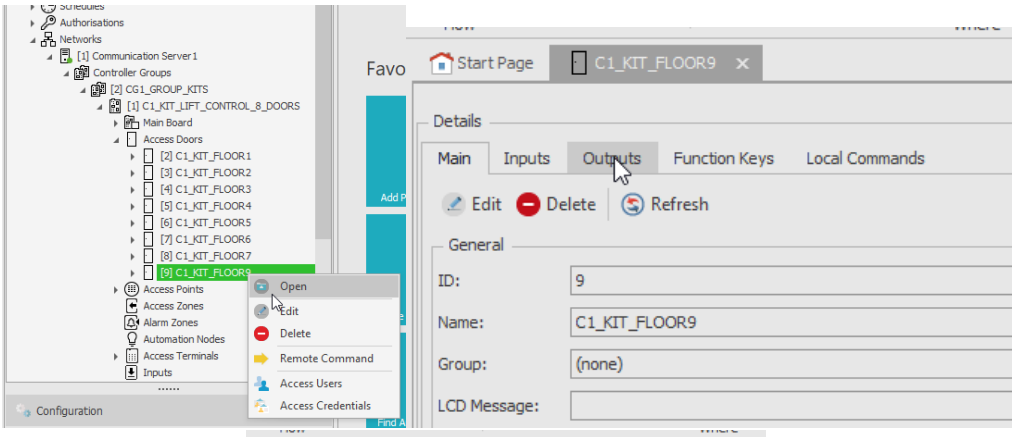
Add the doors (missing Floors), adding the corresponding relay output to each floor.

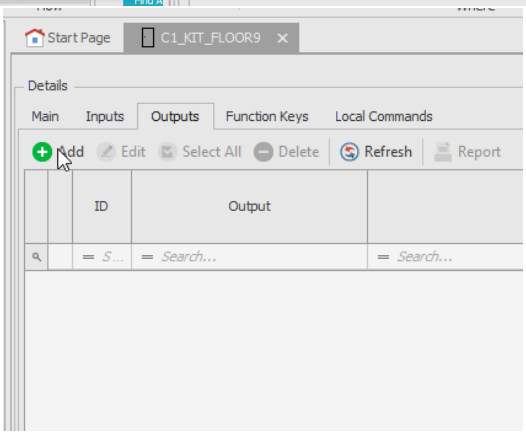
example:

- Add Door and edit name. To create the 9th floor.

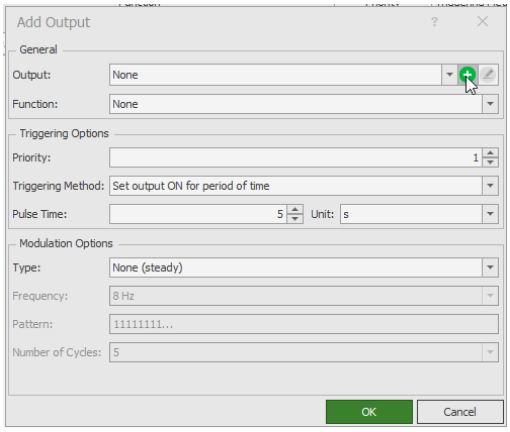


- Open and go to Exits.

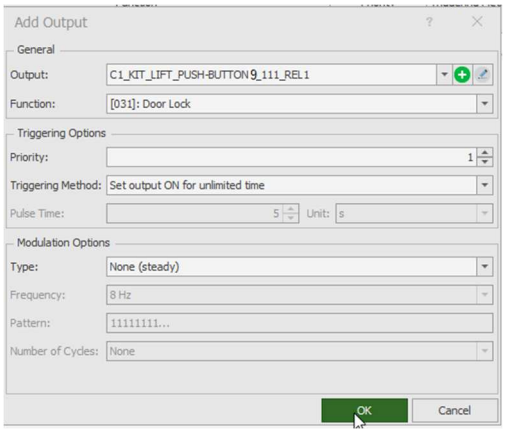


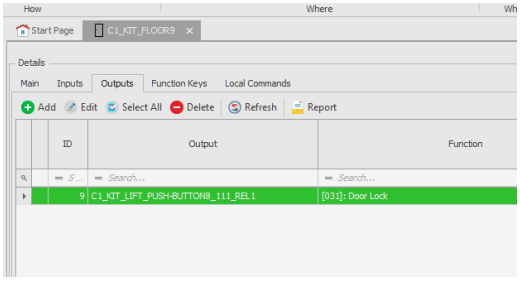


- Add the relay output that we will wire to pushbutton 9 of the elevator.

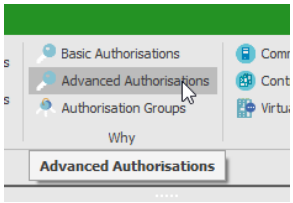


The function will be the [031] Door Lock (to set the opening time as the time that the elevator pushbutton will be active.

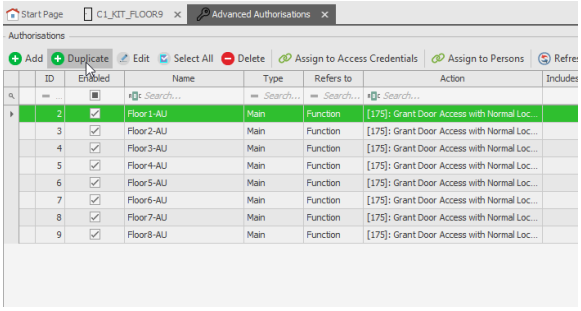


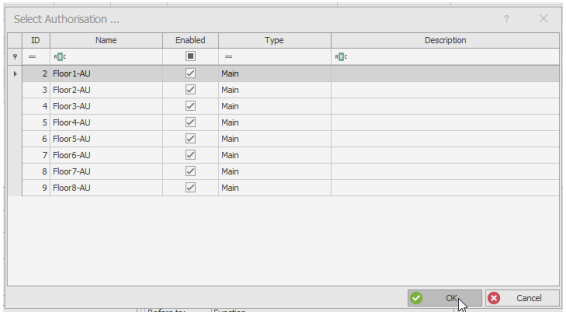


- Then add Advanced Authorizations to allow access to that floor.

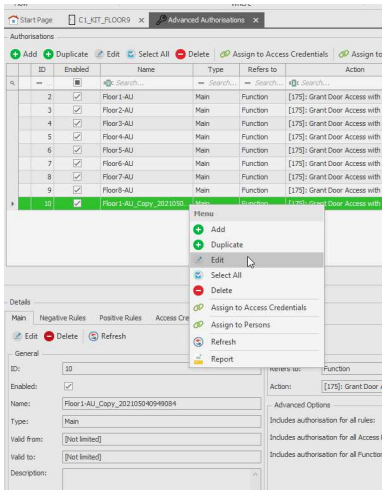


- Duplicate the authorization of FLOORA1.

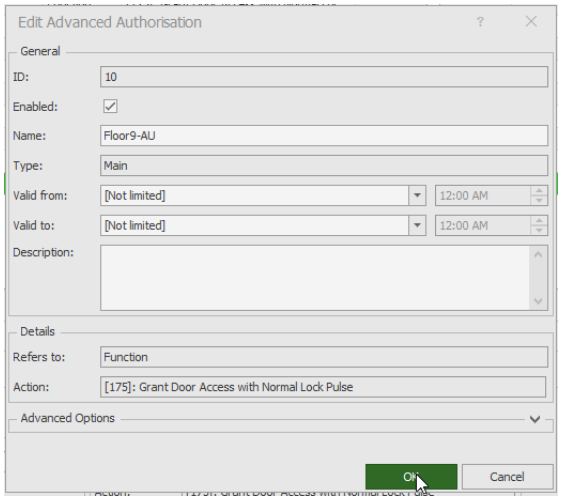




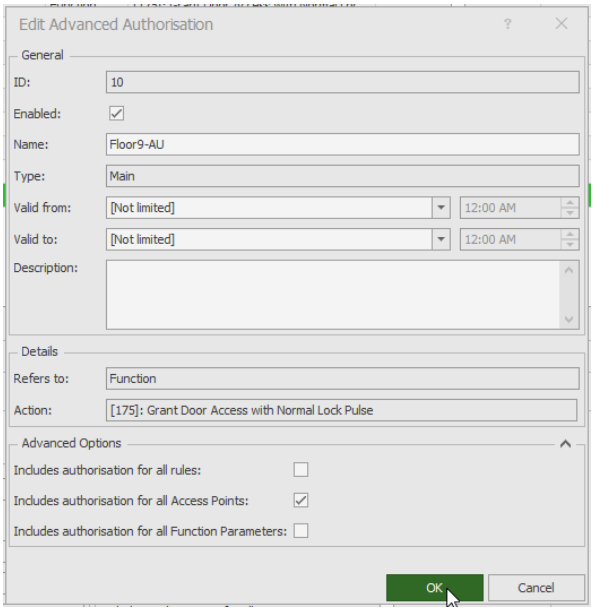
- Then edit.



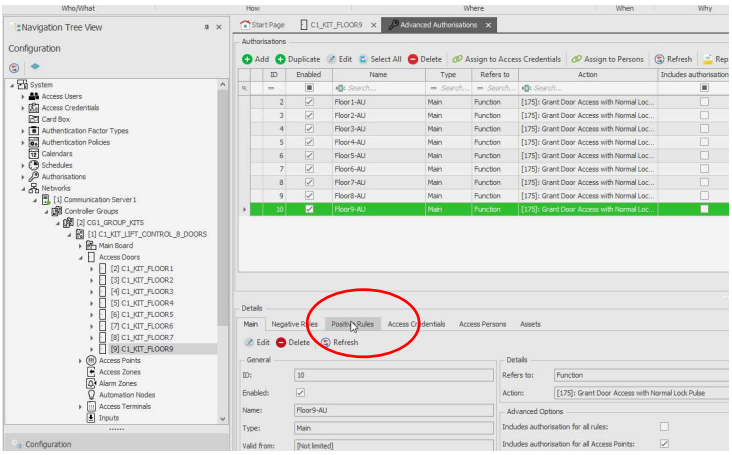
- Rename FLOORA9-AU and give ok.



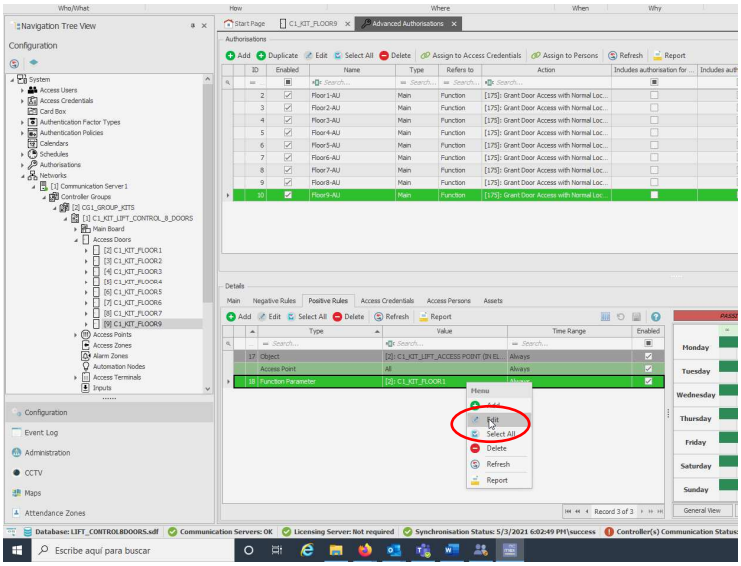
- All authorization has the [175] function and a single advanced option is selected



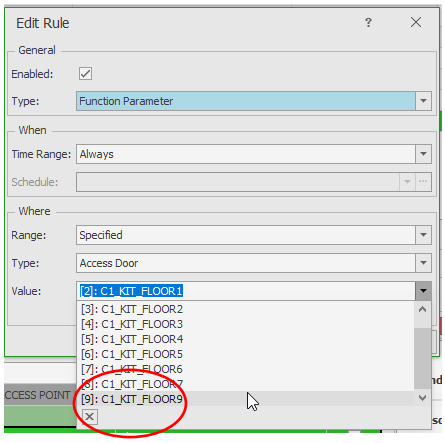
- Edit the positive rule to select the corresponding FLOOR door.

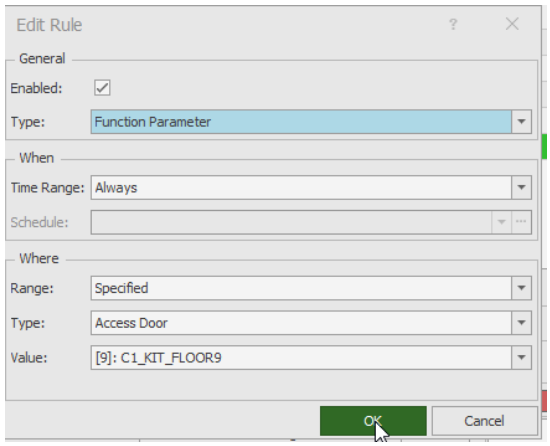


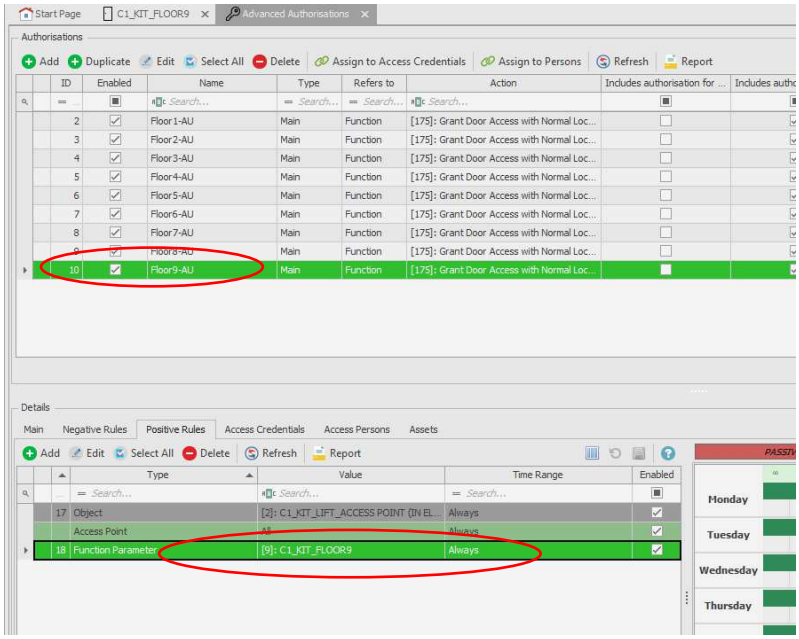
Edit the Funcio Parameter to set the corresponding floor.



Select the Door (floor)







- Then add the remaining Floors and perform the same process with each of them.
- When you finish synchronizing the installation with the elevator driver.