

# User Manual

Revision 1.001  
English

## CANopen / Modbus Master - Converter

(Order Code: HD67421)

for Website information:

[www.adfweb.com?Product=HD67421](http://www.adfweb.com?Product=HD67421)

for Price information:

[www.adfweb.com?Price=HD67421](http://www.adfweb.com?Price=HD67421)

### Benefits and Main Features:

- ▶ Easy to configure
- ▶ Metal enclosure with fixing lugs
- ▶ Varnished / Resined (optionally)
- ▶ Wide supply input range
- ▶ Triple isolation
- ▶ Industrial temperature range:  
-40°C / 105°C (-40°F / 221°F)



HD67421

Similar Products  
→

For other Gateways / Bridges:

#### CAN from/to Modbus

See also the following links:

- [www.adfweb.com?product=HD67012](http://www.adfweb.com?product=HD67012) (Modbus RTU Slave)
- [www.adfweb.com?product=HD67514](http://www.adfweb.com?product=HD67514) (Modbus TCP Master)
- [www.adfweb.com?product=HD67515](http://www.adfweb.com?product=HD67515) (Modbus TCP Slave)

#### CANopen from/to Modbus

See also the following links:

- [www.adfweb.com?product=HD67001](http://www.adfweb.com?product=HD67001) (Modbus RTU Master)
- [www.adfweb.com?product=HD67502](http://www.adfweb.com?product=HD67502) (Modbus RTU Slave)
- [www.adfweb.com?product=HD67504](http://www.adfweb.com?product=HD67504) (Modbus TCP Master)
- [www.adfweb.com?product=HD67505](http://www.adfweb.com?product=HD67505) (Modbus TCP Slave)

Do you have an your customer protocol?

See the following links:

[www.adfweb.com?Product=HD67003](http://www.adfweb.com?Product=HD67003)

Do you need to choose a device? do you want help?

Ask it to the following link:

[www.adfweb.com?Cmd=helpme](http://www.adfweb.com?Cmd=helpme)

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**UPDATED DOCUMENTATION:**

Dear customer, we thank you for your attention and we remind you that you need to check that the following document is:

- Updated
- Related to the product you own

To obtain the most recently updated document, note the “document code” that appears at the top right-hand corner of each page of this document.

With this “Document Code” go to web page [www.adfweb.com/download/](http://www.adfweb.com/download/) and search for the corresponding code on the page. Click on the proper “Document Code” and download the updates.

To obtain the updated documentation for the product that you own, note the “Document Code” (Abbreviated written "Doc. Code" on the label on the product) and download the updated from our web site [www.adfweb.com/download/](http://www.adfweb.com/download/)

**REVISION LIST:**

Revision	Date	Author	Chapter	Description
1.000	04/12/2012	Ff	All	First release version
1.001	29/07/2013	Fl	All	Revision

**WARNING:**

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**SECURITY ALERT:****GENERAL INFORMATION**

To ensure safe operation, the device must be operated according to the instructions in the manual. When using the device are required for each individual application, legal and safety regulation. The same applies also when using accessories.

**INTENDED USE**

Machines and systems must be designed so the faulty conditions do not lead to a dangerous situation for the operator (i.e. independent limit switches, mechanical interlocks, etc.).


**QUALIFIED PERSONNEL**

The device can be used only by qualified personnel, strictly in accordance with the specifications.

Qualified personnel are persons who are familiar with the installation, assembly, commissioning and operation of this equipment and who have appropriate qualifications for their job.

**RESIDUAL RISKS**

The device is state of the art and is safe. The instrument can represent a potential hazard if they are inappropriately installed and operated by personnel untrained. These instructions refer to residual risks with the following symbol:

 This symbol indicates that non-observance of the safety instructions is danger for people to serious injury or death and / or the possibility of damage.

**CE CONFORMITY**

The declaration is made by us. You can send an email to [support@adfweb.com](mailto:support@adfweb.com) or give us a call if you need it.

**CHARACTERISTICS:**

The “**HD67421**” series are rugged devices used to interface CANopen devices with Modbus Slaves.

With his particular enclosure, equipped with four fixing lugs, makes available the mounting of the device in any plane surface (horizontal, vertical, oblique).

It is possible to have the device varnished or totally resined and also in both cases with “Mini-Fit®” connectors or “AMP SuperSeal 1.5” connectors. If is resined, the enclosure, like the “AMP SuperSeal 1.5” connectors, is waterproof (IP67).

All the four series have these characteristics:

- Triple 4kV isolation between Power Supply / RS485 / CANopen;
- Varnished / Resined (optionally);
- Wide power supply input range: 8...26V AC | 10...40V DC;
- Mini-Fit® / AMP SuperSeal 1.5 connectors;
- Metal enclosure with fixing lugs;
- Possibility to use Metal hose clamps for fixing it without using lugs;
- Microprocessor for data control;
- Wide temperature range: -40°C / 105°C (-40°F / 221°F).

**CONFIGURATION:**

The “CANopen / Modbus Master” Converter allows a CANopen network to communicate with a Modbus network.

You need Compositor SW67421 software on your PC in order to perform the following:

- Define that the CANopen frame of the CANopen are reading from Modbus;
- Define that the CANopen frame of the CANopen are writing from Modbus.

**CONNECTION SCHEME:**

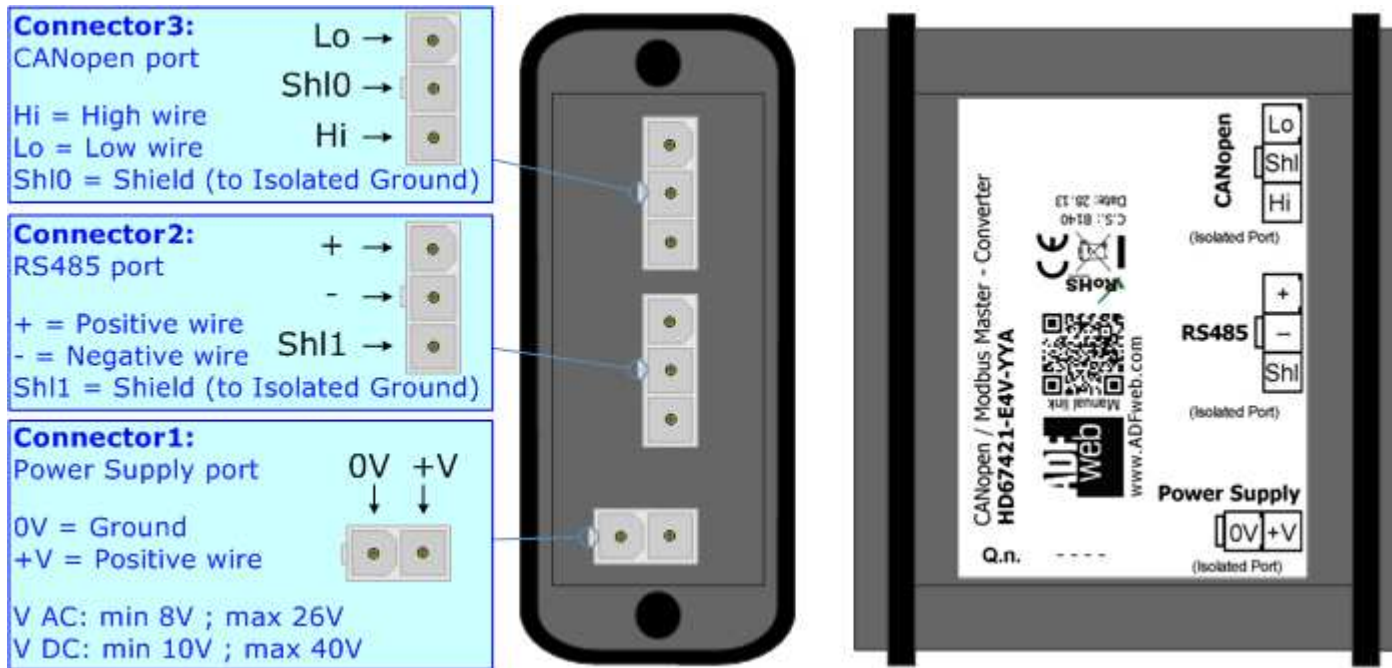


Figure 1a: Connection scheme for HD67421-E4x-xxx

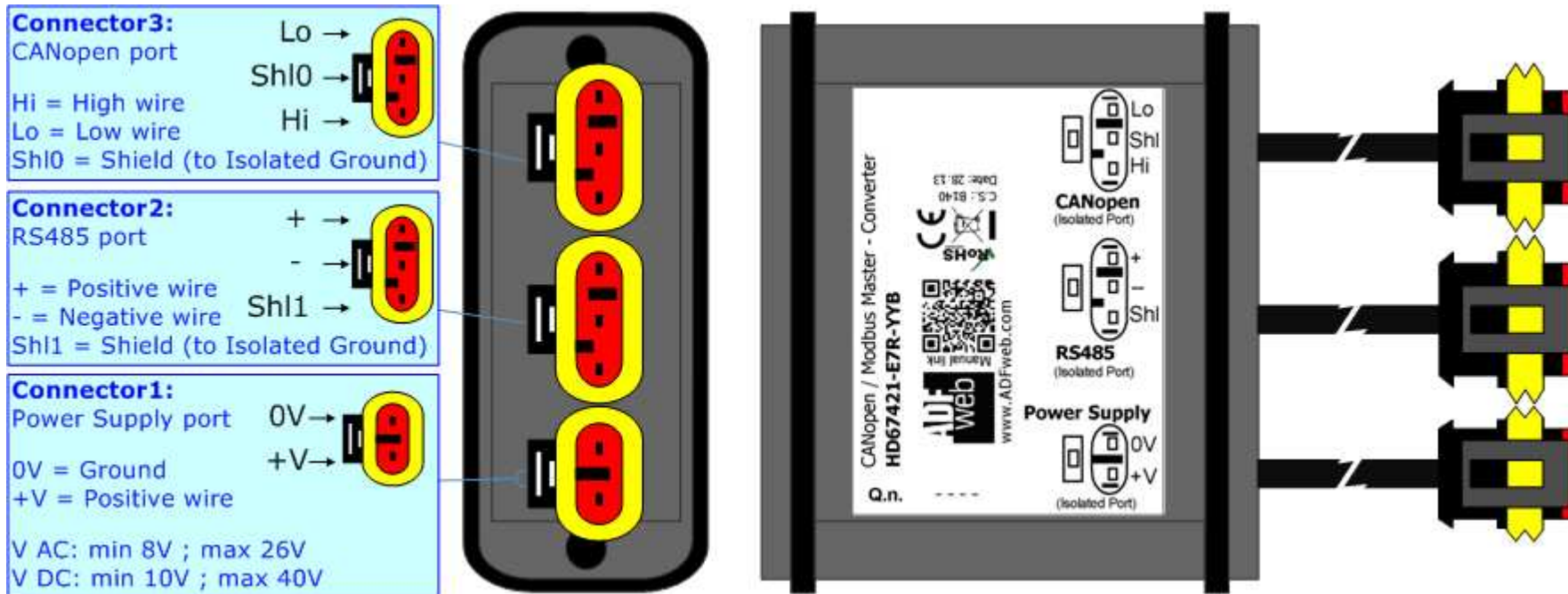


Figure 1b: Connection scheme for HD67421-E7x-xxx

**POWER SUPPLY:**

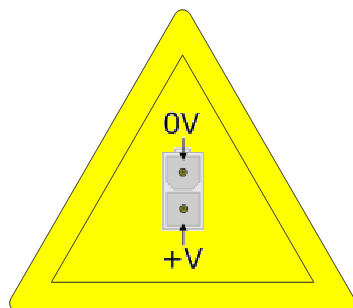
The devices can be powered between a wide range of tensions. For more details see the two tables below.

	VAC		VDC	
	Vmin	Vmax	Vmin	Vmax
<b>HD67421-Exx-xxx</b>	<b>8V</b>	<b>26V</b>	<b>10V</b>	<b>40V</b>

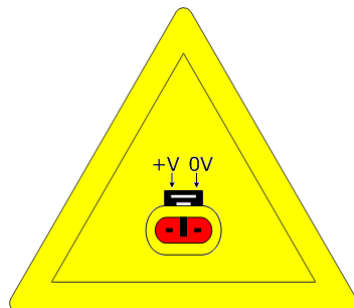
Consumption at 24V DC:

Device	W/VA
HD67421-Exx-xxx	4

**Caution: Not reverse the polarity power**



HD67421-E4x-xxx



HD67421-E7x-xxx

**Note:** It is possible to use also negative tensions. In this case the polarity must be inverted.

**Connector1:**  
Power Supply port

0V = Ground  
+V = Positive wire

V AC: min 8V ; max 26V  
V DC: min 10V ; max 40V

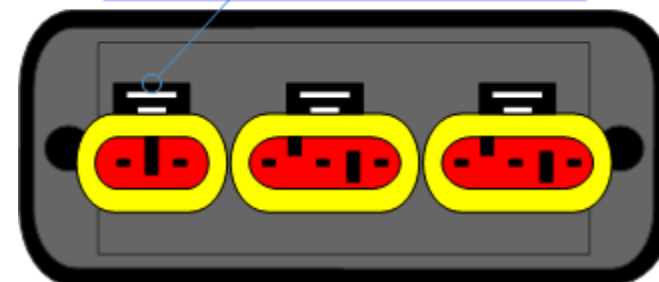


**Connector1:**  
Power Supply port

+V 0V

0V = Ground  
+V = Positive wire

V AC: min 8V ; max 26V  
V DC: min 10V ; max 40V



**RS485:**

The connection of the RS485 in the HD67421-E4x-xxx device must be made with a 3way MiniFit Female connector. The pinout of Male MiniFit connector of the board is at right side of the page.

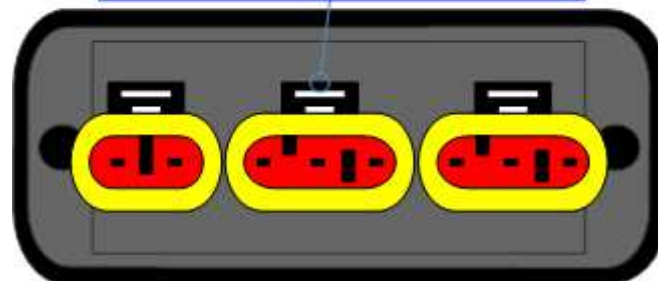
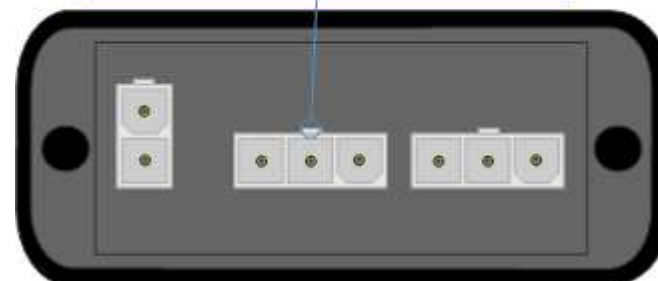
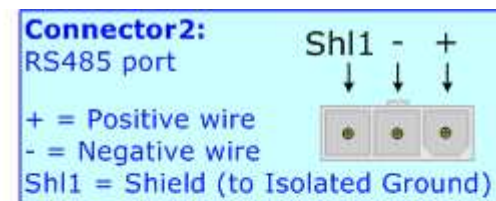
The connection of the RS485 in the HD670421-E7x-xxx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.

The termination of RS485 line, with a 220Ω resistor, in the HD67421-Exx-xxx is made internally of the device; when the order is performed. If the device have the RS485 terminated the code is the follow: HD67421-Exx-xYx; otherwise is this other: HD67421-Exx-xNx.

The maximum length of the cable should be 1200m (4000 feet).

Here some codes of cables:

- Belden: p/n 8132 - 2x 28AWG stranded twisted pairs conductor + foil shield + braid shield;
- Belden p/n 82842 - 2x 24AWG stranded twisted pairs conductor + foil shield + braid shield;
- Tasker: p/n C521 - 1x 24AWG twisted pair conductor + foil shield + braid shield;
- Tasker: p/n C522 - 2x 24AWG twisted pairs conductor + foil shield + braid shield.



Link for Mini-Fit® connectors: [http://www.molex.com/molex/products/group?key=minifit\\_products&channel=products](http://www.molex.com/molex/products/group?key=minifit_products&channel=products)

Link for SuperSeal 1.5 connectors: <http://www.te.com/catalog/cinf/en/c/10876/956>



**CANopen:**

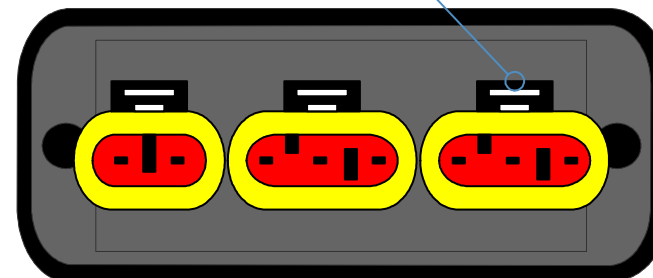
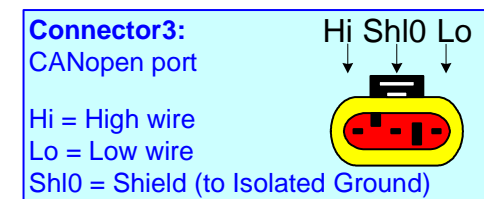
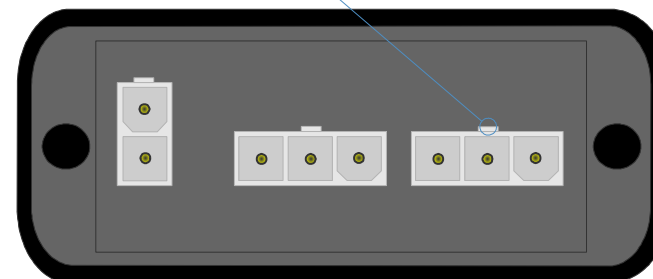
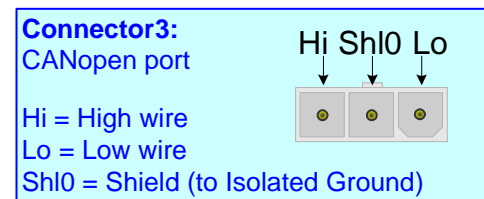
The connection of the CANopen in the HD67421-E4x-xxx device must be made with a 3way MiniFit Female connector. The pinout of Male MiniFit connector of the board is at right side of the page.

The connection of the CANopen in the HD67421-E7x-xxx device must be made with a AMP SuperSeal 1.5 Male connector. The pinout of Female connector of the board is at right side of the page.

The termination of CANopen line, with a 120Ω resistor, in the HD67421-Exx-xxx is made internally of the device; when the order is performed. If the device have the CANopen terminated the code is the follow: HD67421-Exx-Yxx; otherwise is this other: HD67421-Exx-Nxx.

Cable characteristics:

<b>DC parameter:</b>	Impedance	70 Ohm/m
<b>AC parameters:</b>	Impedance	120 Ohm/m
	Delay	5 ns/m
<b>Length</b>	<b>Baud Rate [bps]</b>	<b>Length MAX [m]</b>
	10 K	5000
	20 K	2500
	50 K	1000
	100 K	650
	125 K	500
	250 K	250
	500 K	100
	800 K	50
	1000 K	25



**USE OF COMPOSITOR SW67421:**

To configure the Gateway, use the available software that runs with Windows, called SW67421. It is downloadable on the site [www.adfweb.com](http://www.adfweb.com) and its operation is described in this document. (This manual is referenced to the last version of the software present on our web site). The software works with MSWindows (MS 2000, XP, Vista, Seven, 8). When launching the SW67421 the right window appears (Fig. 2).

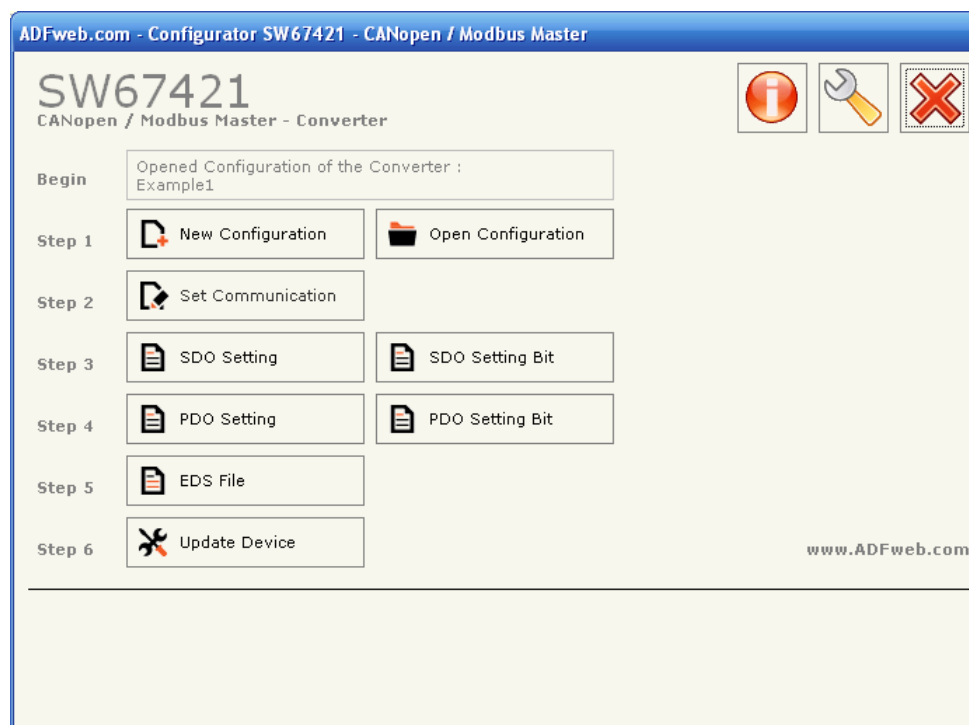
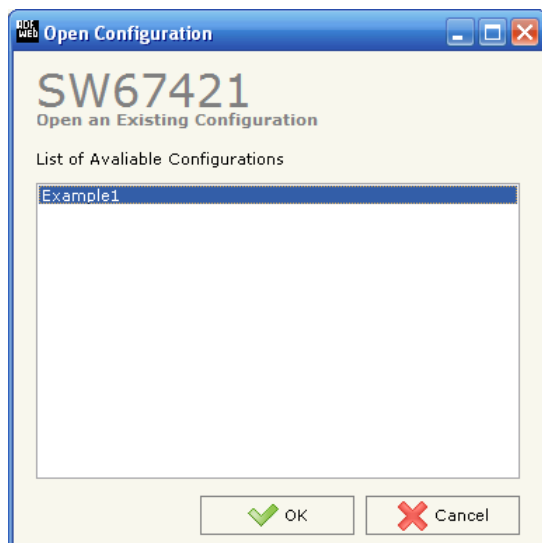


Figure 2: Main Window for SW67421

**NEW CONFIGURATION / OPEN CONFIGURATION:**

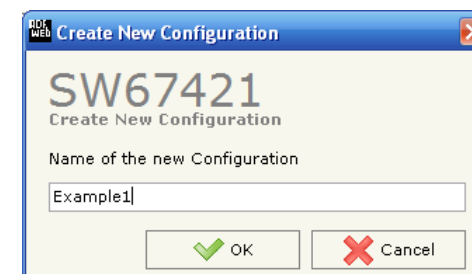


The **“New Configuration”** button creates the folder which contains the entire device configuration.

A device configuration can also be imported or exported:

- To clone the configurations of a Programmable “CANopen / Modbus Master - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;

To clone a project in order to obtain a different version of the project, it is sufficient to duplicate the project folder with another name and open the new folder with the button **“Open Configuration”**.



**SOFTWARE OPTIONS:**

In this section there is the possibility to change the language of the software and check the updatings for the compositor.

In the section "Language" it is possible to change the language of the software.

In the section "Connection Options", it is possible to check if there are some updatings of the software compositor in ADFweb.com website. Checking the option "Check Software Update at Start of program", the SW67421 check automatically if there are updatings when it is launched.



Figure 3: Language Options

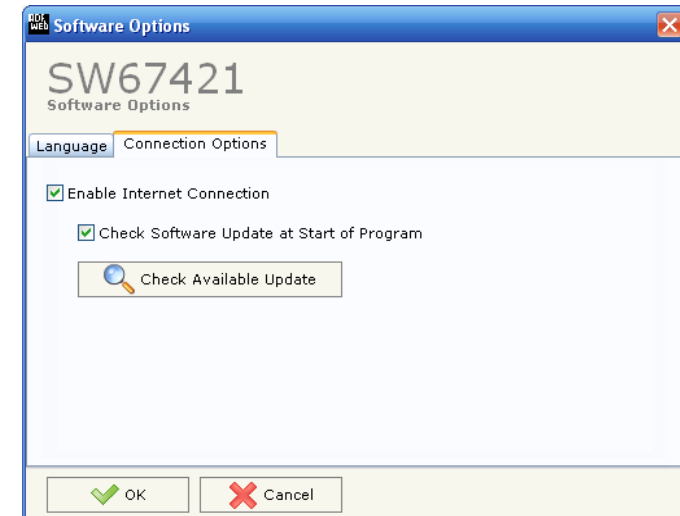


Figure 4: Updating options

**SET COMMUNICATION:**

This section defines the fundamental communication parameters of two Buses, CANopen and Modbus.

By pressing the "**Set Communication**" button from the main window for SW67421 (Fig. 2) the window "Set Communication" appears (Fig. 5).

The meaning of the fields is the follow:

- In the field "**Device ID**", the CANopen address is defined;
- In the fields "**Baud Rate**", the velocity of the two buses is defined;
- "**Send TPDOs on SYNC**", if you select this choice when a SYNC command is on the network the device send PDOs;
- The field "**Transmission type**" define the type of transmission of PDO;
- "**Send TPDOs on change**", if you select this choice, when there is a change in a variable of TPDOs, the TPDO will be automatically transmitted;
- "**SubIndex 0 Enable**", if you select this choice, when you map only a Modbus register into a SDO object, the data will be mapped in the SubIndex 0 of the SDO;
- In the field "**Parity**", the serial parity is defined;
- "**Timeout**" is the maximum time that the device attends for the answer from the Slave interrogated.

Data bits and Stop bits are serial parameters and they are fixed in order to 8 and 1 for default.

The screenshot shows a web-based configuration window titled "Set Communication" for device SW67421. It is divided into two main sections: "CANopen" and "Modbus Master".

**CANopen Section:**

- Device ID: 5
- Baudrate: 1000K
- Send Transmit PDO on SYNC:
- Transmission Type: 255
- Send Transmit PDO on Data Change:
- SubIndex 0 Enable:

**Modbus Master Section:**

- Baudrate: 115200
- Parity: NONE
- TimeOut (ms): 1000

At the bottom, there are two buttons: "OK" (with a green checkmark icon) and "Cancel" (with a red X icon).

Figure 5: "Set Communication" window

**SDO SETTING:**

The following objects can be defined in the section "SDO Setting":

- the SDO of the CANopen give access to a ModBUS registers.

By pressing the "SDO Setting" button from the main window for SW67421 (Fig. 2) the window "SDO Setting" appears (Fig. 6).

In the right scenario:

- In the field "CANOpen Index", insert the index of the CANopen SDO;
- In the field "Modbus ID Device", insert the address of Modbus device that contains the Modbus data;
- In the field "Address Register", insert the Register address that contains the Modbus data;
- In the field "Quantity", insert the number of consecutive registers to map with this SDO;
- In the field "Read/Write", the SDO in reading or in writing is defined;
- In the field "Mnemonic" a description is defined.

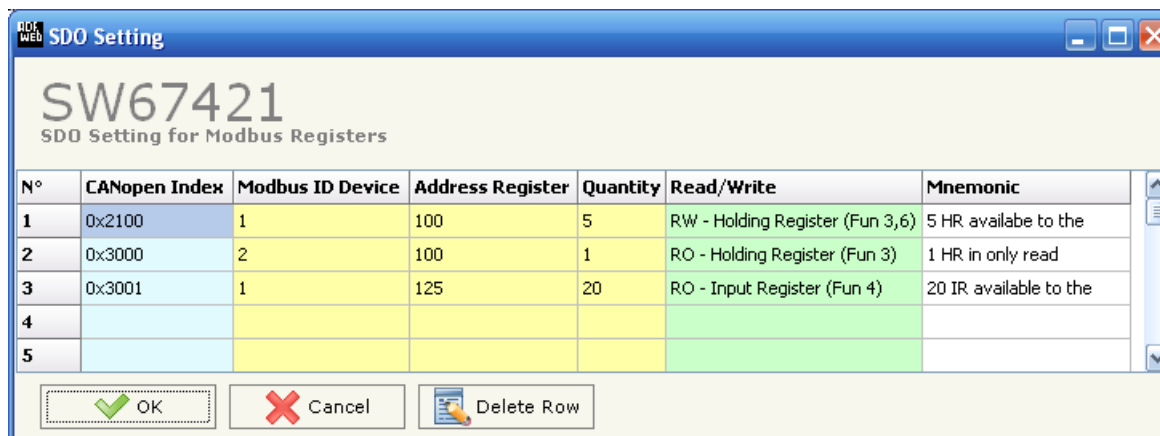


Figure 6: "SDO Setting" window

Example 1:

If I want to read data from the ModBUS network but I'm in a CANopen network :  
I'll define an SDO index ( \$3000 ) and this will be associated to an area inside Modbus network ( address 100 inside device 2 ).

For reading word 100 on device at address 2 you have to read SDO index \$3000 subindex 1.

For reading word 101 on device at address 2 you have to read SDO index \$3000 subindex 2.

Etc.

Field "Quantity" means the number of consecutive location that can be readed.

All data will be retrived on event read of specific SDO. The master CANopen need to have a timeout higher than 500 ms. The reply time is the time for a serial inquiry plus the serial response.

### SDO SETTING BIT

The following objects can be defined in the section "SDO Setting bit":

- the SDO of the CANopen give access to a ModBUS bits (status).

By pressing the "SDO Setting bit" button from the main window for SW67421 (Fig. 2) the window "SDO Setting bit" appears (Fig. 7).

In the above scenario:

- In the field "CANOpen Index", insert the index of the CANopen SDO;
- In the field "Subindex", insert the subindex (is suggested to always be 0);
- In the field "Modbus ID Device", insert the address of the device that contains the Modbus Status;
- In the field "Address Status", insert the address of status that you would like to read or write;
- In the field "Quantity", insert the number of consecutive bits you configured;
- In the field "Bit type", the type of bit is defined;
- In the field "Mnemonic" it is possible to insert a brief description.

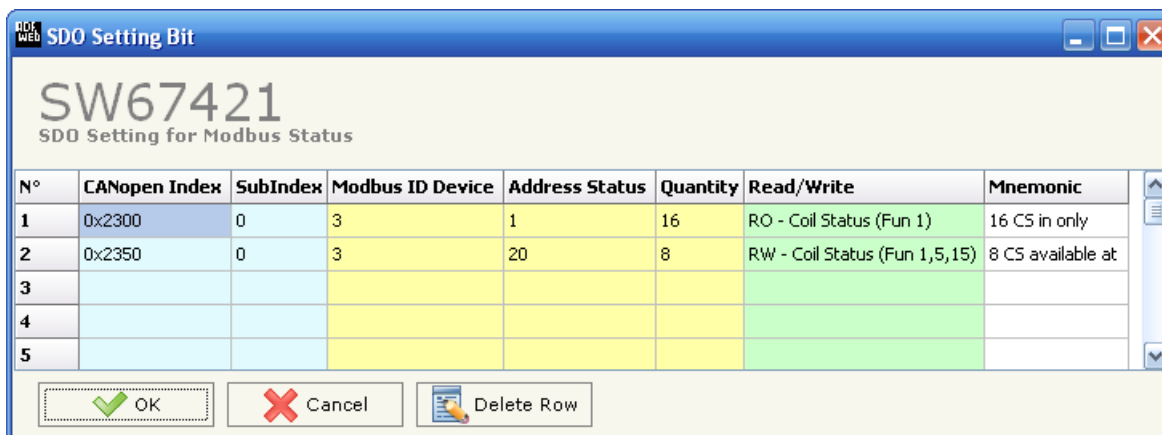


Figure 7: "SDO setting bit" window

For each SDO can be read 16 bits max. (4 bytes: the last 2 bytes are always set to 0).  
 For each SDO can be written 16 bits max. (4 bytes: 2 data bytes + 2 mask bytes).

Data            0001 0001 0011 1111  
 Mask            0011 0110 1111 1111  
 Written bits    xx01 x00x 0011 1111 (bits indicated by x are not written).

**Example 1:**

If I want to read data from the ModBUS network but I'm in a CANopen network :

I'll define a SDO index ( \$2300 ) and this will be associated to a digital area inside Modbus network ( device 3, starting Modbus address 1, number of reading bits 16).

For reading all 16 bits on device at address 3 you have to read SDO index \$2300 subindex 0.

For reading all 8 bits on device at address 3 you have to read SDO index \$2350 subindex 0.

Etc.

All data will be retrived on event read of specific SDO. The master CANopen need to have a timeout higher than 500 ms. The reply time is the time for a serial inquiry plus the serial response.

**PDO SETTING:**

The Converter permit to use 4 Receive PDO and 4 Trasmitt PDO. All PDO are mapped to specific object (SDO) written in the software (for example the TPDO1 is mapped to the SDO 0x6100, 0x6101, 0x6102 and 0x6103). A PDO has 8 bytes lenght and these are divided in 4 words. Each word is linked to a word in serial bus.

Writing an RPDO to the gateway, the data will be written into serial device to the specific address.

Requesting a TPDO, this TPDO will contain the data read from serial bus , from a specific device and address.

By pressing the **"PDO Setting"** button from the main window for SW67421 (Fig. 2) the window "PDO Setting" appears (Fig. 8).

In the right scenario:

- The field **"Index"** is already compiled and it is not possible to modify it;
- The field **"Description"** is already compiled and it is not possible to modify it;
- In the field **"Modbus ID Device"** insert the address of Modbus device;
- In the field **"Address Register"** insert the address of Modbus Register;
- In the field **"Type"** insert the type of data;
- In the field **"Delta Send"** insert the delta send range (when at least one Modbus word exceeds  $\pm$ Delta Send range, the corrispodent transmit TPDO will be automatically transmitted), if you want to send the TPDO to every change set it to 1;
- In the field **"Swap"**, is possible to select if the bytes of the register have to be swapped (checked) or not (unchecked);
- In the field **"Mnemonc"** it is possible to insert a brief description.

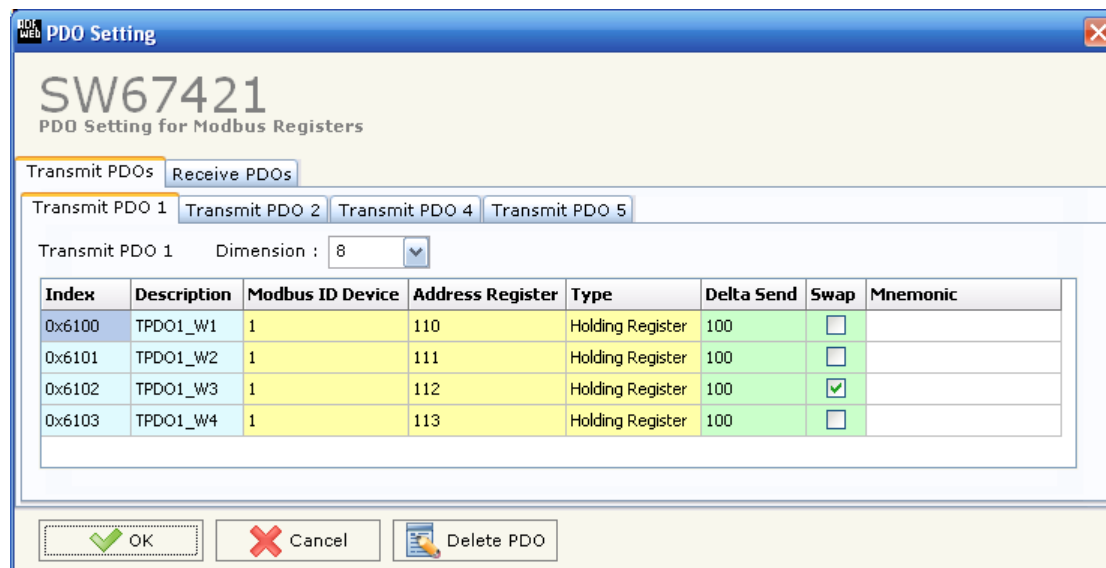


Figure 8: "PDO Setting bit" window



**PDO SETTING BIT:**

The gateway permits to use 1 Receive PDO and 1 Transmit PDO to manage the Coil and Input Status. TPDO3 is mapped at \$6140. RPDO3 is mapped at \$6240. The PDOs are fixed to 8 bytes length.

Writing a RPDO to the gateway, the data will be written into serial device to the specific address.

Requesting a TPDO this PDO will contain the data read from serial bus, from a specific device and address.

By pressing the **"PDO Setting bit"** button from the main window for SW67421 (Fig. 2) the window "PDO Setting bit" appears (Fig. 9).

In the right scenario:

- The field **"Modbus ID"** insert the address of device that contain the bits;
- The field **"Address Status"** insert the address of status that you would like to read;
- In the field **"Quantity"** insert the number of consecutive status you configured;
- In the field **"Bit Type"** the type of bit is defined;
- In the field **"Mnemonic"** you can insert a brief description;
- In the field **"Mask for automatic SEND of PDO"** insert a mask.

```
Data      0001 0001 0011 1111 0001 0001 0011 1111
Mask      0011 0110 1111 1111 0011 1110 1110 1111
Written bits  xx01 x00x 0011 1111 xx01 000x 001x 1111 (bits indicated by x are not written)
```

For the TPDO can be read from the protocol converter 64 bits max. (8data bytes).

For the RPDO can be written to protocol converter 32 bits max. (8 bytes: 4 data bytes + 4 mask bytes).

**EDS FILE**

By clicking on this button the user can create a valid EDS file.

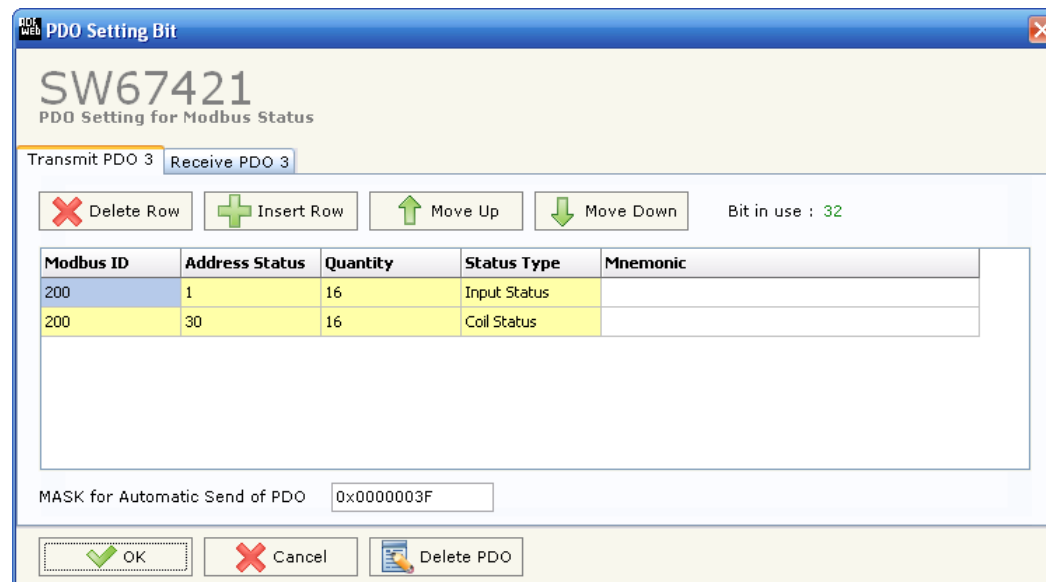


Figure 9: "PDO Setting bit" window

### UPDATE DEVICE:

By pressing the **Update Device** button from the main window for SW67421 (Fig. 2) the right window appears (Fig. 10).



**Note:**

For updating the device you need the programmer "AC67400 - CAN Interface to configure devices".

In order to load the parameters or update the firmware in the gateway, follow these instructions:

- Connect the "AC67400" programmer to the PC through the USB port and connect the CAN port of the "AC67400" to the CANopen port of HD67421-Exx-xxx;
- Select the **COM port** where the "AC67400" is connected (the USB port of the device is see like a COM port);
- If the Baudrate of CANopen is known select it in the field "Select the BaudRate of CAN" otherwise you have to select **Search Baudrate**;
- Press the **Next** button;
- Select which operations you want to do. You can select only **Firmware**, only **Project** or both of them;
- Press the **Execute update firmware** button to start the upload;
- When all the operations are "OK" the configuration/firmware on the device is correctly updated and it is possible to disconnect the "AC67400" programmer.



**Note:**

When you install a new version of the software it is better if the first time you do the update of the Firmware in the HD67421-Exx-xxx device.



**Warning:**

If the Fig. 11 appears when you try to do the Update before require assistance try these points:

- Check if the serial COM port selected is the correct one;
- Check if the CAN cable is connected between the "AC67400" and the device;
- Try to repeat the operations for the updating;
- Try with another PC;
- Try to restart the PC.

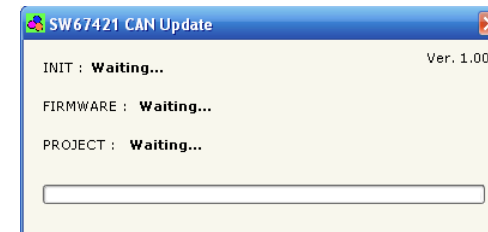
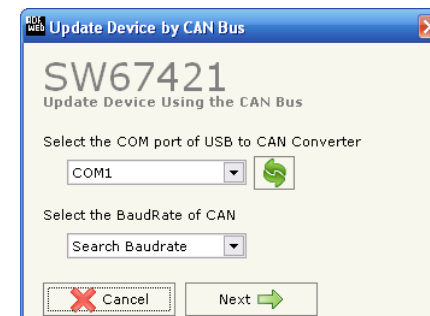


Figure 10: "Update Device"

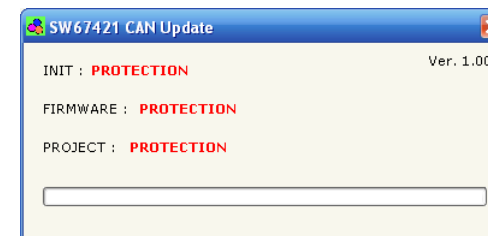
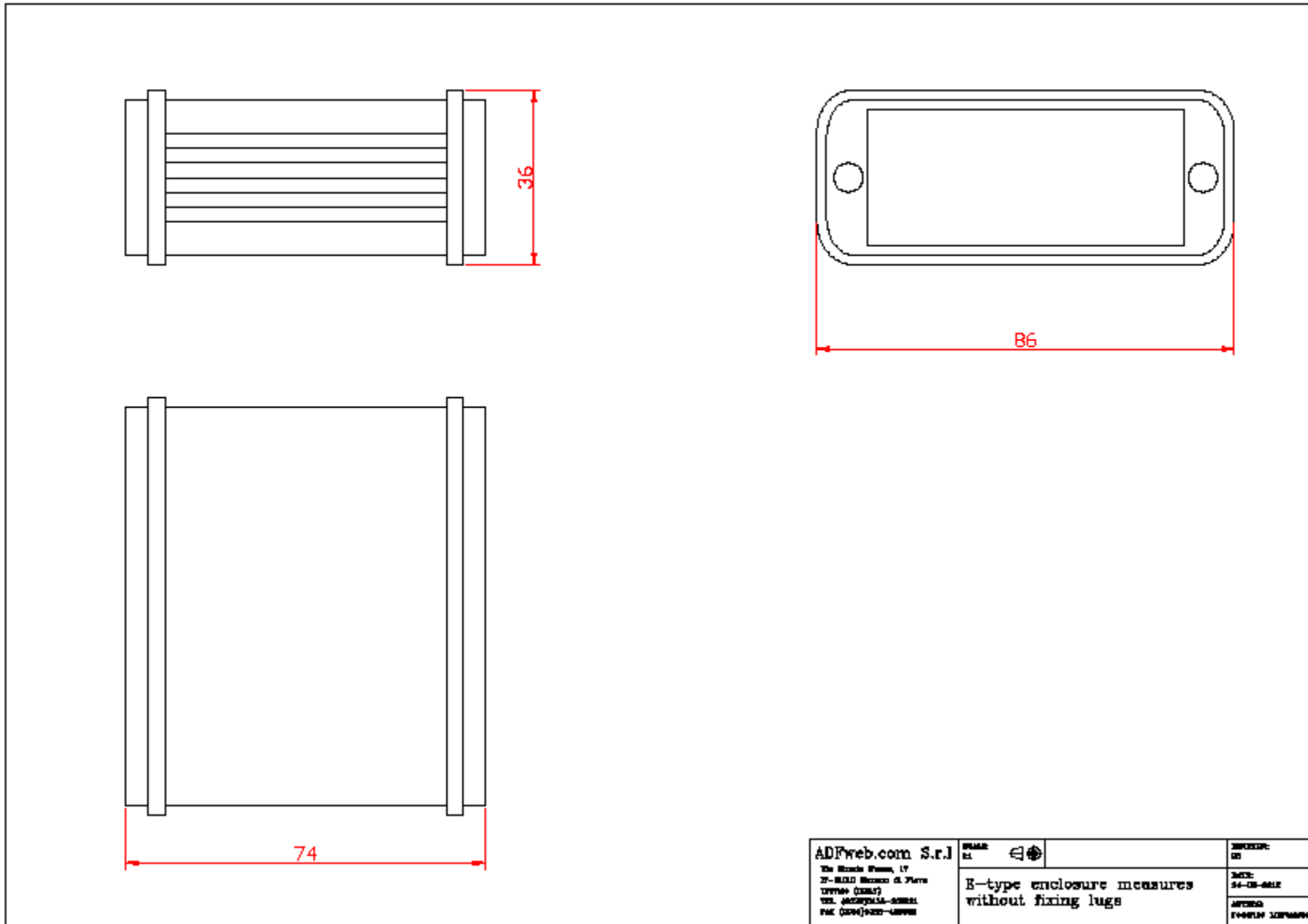
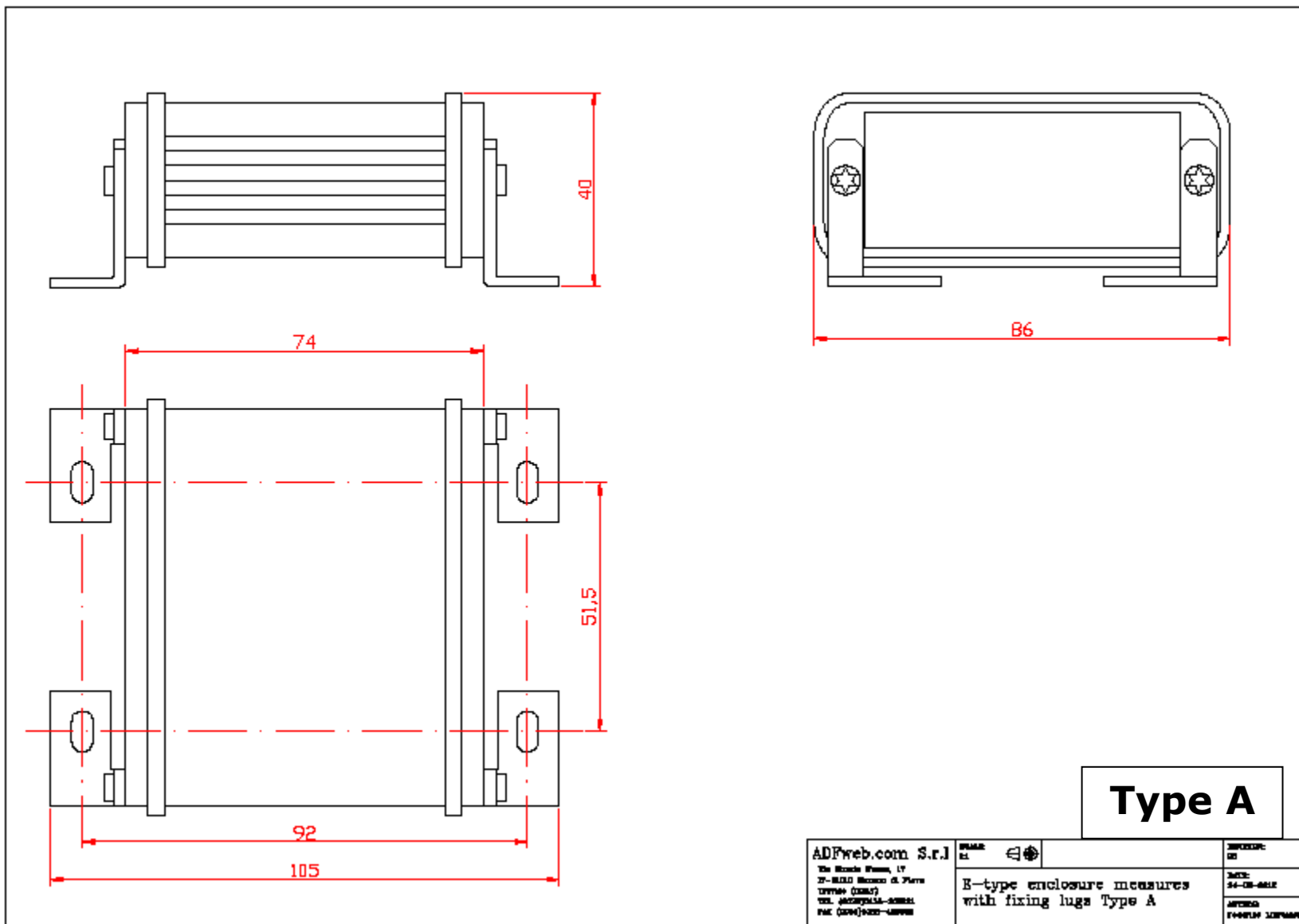


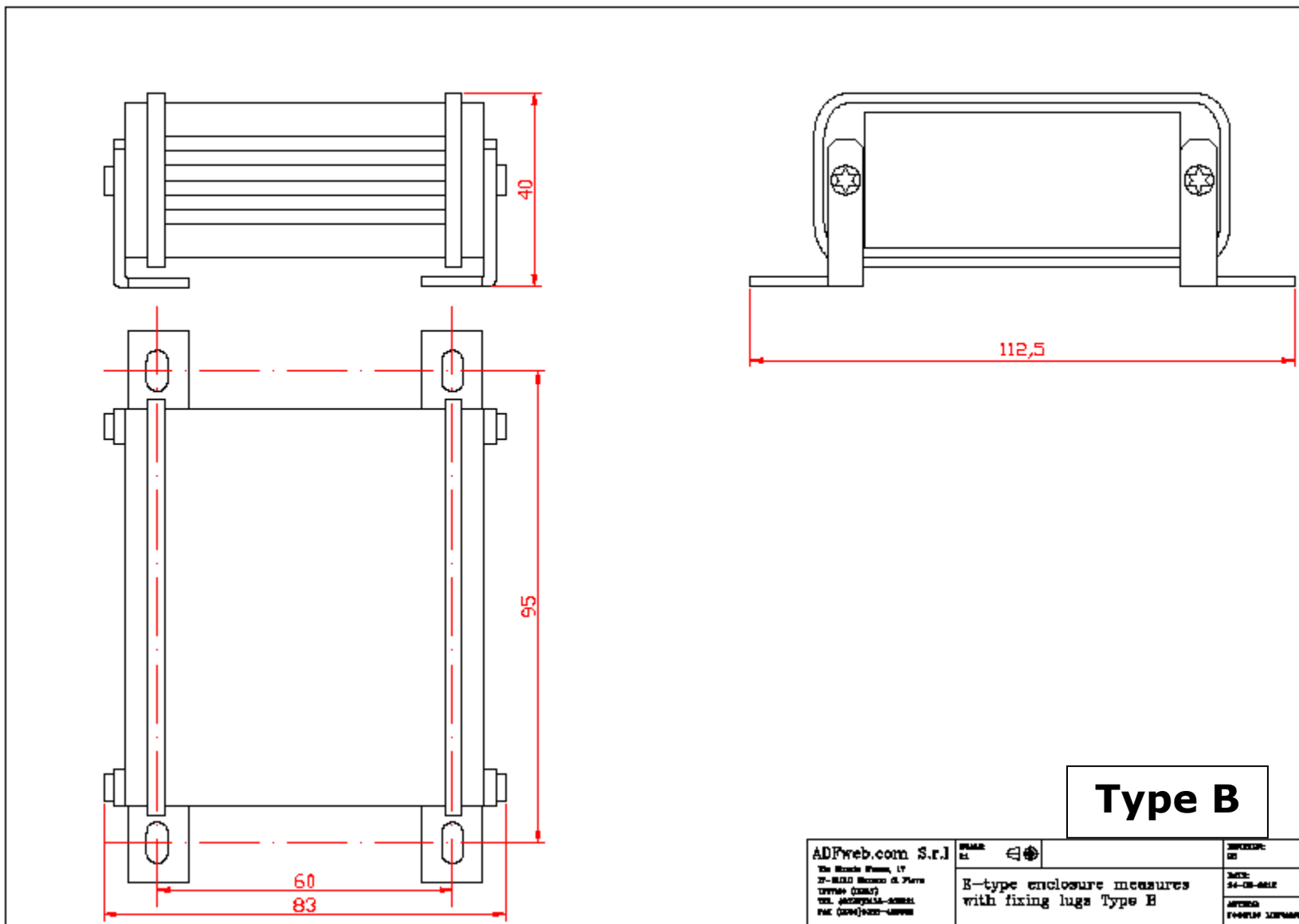
Figure 11: "Protection" window

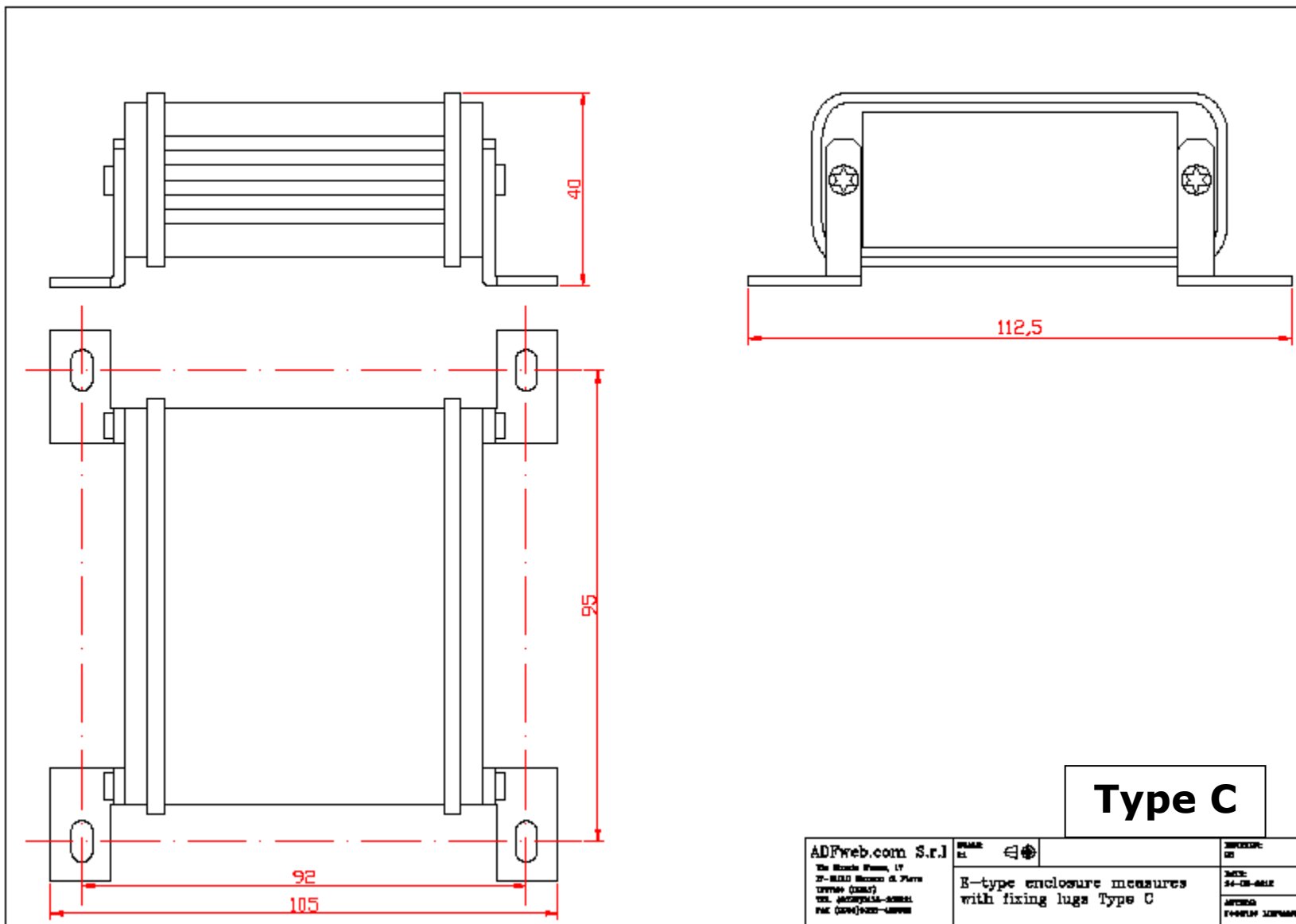
**MECHANICAL DIMENSIONS:**



<b>ADFweb.com S.r.l</b> Via Sileto 17 31-04010 Marenco di Piave (TV) - (ITALY) TEL. (0423)544-0000 FAX (0423)544-0000	SYMBOL E2		SYMBOL E2
	E-type enclosure measures without fixing lugs		DATE 24-08-2012
			AUTHOR F0001M 12/2000



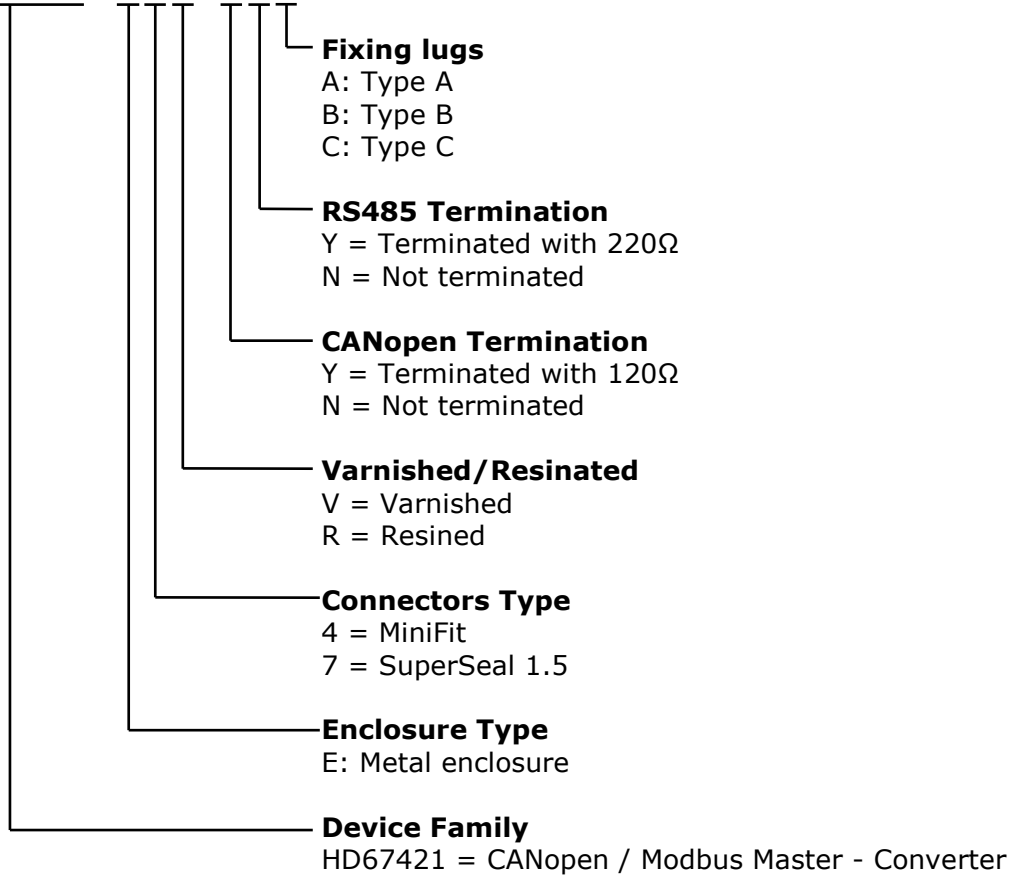




**ORDERING INFORMATIONS:**

The ordering part number is formed by a valid combination of the following:

**HD67421 - E y z - s d f**



- Order Code: **HD67421-E4V-NNA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4V-NNB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4V-NNC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4V-NYA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4V-NYB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4V-NYC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4V-YNA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4V-YNB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4V-YNC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4V-YYA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4V-YYB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4V-YYC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4R-NNA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4R-NNB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type B"



- Order Code: **HD67421-E4R-NNC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4R-NYA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4R-NYB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4R-NYC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4R-YNA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4R-YNB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4R-YNC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E4R-YYA** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E4R-YYB** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E4R-YYC** - CANopen / Modbus Master - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7V-NNA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7V-NNB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7V-NNC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7V-NYA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type A"

- Order Code: **HD67421-E7V-NYB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7V-NYC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7V-YNA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7V-YNB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7V-YNC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7V-YYA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7V-YYB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7V-YYC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7R-NNA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7R-NNB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7R-NNC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN not terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7R-NYA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7R-NYB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7R-NYC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN not terminated and fixing lugs "Type C"

- Order Code: **HD67421-E7R-YNA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7R-YNB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7R-YNC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CAN terminated and fixing lugs "Type C"
- Order Code: **HD67421-E7R-YYA** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type A"
- Order Code: **HD67421-E7R-YYB** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type B"
- Order Code: **HD67421-E7R-YYC** - CANopen / Modbus Master - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CAN terminated and fixing lugs "Type C"

**ACCESSORIES:**

- Order Code: **AC67400** - CAN interface to configure devices

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## OTHER REGULATIONS AND STANDARDS

### WEEE INFORMATION



Disposal of old electrical and electronic equipment (as in the European Union and other European countries with separate collection systems).

— This symbol on the product or on its packaging indicates that this product may not be treated as household rubbish. Instead, it should be taken to an applicable collection point for the recycling of electrical and electronic equipment. If the product is disposed correctly, you will help prevent potential negative environmental factors and human health, which could otherwise be caused by inappropriate disposal. The recycling of materials will help to conserve natural resources. For more information about recycling this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

### RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE



The device respects the 2002/95/EC Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (commonly referred to as Restriction of Hazardous Substances Directive or RoHS).

### CE MARKING



The product conforms with the essential requirements of the applicable EC directives.



### **WARRANTIES AND TECHNICAL SUPPORT:**

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at [www.adfweb.com](http://www.adfweb.com).  
Otherwise contact us at the address [support@adfweb.com](mailto:support@adfweb.com)

### **RETURN POLICY:**

If while using your product you have any problem and you wish to exchange or repair it, please do the following:

- 1) Obtain a Product Return Number (PRN) from our internet support at [www.adfweb.com](http://www.adfweb.com). Together with the request, you need to provide detailed information about the problem.
- 2) Send the product to the address provided with the PRN, having prepaid the shipping costs (shipment costs billed to us will not be accepted).

If the product is within the warranty of twelve months, it will be repaired or exchanged and returned within three weeks. If the product is no longer under warranty, you will receive a repair estimate.