User Manual

Revision 1.000
English

CANopen / Modbus Slave - Converter

(Order Code: HD67422)

for Website information:
www.adfweb.com?Product=HD67422

for Price information:
www.adfweb.com?Price=HD67422

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)

HD67422

Similiar Products

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CAN from/to Modbus

See also the following links:

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www.adfweb.com?product=HD67514	(Modbus TCP Master)
www.adfweb.com?product=HD67515	(Modbus TCP Slave)

CANopen from/to Modbus

See also the following links:

www.adfweb.com?product=HD67001	(Modbus RTU Master)
www.adfweb.com?product=HD67502	(Modbus RTU Slave)
www.adfweb.com?product=HD67504	(Modbus TCP Master)
www.adfweb.com?product=HD67505	(Modbus TCP Slave)

Do you have an your customer protocol?
See the following links:
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Do you need to choose a device? do you want help?
Ask it to the following link:
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INDEX:

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With this "Document Code" go to web page www.adfweb.com/download/ and search for the corresponding code on the page. Click on the proper "Document Code" and download the updates.

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REVISION LIST:

Revision	Date	Author	Chapter	Description
1.000	04/12/2012	Ff	All	First release version

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 or give us a call if you need it.

CHARACTERISTICS:

The "**HD67422**" series are rugged devices used to interface CANopen devices with a Modbus Master.
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 Slave" Converter allows to a CANopen network to communicate with a Modbus network.

You need Compositor SW67422 software on your PC in order to perform the following:

- Define that the SDO of the CANopen are accessible from Modbus;
- Define how to update SDO in CANopen from Modbus;
- Define that the EMCY of the CANopen are accessible from Modbus;
- Define how and which EMCY generated in CANopen can be filtered;
- Define which and how the PDO of CANopen are accessible from Modbus;
- Update the new configurations of the device;
- Save, duplicate, modify, export the configurations.

CONNECTION SCHEME:

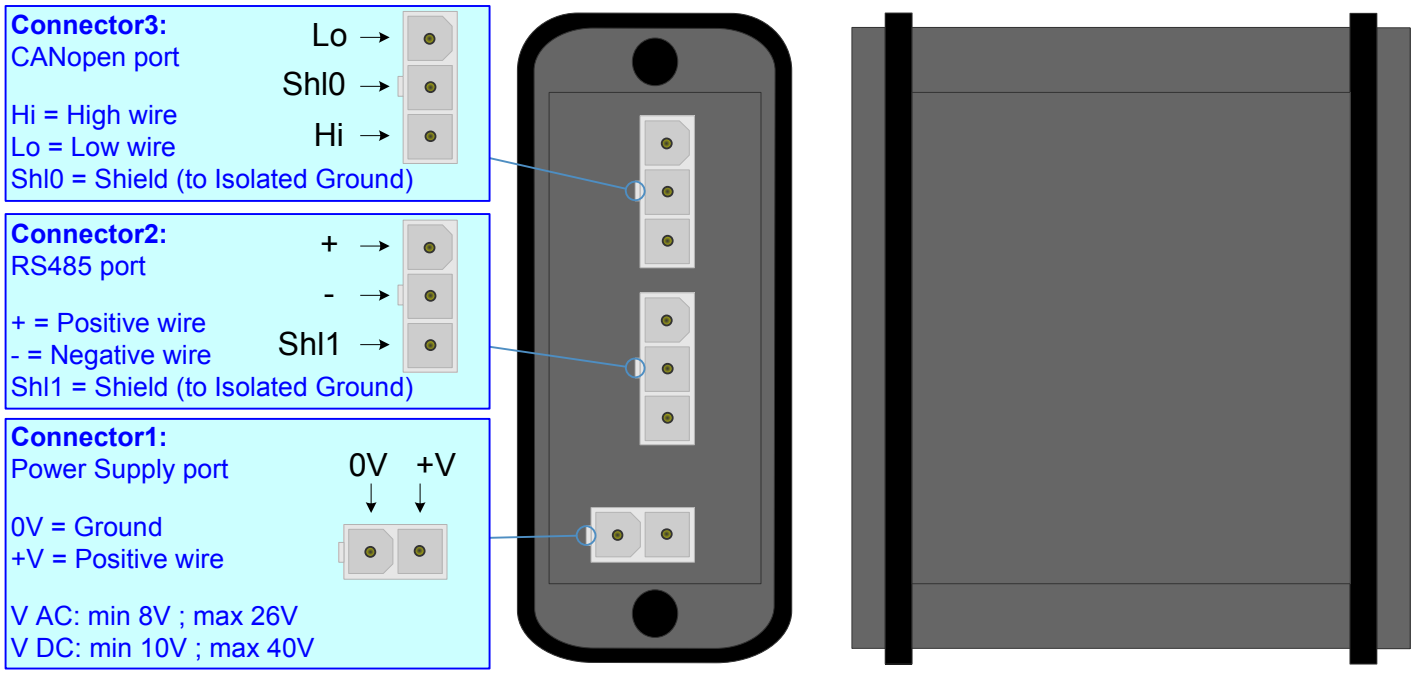


Figure 1-1: Connection scheme for HD67422-E4x-xxx

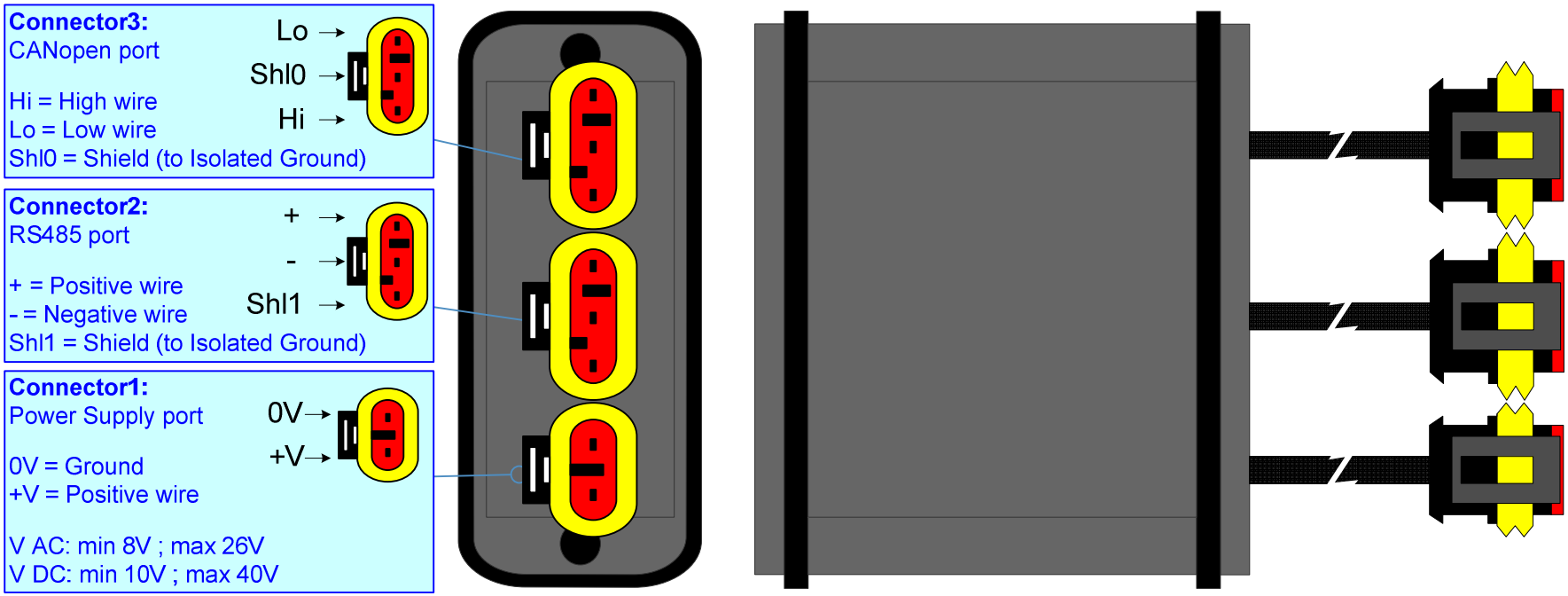


Figure 1-2: Connection scheme for HD67422-E7x-xxx

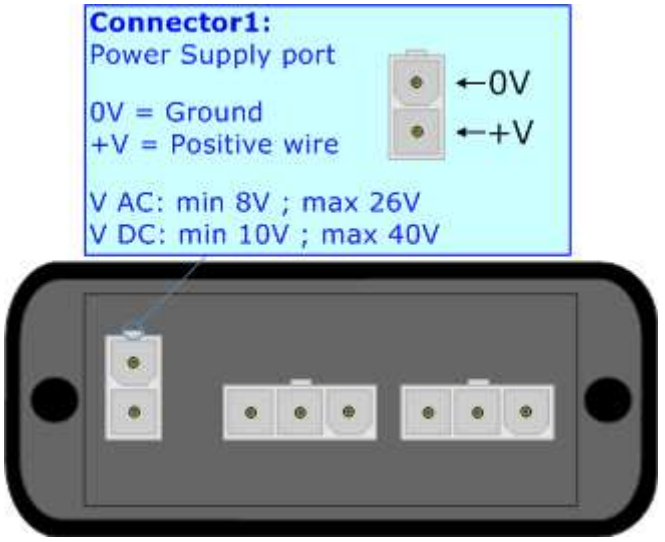
POWER SUPPLY:

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

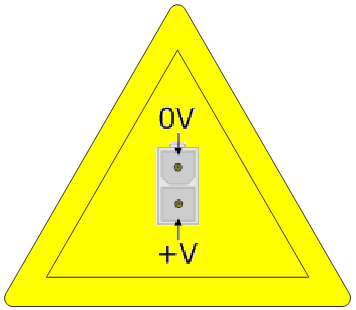
	VAC ~		VDC ⎓	
	Vmin	**Vmax**	**Vmin**	**Vmax**
HD67422-Exx-xxx	**8V**	**26V**	**10V**	**40V**

Consumption at 24V DC:

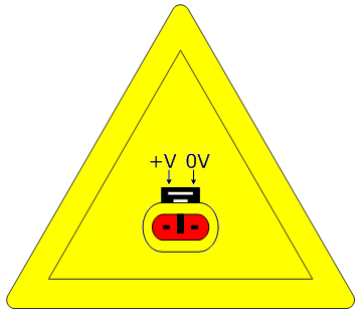
Device	W/VA
HD67422-Exx-xxx	4



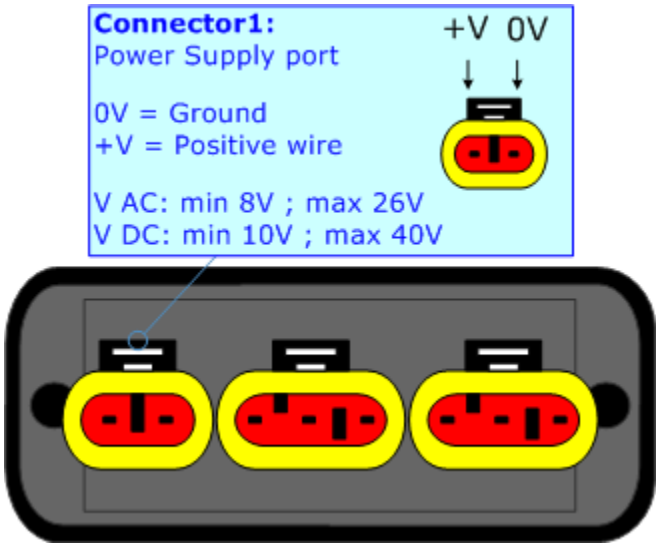
Caution: Not reverse the polarity power



HD67422-E4x-xxx



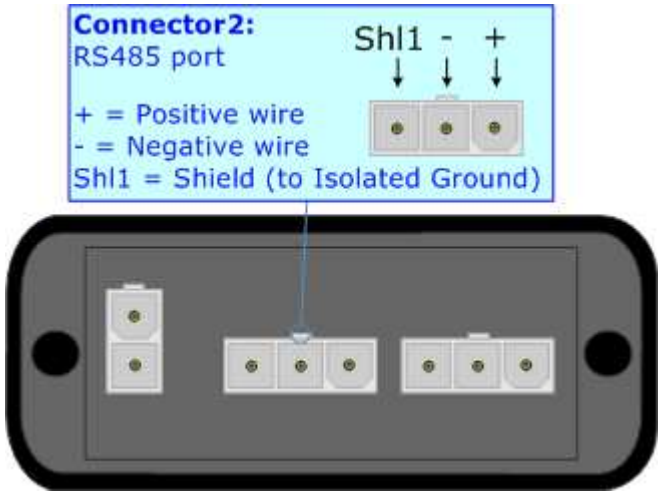
HD67422-E7x-xxx



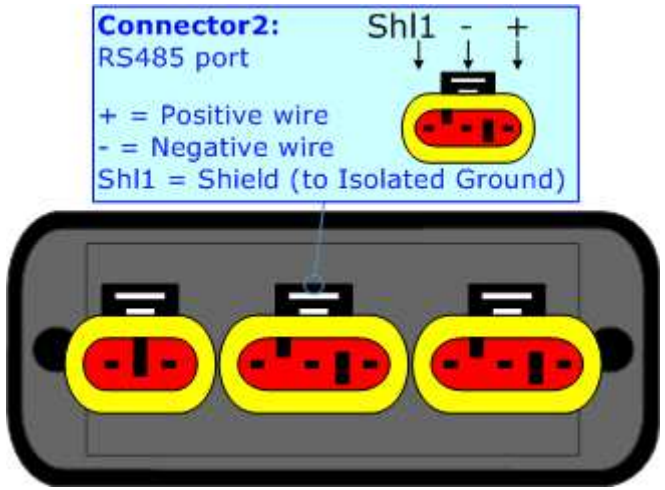
Note: It is possible to use also negative tensions. In this case the polarity must be inverted.

RS485:

The connection of the RS485 in the HD67422-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 HD67422-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 HD67422-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: HD67422-Exx-xYx; otherwise is this other: HD67422-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.

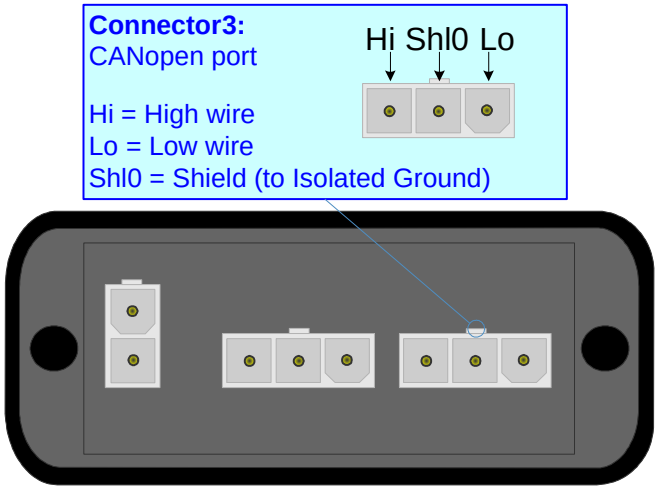
Link for Mini-Fit® connectors: http://www.molex.com/molex/products/group?key=minifit_products&channel=products
Link for SuperSeal 1.5 connectors: http://www.te.com/catalog/cinf/en/c/10876/956

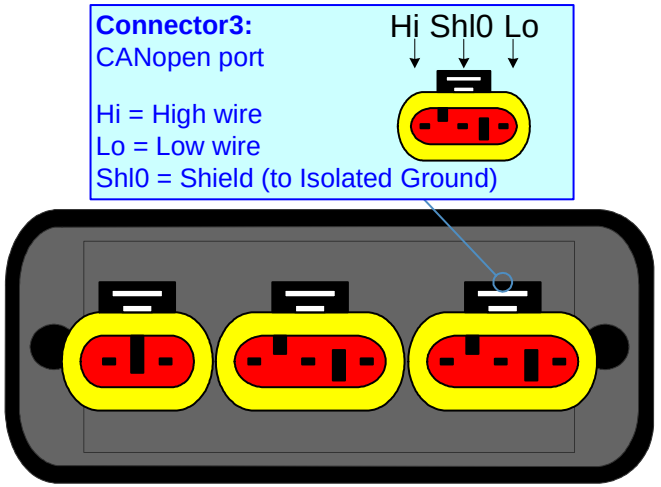
CANopen:

The connection of the CANopen in the HD67422-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 HD67422-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 HD67422-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: HD67422-Exx-Yxx; otherwise is this other: HD67422-Exx-Nxx.





Cable characteristics:

DC parameter:		Impedance	70 Ohm/m
AC parameters:		Impedance	120 Ohm/m
		Delay	5 ns/m

Length		**Baud Rate [bps]**	**Length MAX [m]**
		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 SW67422:

To configure the Gateway, use the available software that runs with Windows, called SW67422. It is downloadable on the site 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 SW67422 the right window appears (Fig. 2).

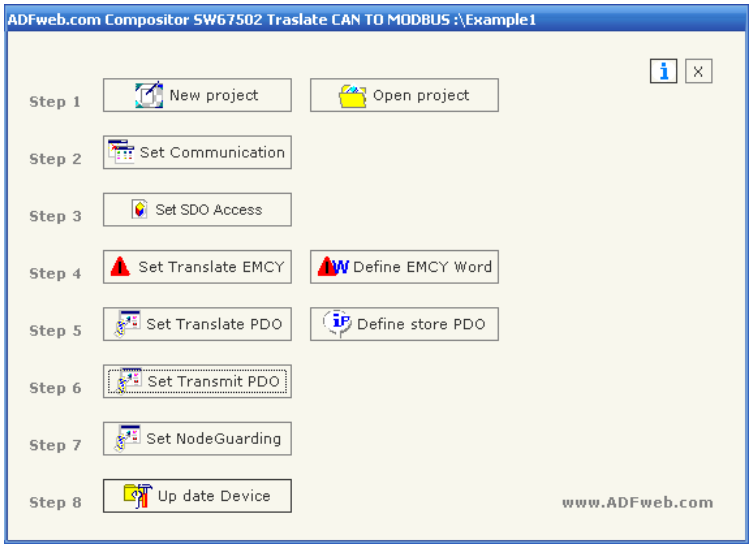
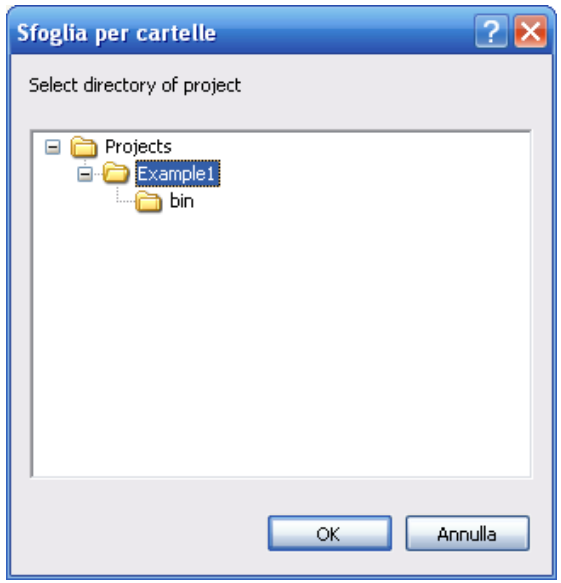
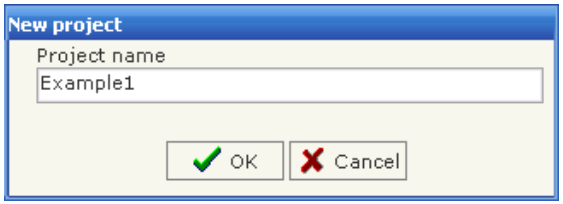


Figure 2: Main Window for SW67422

NEW PROJECT / OPEN PROJECT:



The "**New Project**" 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 Slave - 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 Project**".

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 SW67422 (Fig. 2) the window "Set communication" appears (Fig. 3):

- In the fields "**DevID**" the Gateway address is defined in the respective CANopen and Modbus sections;
- In the fields "**Baud rate**" the velocity of the two Buses is defined;
- The check box "**Set Operational State at Start-Up**" is used to set the operational state of the device at start-up;
- The check box "**Network Start at Start-Up**" is used to send the command of the operational to the CANopen Network (i.e. when the device start up send to Modbus Network a command and all the devices are in operational);
- In the field "**Delay**" the delay before sending the network command for the CANopen is defined;
- The check box "**Can Start on Modbus command**" is used to send the Modbus command (sender word) of Operational/Pre-Operational State to one or to all the devices in CANopen network:

  The sender word must have:
  - The high byte with the value of 1 for Operational or 2 for Pre-Operational;
  - The low byte must have the address of the device that is commanded to do the action (Operational/PreOperational). If you set 0, in this byte, all the devices in network take this command.

  Example if you want to set the state of Operational to the device CANopen with address 3, you must write the word "259" in the field "Add. Word Modbus". Note: 259=0x0103;
- The check box "**Enable NodeGuarding**" is used to enable the NodeGuard of CANopen Slave, the two fields (Modbus Address) are used for indicate which Modbus register use for save the state of the CANopen device. Every bit represents a CANopen deivce, if the devise is present the bit is equal to 1 otherwise 0.
- In the field "**Parity**" the serial parity is defined;
- It is possible to choose among five different type of Modbus Protocol: "Modbus RTU", "Modbus ASCII", "JBUS", "Binary" and "ASCII";
- "**SDO Timeout (1/10 ms)**" is the maximum time that the device attends for the answer from the Slave interrogated.

Data bits and Stop bits, are a serial parameter and they are fixed in order at 8 and 1 for default.

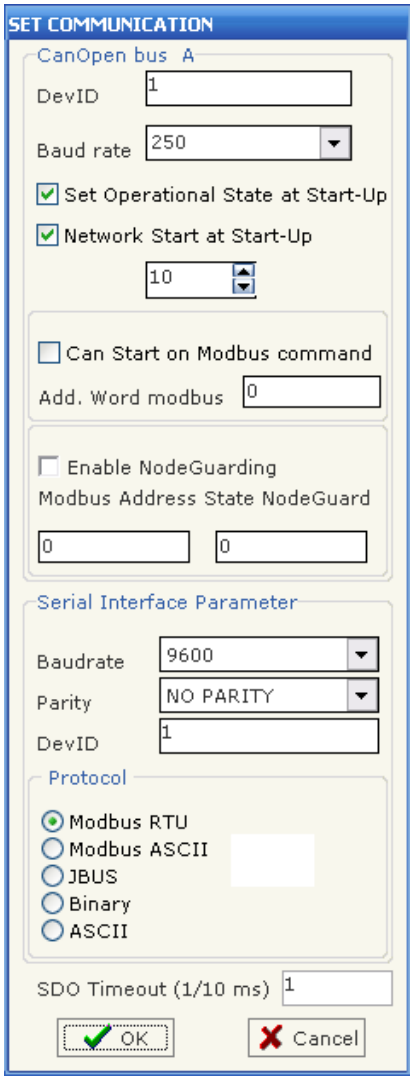


Figure 3: "Set Communication" window

SET SDO ACCESS:

The following objects can be defined within this section:

- the SDO of the CANopen are accessible from a word Modbus.
- Which word of the Modbus are accessible from a SDO of the CANopen.

By pressing the "**Set SDO Access**" button from the Main Window for SW67422 (Fig. 3) the window "SDO" appears (Fig. 4).

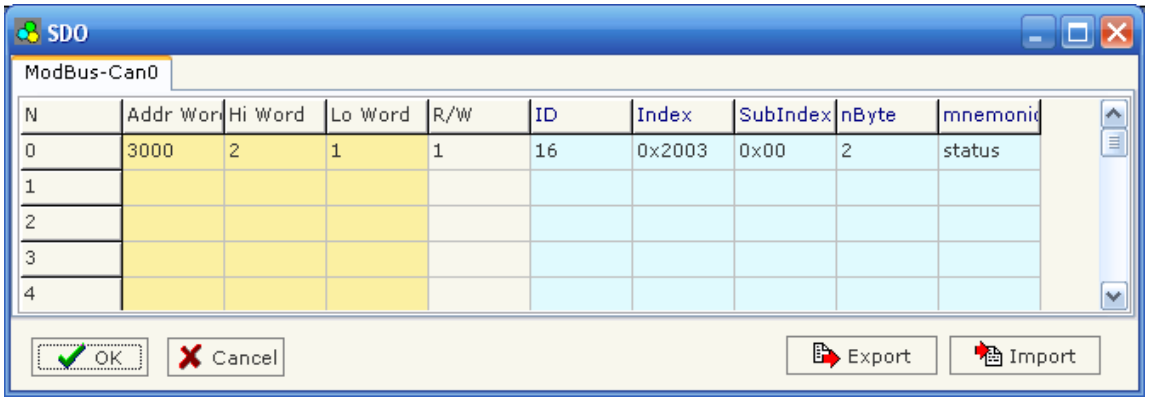


Figure 4: "SDO" window

The data of the columns have the following meanings:

- In the field "**Addr Word**" insert the address of the SDO that supports the ModBUS word;
- In the field "**Hi Word**" insert the correspondence between the high byte of the Modbus word and a SDO byte (note: its number can be 0, 1, 2, 3, 4):
  - 1 = First byte of the SDO;
  - 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - 4 = Fourth byte of the SDO;
  - 0 = No byte.
- In the field "**Lo word**" insert the correspondence between the low byte of the Modbus word and a SDO byte (note: its number can be 0, 1, 2, 3, 4):
  - 1 = First byte of the SDO;
  - 2 = Second byte of the SDO;
  - 3 = Third byte of the SDO;
  - 4 = Fourth byte of the SDO;
  - 0 = No byte.
- In the field "**R/W**" insert number "0" if the SDO is only in reading or insert number "1" if the SDO is also in writing;
- In the field "**ID**" insert the address of the CANopen device;
- In the fields "**Index**", "**SubIndex**" insert the coordinates of the SDO in the CANopen;
- The field "**nByte**" indicates the length of the SDO;
- In the field "**mnemonic**" you can insert a brief description.

Example 1:

If you want to write data in the form of SDO in the CANopen from the Modbus network on the device at the address:

- Address 16;
- Index 0x2003;
- Subindex 0;
- By dimensions 2 bytes;
  By the following word ModBUS;
- Addr Word 3000.

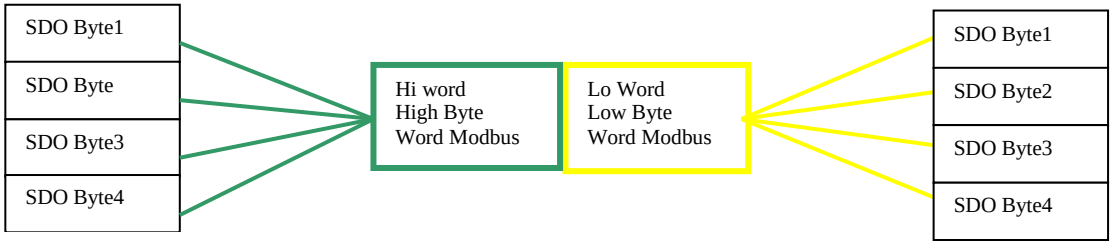


Figure 5: Scheme of the word configuration

In the above scenario (Fig 5):

The Modbus Master can read or write (note RW=1):

- to the address of the Modbus side Gateway slave (note the one specified in the "Set Communication");
- to the word Modbus 3000 (note: Addr word 3000);
- the first byte of the SDO found in the low byte of the Modbus word (note: Lo Word=1);
- the second byte of the SDO found in high byte of the Modbus word (note: Hi Word=2).

The SDO:

- two byte dimension (note: nByte=2);
- belonging to a CANopen device ID 16 (note: ID=16);
- of the following coordinates: Index 2003 and Subindex 0.

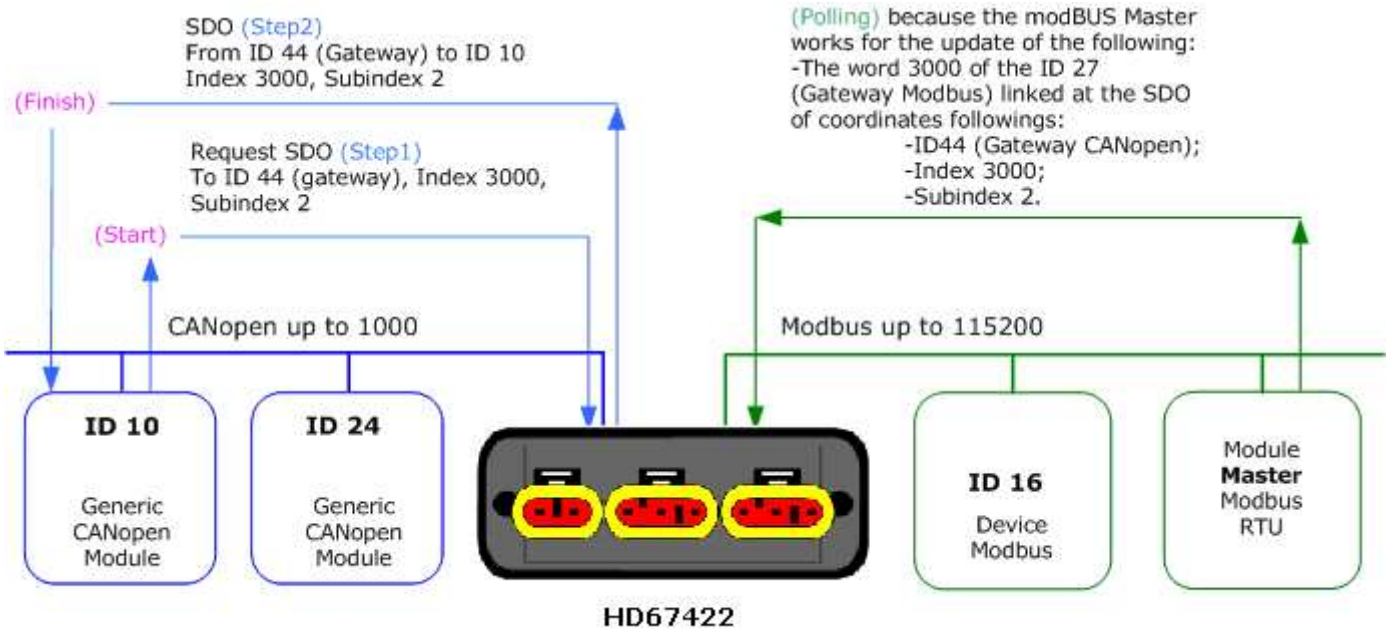


Figure 6: Chart of SDO request from Modbus side

SET TRANSLATE EMCY:

By pressing the "**Set Translate EMCY**" button from the Main Window for SW67422 (Fig. 2) the window "Set Translate EMCY" appears (Fig. 7).

A user who has to pass a EMCY from CANopen to Modbus needs to insert the coordinates of the EMCY to be transmitted in the field "Set Translate EMCY" of the window.

- In the field "**ID EMCY**" insert the Node ID of your CANopen device that transmit the EMCY;
- In the field "**Error Code**" insert the value of your error code (the maximum value is 0xFFFF);
- In the field "**Error Register**" insert the value of your error register (the maximum value is 0xFF).

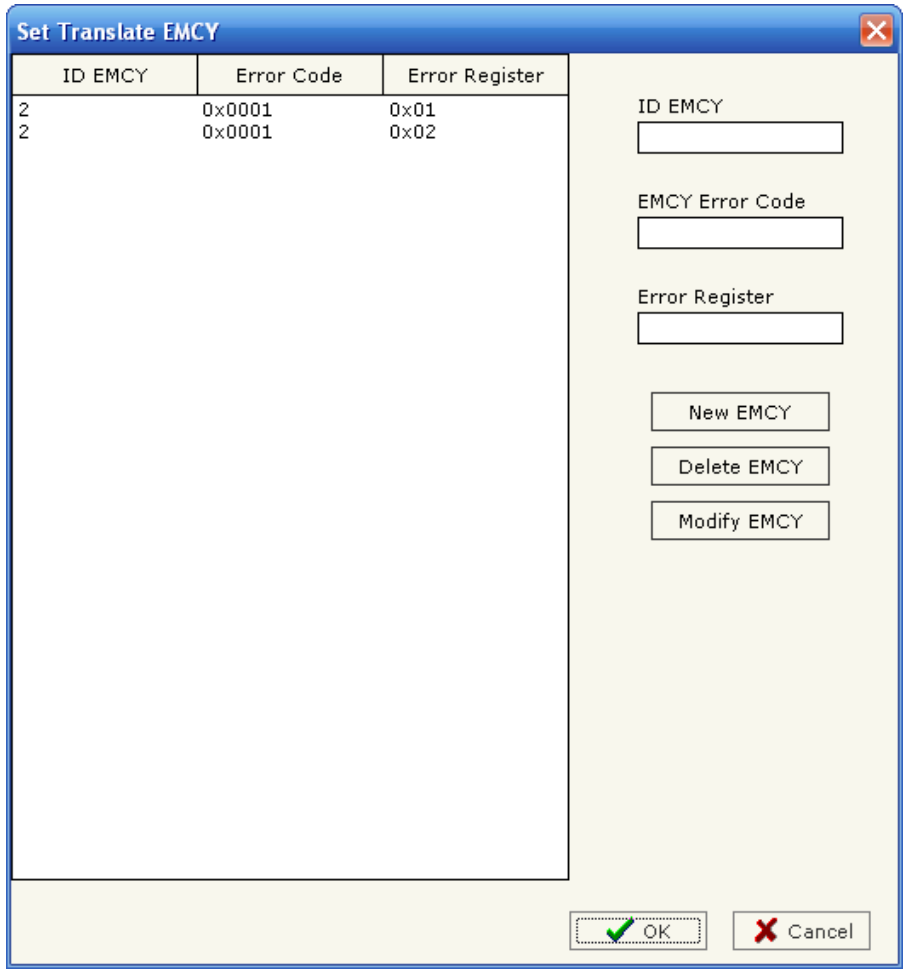


Figure 7: "Set Translate EMCY" window

DEFINE EMCY WORD:

By pressing the "**Define EMCY word**" button from the Main Window for SW67422 (Fig. 2) the window "Word EMCY" appears (Fig. 8).

- In the field "**List of EMCY**" there are the EMCY that you insert in the list of window "Set translate EMCY;
- In the field "**List of Modbus Register**" there are the Modbus registers that you insert;
- In the field "**Number of Modbus register**" insert the number of register that contain the Modbus word;
- In the field "**Hi byte of Modbus register**" select which byte you would locate in the Hi position;
- In the field "**Lo byte of Modbus register**" select which byte you would locate in the Lo position.

For example:

Click on the "List of EMCY", insert the valid address in the field "Number of Modbus Register", select the byte position (First byte in "Hi byte of Modbus Register" and Second Byte in "Lo byte of Modbus Register"), click the "New" button, then in the field "List of Modbus Register" appears the number of Modbus register.

The maximum number of setting byte is 500.

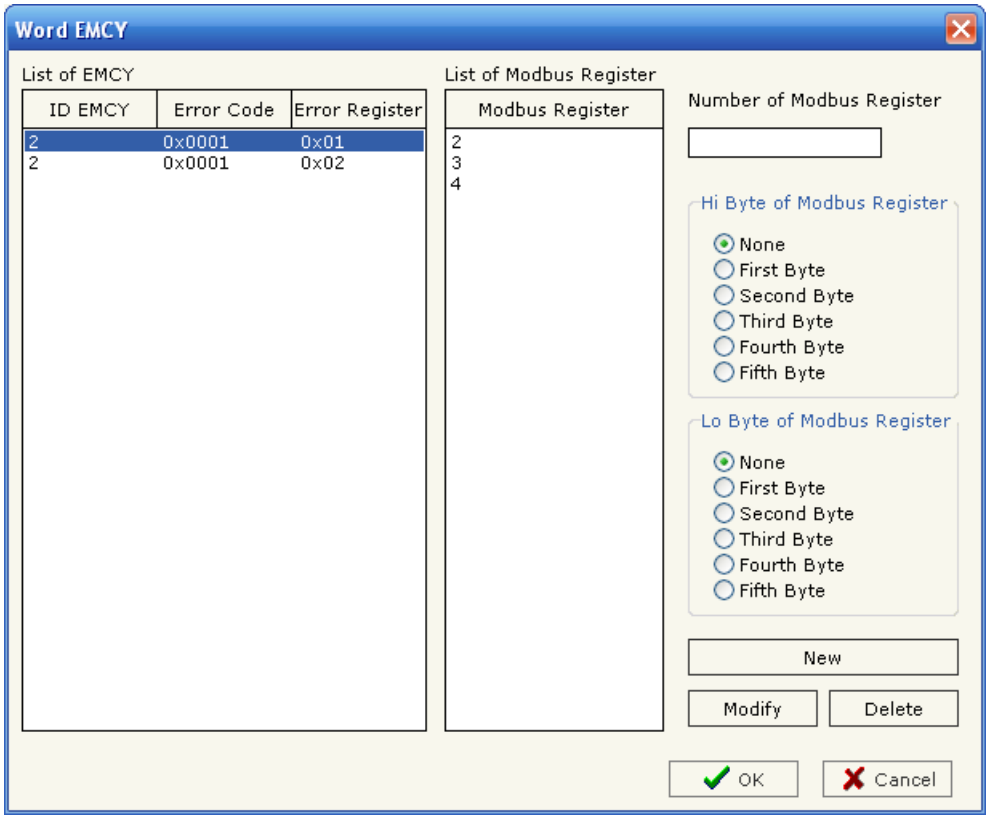


Figure 8: "Word EMCY" window

SET TRANSLATE PDO:

By pressing the "**Set Translate PDO**" button from the Main Window for SW67422 (Fig. 2) the window "RPDO" appears (Fig. 9).

A user who has to memorize a PDO from CANopen to Modbus needs to insert the coordinates of the PDO to be transmitted in the field "SET Translate PDO" of the window.

- In the field "**cobid**" insert the Cob_ID of the original PDO;
- In the field "**id_dev_orig**" insert the address of the original device of BUS A (note: an alias can be inserted in the field instead of the actual address of the PDO generator);
- In the field "**dimension**" insert the number of byte of PDO.

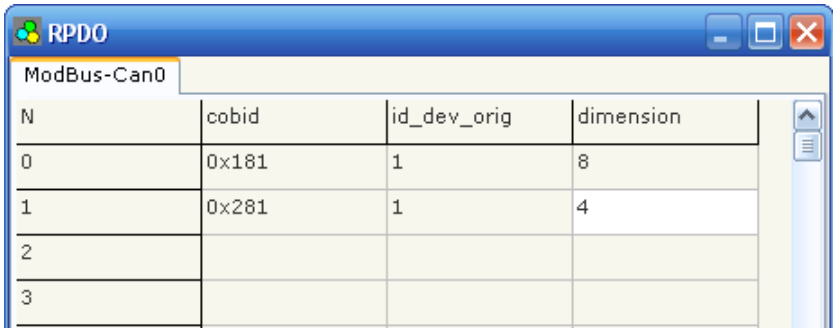


Figure 9: "RPDO" window

DEFINE STORE PDO:

By pressing the "**Define store PDO**" button from the Main Window for SW67422 (Fig. 2) the window "INFOPDO" appears (Fig. 10).

In this section it is possible to define the Modbus registers where the RPDOs of the converter will be saved.

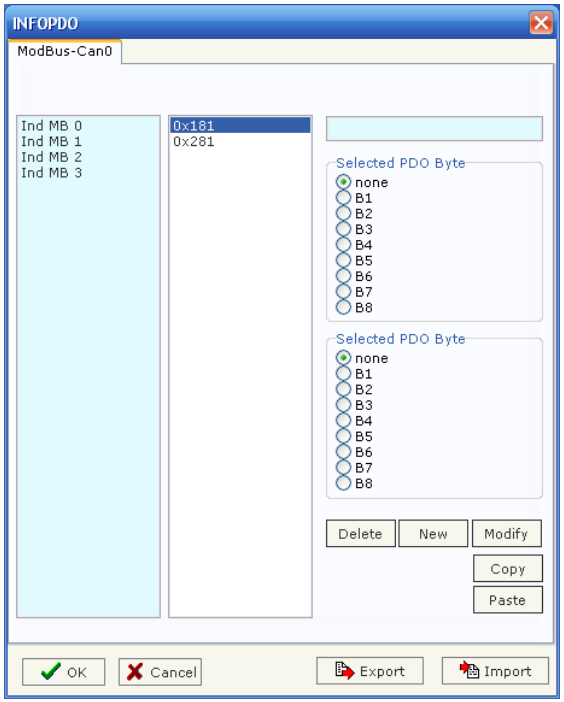


Figure 10: "INFOPDO" window

SET TRANSMIT PDO:

It is possible to write the PDOs using the Preset Multiple Registers Function (Modbus function 16). You have to write all the Modbus registers (that represent the PDO Data) with one Modbus command.

By pressing "**Set Transmit PDO**" button from the Main Window for SW67502 (Fig. 2) the window "Transmit PDO" appears (Fig. 11).

A user who has to write a PDO from Modbus to CANopen needs to insert the coordinates of the PDO to be transmitted in the field "SET Transmit PDO" of the window.

- In the field "**COB-ID**" insert the COB-ID of the PDO;
- In the field "**Dimension**" insert the number of byte of the PDO;
- In the field "**Start Modbus Address**" insert the number of Modbus register that you would like to start for writing the PDO.

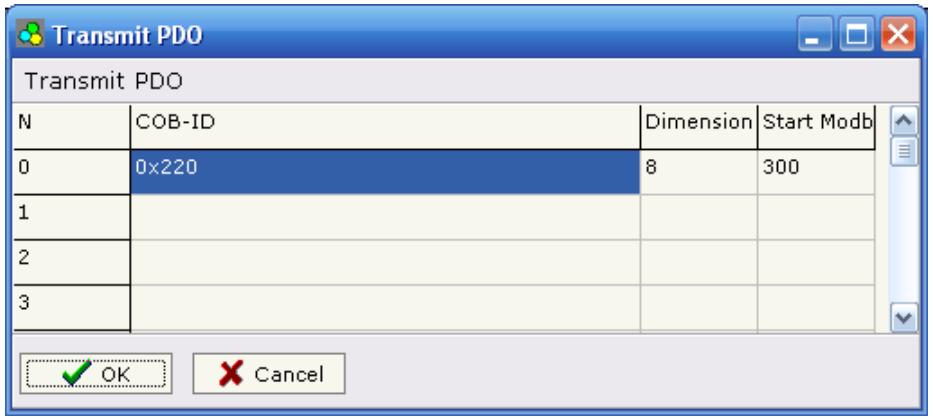


Figure 11: "Transmit PDO" window

SET NODEGUARDING

By pressing the "**Set Node Guarding**" button from the Main Window for SW67422 (Fig. 2) the right window appears (Fig. 12).

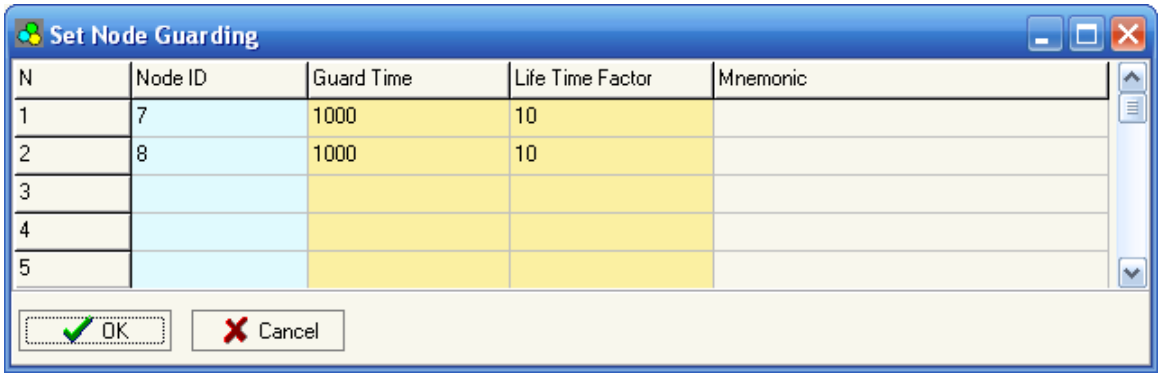


Figure 12: "Set Node Guarding" window

- In the field "**Node ID**" insert the address of the device that you want to control. It is possible to insert up to 32 address;
- In the field "**Guard Time**" insert a time. This value indicates the delay between two interrogations;
- In the field "**Life Time Factor**" insert the number of attempts before considering the device absent;
- In the field "**Mnemonic**" you can insert a brief description.

UPDATE DEVICE:

By pressing the "**Update by CAN**" button from the main window for SW67422 (Fig. 2) the right window appears (Fig. 13).

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 CAN port of HD67422-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 CAN 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.

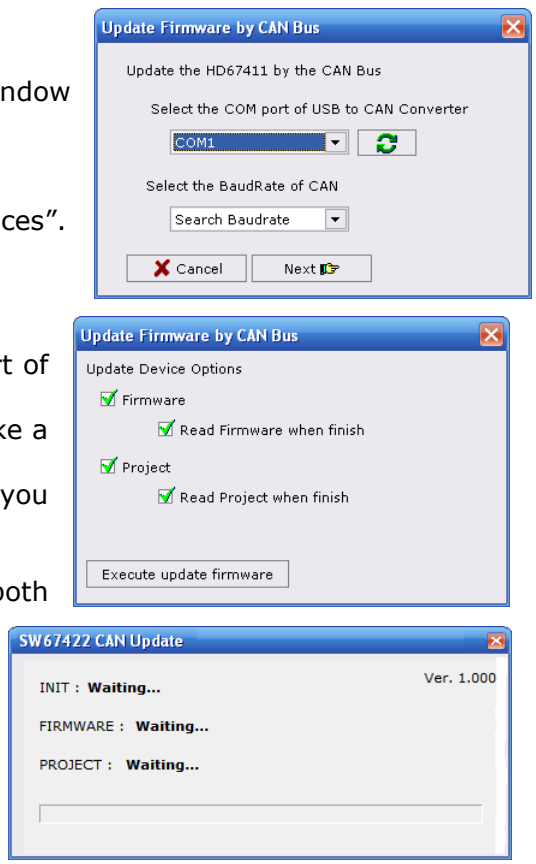


Figure 13: "Update device"

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 HD67422-Exx-xxx device.

Warning:
If the Fig. 14 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.

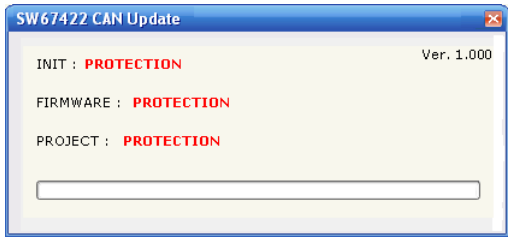
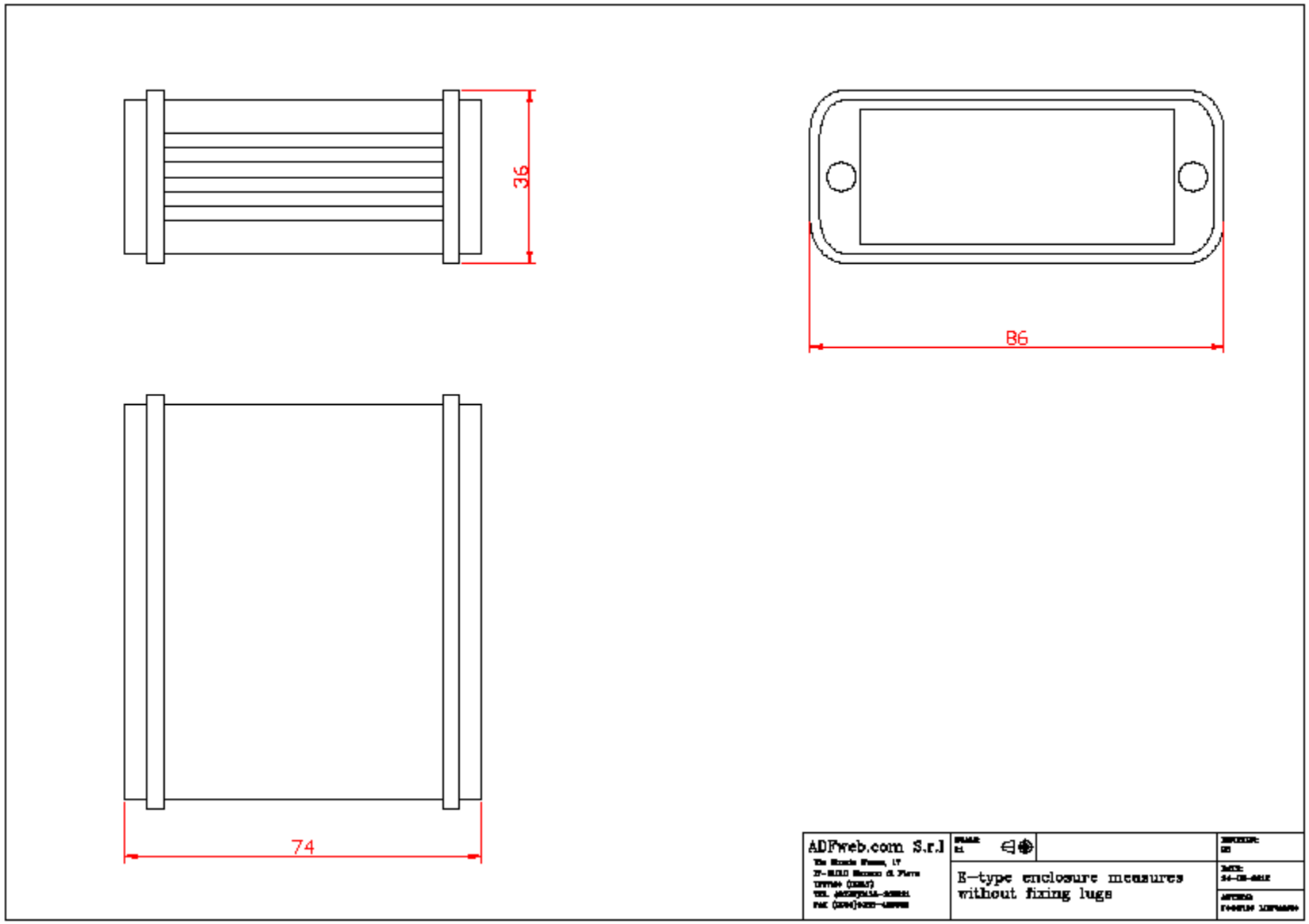
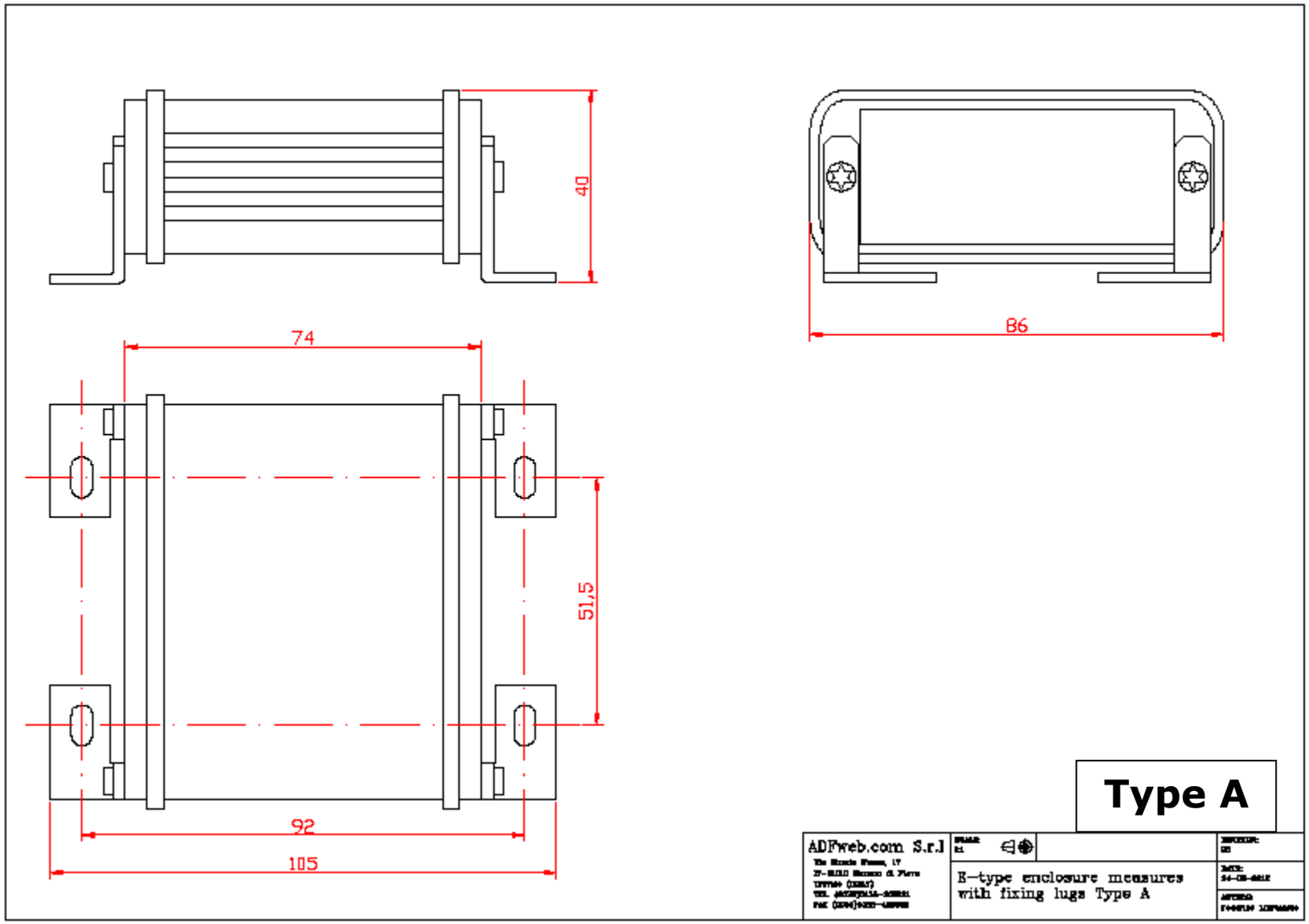
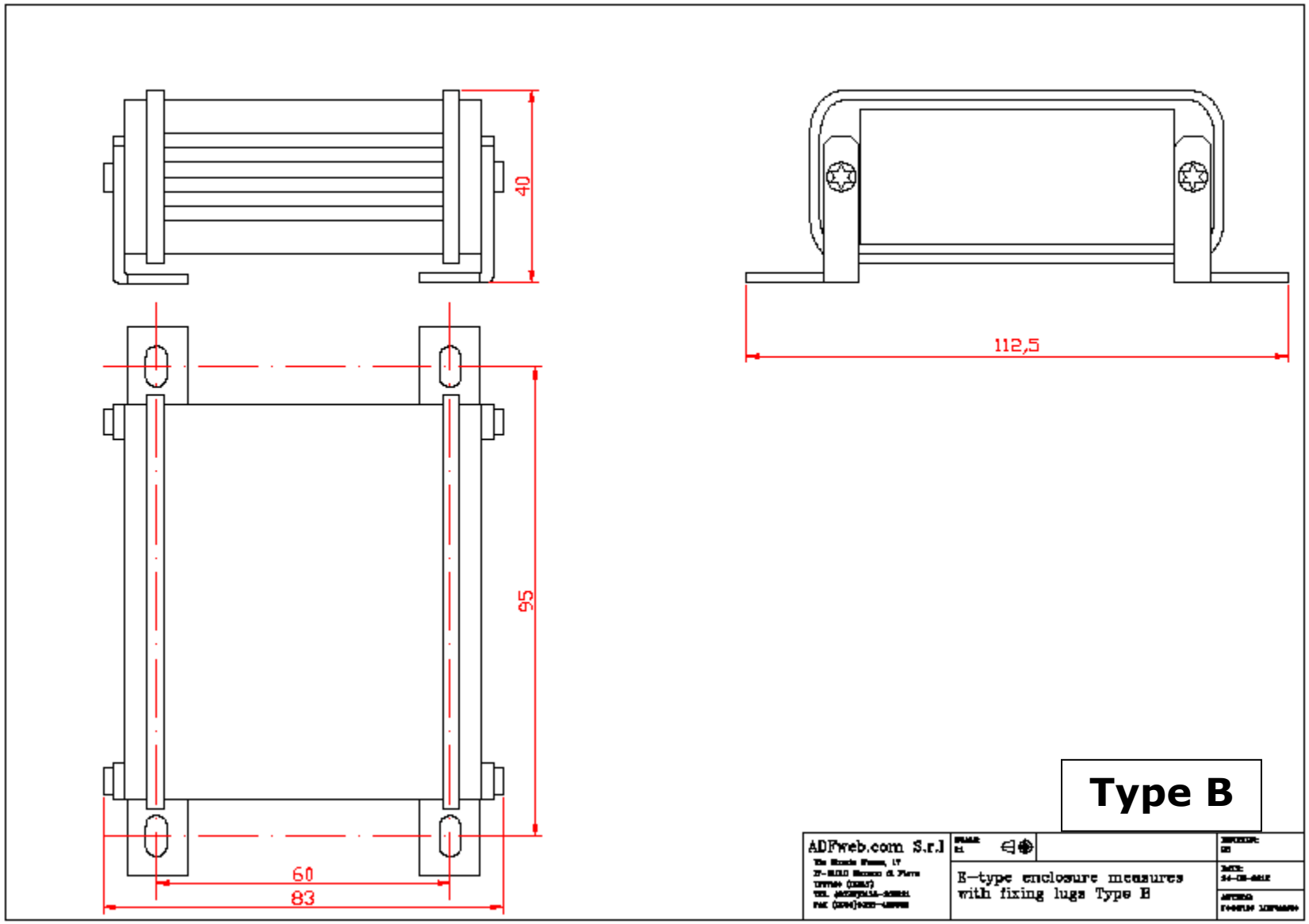


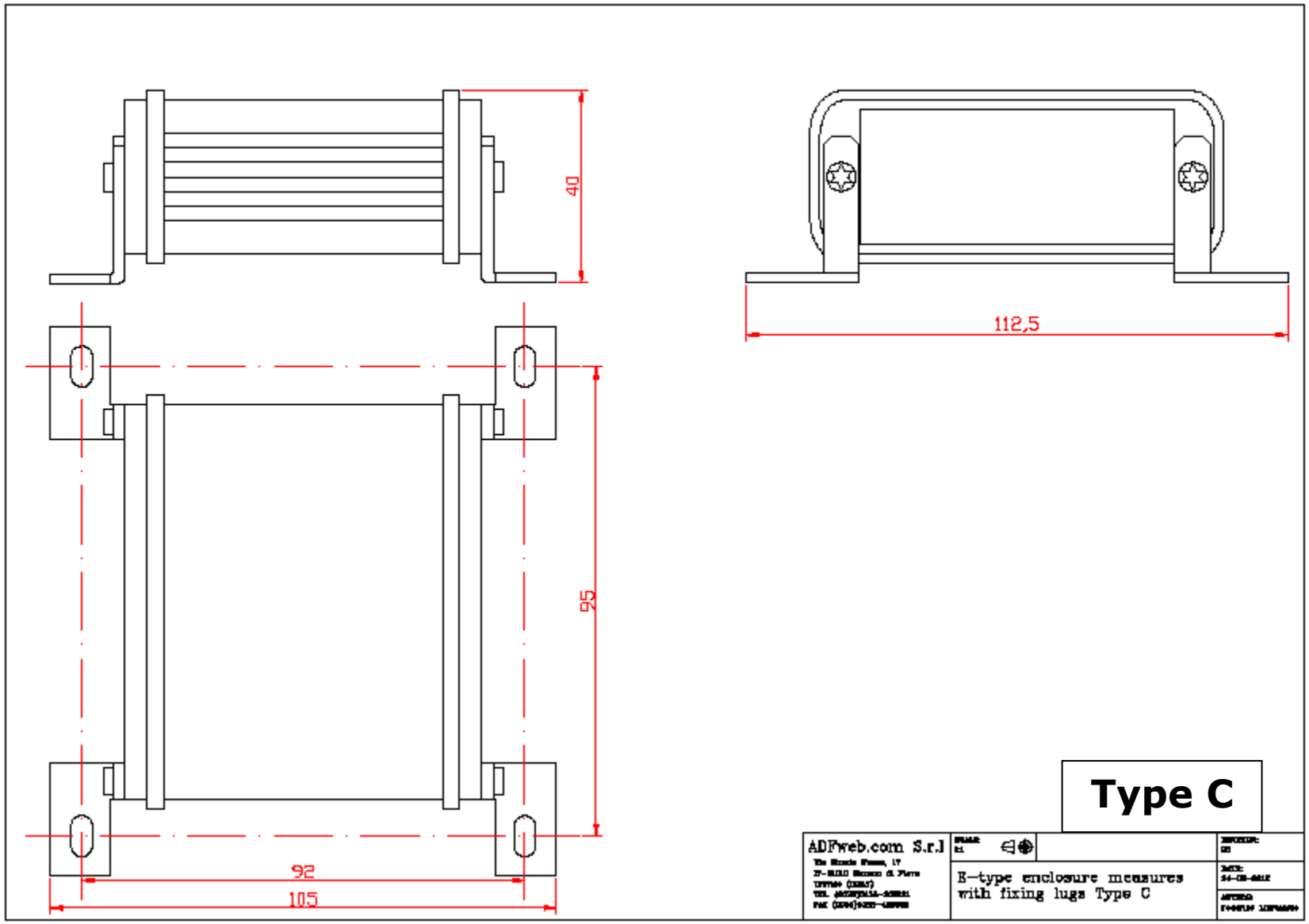
Figure 14: "Protection" window

MECHANICAL DIMENSIONS:




40
86
74
51,5
92
105
Type A
ADFweb.com S.r.l
E-type enclosure measures
with fixing lugs Type A


40
112,5
95
60
83
Type B
ADFweb.com S.r.l
E-type enclosure measures
with fixing lugs Type B


40
112,5
95
92
105
Type C
ADFweb.com S.r.l
E-type enclosure measures
with fixing lugs Type C

ORDERING INFORMATIONS:

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

HD67422 – E y z – s d f

Fixing lugs
A: Type 1
B: Type 2
C: Type 3

RS485 Termination
Y = Terminated with 220Ω
N = Not terminated

CANopen Termination
Y = Terminated with 120Ω
N = Not terminated

Varnished/Resinated
V = Varnished
R = Resined

Connectors Type
4 = MiniFit
7 = SuperSeal 1.5

Enclosure Type
E: Metal enclosure

Device Family
HD67422 = CANopen / Modbus Slave - Converter

Order Code: **HD67422-E4V-NNA** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E4V-NNB** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E4V-NNC** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type C"

Order Code: **HD67422-E4V-NYA** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E4V-NYB** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E4V-NYC** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type C"

Order Code: **HD67422-E4V-YNA** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E4V-YNB** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E4V-YNC** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type C"

Order Code: **HD67422-E4V-YYA** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E4V-YYB** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E4V-YYC** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type C"

Order Code: **HD67422-E4R-NNA** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E4R-NNB** - CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E4R-NNC**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type C"
Order Code: **HD67422-E4R-NYA**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type A"
Order Code: **HD67422-E4R-NYB**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type B"
Order Code: **HD67422-E4R-NYC**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type C"
Order Code: **HD67422-E4R-YNA**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type A"
Order Code: **HD67422-E4R-YNB**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type B"
Order Code: **HD67422-E4R-YNC**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type C"
Order Code: **HD67422-E4R-YYA**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type A"
Order Code: **HD67422-E4R-YYB**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type B"
Order Code: **HD67422-E4R-YYC**	**-**	CANopen / Modbus Slave - Converter with MiniFit connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type C"
Order Code: **HD67422-E7V-NNA**	**-**	CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type A"
Order Code: **HD67422-E7V-NNB**	**-**	CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type B"
Order Code: **HD67422-E7V-NNC**	**-**	CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen not terminated and fixing lugs "Type C"
Order Code: **HD67422-E7V-NYA**	**-**	CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E7V-NYB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E7V-NYC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen not terminated and fixing lugs "Type C"

Order Code: **HD67422-E7V-YNA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E7V-YNB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E7V-YNC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 not terminated, CANopen terminated and fixing lugs "Type C"

Order Code: **HD67422-E7V-YYA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E7V-YYB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E7V-YYC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board varnished, RS485 terminated, CANopen terminated and fixing lugs "Type C"

Order Code: **HD67422-E7R-NNA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E7R-NNB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E7R-NNC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen not terminated and fixing lugs "Type C"

Order Code: **HD67422-E7R-NYA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type A"

Order Code: **HD67422-E7R-NYB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type B"

Order Code: **HD67422-E7R-NYC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen not terminated and fixing lugs "Type C"

Order Code: **HD67422-E7R-YNA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E7R-YNB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E7R-YNC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 not terminated, CANopen terminated and fixing lugs "Type C"

Order Code: **HD67422-E7R-YYA** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type A"

Order Code: **HD67422-E7R-YYB** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type B"

Order Code: **HD67422-E7R-YYC** - CANopen / Modbus Slave - Converter with SuperSeal 1.5 connectors, electronic board resined, RS485 terminated, CANopen terminated and fixing lugs "Type C"

ACCESSORIES:

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

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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.

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Otherwise contact us at the address 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. 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.