

User Manual

Revision 1.000
English

EtherNet/IP / CANopen – Converter

(Order Code: HD67429)

For Website information:

www.adfweb.com?Product=HD67429

For Price information:

www.adfweb.com?Price=HD67429

Benefits and Main Features:

- ⊕ Very easy to configure
- ⊕ Wide supply input range
- ⊕ Electrical isolation
- ⊕ Industrial temperature range:
- ⊕ -40°C / 105°C (-40°F / 221°F)



User Manual



For others Gateways / Bridges:

J1939 to Modbus

See also the following links:

www.adfweb.com?Product=HD67212 (Modbus RTU)

CANopen to Modbus

See also the following links:

www.adfweb.com?Product=HD67001 (Modbus RTU Master)
www.adfweb.com?Product=HD67002 (Modbus RTU Slave)
www.adfweb.com?Product=HD67004 (Modbus TCP Master)
www.adfweb.com?Product=HD67005 (Modbus TCP Slave)

For others Gateways / Bridges:

For **CAN bus 2.0A** and/or **CAN bus 2.0B** to **Modbus**

See also the following links:

www.adfweb.com?Product=HD67011 (Modbus RTU Slave)
www.adfweb.com?Product=HD67012 (Modbus RTU Master)
www.adfweb.com?Product=HD67014 (Modbus TCP Slave)
www.adfweb.com?Product=HD67015 (Modbus TCP Master)

Do you have an your customer protocol?

See the following links:

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

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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/ and search for the corresponding code on the page. Click on the proper “Document Code” and download the updates.

REVISION LIST:

Revision	Date	Author	Chapter	Description
1.000	11/12/2015	Ff	All	First released version

WARNING:

ADFweb.com reserves the right to change information in this manual about our product without warning.
ADFweb.com is not responsible for any error this manual may contain.

TRADEMARKS:

All trademarks mentioned in this document belong to their respective owners.

SECURITY ALERT:**GENERAL INFORMATION**

To ensure safe operation, the device must be operated according to the instructions in the manual. When using the device, legal and safety regulation are required for each individual application. 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 instruments can represent a potential hazard if they are inappropriately installed and operated by untrained personnel. These instructions refer to residual risks with the following symbol:

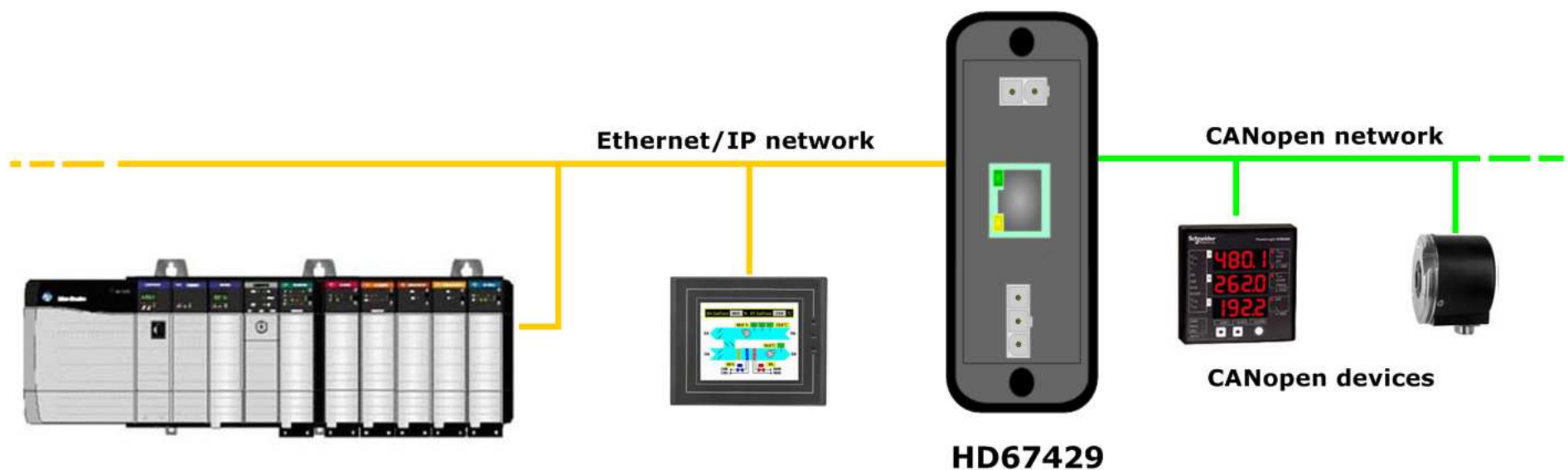


This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

CE CONFORMITY

The declaration is made by our company. You can send an email to support@adfweb.com or give us a call if you need it.

EXAMPLE OF CONNECTION:



CONNECTION SCHEME:



Figure 1a: Connection scheme for HD67429-E4x-xx

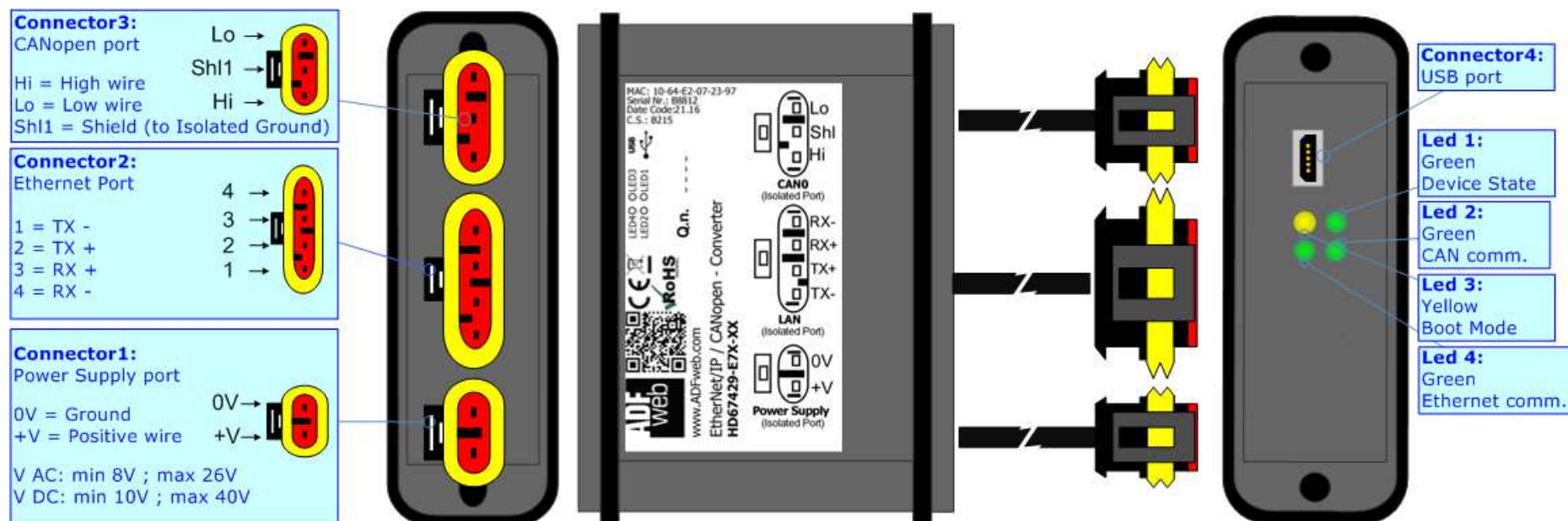


Figure 1b: Connection scheme for HD67429-E7x-xx

CHARACTERISTICS:

The “**HD67429**” series are rugged devices used to interface CANopen devices with EtherNet/IP network.

With its 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 (IP63).

All the four series have these characteristics:

- Triple 4kV isolation between Power Supply / EtherNet/IP / 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:

You need Compositor SW67429 software on your PC in order to perform the following:

- Define the parameter of Ethernet/IP line;
- Define the parameter of CANopen line;
- Determinate which Ethernet/IP byte transfer in CANopen and vice versa;
- Define SDO Server informations;
- Define SDO Client informations;
- Define PDO informations (RPDO/TPDO);
- Update the device.

POWER SUPPLY:

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

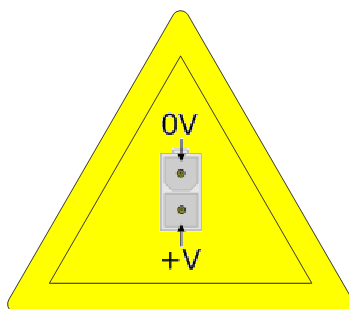
	VAC 		VDC 	
	Vmin	Vmax	Vmin	Vmax
HD67429-Exx-xx	8V	26V	10V	40V

Consumption at 24V DC:

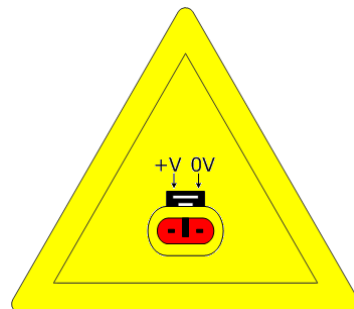
Device	W/VA
HD67429-Exx-xx	4



Caution: Not reverse the polarity power



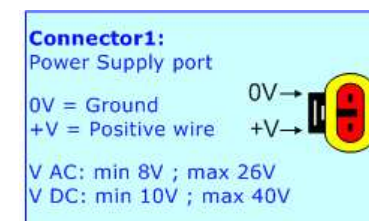
HD67429-E4x-xx



HD67429-E7x-xx



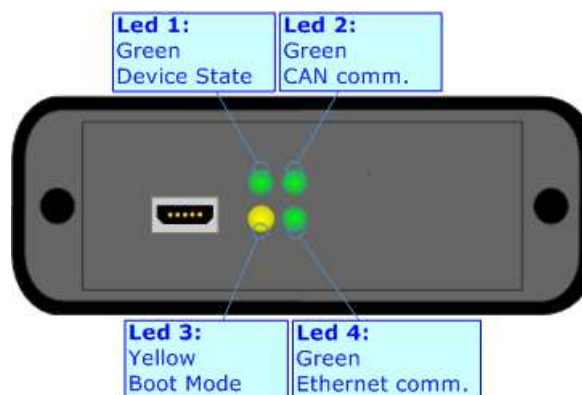
Note: It is possible to use also negative tensions. In this case the polarity must be inverted.



LEDS:

The device has got four LEDs that are used to give information of the functioning status.
The various meanings of the LEDs are described in the table below.

LED	Normal Mode	Boot Mode
1: Device state (green)	Blinks slowly (~1Hz)	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
2: CAN Communication (green)	Blinks when CANopen frames are received	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress
3: Boot Mode (yellow)	OFF	ON
4: Ethernet communication (green)	Blinks when EtherNet/IP communication is working	Blinks quickly: Boot state Blinks very slowly (~0.5Hz): update in progress



CANOPEN:

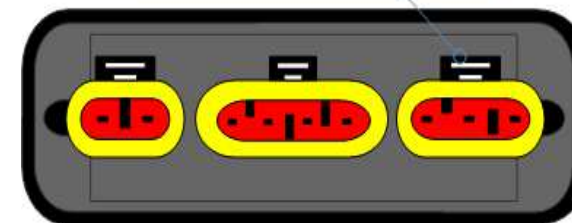
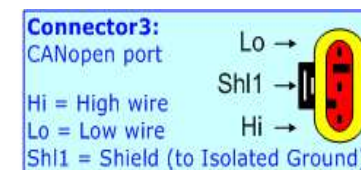
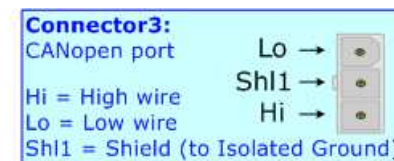
The connection of CANopen in the HD67429-E4x-xx device must be made with a 3way MiniFit Female connector. The pinout of Male Mini-Fit connector of the board is at right side of the page.

The connection of CANopen in the HD67429-E7x-xx 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 HD67429-Exx-xx is made internally of the device; when the order is performed. If the device have the CANopen terminated the code is the follow: HD67429-Exx-Yx; otherwise is this other: HD67429-Exx-Nx.

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

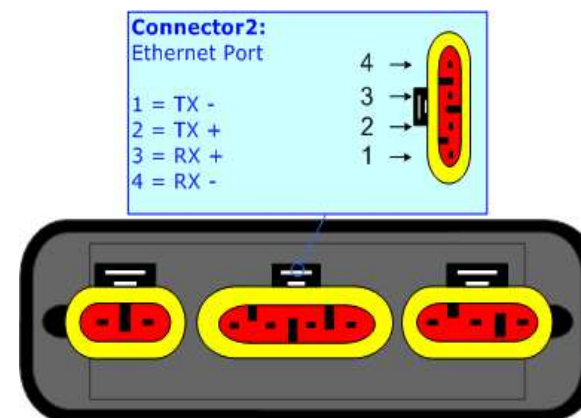


ETHERNET:

The connection of Ethernet in the HD67429 device must be made with at least a Category 5E cable. The maximum length of the cable should not exceed 100m. The cable has to conform to the T568 norms relative to connections in cat.5 up to 100 Mbps. To connect the device to an Hub/Switch is recommended the use of a straight cable, to connect the device to a PC/PLC/other is recommended the use of a cross cable.

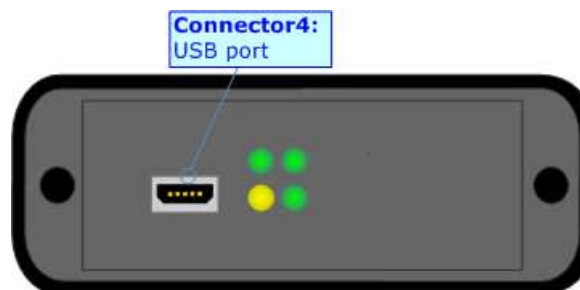
The connection of Ethernet in the HD67429-E4x-xx device must be made with RJ45 connector.

The connection of the Ethernet in the HD67429-E7x-xx 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.



USB:

The USB port is used to start the converter in Boot Mode. It is necessary to use a Micro USB type C cable.



USE OF COMPOSITOR SW67429:

To configure the Converter, use the available software that runs with Windows called SW67429. 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 (XP, Vista, Seven, 8, 10; 32/64bit).

When launching the SW67429, the window below appears (Fig. 2).



Note:

It is necessary to have installed .Net Framework 4.

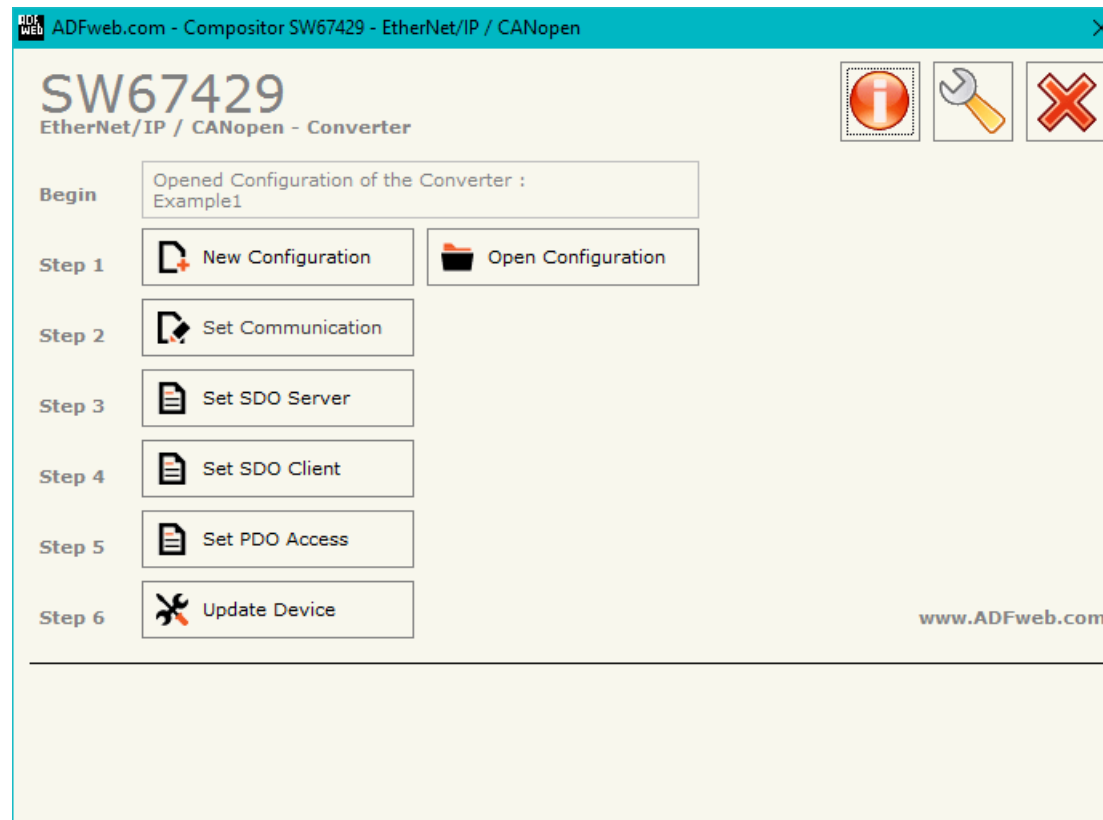
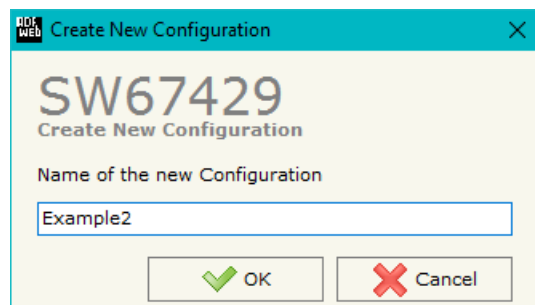


Figure 2: Main window for SW67429

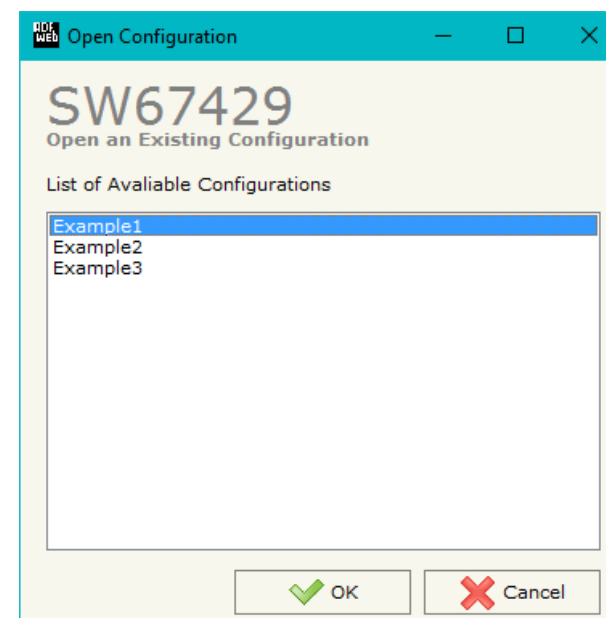
NEW CONFIGURATION / OPEN CONFIGURATION:

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




A device’s configuration can also be imported or exported:

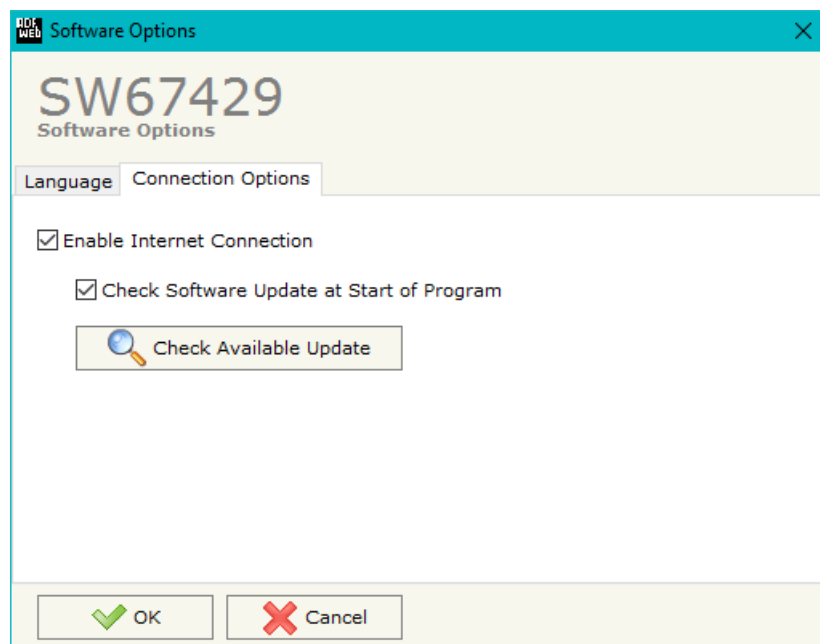
- To clone the configurations of a programmable “EtherNet/IP / CANopen - Converter” in order to configure another device in the same manner, it is necessary to maintain the folder and all its contents;
- To clone a project in order to obtain a different version of the project, it is sufficient to duplicate the project folder with another name and open the new folder with the button “**Open Configuration**”.



SOFTWARE OPTIONS:

By pressing the “**Settings**” () button 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 SW67429 checks automatically if there are updatings when it is launched.

SET COMMUNICATION:

This section define the fundamental communication parameters of two buses, CANopen and EtherNet/IP.

By Pressing the **"Set Communication"** button from the main window of SW67429 (Fig. 2) the window "Set Communication" appears (Fig. 3).

The meaning of the fields of "EtherNet/IP" are:

- In the field **"IP ADDRESS"** insert the IP address that you want to give to the Converter;
- In the field **"SUBNET Mask"** insert the SubNet Mask;
- In the field **"GATEWAY"** insert the default gateway that you want to use. This feature can be enabled or disabled pressing the Check Box field. This feature is used for going out of the net;
- In the field **"Port"** insert the number of port (fixed to 44818);
- In the field **"Number Byte IN"** the number of byte from the Ethernet/IP to the Converter is defined (at maximum it is possible to use 496 byte);
- In the field **"Number Byte OUT"** the number of byte from the Converter to the Ethernet/IP is defined (at maximum it is possible to use 496 byte).

The means of the fields for the "CANopen" section are:

- In the field **"Device ID"** the address for the CANopen side is defined;
- In the field **"Baudrate"** the baudrate for the CANopen is defined;
- In the field **"Set Operational State at Start-up"** the state of the CANopen is defined. I.e. if it is checked the board starts in Operational State, else it starts in Preoperational;
- In the field **"Network Start at Start-up"** the state of the network CANopen is defined. I.e. if it is checked the board sends a command to set the Operational State of all the devices present in the network;
- In the field **"Delay"** the delay before sending the network command for the CANopen is defined;
- If the field **"TimeOut SDO (1/10 ms)"** insert a time. It is the maximum time that the device attends for the answer from the Slave interrogated;
- If the field **"Enable Sync (ms)"** is checked and a time is defined, the converter can send cyclically a SYNC message to the CANopen network.

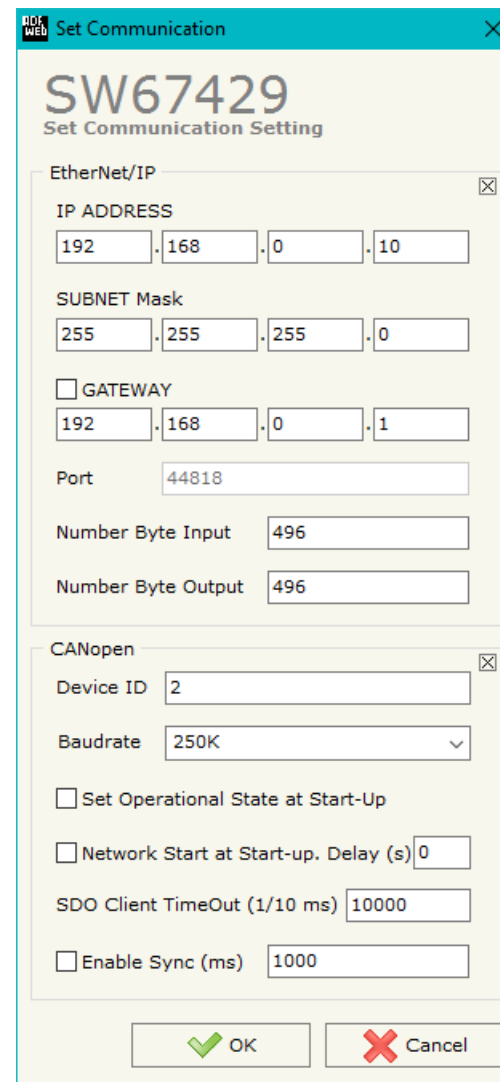


Figure 3: "Set Communication" window

SET SDO SERVER:

By pressing the **"Set SDO Server"** button from the main window for SW67429 (Fig. 2) the window "Set SDO Server Access" appears (Fig. 4).

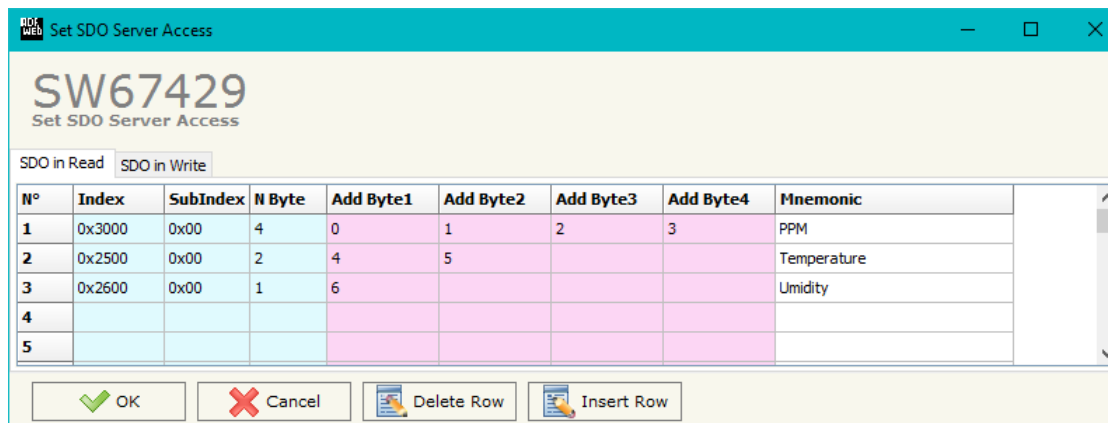
This window is made to create the SDO in read or write in the CANopen side, and to indicate which byte are associated to these SDOs.

It is divided in two parts, the "SDO in read" and the "SDO in Write".

The first part is used to read, using the SDO, the data arrived from the EtherNet/IP devices. The second is used to write, using SDO, the data that will be sent to the EtherNet/IP devices.

The data of the columns have the following meanings:

- In the field **"Index"** the address of the SDO is defined;
- In the field **"SubIndex"** the second address of the SDO is defined;
- If the field **"N Byte"** the dimension of the SDO is defined (it can be 1, 2 or 4);
- In the field **"Address Byte1"** insert the address of the EtherNet/IP arrays where read/write first byte of the SDO;
- In the field **"Address Byte2"** insert the address of the EtherNet/IP arrays where read/write second byte of the SDO (only if N Byte is 2 or 4);
- In the field **"Address Byte3"** insert the address of the EtherNet/IP arrays where read/write third byte of the SDO (only if N Byte is 4);
- In the field **"Address Byte4"** insert the address of the EtherNet/IP arrays where read/write fourth byte of the SDO (only if N Byte is 4);
- In the field **"Mnemonic"** the description for the SDO is defined.



N°	Index	SubIndex	N Byte	Add Byte1	Add Byte2	Add Byte3	Add Byte4	Mnemonic
1	0x3000	0x00	4	0	1	2	3	PPM
2	0x2500	0x00	2	4	5			Temperature
3	0x2600	0x00	1	6				Umidity
4								
5								

Figure 4: "Set SDO Server Access" window

SET SDO CLIENT:

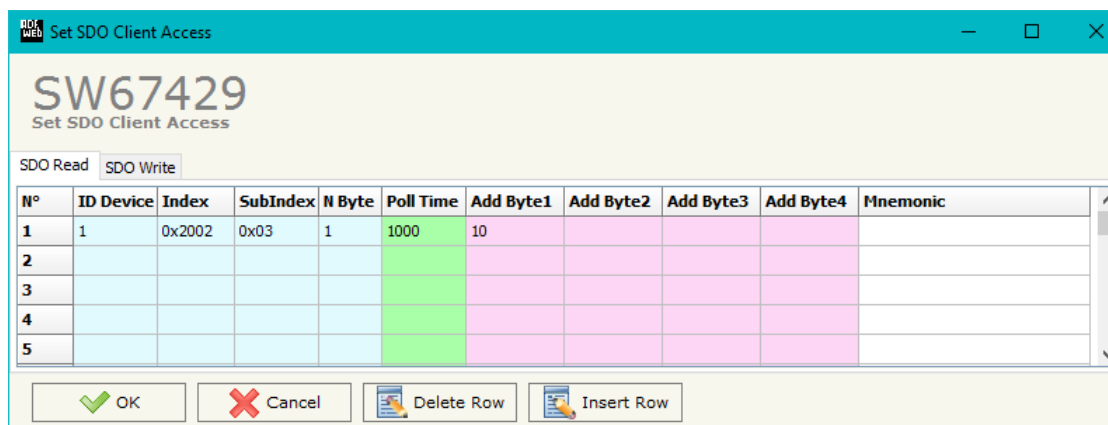
By pressing the **"Set SDO Client"** button from the main window for SW67429 (Fig. 2) the window "Set SDO Client Access" appears (Fig. 5a and 5b).

With the SDO Client the HD67429 Gateway can read and/or write the data from other devices connected in the network CANopen.

It is divided in two parts, the "SDO Read" and the "SDO Write". The first part is used to read, using the SDO, the data in another device and then put them in the EtherNet/IP array. The second part is used to write, using the SDO, the data present in the EtherNet/IP array to others CANopen devices.

The data of the columns in the "SDO Read" have the following meanings:

- In the field **"Device ID"** insert the ID of the device to read;
- In the field **"Index"** the address for the SDO is defined;
- In the field **"SubIndex"** the second address for the SDO is defined;
- In the field **"N Byte"** the dimension of the SDO is defined (it can be 1, 2, or 4);
- In the field **"Poll Time"** insert the cyclic time to make this request;
- In the field **"Address Byte1"** the address of the EtherNet/IP array where coping the first byte of the SDO read is defined;
- In the field **"Address Byte2"** the address of the EtherNet/IP array where coping the second byte of the SDO read is defined (only if N Byte is 2 or 4);
- In the field **"Address Byte3"** the address of the EtherNet/IP array where coping the third byte of the SDO read is defined (only if N Byte is 4);
- In the field **"Address Byte4"** the address of the EtherNet/IP array where coping the fourth byte of the SDO read is defined (only if N Byte is 4);
- In the field **"Mnemonic"** the description for the SDO is defined.

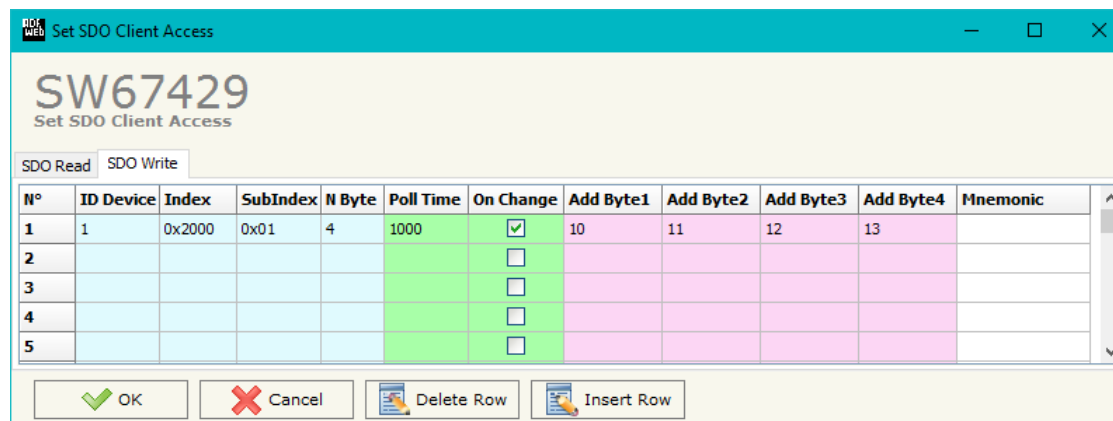


N°	ID Device	Index	SubIndex	N Byte	Poll Time	Add Byte1	Add Byte2	Add Byte3	Add Byte4	Mnemonic
1	1	0x2002	0x03	1	1000	10				
2										
3										
4										
5										

Figure 5a: "Set SDO Client Access – SDO Read" window

The data of the columns in the "SDO Write" have the following meanings:

- In the field "**Device ID**" insert the ID of the device to write;
- In the field "**Index**" the address for the SDO is defined;
- In the field "**SubIndex**" the second address for the SDO is defined;
- In the field "**N Byte**" the dimension of the SDO is defined (it can be 1, 2, or 4);
- In the field "**Poll Time**" insert the cyclic time to make this request;
- If the field "**On Change**" is checked, the gateway sends the Write SDO request when the data change the value;
- In the field "**Address Byte1**" the address of the EtherNet/IP array where reading the first byte of the SDO write is defined;
- In the field "**Address Byte2**" the address of the EtherNet/IP array where reading the second byte of the SDO write is defined (only if N Byte is 2 or 4);
- In the field "**Address Byte3**" the address of the EtherNet/IP array where reading the third byte of the SDO write is defined (only if N Byte is 4);
- In the field "**Address Byte4**" the address of the EtherNet/IP array where reading the fourth byte of the SDO write is defined (only if N Byte is 4);
- In the field "**Mnemonic**" the description for the SDO is defined.



N°	ID Device	Index	SubIndex	N Byte	Poll Time	On Change	Add Byte1	Add Byte2	Add Byte3	Add Byte4	Mnemonic
1	1	0x2000	0x01	4	1000	<input checked="" type="checkbox"/>	10	11	12	13	
2						<input type="checkbox"/>					
3						<input type="checkbox"/>					
4						<input type="checkbox"/>					
5						<input type="checkbox"/>					

Figure 5b: "Set SDO Client Access – SDO Write" window

SET PDO ACCESS:

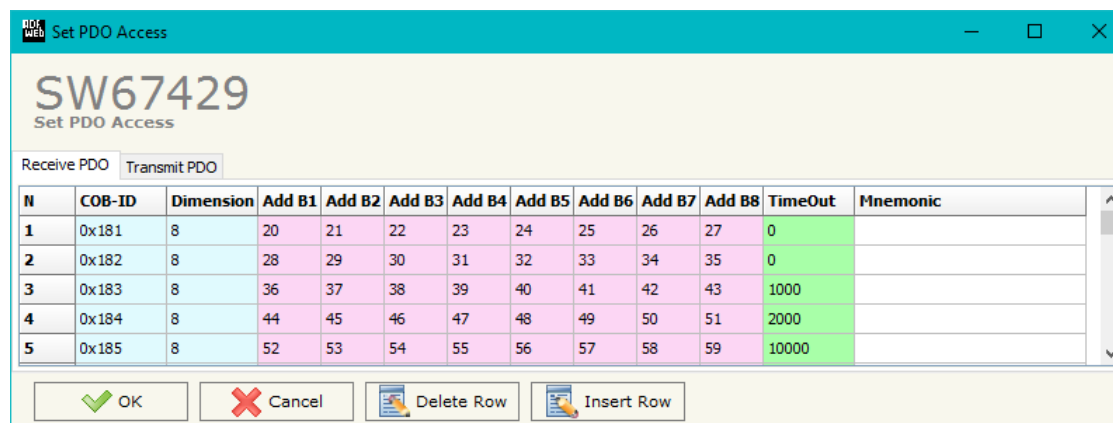
By pressing the "Set PDO Access" button from the main window for SW67429 (Fig. 2) the window "Set PDO Access" appears (Fig. 6a and 6b).

This window is made to create the Receive and the Transmit PDO in the CANopen side, and to indicate which bytes are associated to these PDO.

It is divided in two parts, the "Receive PDO" and the "Transmit PDO". The first part is used to receive PDO in the CANopen network and copy the data in the EtherNet/IP array. The second part is used to transmit PDO in the CANopen network with the data of EtherNet/IP array.

The data of the columns in the "Receive PDO" have the following meanings:

- In the Field "**Cob-ID**" the address for the PDO is defined;
- In the Field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8);
- In the Field "**Add B1**" the first byte where the data will be saved in the EtherNet/IP array is defined;
- In the Field "**Add B2**" the second byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 1);
- In the Field "**Add B3**" the third byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 2);
- In the Field "**Add B4**" the fourth byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 3);
- In the Field "**Add B5**" the fifth byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 4);
- In the Field "**Add B6**" the sixth byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 5);
- In the Field "**Add B7**" the seventh byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 6);
- In the Field "**Add B8**" the eighth byte where the data will be saved in the EtherNet/IP array is defined (only if **Dimension** > 7);
- The field "**TimeOut**" is used for put at zero the data into EtherNet/IP if the PDO doesn't arrive with a frequency less than the time expressed in the field. If the value in the field is 0, it means that you don't want to use this feature, and so the value is never deleted;
- In the field "**Mnemonic**" the description for the PDO is defined.

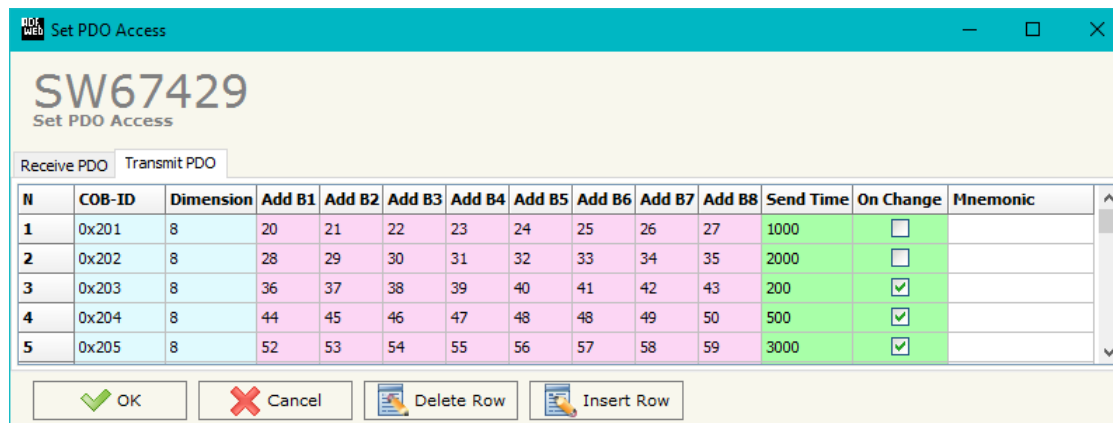


N	COB-ID	Dimension	Add B1	Add B2	Add B3	Add B4	Add B5	Add B6	Add B7	Add B8	TimeOut	Mnemonic
1	0x181	8	20	21	22	23	24	25	26	27	0	
2	0x182	8	28	29	30	31	32	33	34	35	0	
3	0x183	8	36	37	38	39	40	41	42	43	1000	
4	0x184	8	44	45	46	47	48	49	50	51	2000	
5	0x185	8	52	53	54	55	56	57	58	59	10000	

Figure 6a: "Set PDO Access – Receive PDO" window

The data of the columns in the "Transmit PDO" have the following meanings:

- In the Field "**Cob-ID**" the address for the PDO is defined;
- In the Field "**Dimension**" the dimension of the PDO is defined (it can be between 1 and 8);
- In the Field "**Add B1**" the first byte where the data will be loaded in the EtherNet/IP array is defined;
- In the Field "**Add B2**" the second byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 1);
- In the Field "**Add B3**" the third byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 2);
- In the Field "**Add B4**" the fourth byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 3);
- In the Field "**Add B5**" the fifth byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 4);
- In the Field "**Add B6**" the sixth byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 5);
- In the Field "**Add B7**" the seventh byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 6);
- In the Field "**Add B8**" the eighth byte where the data will be loaded in the EtherNet/IP array is defined (only if **Dimension** > 7);
- In the Field "**Send Time**" insert the interval used to send the PDO. The time is in milliseconds;
- If the field "**On Change**" is checked, the gateway send the Transmit PDO when the data change the value;
- In the field "**Mnemonic**" the description for the PDO is defined.



N	COB-ID	Dimension	Add B1	Add B2	Add B3	Add B4	Add B5	Add B6	Add B7	Add B8	Send Time	On Change	Mnemonic
1	0x201	8	20	21	22	23	24	25	26	27	1000	<input type="checkbox"/>	
2	0x202	8	28	29	30	31	32	33	34	35	2000	<input type="checkbox"/>	
3	0x203	8	36	37	38	39	40	41	42	43	200	<input checked="" type="checkbox"/>	
4	0x204	8	44	45	46	47	48	48	49	50	500	<input checked="" type="checkbox"/>	
5	0x205	8	52	53	54	55	56	57	58	59	3000	<input checked="" type="checkbox"/>	

Figure 6b: "Set PDO Access – Transmit PDO" window

UPDATE DEVICE:

By pressing the **"Update Device"** button, it is possible to load the created Configuration into the device; and also the Firmware, if necessary.

If you don't know the actual IP address of the device you have to use this procedure:

- Connect the USB cable;
- Connect the Ethernet cable;
- Turn ON the converter;
- Insert the IP **"192.168.2.205"**;
- Press the **"Ping"** button, "Device Found! must appear";
- Press the **"Next"** button;
- Select which operations you want to do;
- Press the **"Execute update firmware"** button to start the upload;
- When all the operations are "OK", the updating is done;
- Remove the USB cable;

At this point the configuration/firmware on the device is correctly updated.

If you know the actual IP address of the device, you have to use this procedure:

- Turn on the Device with the Ethernet cable inserted;
- Insert the actual IP of the Converter;
- Press the **"Ping"** button, must appear "Device Found!";
- Press the **"Next"** button;
- Select which operations you want to do;
- Press the **"Execute update firmware"** button to start the upload;
- When all the operations are "OK" the device automatically goes at Normal Mode.



Note:

When you install a new version of the software, if it is the first time it is better you do the update of the Firmware in the HD67429 device.

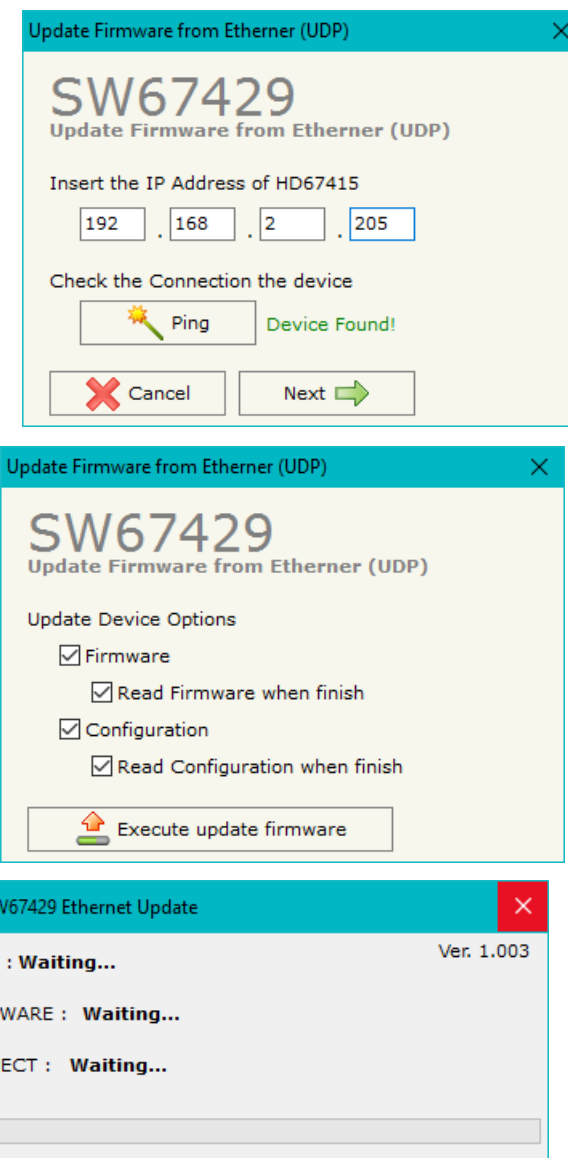


Figure 7: "Update Device" windows

**Note:**

When you receive the device, for the first time, you also have to update the Firmware in the HD67429 device.

**Warning:**

If Fig. 8 appears when you try to do the Update try these points before seeking assistance:

- ➔ Try to repeat the operations for the updating;
- ➔ Try with another PC;
- ➔ Try to restart the PC;
- ➔ Check the LAN settings;
- ➔ If you are using the program inside a Virtual Machine, try to use in the main Operating System;
- ➔ If you are using Windows Seven, Vista, 8 or 10 make sure that you have the administrator privileges;
- ➔ In case you have to program more than one device, using the "UDP Update", you have to cancel the ARP table every time you connect a new device on Ethernet. For do this you have to launch the "Command Prompt" and write the command "arp -d". Pay attention that with Windows Vista, Seven, 8, 10 you have to launch the "Command Prompt" with Administrator Rights;
- ➔ Pay attention at Firewall lock.

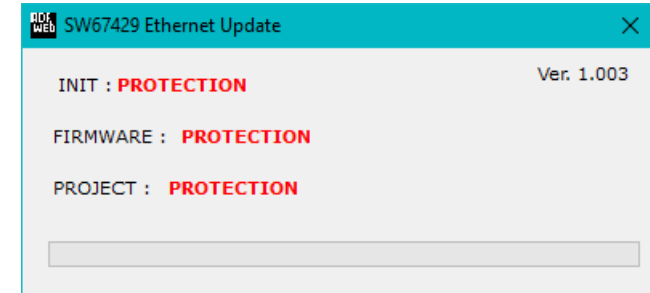


Figure 8: "Protection" window

In the case of HD67429 you have to use the software "SW67429": www.adfweb.com/download/filefold/SW67429.zip.

SENDING ASYNCHRONOUS CAN MESSAGES FROM ETHERNET

The converter allows to send asynchronous CAN messages (for example a NMT message) directly from Ethernet to CANopen. The Ethernet message to send to the converter must have this structure:

Byte Number	Description
$1 \div 4$	COB-ID of the CAN message to send
$5 \div (4+n)$	Data of the CAN message

n=Number of Byte to Write

To choose the type of CAN (2.0A or 2.0B) of the frame that the converter will send, it is necessary to put the most significant bit of the byte 1 to:

- 0: CAN 2.0A;
- 1: CAN 2.0B.

To send the Ethernet frame to the converter, there are two different ways:

- Using the EtherNet/IP;
- Using the tunneling port of the converter.

MODE 1: ETHERNET/IP

In this case, to send a CAN message from Ethernet to CANopen, it is necessary to use the assembly 103 (0x66) of the EtherNet/IP. The messages to send will have these parameters:

- Service: Set Attribute Single;
- Class: 4 (0x04);
- Instance: 103 (0x66);
- Attribute: 3 (0x03).

Example:

We want to send the NMT message "Start" to the CANopen device 5. The Ethernet frame will have these characteristics:
CAN Type=2.0A; Frame: Cob_ID=0x0000; Data=0x0105.

So the string of hexadecimal numbers to be send to the converter is: [00][00][00][00][01][05].

MODE 2: TUNNELING PORT

In this case, to send a CAN message from Ethernet to CANopen, it is necessary to send an UDP message to the Tunneling port of the converter (by default is 2000).

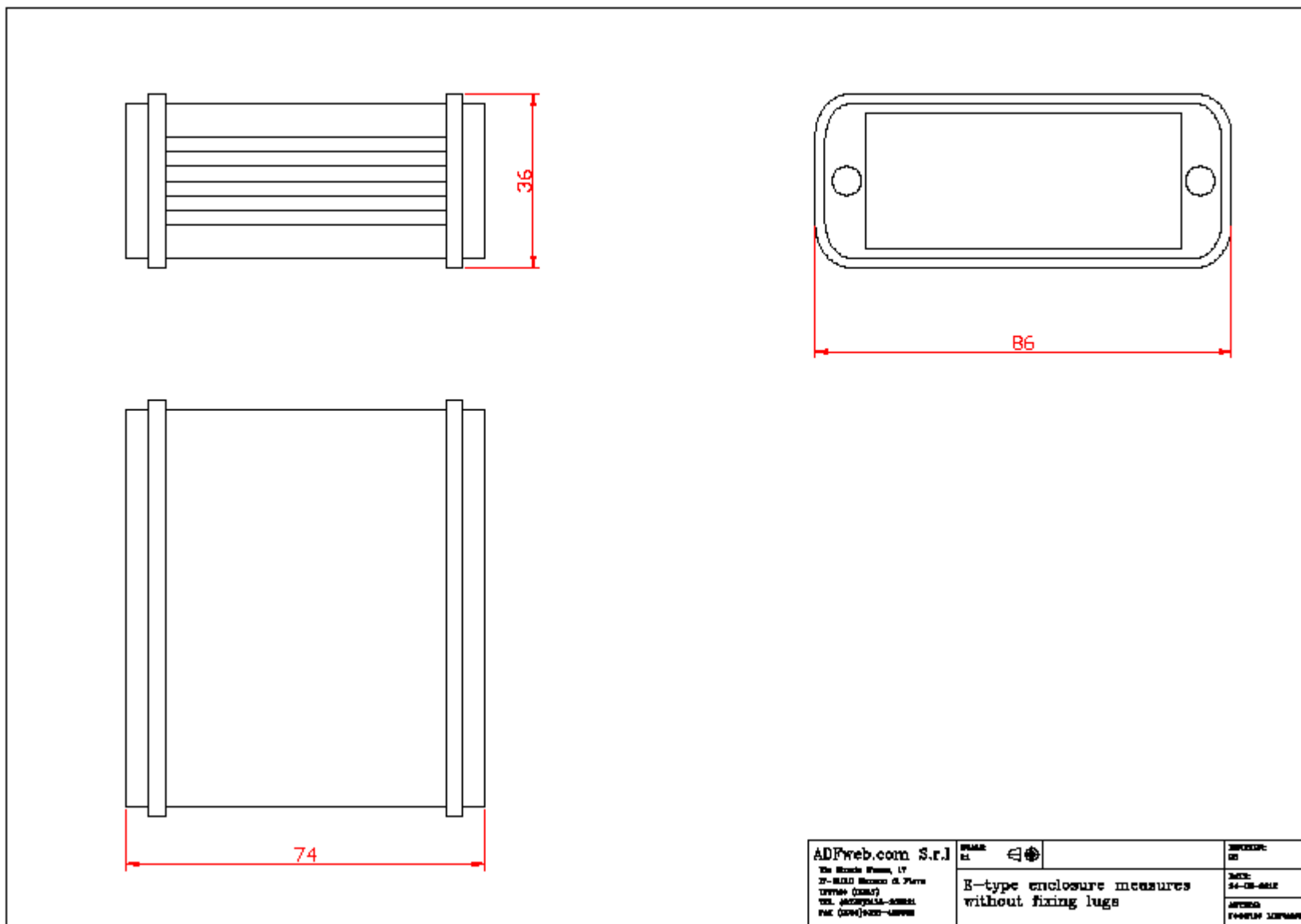
Example:

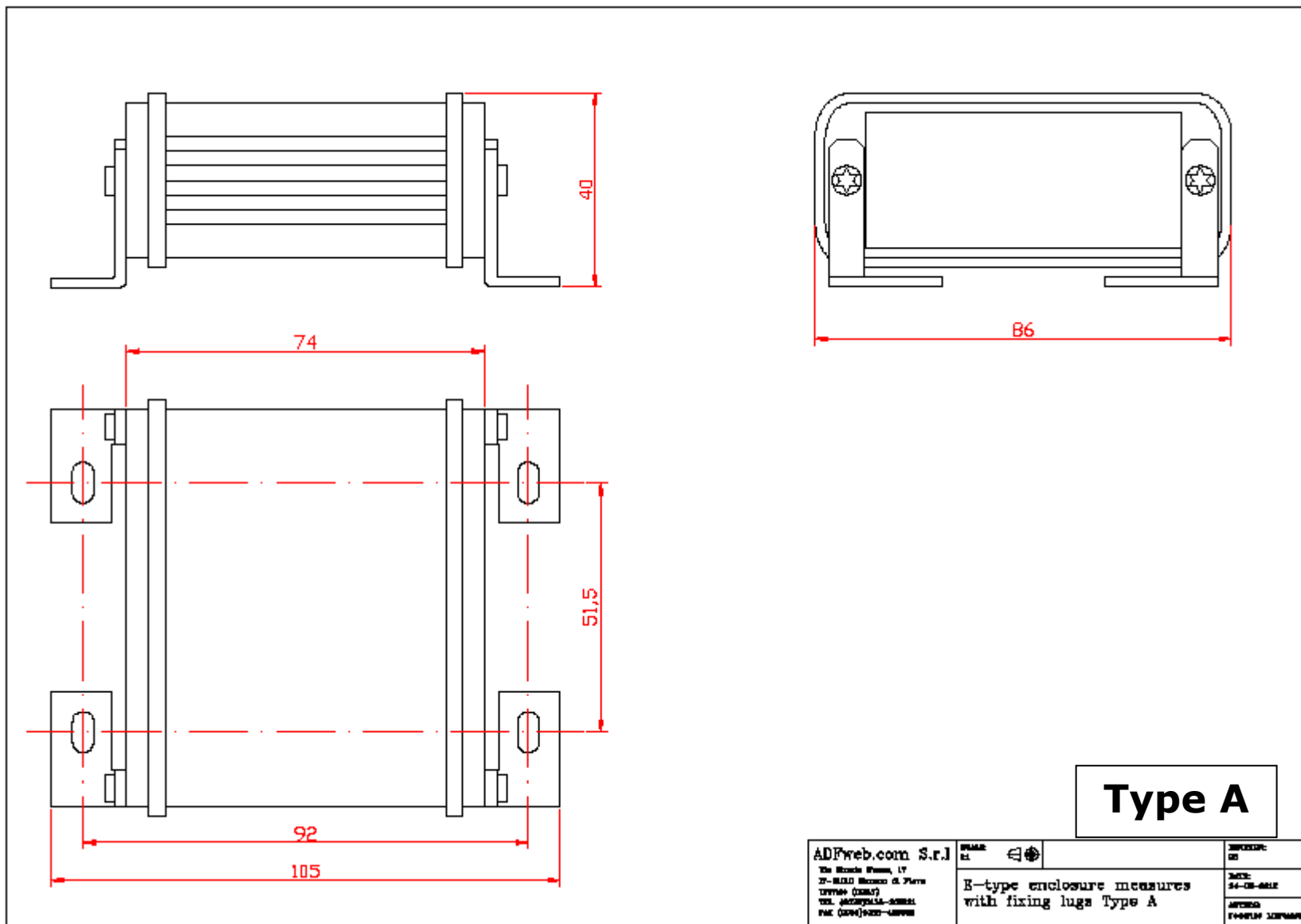
We want to send the NMT message "Start" to the CANopen device 5. The Ethernet frame will have these characteristics:

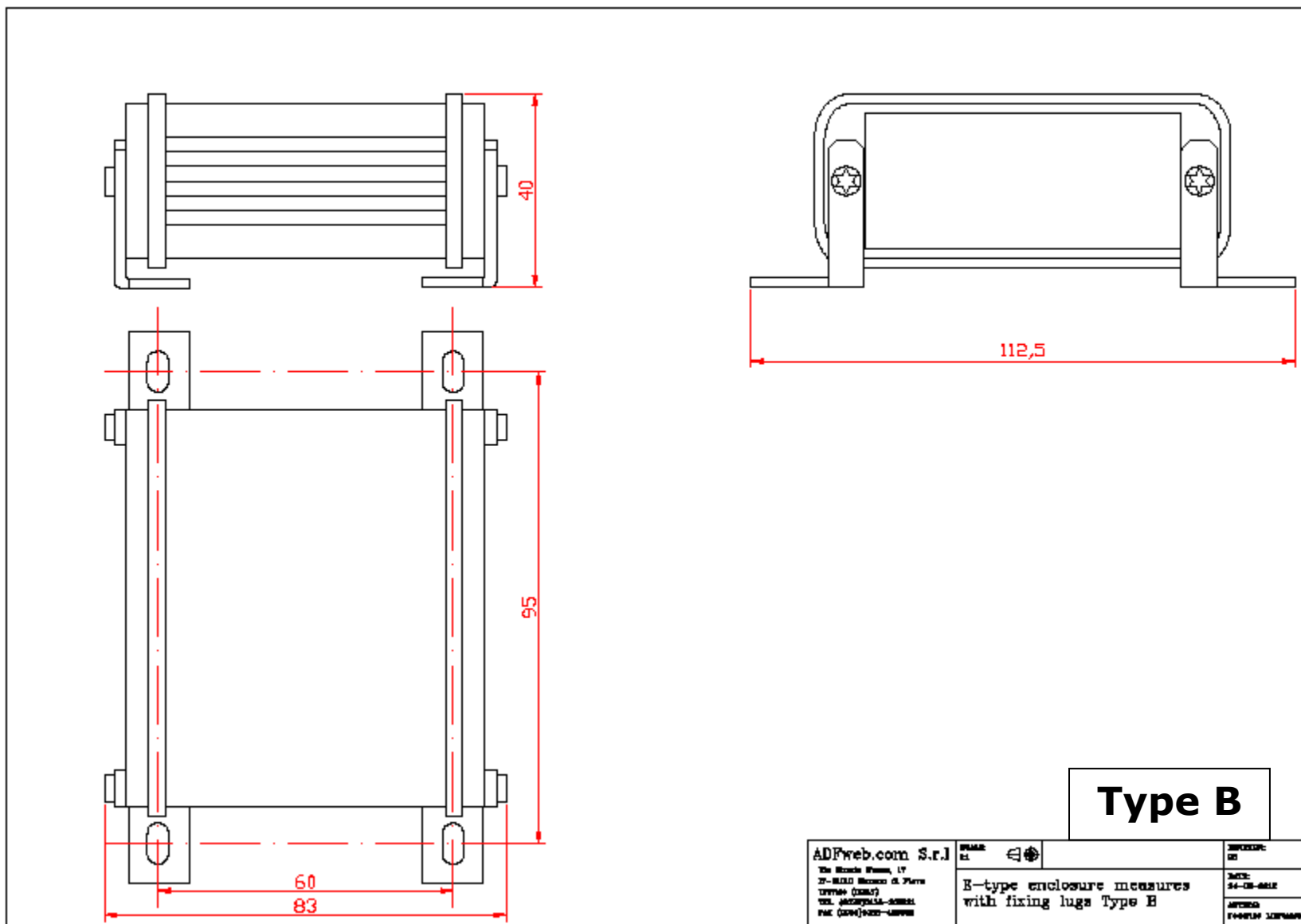
CAN Type=2.0A; Frame: Cob_ID=0x0000; Data=0x0105.

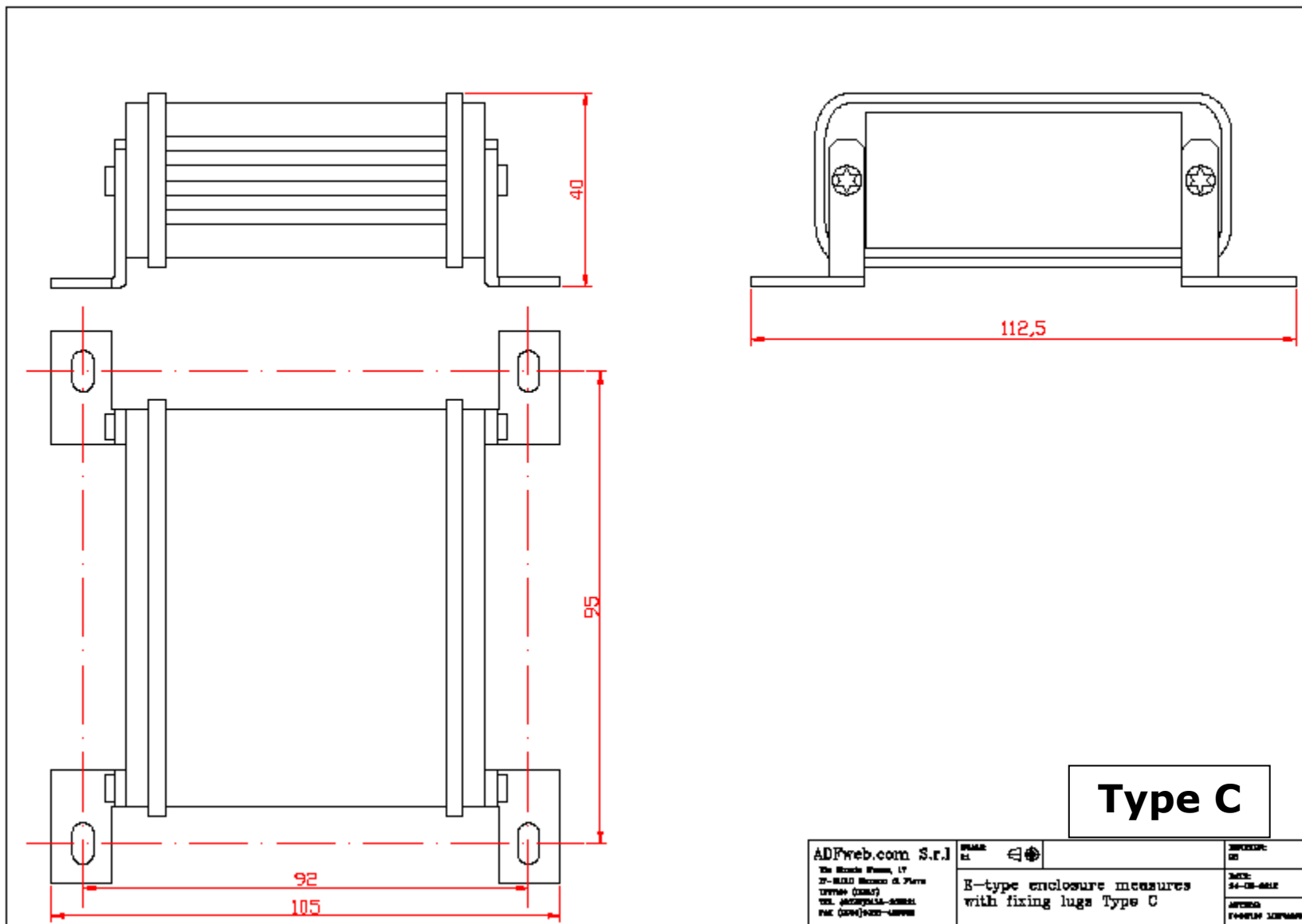
So the string of hexadecimal numbers to be send to the converter is: [00][00][00][00][01][05].

MECHANICAL DIMENSIONS:





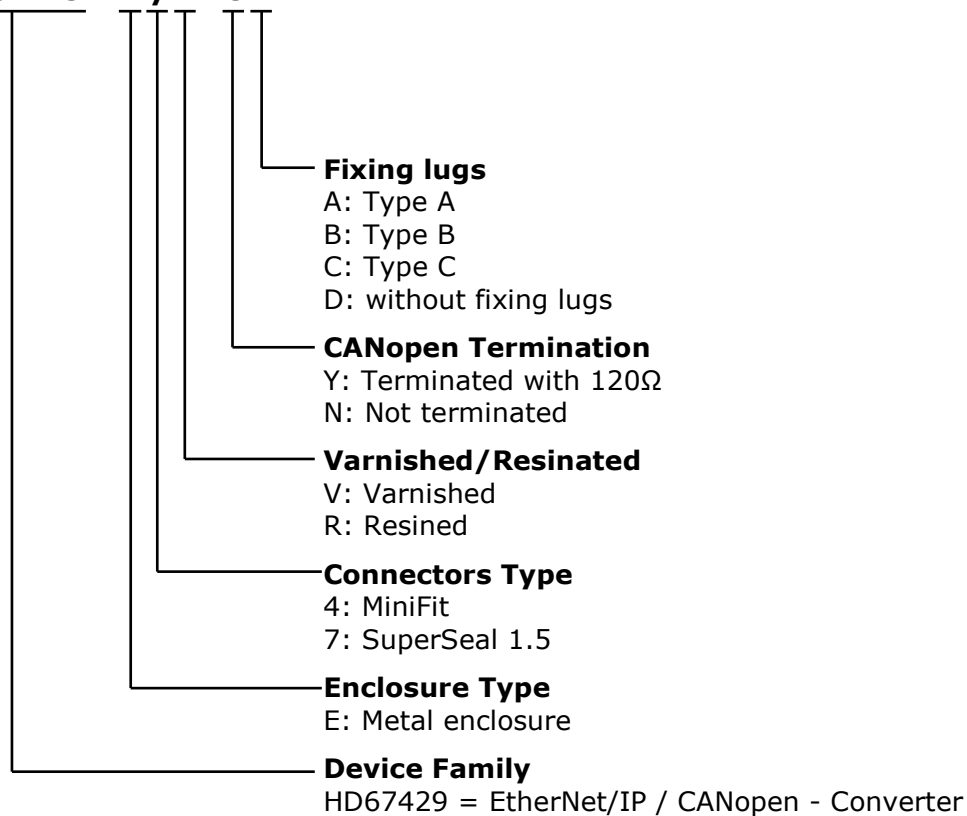




ORDERING INFORMATION:

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

HD67429 - E y z - s f



ACCESSORIES:

- | | | |
|----------------------------|---|---|
| Order Code: AC34001 | - | Rail DIN - Power Supply 220/240V AC 50/60Hz – 12 V AC |
| Order Code: AC34002 | - | Rail DIN - Power Supply 110V AC 50/60Hz – 12 V AC |
| Order Code: AC67410 | - | Accessory Automotive Devices - Support for rail DIN |

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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 impact of 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. 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:

- 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.
- 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.



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