Industrial Electronic Devices

User Manual

Revision 1.201
English

J1939 / Modbus TCP Master – Converter

(Order Code: HD67433)

For Website information:
www.adfweb.com?Product=HD67433

For Price information:
www.adfweb.com?Price=HD67433

Benefits and Main Features:

⊕ Very easy to configure

⊕ Wide supply input range

⊕ Isolation between two buses

⊕ Industrial temperature range:

⊕ -40°C / 105°C (-40°F / 221°F)

User Manual

HD67433

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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INDEX:

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- ♦ Related to the product you own

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REVISION LIST:

Revision	Date	Author	Chapter	Description
1.001	17/09/2013	Ff	All	Revision
1.100	10/02/2015	Ff	All	Added DM1 & new interface
1.200	09/01/2017	Ff	All	New hardware version
1.201	13/03/2017	Ff	All	Revision

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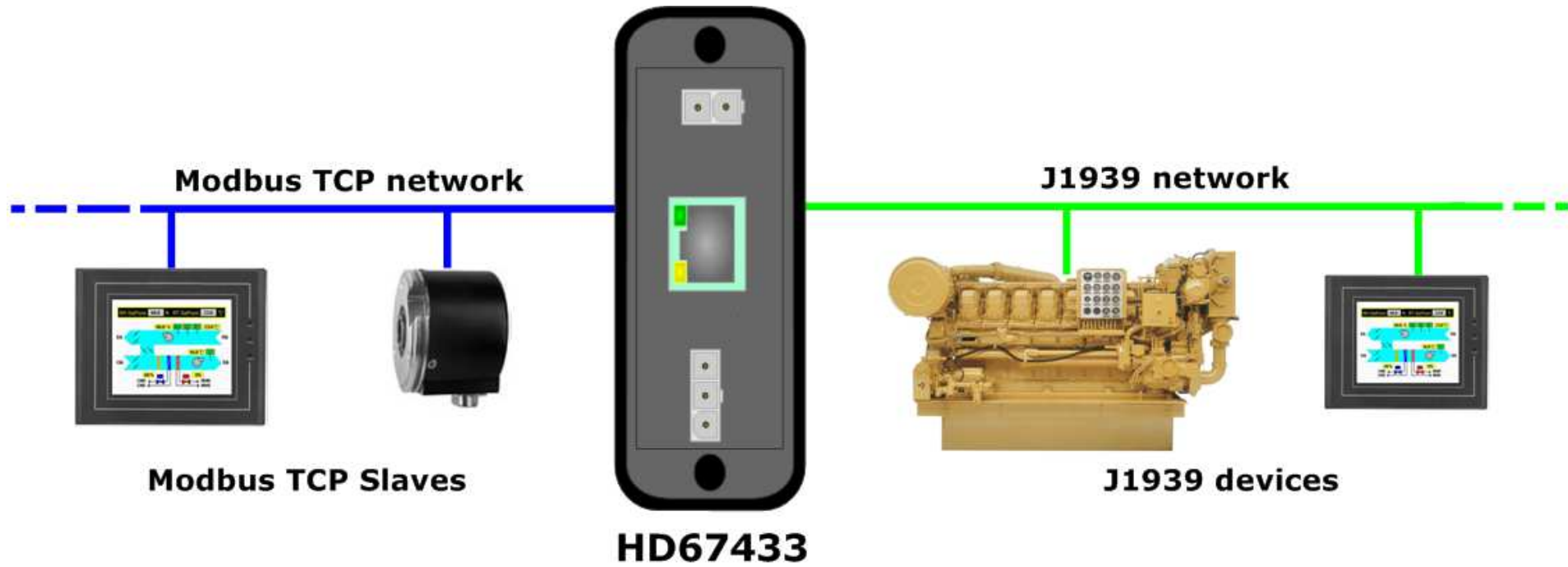
This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

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.
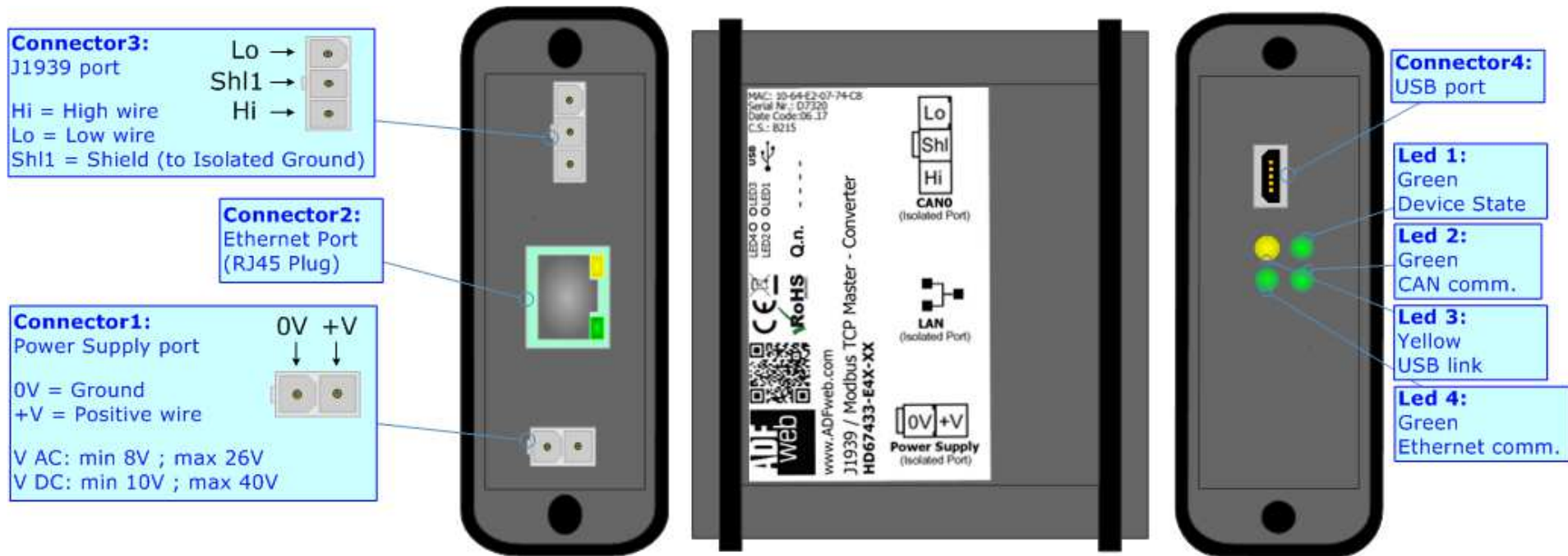
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EXAMPLE OF CONNECTION:

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CONNECTION SCHEME:

Connector3:
J1939 port

Lo →
Shl1 →
Hi →

Hi = High wire
Lo = Low wire
Shl1 = Shield (to Isolated Ground)

Connector2:
Ethernet Port
(RJ45 Plug)

Connector1:
Power Supply port

0V +V
↓   ↓

0V = Ground
+V = Positive wire

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

Connector4:
USB port

Led 1:
Green
Device State

Led 2:
Green
CAN comm.

Led 3:
Yellow
USB link

Led 4:
Green
Ethernet comm.

Figure 1a: Connection scheme for HD67433-E4x-xx

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Connector3:
J1939 port

Lo →
Shl1 →
Hi →

Hi = High wire
Lo = Low wire
Shl1 = Shield (to Isolated Ground)

Connector2:
Ethernet Port

4 →
3 →
2 →
1 →

1 = TX -
2 = TX +
3 = RX +
4 = RX -

Connector1:
Power Supply port

0V →
+V →

0V = Ground
+V = Positive wire

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

MAC: 10-64-E2-07-86-A3
Serial Nr.: E1891
Date Code:06 .17
C.S.: B215

CAN0
(Isolated Port)

Lo
Shl
Hi

RX-
RX+
TX+
TX-

LAN
(Isolated Port)

0V
+V

Power Supply
(Isolated Port)

J1939 / Modbus TCP Master - Converter
HD67433-E7X-XX
www.ADFweb.com

Connector4:
USB port

Led 1:
Green
Device State

Led 2:
Green
CAN comm.

Led 3:
Yellow
USB link

Led 4:
Green
Ethernet comm.

Figure 1b: Connection scheme for HD67433-E7x-xx

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CHARACTERISTICS:

The "HD67433" series are rugged devices used to interface J1939 devices with Modbus TCP 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.

All the four series have these characteristics:

- Triple 4kV isolation between Power Supply / Ethernet / J1939;
- 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 SW67433 software on your PC in order to perform the following:

- Define which J1939 frames of the J1939 are readable by Modbus;
- Define which J1939 frames of the J1939 are writeable by Modbus;
- Define which alarms (DM1) will be managed with Modbus;
- Update the device.

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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**
HD67433-Exx-xx	**8V**	**26V**	**10V**	**40V**

Consumption at 24V DC:

Device	W/VA
HD67433-Exx-xx	4

⚠️ **Caution: Not reverse the polarity power**

HD67433-E4x-xx   HD67433-E7x-xx
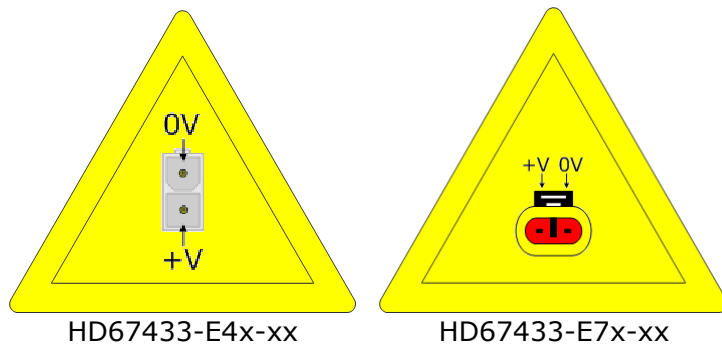
Note: It is possible to use also negative tensions. In this case the polarity must be inverted.

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

0V = Ground
+V = Positive wire

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

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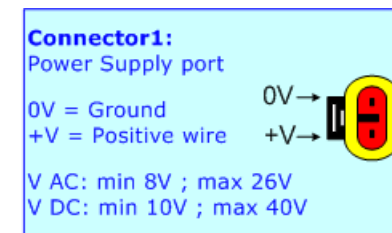
LEDS:

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 J1939 frames are received	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
3: USB link (yellow)	**ON**: USB cable inserted **OFF**: USB cable not inserted	**ON**: USB cable inserted **OFF**: USB cable not inserted
4: Ethernet communication (green)	Blinks when a Modbus TCP response is received	**Blinks quickly:** Boot state **Blinks very slowly (~0.5Hz):** update in progress
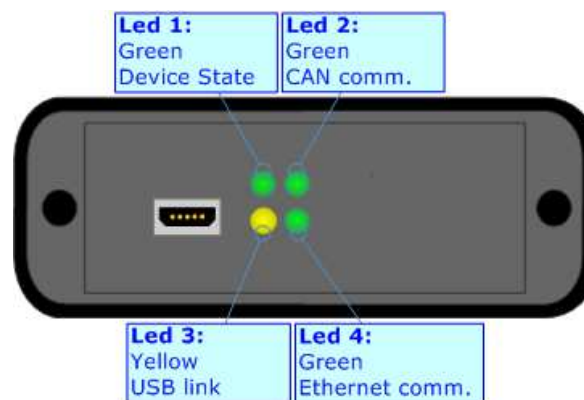
J1939:

The connection of J1939 in the HD67433-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 J1939 in the HD67433-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 J1939 line, with a 120Ω resistor, in the HD67433-Exx-xx is made internally of the device; when the order is performed. If the device have the J1939 terminated the code is the follow: HD67433-Exx-Yx; otherwise is this other: HD67433-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

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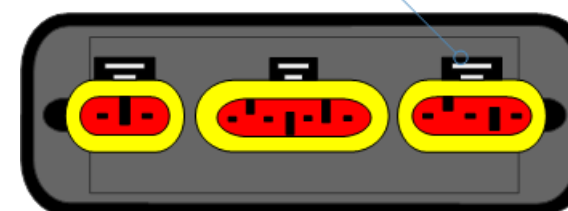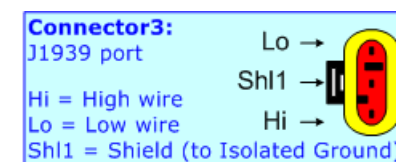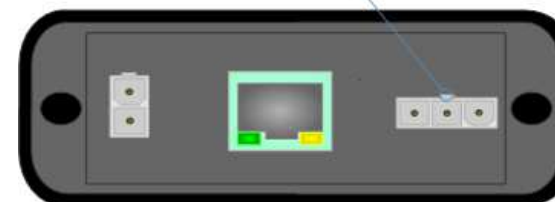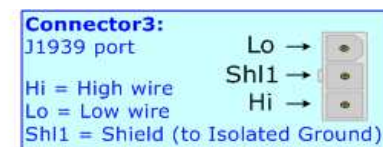
ETHERNET:

The connection of Ethernet in the HD67433 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 HD67433-E4x-xx device must be made with RJ45 connector.

The connection of the Ethernet in the HD67433-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.

Connector2:
Ethernet Port

4 →
3 →
2 →
1 →

1 = TX -
2 = TX +
3 = RX +
4 = RX -
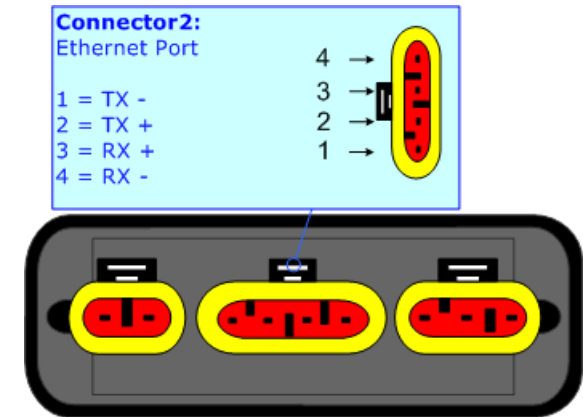
USB:

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

Connector4:
USB port

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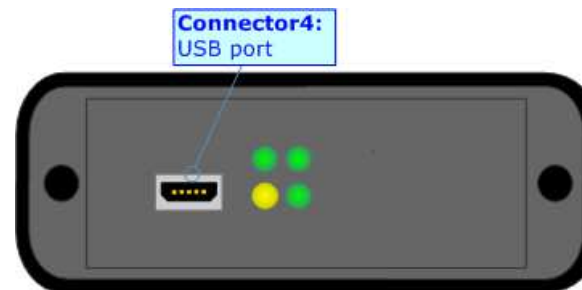
USE OF COMPOSITOR SW67433:

To configure the Converter, use the available software that runs with Windows called SW67433. 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 SW67433, the window below appears (Fig. 2).

Note:
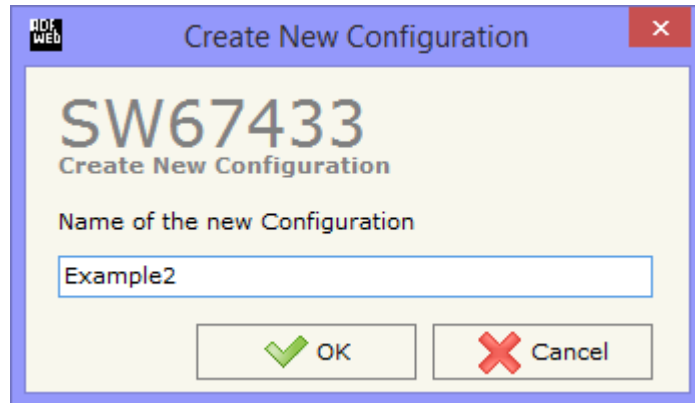It is necessary to have installed .Net Framework 4.
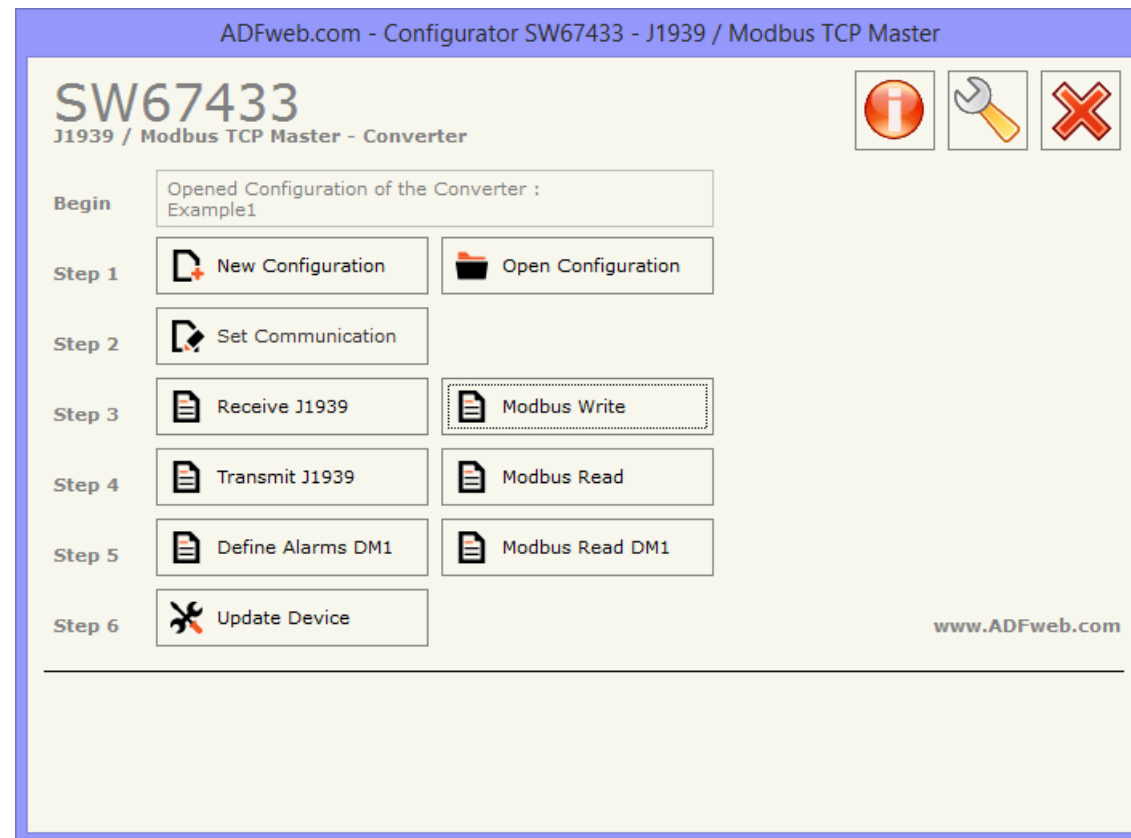

Figure 2: Main window for SW67433

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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 "J1939 / Modbus TCP 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**".

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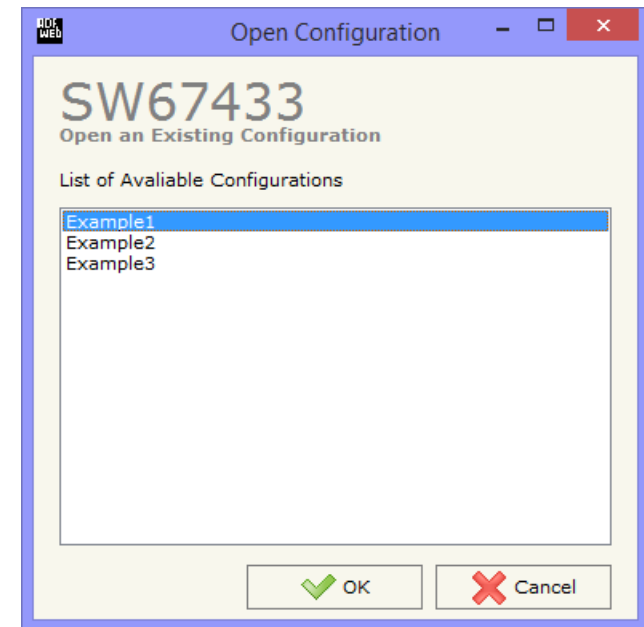
SOFTWARE OPTIONS:

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.
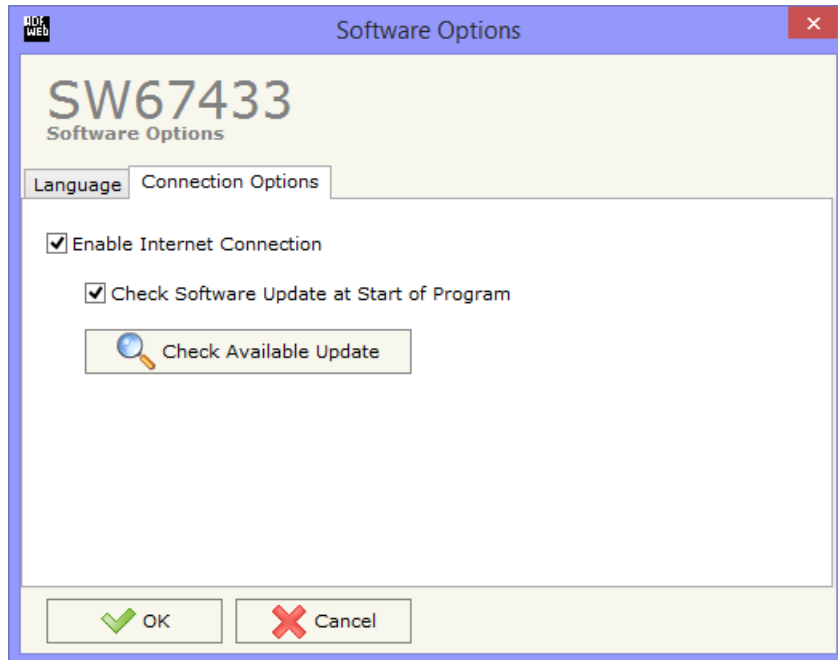
In the section "Connection Options", it is possible to check if there are some updatings of the software compositor in ADFweb.com website.
Checking the option "**Check Software Update at Start of Program**", the SW67433 checks automatically if there are updatings when it is launched.

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SET COMMUNICATION:

This section define the fundamental communication parameters of two buses, PROFINET and J1939.

By Pressing the "**Set Communication**" button from the main window for SW67433 (Fig. 2) the window "Set Communication" appears (Fig. 3).

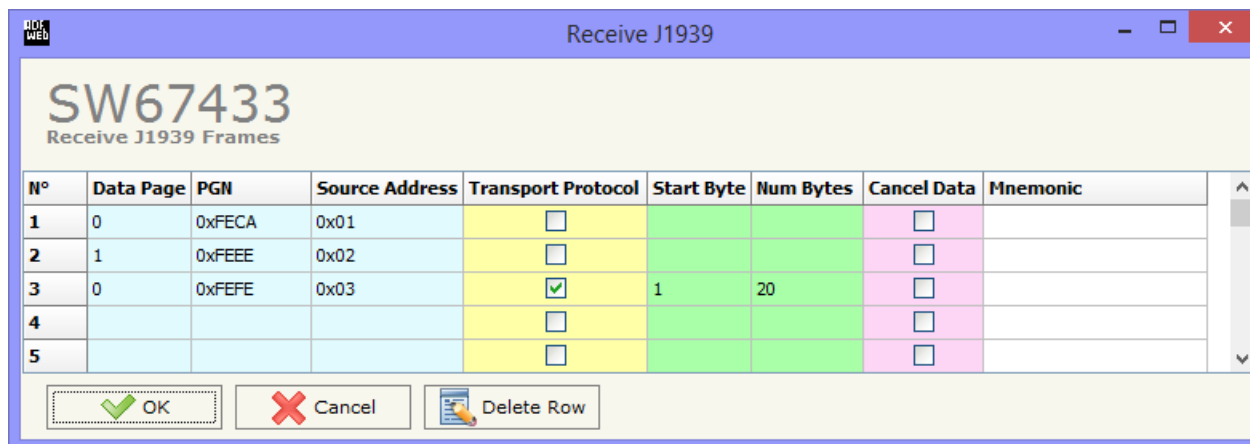The means of the fields for "J1939" are:

- In the fields "**Baudrate**", the velocity of J1939 bus is defined;
- In the field "**Time out Data (s)**" insert a time, when this time is elapsed the data isn't reliable and in the Modbus register you can read "FFFF";
- If the field "**Enable Peer to Peer**" is checked, the gateway accepts any ID that have the PGN inserted in the section "Receive J1939";
- In the field "**Device ID J1939**", the J1939 ID of the converter is defined;
- If the field "**Enable Send DM1**" is checked, the DM1 message (Diagnostic Message 1) is enabled.

The means of the fields for "Modbus TCP Master" are:

- In the field "**IP ADDRESS**", the IP address that you want to give to the Master Modbus TCP is defined;
- In the field "**SUBNET Mask**", the SubNet Mask of your Network is defined;
- In the fields "**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**", the number of port that Modbus TCP uses is defined;
- In the field "**TimeOut (ms)**", the maximum time that the device has to attend for the answer from the Slave interrogated is defined;
- In the field "**Cyclic Delay (ms)**", the delay between a Modbus request and the follow is defined.

Figure 3: "Set Communication" window

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RECEIVE J1939:

Figure 4: "Receive J1939" window

By pressing the "**Receive J1939**" button from the main window for SW67433 (Fig. 2) the window "Receive J1939" appears (Fig. 4).

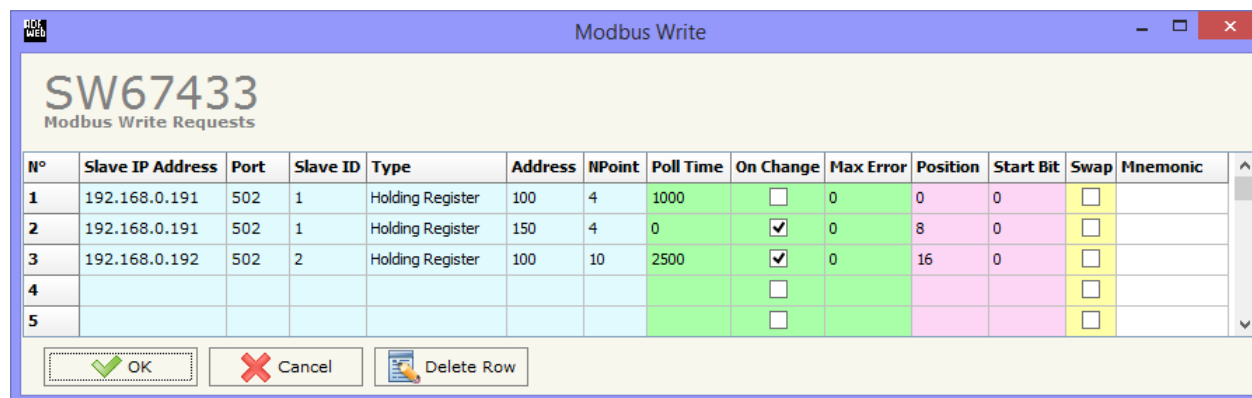The means of the fields of the table are:

- In the field "**Data Page**", the data page is defined; the value can be 0 or 1 (usually it is 0);
- In the field "**PGN**", the PGN of the data you would to read from modbus to J1939 is defined (in the J1939 protocol the PGN is an identifier);
- In the field "**Source Address**", the address of the device that sends the frame is defined.
- If the field "**Transport Protocol**" is checked, the frame can use transport protocol functions;
- In the field "**Start Byte**", the start byte from which you would start to read is defined; this field is enable only when the field "Transport Protocol" is checked;
- In the field "**Num Bytes**", the number of consecutive bytes you would read is defined; for example, if your Start Byte is 20 and Num Bytes is 10, you can read the byte from 20 to 30;
- If the field "**Cancel Data**" is checked, when the data is older than the time inserted in the "TimeOut Data (s)" in the section "Set Communication" (Fig. 3), you visualize "FFFF" in the Modbus registers reserved for this PGN;
- In the field "**Mnemonic**", the description for the frame is defined.

MODBUS WRITE:

By pressing the "**Modbus Write**" button from the main window for SW67433 (Fig. 2) the window "Modbus Write" appears (Fig. 5).
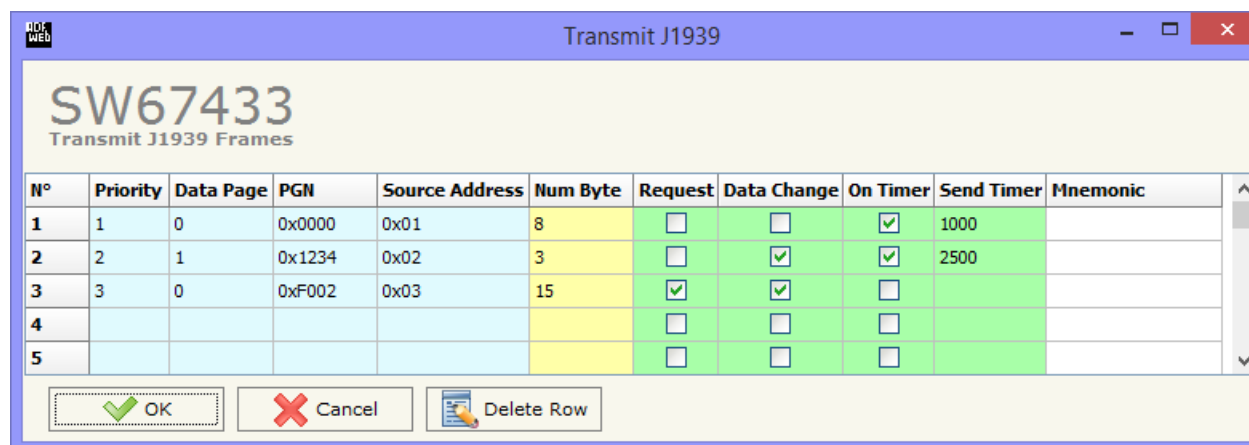
The means of the fields of the table are:

- ↓ In the field "**Slave IP Address**", the IP address of the Modbus slave in which you will write the data is defined;
- ↓ In the field "**Port**", the number of the port that the Modbus TCP slave uses is defined;
- ↓ In the field "**Slave ID**", the ID of the Modbus slave in which you will write the data is defined;
- ↓ In the field "**Type**", the data type of the register you will write is defined. You can choose between the following:
  - ○ Coil Status;
  - ○ Holding Register.
- ↓ In the field "**Address**", the starting address of the Modbus register to be written is defined;
- ↓ In the field "**NPoint**", the number of consecutive Modbus registers to write is defined;
- ↓ In the field "**Poll Time**", the delay between two Modbus requests is defined (if the field "On Change" is unchecked);
- ↓ If the field "**On Change**" is checked, the Modbus writing request is sent only when the data on J1939 sides change; if it is unchecked, the Modbus writing request is sent cyclically;
- ↓ In the field "**Max Error**", the number of consecutive errors that the gateway waits before suspending the poll until the next reboot is defined. If is set to zero this function is disabled;
- ↓ In the field "**Position**", the address of the J1939 array where reading the informations is defined;
- ↓ In the field "**Start Bit**", the start bit of the first byte of the field "Position" where starting to read the data to write is defined. Valid only for the "Coil Status";
- ↓ If the field "**SWAP**" is checked, the bytes of the registers will be swapped;
- ↓ In the field "**Mnemonic**", a description for the request is defined.

N°	Slave IP Address	Port	Slave ID	Type	Address	NPoint	Poll Time	On Change	Max Error	Position	Start Bit	Swap	Mnemonic
1	192.168.0.191	502	1	Holding Register	100	4	1000	☐	0	0	0	☐	
2	192.168.0.191	502	1	Holding Register	150	4	0	☑	0	8	0	☐	
3	192.168.0.192	502	2	Holding Register	100	10	2500	☑	0	16	0	☐	
4								☐				☐	
5								☐				☐	

Figure 5: "Modbus Write" window

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TRANSMIT J1939:

Figure 6: "Transmit J1939" window

By pressing the "**Transmit J1939**" button from the main window of SW67433 the window "Transmit J1939" appears (Fig. 6):

The means of the fields of the table are:

- In the field "**Priority**", the priority of the frame is defined. It is a number among 0,1,2,3,4,5,6,7 (J1939 specification). The number 0 is the highest priority and 7 is the lowest;
- In the field "**Data Page**", the data page is defined. It can be 0 or 1;
- In the field "**PGN**", the PGN of the frame that you want to send is defined (in the J1939 protocol, the PGN is an identifier);
- In the field "**Source Address**" you insert the ID of device that send the frame;
- In the field "**Num Byte**", the dimension of the PGN (number of bytes) is defined;
- If the option "**Request**" is checked, the PGN is transmitted when a J1939 request is sent (On Request);
- If the option "**Data Change**" is checked, the PGN is transmitted when the data read from Modbus changes;
- If the option "**On Timer**" is checked, the PGN is transmitted cyclically;
- In the field "**Send Timer**", the delay with which the PGN is sent is defined (only if you use the Transmition Type "On Timer");
- In the field "**Mnemonic**", the description for the frame is defined.

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MODBUS READ:

By pressing the "**Modbus Read**" button from the main window for SW67433 (Fig. 2) the window "Modbus Read" appears (Fig. 7).

The means of the fields of the table are:

➢ In the field "**Slave IP Address**", the IP address of the Modbus slave from which you will read the data is defined;

➢ In the field "**Port**", the number of the port that the Modbus TCP slave uses is defined;

➢ In the field "**Slave ID**", the ID of the Modbus slave from which you will read the data is defined;

➢ In the field "**Type**", the data type of the register you will read is defined. You can choose between the following:
  - o Coil Status;
  - o Input Status;
  - o Holding Register;
  - o Input Register.

➢ In the field "**Address**", the starting address of the Modbus register to be read is defined;

➢ In the field "**NPoint**", the number of consecutive Modbus registers to read is defined;

➢ In the field "**Poll Time**", the delay between two Modbus requests is defined;

➢ In the field "**Max Error**", the number of consecutive errors that the gateway waits before suspending the poll until the next reboot is defined. If is set to zero this function is disabled;

➢ In the field "**Position**", the address of the J1939 array where putting the informations is defined;

➢ In the field "**Start Bit**", the start bit of the first byte of the field "Position" where starting to put the data read is defined. Valid only for the "Coil Status" and "Input Status";

➢ If the field "**SWAP**" is checked, the bytes of the registers will be swapped;

➢ In the field "**Mnemonic**", a description for the request is defined.

N°	Slave IP Address	Port	Slave ID	Type	Address	NPoint	Poll Time	Max Error	Position	Start Bit	Swap	Mnemonic
1	192.168.0.191	502	1	Holding Register	200	13	1000	0	0	0	☐	
2											☐	
3											☐	
4											☐	
5											☐	
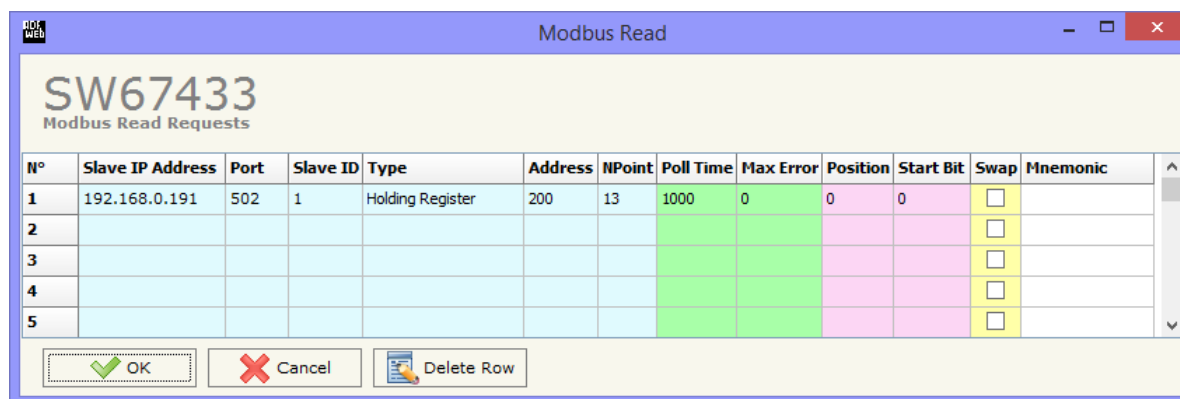
Figure 7: "Modbus Read" window

DEFINE ALARMS DM1:

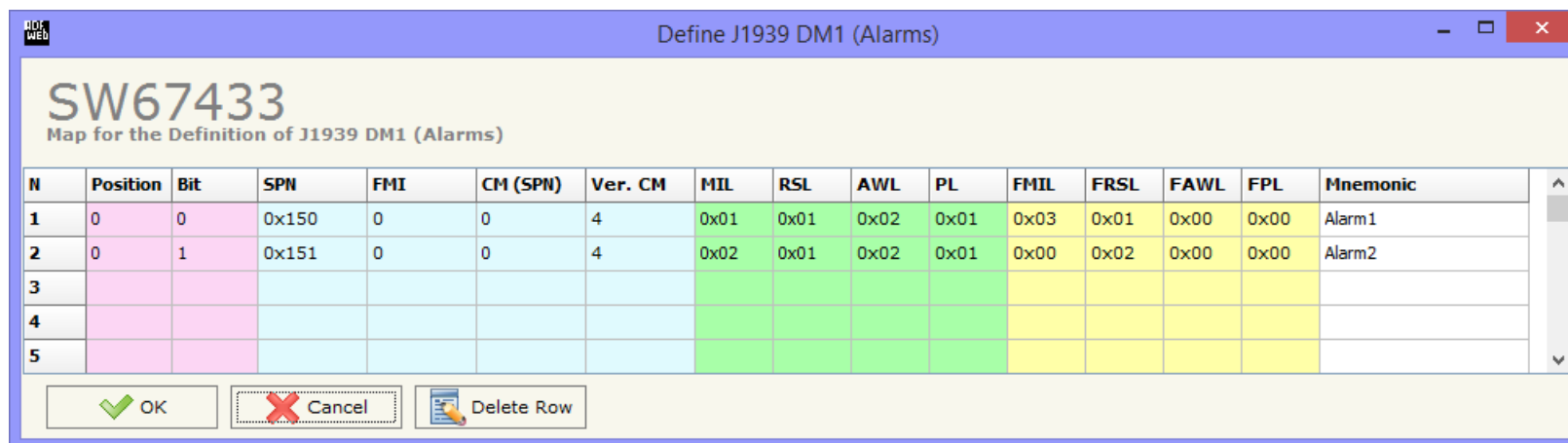| N	Position	Bit	SPN	FMI	CM (SPN)	Ver. CM	MIL	RSL	AWL	PL	FMIL	FRSL	FAWL	FPL	Mnemonic
1	0	0	0x150	0	0	4	0x01	0x01	0x02	0x01	0x03	0x01	0x00	0x00	Alarm1
2	0	1	0x151	0	0	4	0x02	0x01	0x02	0x01	0x00	0x02	0x00	0x00	Alarm2
3															
4															
5															

Figure 8: "Define Alarms DM1" window

By pressing the "**Define Alarms DM1**" button from the main window for SW67433 (Fig. 2) the window "Define Alarms DM1" appears (Fig. 8). The button is enabled only if the option "Enable Send DM1" is checked.

The means of the fields of the table are:

- ➡ In the field "**Position**", the address of the J1939 alarms array where putting the informations is defined;
- ➡ In the field "**Bit**", the start bit of the first byte of the field "Position" where starting to put the data read is defined;
- ➡ In the field "**SPN**", the SPN (Suspect Parameter Number) of the alarm is defined (refer to the J1939 specifications).
- ➡ In the field "**FMI**", the FMI (Failure Mode Indicator) of the alarm is defined (refer to the J1939 specifications);
- ➡ In the field "**CM (SPN)**", the CM (Conversion Method of the SPN) is defined. You can choose between 0 and 1 (refer to the J1939 specifications);
- ➡ In the field "**Ver. CM**", the version of CM is defined. You can choose between 1, 2, 3 and 4 (refer to the J1939 specifications);
- ➡ In the field "**MIL**", the MIL (Malfunction Indicator Lamp) is defined (refer to the J1939 specifications);
- ➡ In the field "**RSL**", the RSL (Red Stop Lamp) is defined (refer to the J1939 specifications);
- ➡ In the field "**AWL**", the AWL (Amber Warning Lamp) is defined (refer to the J1939 specifications);
- ➡ In the field "**PL**", the PL (Protect Lamp) is defined (refer to the J1939 specifications);

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- In the field "**FMIL**", the FMIL (Flash Malfunction Indicator Lamp) is defined (refer to the J1939 specifications);
- In the field "**FRSL**", the FRSL (Flash Red Stop Lamp) is defined (refer to the J1939 specifications);
- In the field "**FAWL**", the FAWL (Flash Amber Warning Lamp) is defined (refer to the J1939 specifications);
- In the field "**FPL**", the FPL (Flash Protect Lamp) is defined (refer to the J1939 specifications);
- In the field "**Mnemonic**", the description for the frame is defined.

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MODBUS READ DM1:

By pressing the "**Modbus Read DM1**" button from the main window for SW67433 (Fig. 2) the window "Modbus Read DM1" appears (Fig. 9).

The means of the fields of the table are:

- In the field "**Slave IP Address**", the IP address of the Modbus slave from which you will read the alarm flags is defined;
- In the field "**Port**", the number of the port that the Modbus TCP slave uses is defined;
- In the field "**Slave ID**", the ID of the Modbus slave from which you will read the alarm flags is defined;
- In the field "**Type**", the data type of the register you will read is defined. You can choose between the following:
  - o Coil Status;
  - o Input Status;
  - o Holding Register;
  - o Input Register.
- In the field "**Address**", the starting address of the Modbus register to be read is defined;
- In the field "**NPoint**", the number of consecutive Modbus registers to read is defined;
- In the field "**Poll Time**", the delay between two Modbus requests is defined;
- In the field "**Max Error**", the number of consecutive errors that the gateway waits before suspending the poll until the next reboot is defined. If is set to zero this function is disabled;
- In the field "**Position**", the address of the J1939 alarms array where putting the informations is defined;
- In the field "**Start Bit**", the start bit of the first byte of the field "Position" where starting to put the alarm flags is defined. Valid only for the "Coil Status" and "Input Status";
- If the field "**SWAP**" is checked, the bytes of the registers will be swapped;
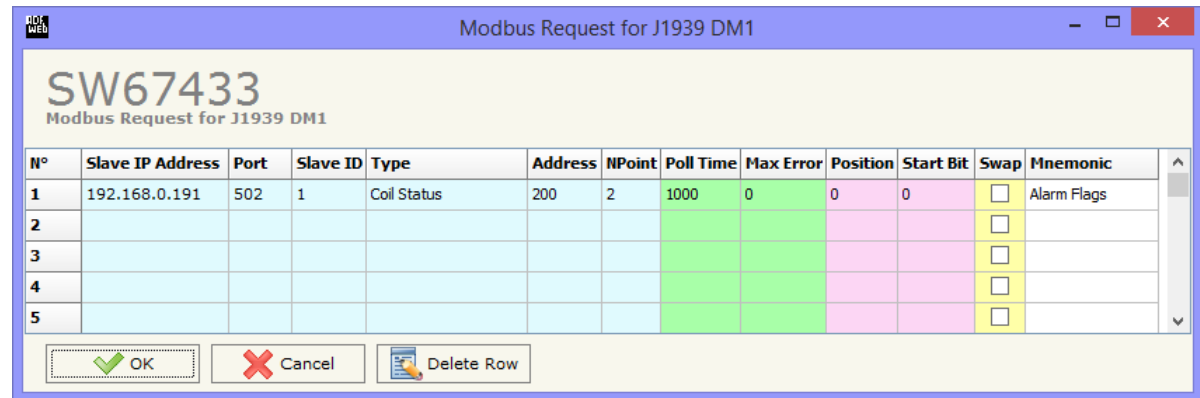- In the field "**Mnemonic**", a description for the request is defined.

Figure 9: "Modbus Read DM1" window

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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;
- Insert the IP "**192.168.2.205**";
- Turn on the device;
- 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.

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.

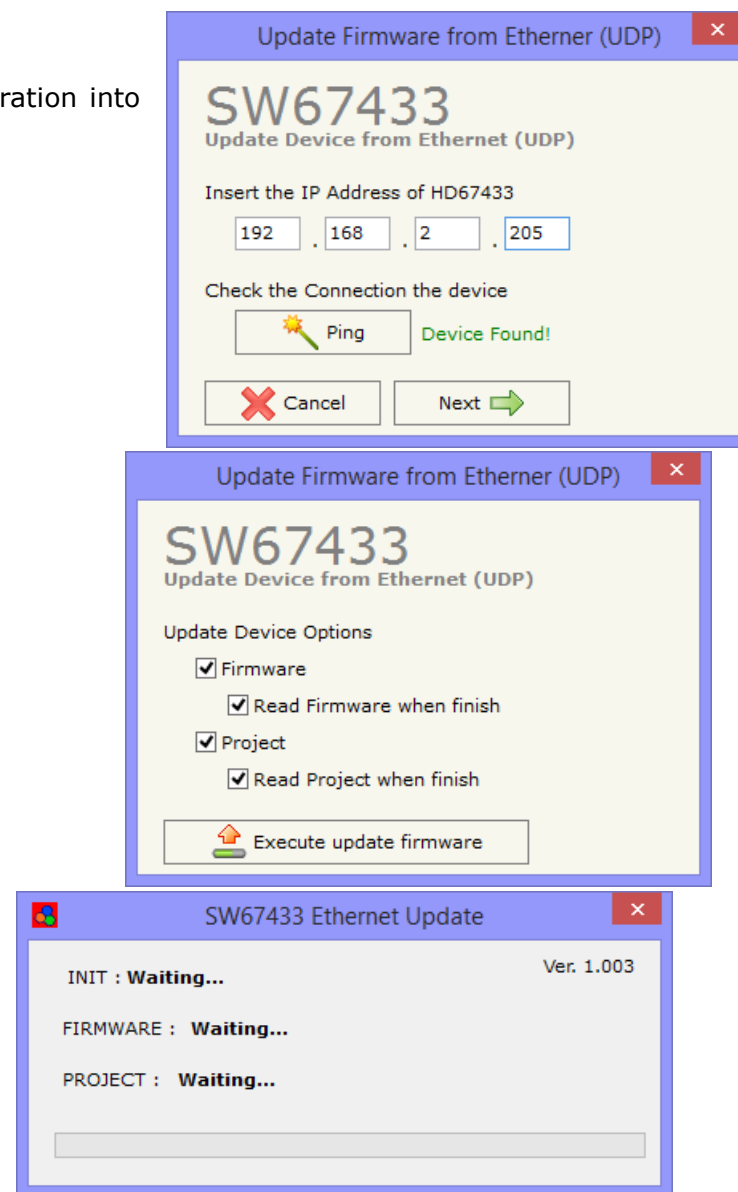At this point the configuration/firmware on the device is correctly updated.

Figure 10: "Update Device" windows

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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 HD67433 device.

Note:
When you receive the device, for the first time, you also have to update the Firmware in the HD67433 device.

Warning:

If Fig. 7 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 and 8 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 you have to launch the "Command Prompt" with Administrator Rights;
- Pay attention at Firewall lock.

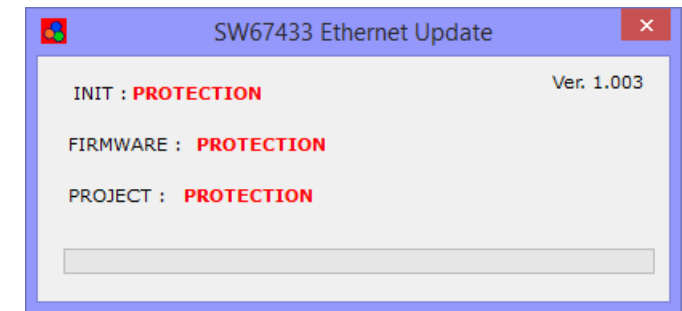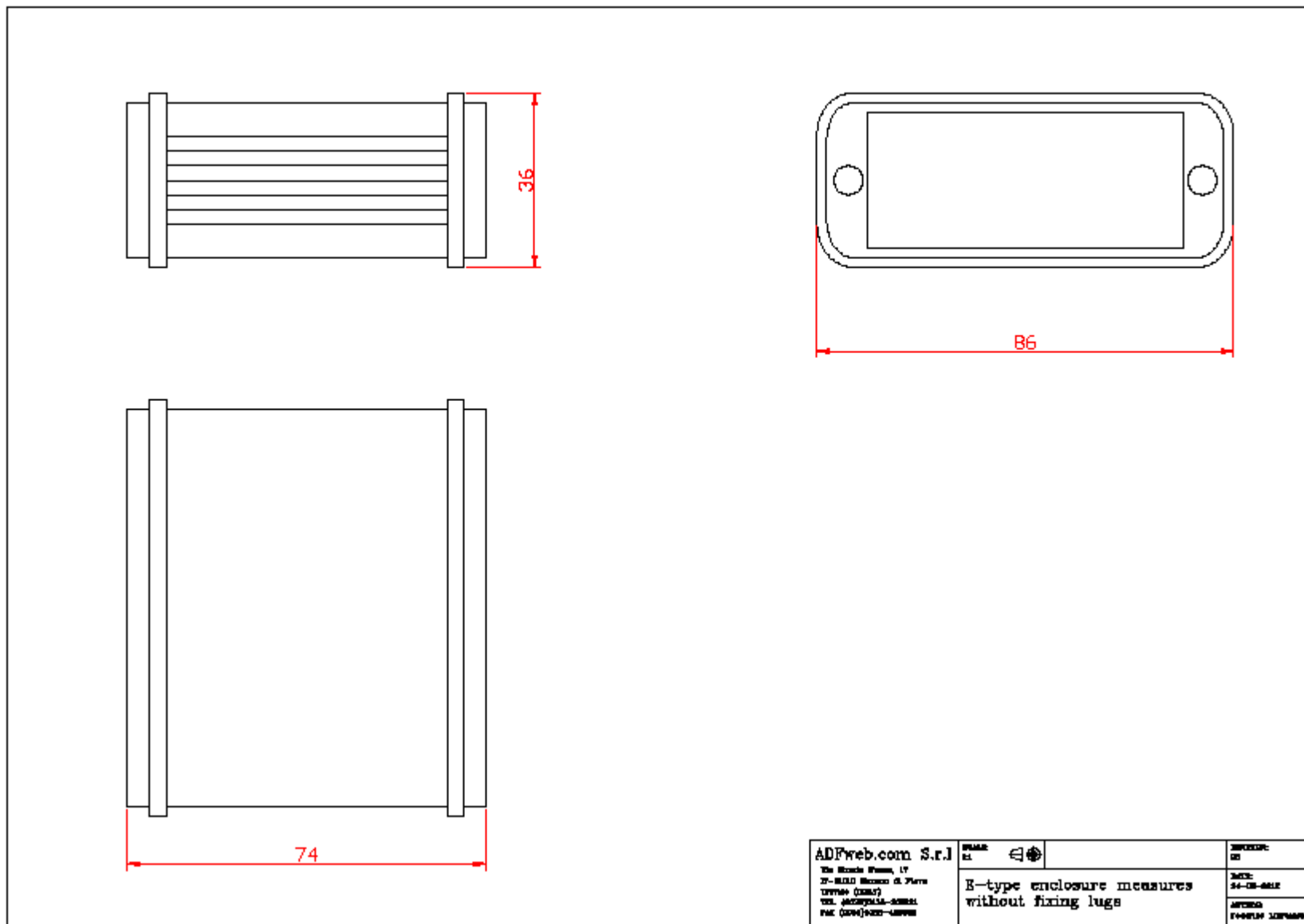In the case of HD67433 you have to use the software "SW67433": www.adfweb.com\download\filefold\SW67433.zip.

Figure 11: "Protection" window

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MECHANICAL DIMENSIONS:

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E-type enclosure measures
without fixing lugs

![ADFweb logo] Industrial Electronic Devices

Type A

ADFweb.com S.r.l

E-type enclosure measures
with fixing lugs Type A

74

40

B6

92

105

51,5

![ADFweb logo] Industrial Electronic Devices

Type B

ADFweb.com S.r.l

E-type enclosure measures with fixing lugs Type B

![ADFweb logo] Industrial Electronic Devices

Type C

ADFweb.com S.r.l

E-type enclosure measures
with fixing lugs Type C

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ORDERING INFORMATIONS:

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

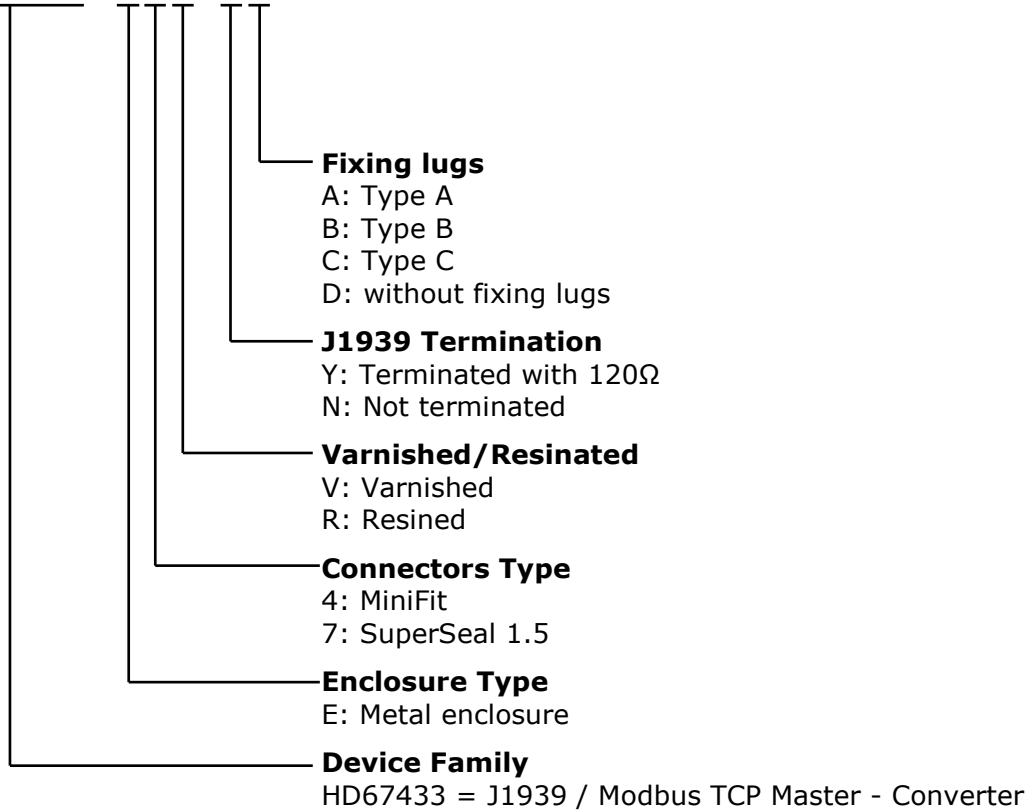**HD67433 – E y z – s f**

Fixing lugs
A: Type A
B: Type B
C: Type C
D: without fixing lugs

J1939 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
HD67433 = J1939 / Modbus TCP Master - Converter

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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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DISCLAIMER:

All technical content within this document can be modified without notice. The content of the document is a under continual renewal.
For losses due to fire, earthquake, third party access or other accidents, or intentional or accidental abuse, misuse, or use under abnormal conditions repairs are charged to the user. ADFweb.com S.r.l. will not be liable for accidental loss of use or inability to use this product, such as loss of business income. ADFweb.com S.r.l. shall not be liable for consequences of improper use.

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.

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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.