FTE2.0 - CONFIGURATION FTE2.0 IN MTGW DANFOSS

Rev.	Date	Modification
1	27/06/22	Add more detailed info regards the connection between EVCO – EXOR – AK-SM – LAPTOP (pages 5 & 8 & 9) Page 10: use a USB key formatted (fat32), unzip the folder
0	16/12/20	

This document is deemed as *Classified*. This means that first circulation is limited to selected people, who must diffuse it only as strictly necessary for correct operations

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Author: Bigaran H./De Din L.   *Checked:*

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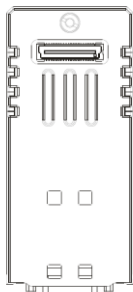© *EPTA GROUP – ALL RIGHTS RESERVED*

MTGW connections

The elements in order to have a complete MTGW with two RS485 are:

- The multigateway:
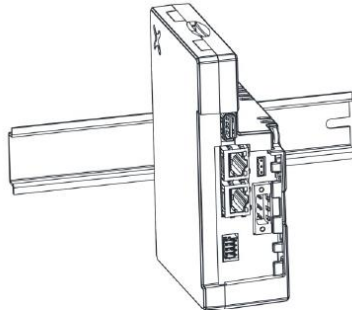
- The adding RS485 port:

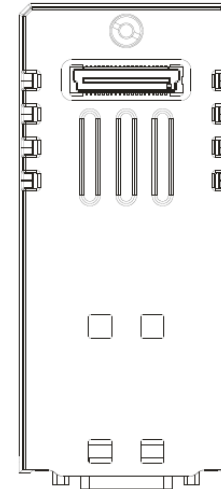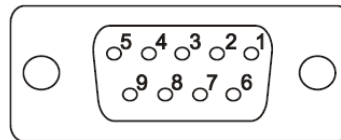- The power supply (as Epta code **65281072**)

	DISTRIBUTION: CLASSIFIED	**SYSTEM ENGINEERING**
Epta TECHNICA		Project: Insert PJ

FTE2.0 - Configuration FTE2.0 in MTGW Danfoss

Pin	Description	RS-422	RS-485
1	GND	X	X
2			
3	A- (TX-)	X	X
4	B- (RX-)	X	
5			
6	+5V 100mA max.	X	X
7	B+ (RX+)	X	
8	A+ (TX+)	X	X
9			

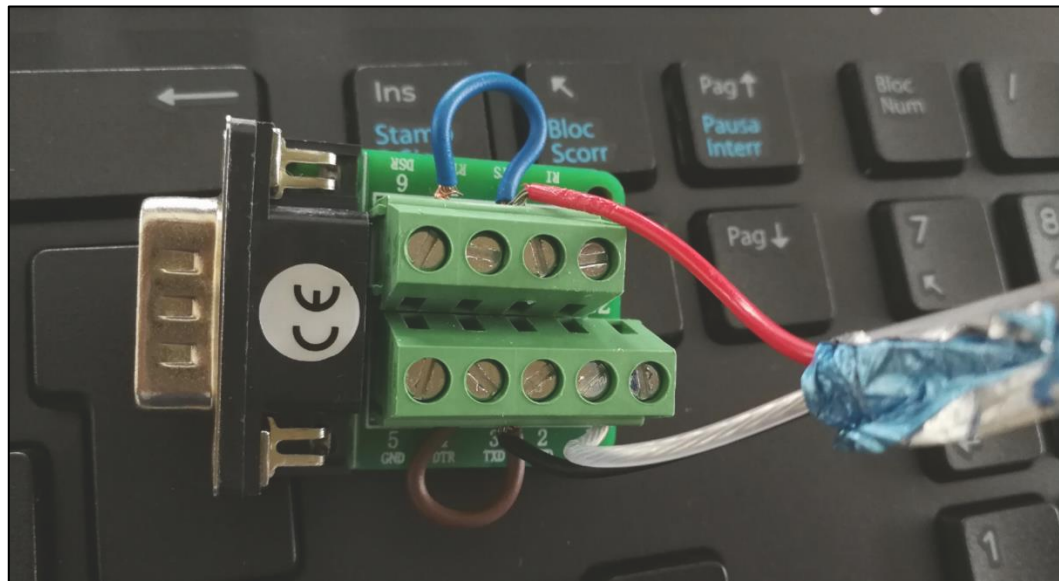To operate in RS-485 pins 3-4 and 7-8 must be connected externally.

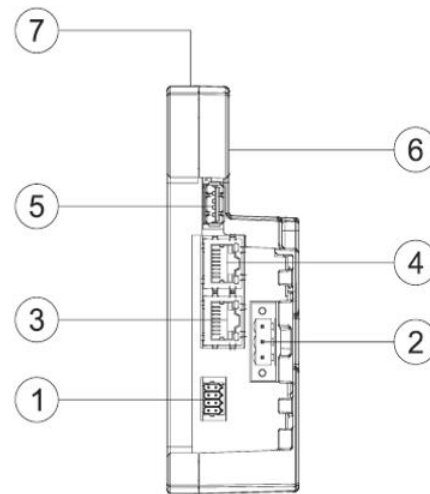In order to connect the MTGW to FTE2.0, connect the second RS485 port as indicated.

An adapter is necessary ([SIENOC RS232 D-SUB adattatore DB9 maschio al Terminal connettore del modulo di segnale: Amazon.it: Elettronica](#))

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Cable between EVCO and SIENOC adapter:

- 4-3: externally connected
- 7-8: externally connected
- 8: A+
- 3: B-
- 1: GND

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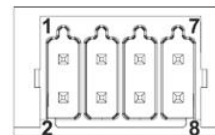*Filename:* SE-TS046R01_FTE2.0 - Configuration FTE2.0 in MTGW Danfoss.docx

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① Serial Port
② Power
③ Ethernet Port 1 (10/100 Mb)
④ Ethernet Port 0 (10/100 Mb)
⑤ USB Port V2.0, max 500 mA *
⑥ Expansion slot for plug-in modules
⑦ SD card slot

SERIAL PORT

Pin	Description
1	RX/CHB-
2	TX/CHA-
3	CTS/CHB+
4	RTS/CHA+
5	+5V output
6	GND
7	
8	SHIELD

To operate in RS-485 pins 1-2 and 4-3 must be connected externally / Für den Betrieb in RS-485 müssen die Pins 1-2 und 4-3 extern angeschlossen werden / Pour fonctionner sur RS-485, les broches 1-2 et 4-3 doivent être connectées en externe / Para operar en RS-485 pines 1-2 y 4-3 debe estar conectada externamente / Per operare in RS-485 i pin 1-2 e 4-3 devono essere collegati esternamente
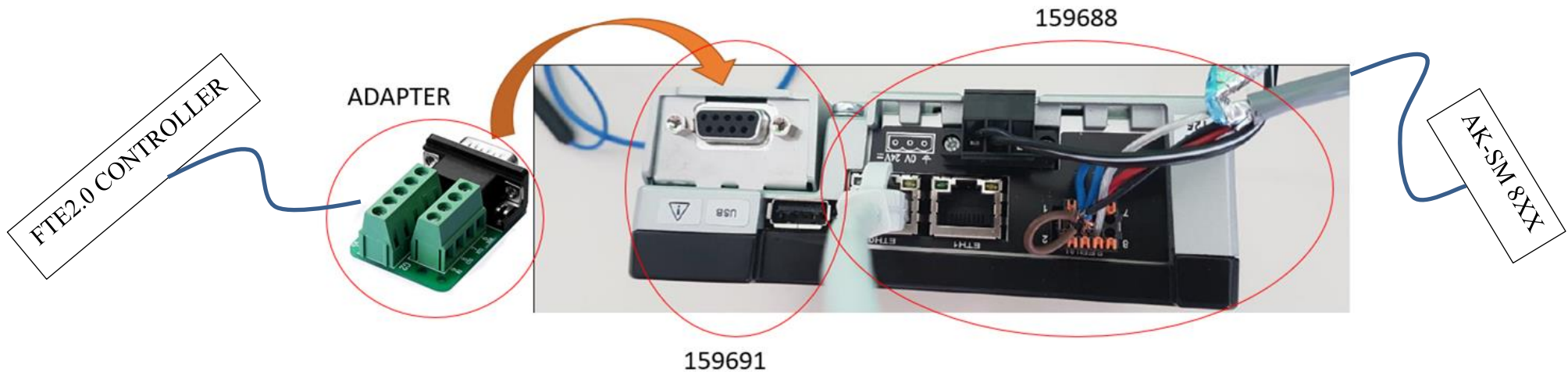
Connect the Supervisor 850 to Serial Port (1)
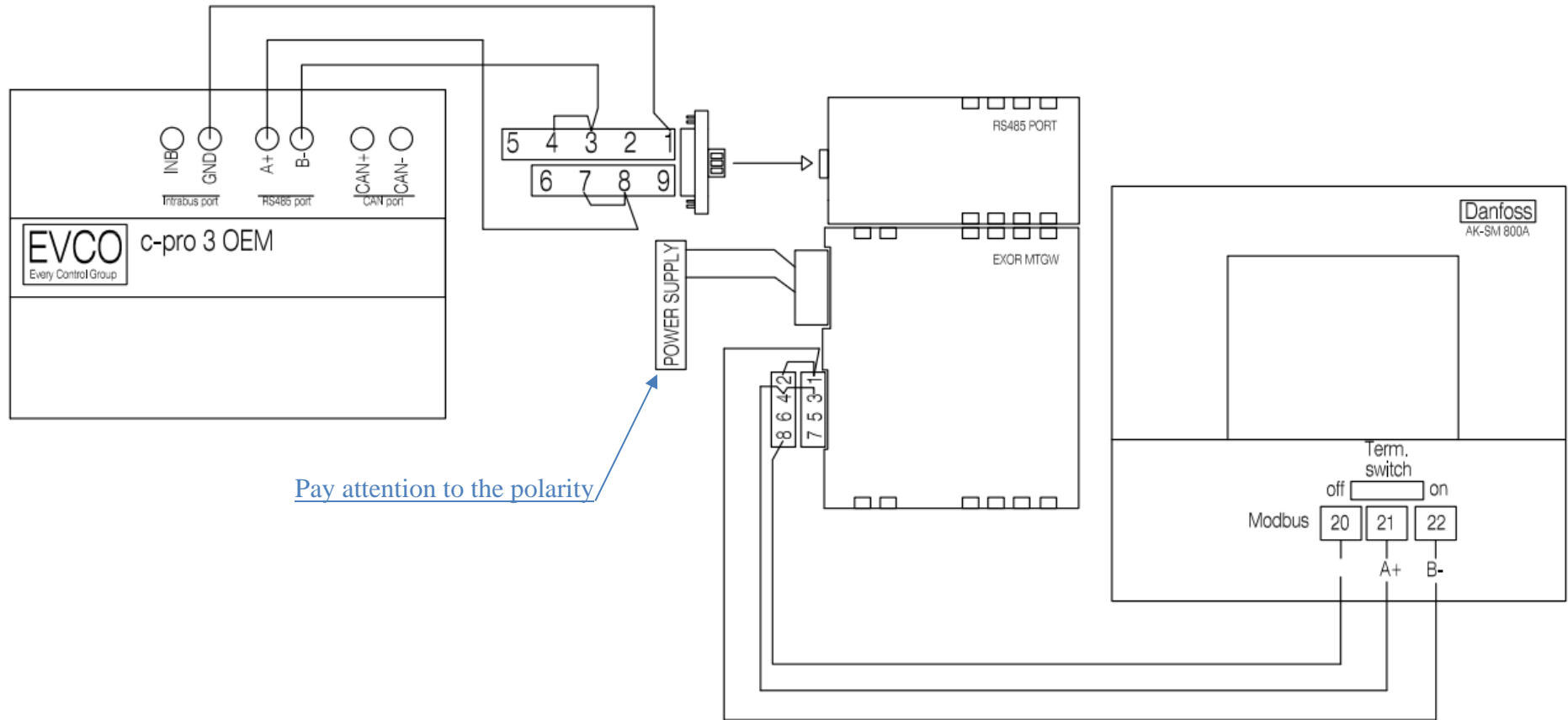
Connect the Ethernet cable to the Ethernet Port 0 (4)

Resuming EPTA codes and connections

ITEM	Description	Text in SAP
159688	GATEWAY Exware703	GATEWAY Exware703 , codici EXOR : +EXW703U0P1 (WKST. EXOR eXware703 JMOBILE) Gateway ;
159691	Exor+PLCM04U0P1 (PLCM04 ADD-ON MODULE RS422/485) ;	+PLCM04U0P1 (PLCM04 ADD-ON MODULE RS422/485 RoHS) ;
65281072	Power supply	

- The first code is the gateway,
- The second one is the add-on module for the second RS485 line,
- The third is the supply,
- The adapter (not yet codified) is necessary to connect the cable RS485 that comes from the EVCO controller.

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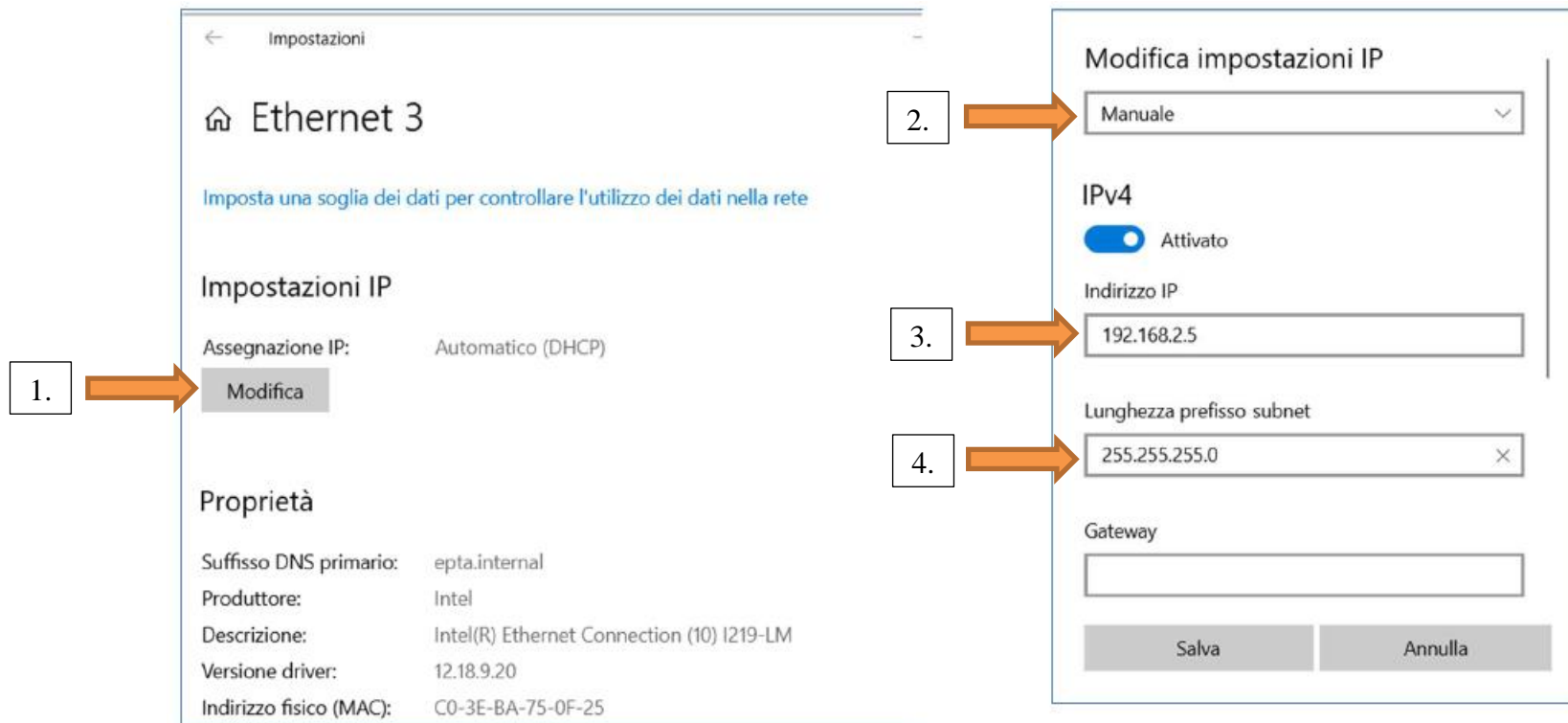
Pay attention to the polarity

Electrical connections to do on site.

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Set the IP of the Ethernet port

Connect the ethernet cable from the ETH0 of Exor to the laptop.

Configure the port with following information:

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USB configuration

Choose a USB formatted as FAT32;

Unzip the folder "mg_eXware703_usb_install_R03" and copy in the USB the following files (not integrated in folder!):

autoexec.sh	05/05/2021 09:18	File SH	7 KB
mgtw_auto.bin	05/05/2021 09:18	File BIN	1.887 KB
package.zip	05/05/2021 09:18	Cartella compressa	23.605 KB
platform_common.sh	05/05/2021 09:18	File SH	3 KB

Supply the MTGW and connect the USB to it. Wait some seconds, 1 bip and, when the installation is finished, 2 bips you should hear.

➔ *PLEASE CONTACT SYSTEM ENGINEERING DEPT. TO HAVE THE FOLDER "mg_eXware703_usb_install_R03" IN WHICH THESE FILES ARE PRESENT (unzip the folder).*
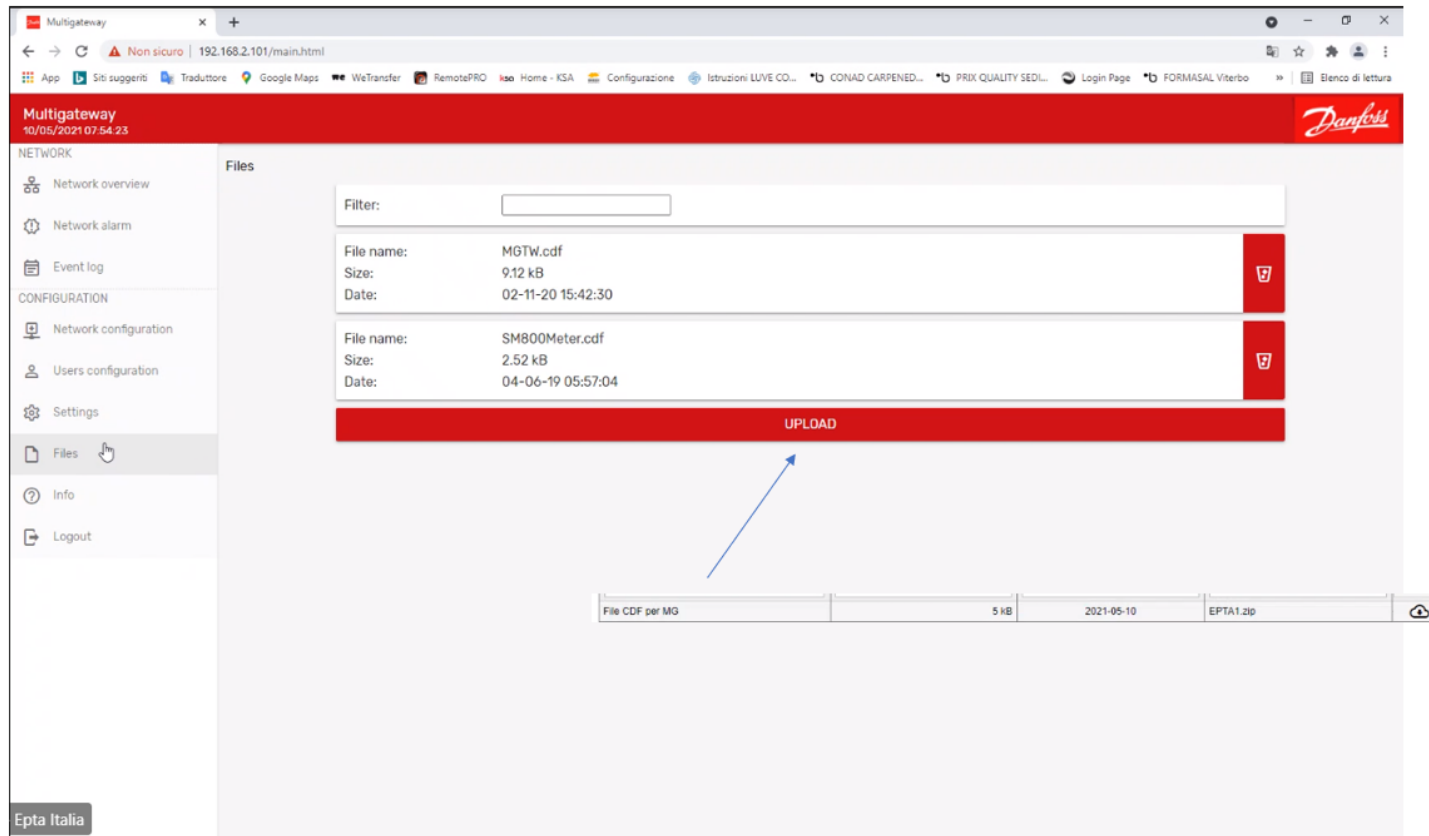
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MTGW configuration

Connect to the link: http://192.168.2.101/

Enter with:
- User: **admin**
- Password: **PASS**

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In tab "files" upload the file **EPTA1**. Pay attention, the name of the file must be "**EPTA1**":
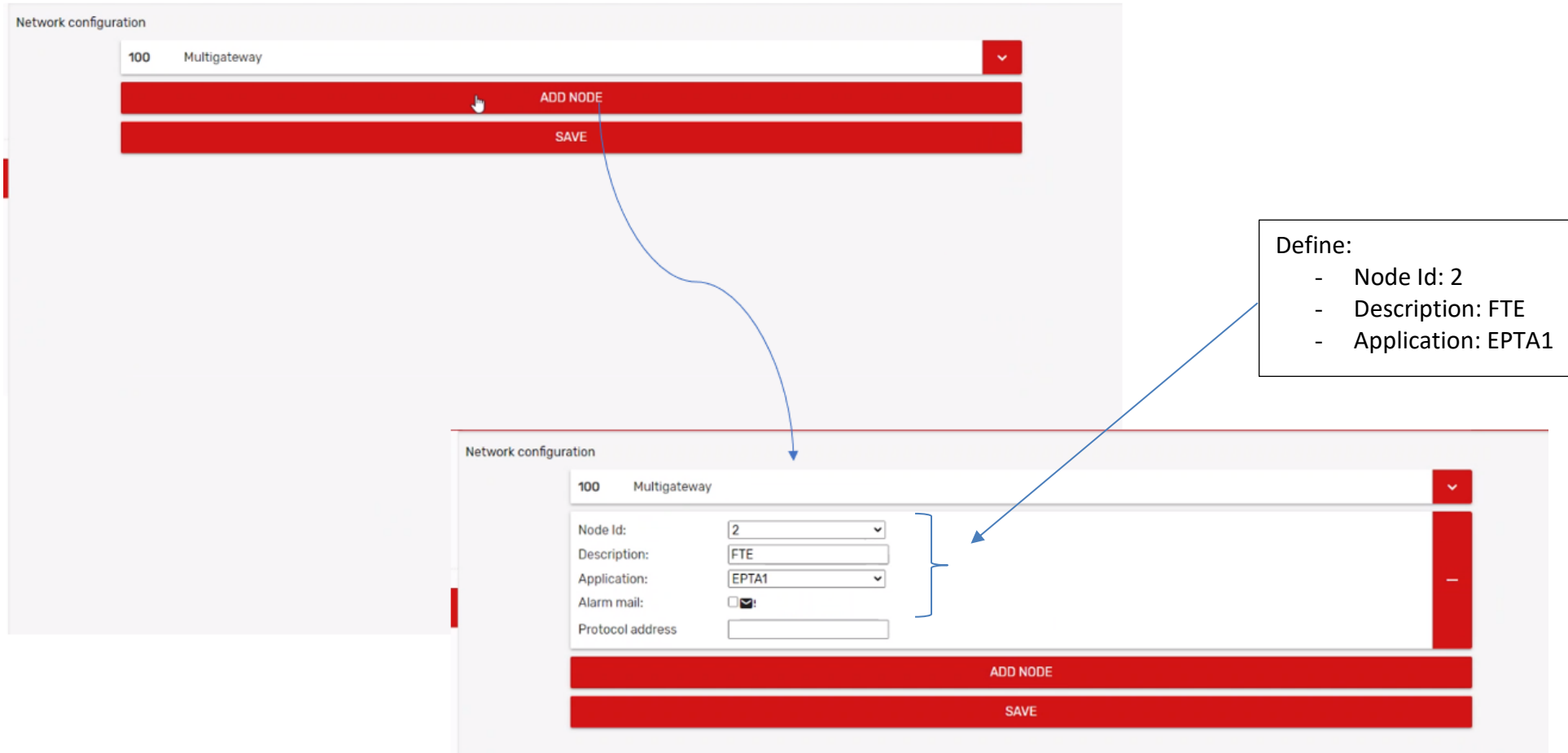
➔ *PLEASE CONTACT SYSTEM ENGINEERING DEPT. TO HAVE THE FOLDER "Epta_FTE_R01" IN WHICH THE FILE "EPTA1.cdf" IS PRESENT.*

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The new file will appear in this section:

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In the "Network configuration" tab, add the node of FTE2.0 with the following input data:
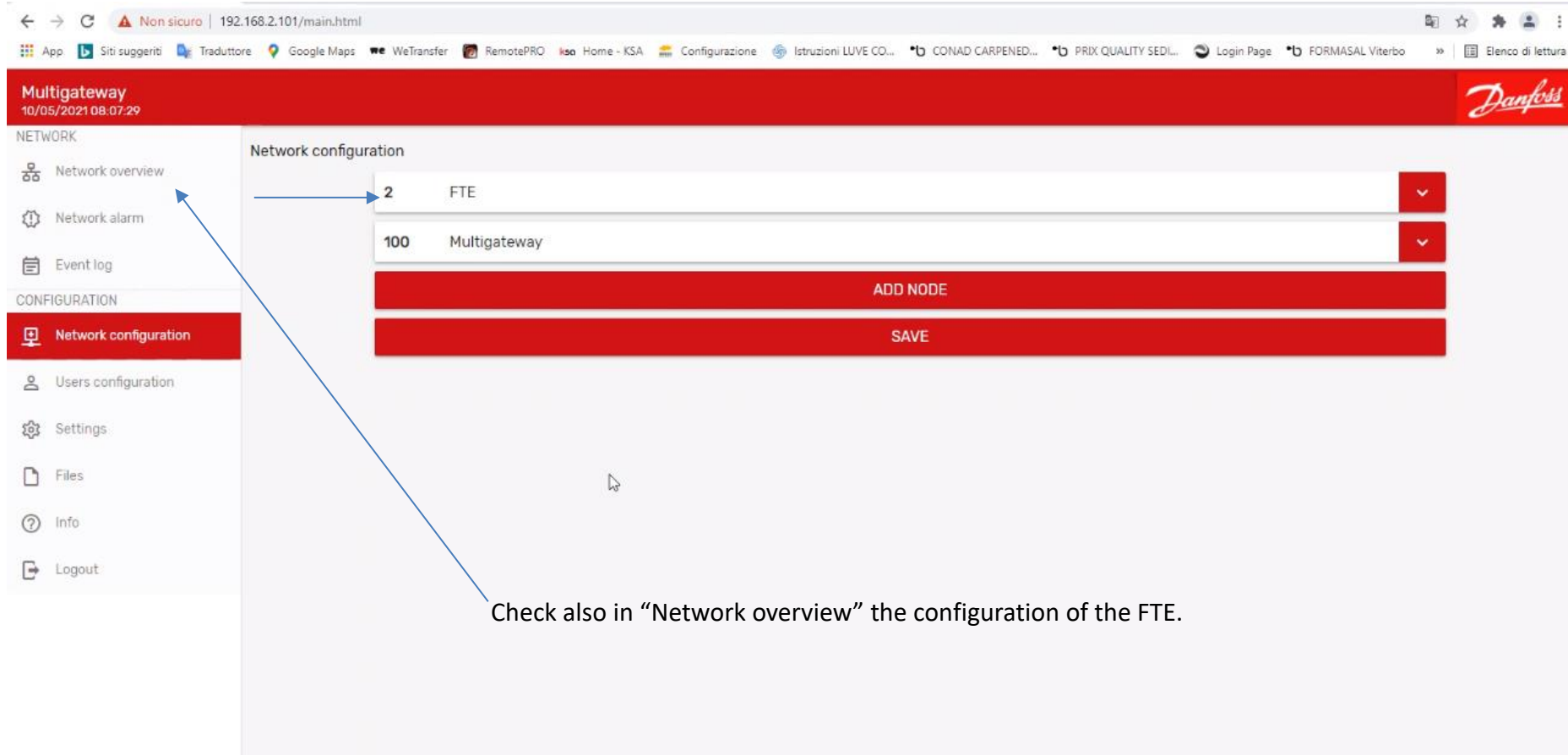
Define:
- Node Id: 2
- Description: FTE
- Application: EPTA1

The new node will appear:

Check also in "Network overview" the configuration of the FTE.

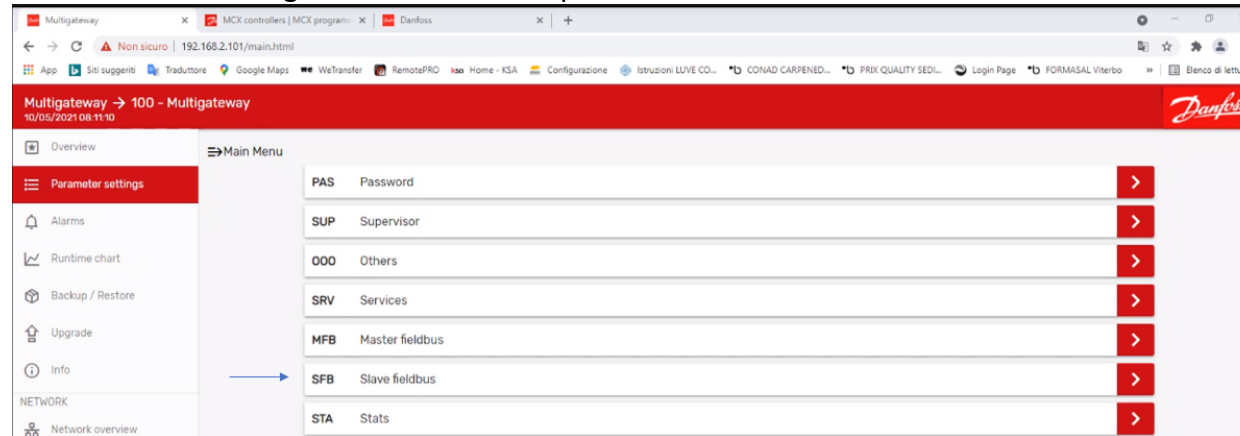| *Document N:°* SE-TS046	*Revision:* 01	*Date:* 10/05/21
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In "Parameter setting" → "Main Menu" → "Supervisor" change **SU7** and **SU8** parameters (choose same velocity, parity bit stop in the EVCO controller):
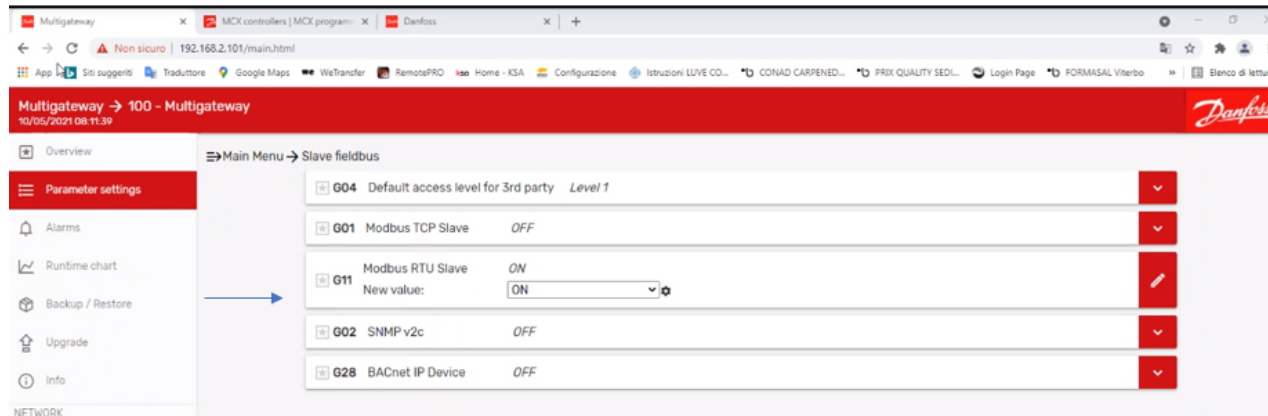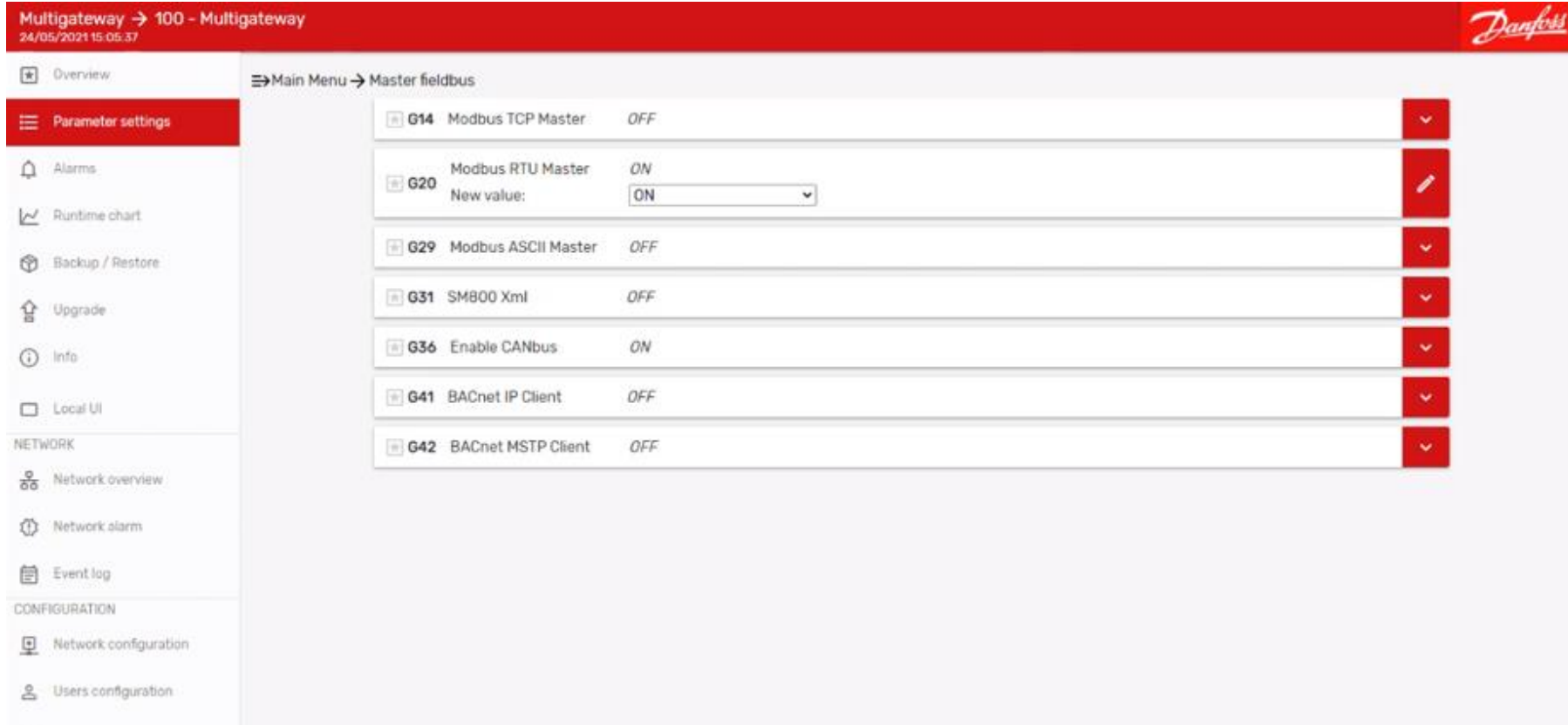- SUV7 = 9600
- SUV8 = 8N2
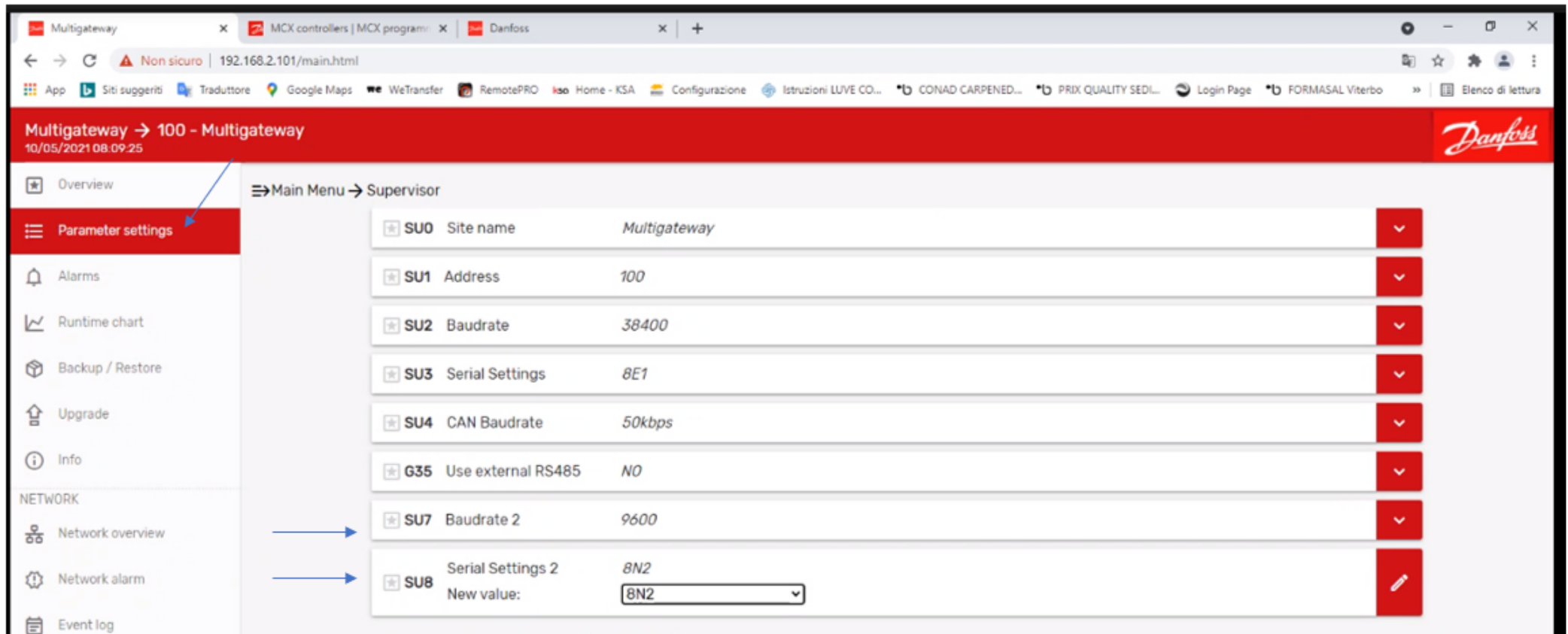
Enable the Supervisor 850. In "Parameter setting" → "Main Menu" open the menu **SFB** Slave fieldbus:

And enable the **G11** parameter:

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Also enable the Master fieldbus parameter **G20**

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Set the timezone in "Settings" menu and "Save" at the end of operation:

In case of a new release of mgtw_auto.bin file, updated it in this section.

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