

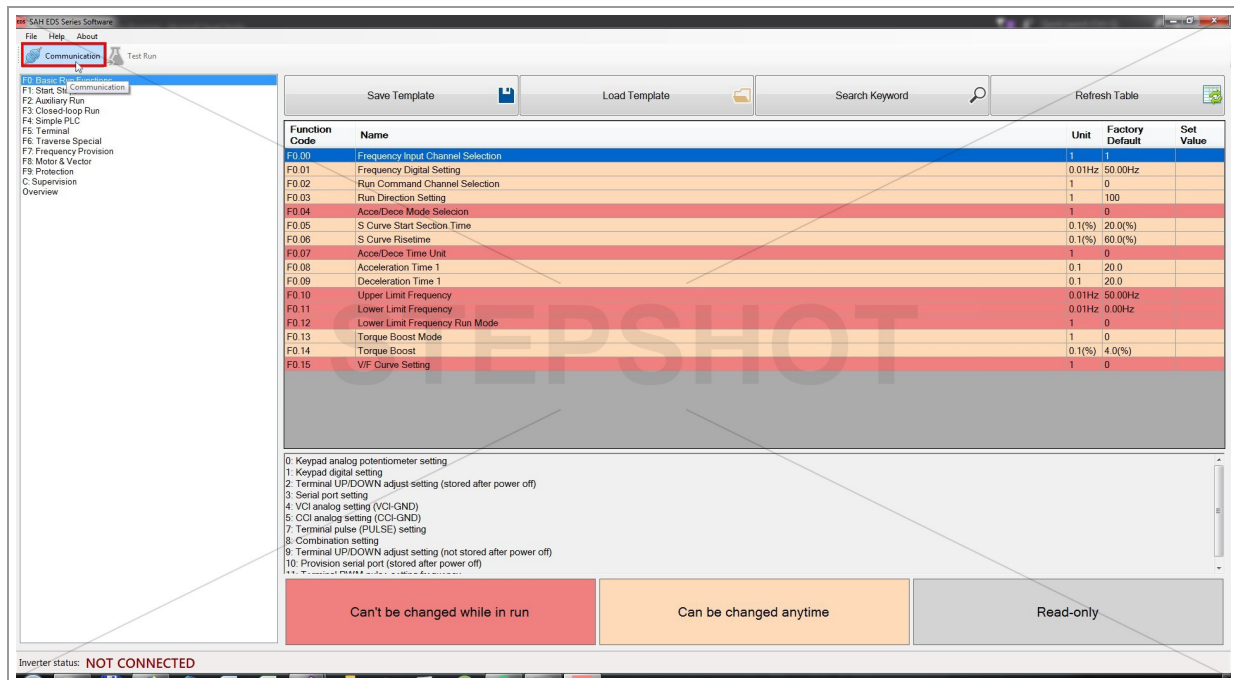
EDS Software Manual

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This is a brief guide through all the features of SAH EDS Software.

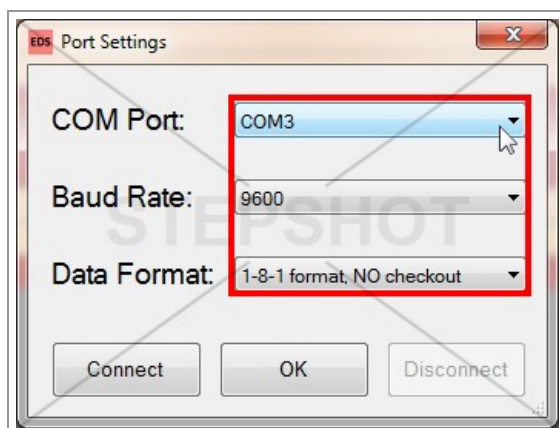
Establishing Communication

Communication



Click on "Communication" button from tool menu to get the "Port Settings" window.

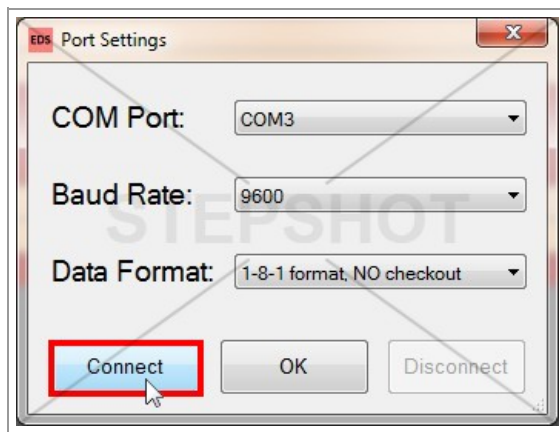
Port Settings



Set the "COM Port" parameter to the one that your USB to RS485 communication converter is connected to.

To be sure how your port is labeled, check it in Control Panel -> Device Manager -> Ports (COM & LPT) and search for the component that starts with "USB-SERIAL".

In addition, set Baud Rate to 9600 and Data Format to "1-8-1 format, NO checkout" (default for EDS series inverters), as shown above.



Click on "Connect" button to establish the communication between PC and EDS series inverter.

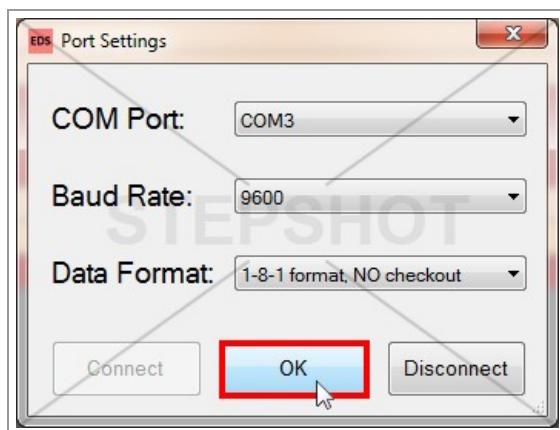


You should get the message of successful communication establishment like this.

Otherwise:

Check if all the parameters from previous step are set properly and check if your serial port is not already used by another software or device.

Also check if your inverter is powered on.



Click on "OK" button and then wait for few seconds until the values of all inverter parameters are loaded successfully (this process usually takes about 10 seconds).

Main Screen Features

Table View

Function Code	Name	Unit	Factory Default	Set Value
F0.00	Frequency Input Channel Selection	1	1	3
F0.01	Frequency Digital Setting	0.01Hz	50.00Hz	50.00
F0.02	Run Command Channel Selection	1	0	4
F0.03	Run Direction Setting	1	100	100
F0.04	Accel/Decel Mode Selection	1	0	0
F0.05	S Curve Start Section Time	0.1(%)	20.0(%)	20.0
F0.06	S Curve Risetime	0.1(%)	60.0(%)	60.0
F0.07	Accel/Decel Time Unit	1	0	0
F0.08	Acceleration Time 1	0.1	20.0	20.0
F0.09	Deceleration Time 1	0.1	20.0	20.0
F0.10	Upper Limit Frequency	0.01Hz	50.00Hz	50.00
F0.11	Lower Limit Frequency	0.01Hz	0.00Hz	0.00
F0.12	Lower Limit Frequency Run Mode	1	0	0
F0.13	Torque Boost Mode	1	0	0
F0.14	Torque Boost	0.1(%)	4.0(%)	4.0
F0.15	V/F Curve Setting	1	0	0

0: Keypad analog potentiometer setting
1: Keypad digital setting
2: Terminal UP/DOWN adjust setting (stored after power off)
3: Serial port setting
4: VCI analog setting (VCI-GND)
5: CCI analog setting (CCI-GND)
7: Terminal pulse (PULSE) setting
8: Combination setting
9: Terminal UP/DOWN adjust setting (not stored after power off)
10: Provision serial port (stored after power off)

Can't be changed while in run Can be changed anytime Read-only

Inverter status: **CONNECTED**

You'll see the loaded values of every parameter from the chosen parameter group in the last column of the table, as shown above.

Parameter group "F0: Basic Run Functions" is chosen by default in the listbox on the left side of the screen.

Notes of value meanings for the selected parameter are listed below the table (in case above F0.00).

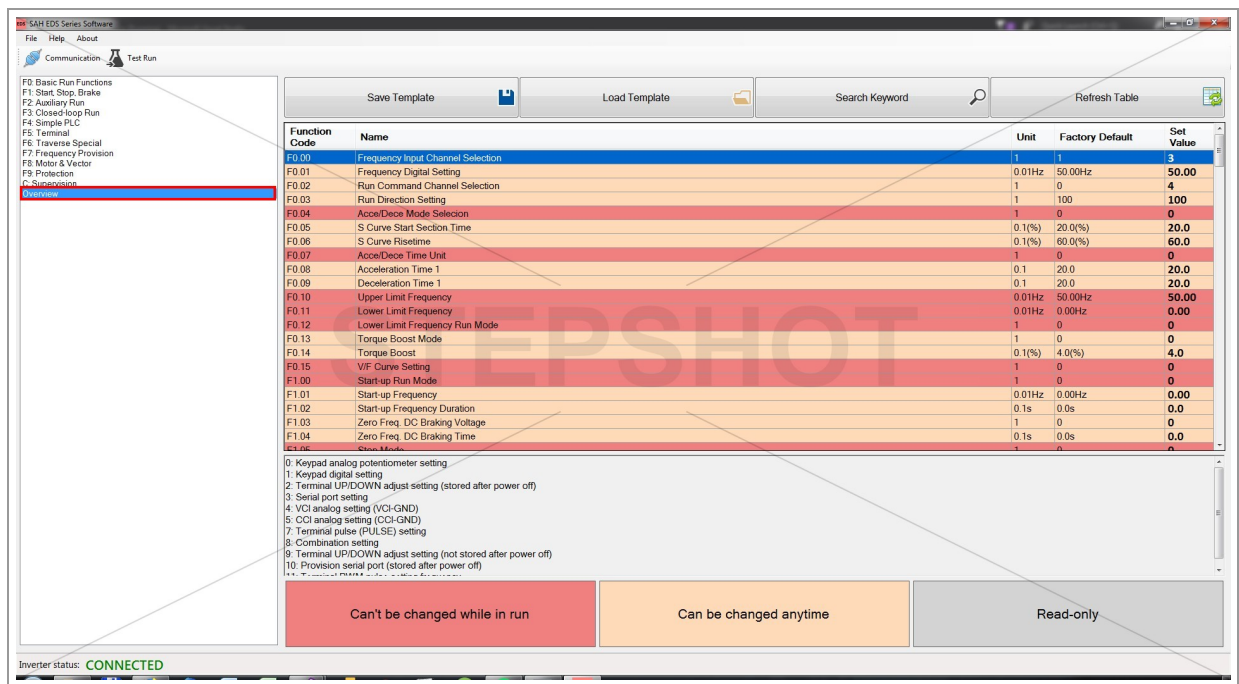
Function Code	Name	Unit	Factory Default	Set Value
F1.00	Start-up Run Mode	1	0	0
F1.01	Start-up Frequency	0.01Hz	0.00Hz	0.00
F1.02	Start-up Frequency Duration	0.1s	0.0s	0.0
F1.03	Zero Freq. DC Braking Voltage	1	0	0
F1.04	Zero Freq. DC Braking Time	0.1s	0.0s	0.0
F1.05	Stop Mode	1	0	0
F1.06	DC Brake Initial Frequency When Stop Running	0.01Hz	0.00Hz	0.00
F1.07	DC Brake Time When Stop Running	0.1s	0.0s	0.0
F1.08	DC Brake Voltage When Stop Running	1	0	0

0: Start at start-up frequency
1: First brake, then start at start-up frequency

Can't be changed while in run Can be changed anytime Read-only

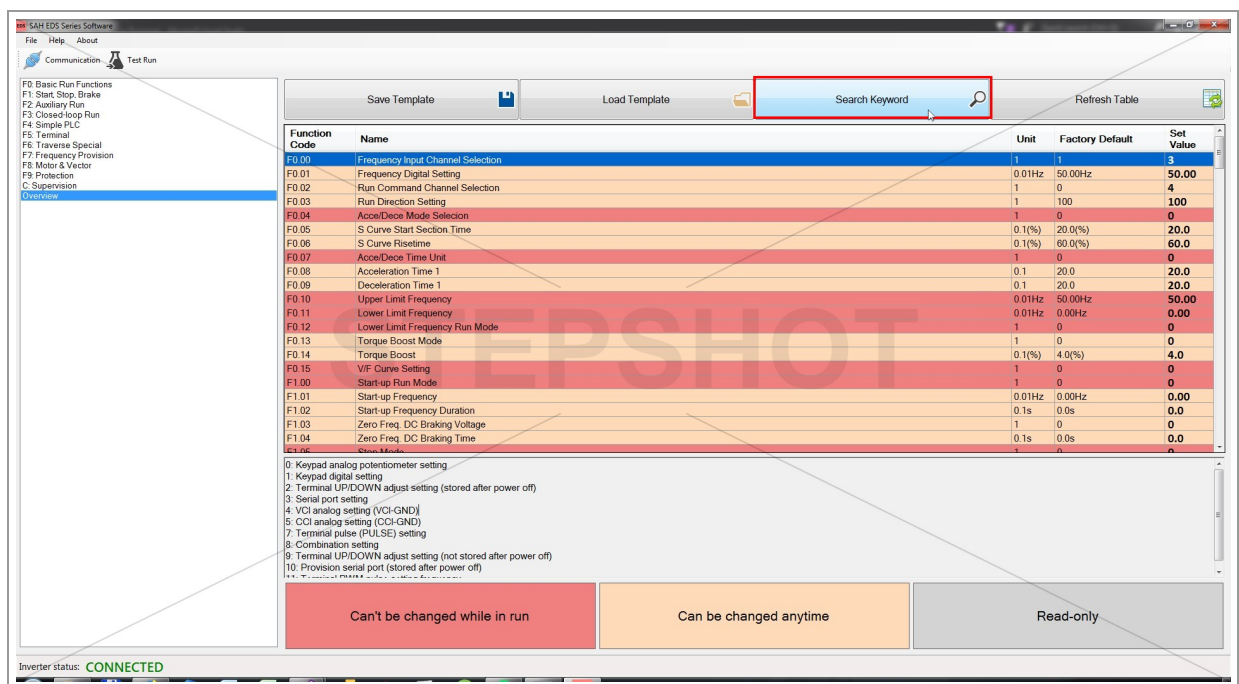
Inverter status: **CONNECTED**

You can select the parameter group you wish in order to get the different parameters in the table.

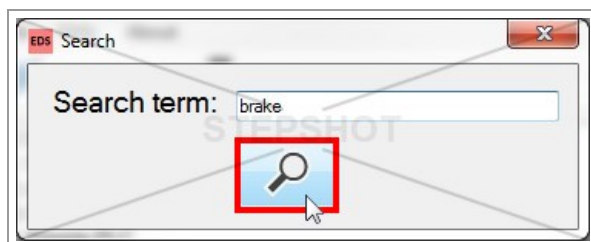


"Overview" shows the list of all available parameters and it's suitable for searching by the keyword.

Search by Keyword



Click on "Search Keyword" button to search for desired term.

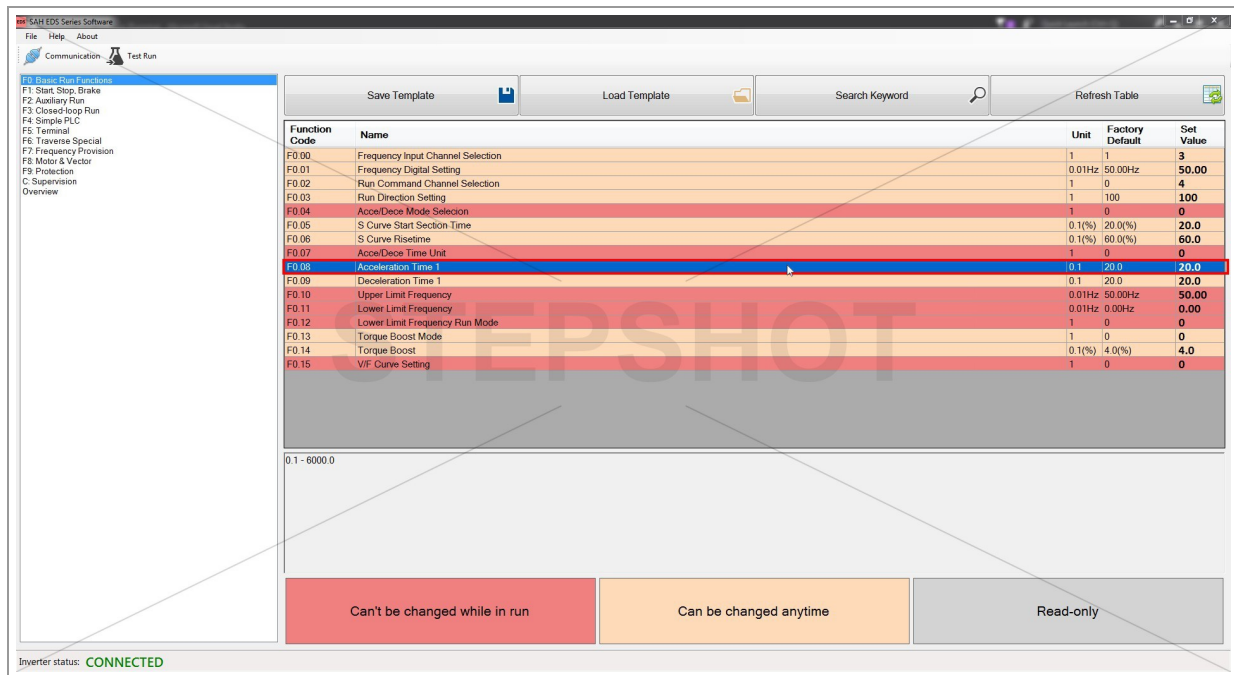


In "Search" window write the desired term and click on the magnifying glass button or press ENTER to search for the parameter(s) that contain(s) the mentioned term.

You'll see the change of selected parameter in the main window table every time the term appears in the list of parameters.

Change Parameter Value

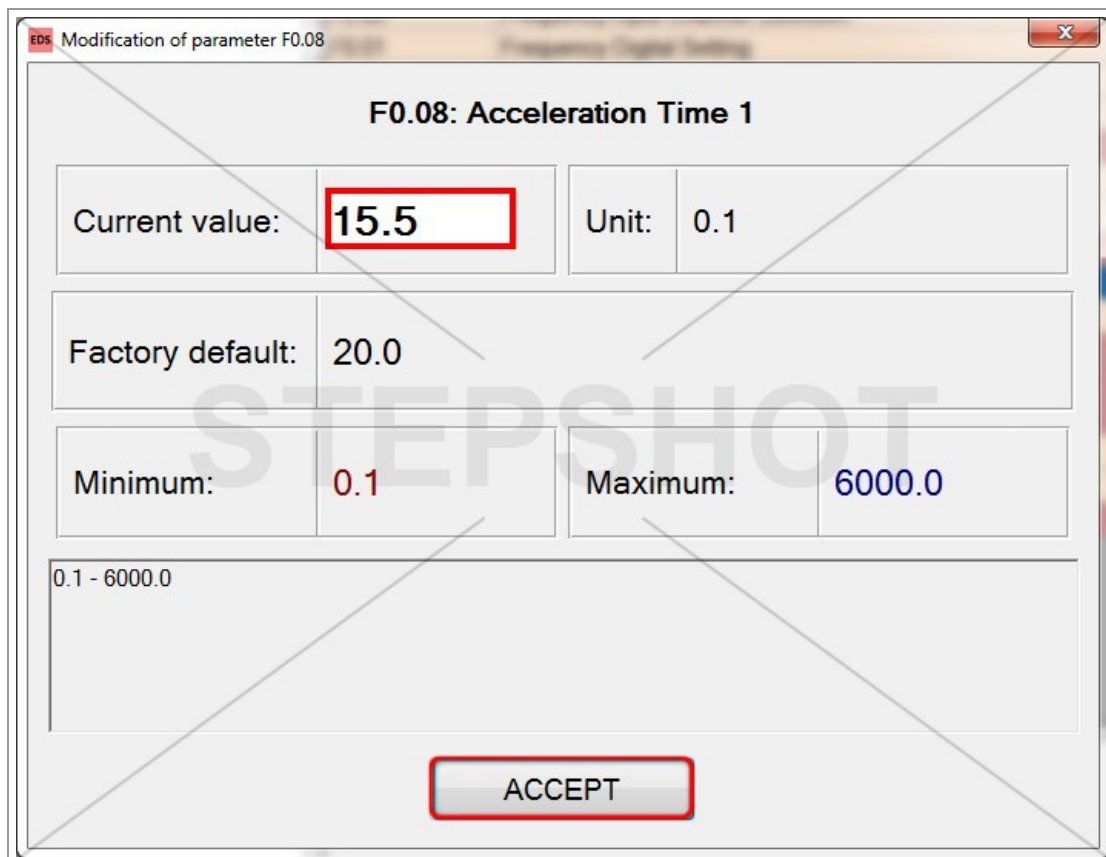
Parameter Modification



You can enter the parameter change menu by double-clicking the desired row in the table.

In this example, we will change the F0.08 ("Acceleration Time 1") parameter from 20.0 to 15.5.

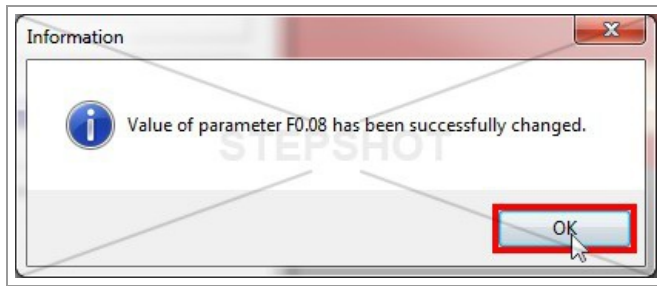
Note: Some parameters cannot be changed while the motor is in the run state (colored in rose) and some parameters are read-only and cannot be modified at all (colored in grey).



Change the value from initial 20.0 to 15.5 and click on "Accept" button or press ENTER.

Note: You don't have to use the decimal separator if you want to enter the whole number (e.g. 25 will be considered as 25.0).

Mind that you are not allowed to enter more decimals than defined by the unit format.



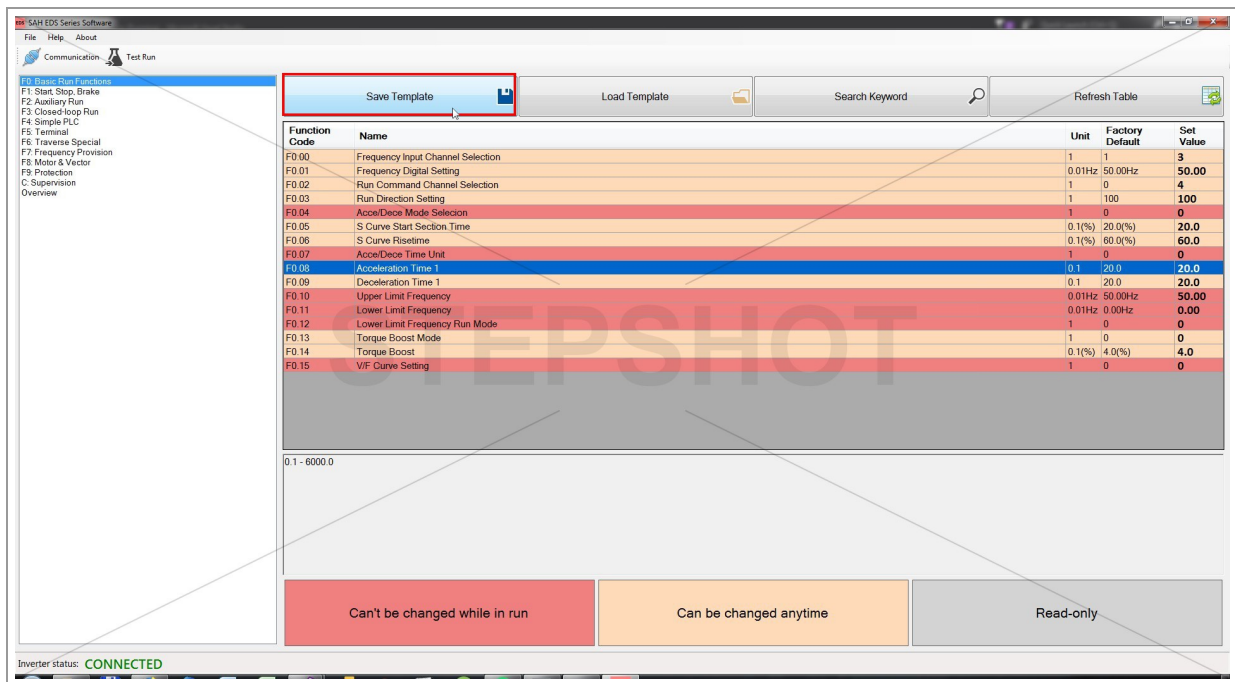
You should get the message shown above in case the new value of parameter is written to inverter successfully.

The error may happen if you enter the same value as the initial one or if you exceed the minimum or maximum limit.

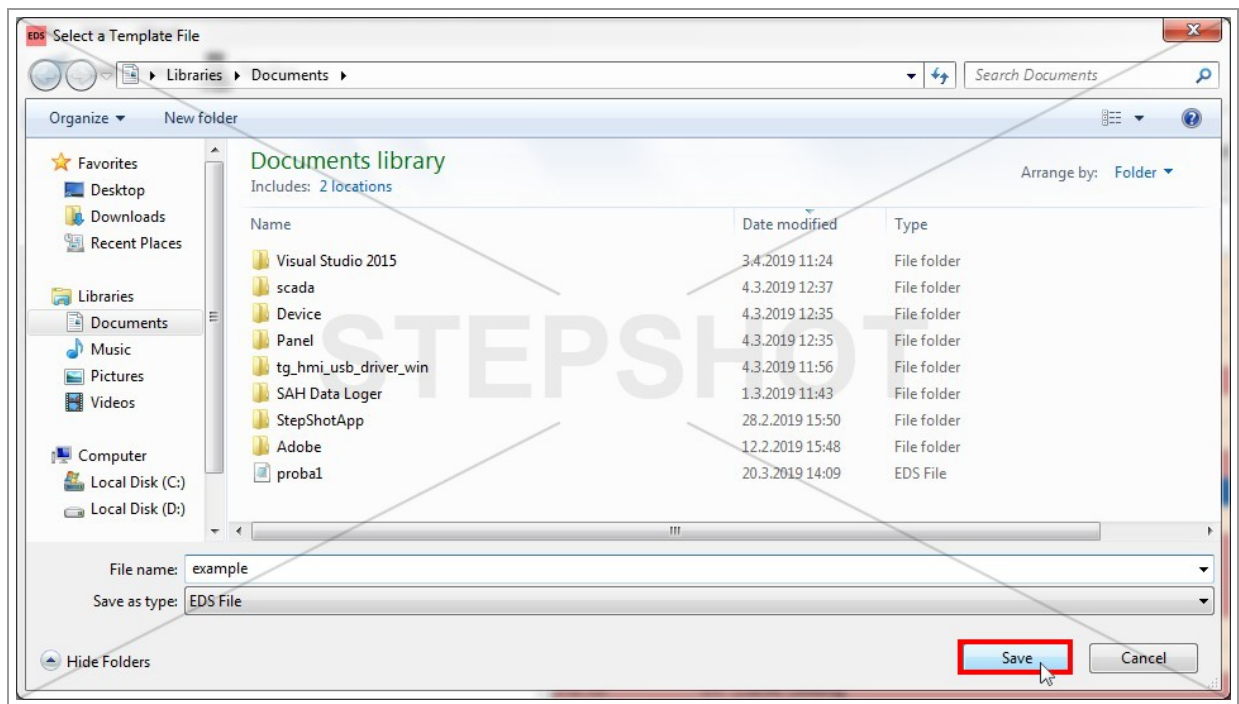
After clicking on "OK" button, you will have to wait for few seconds until the values in the table are refreshed.

Save/Load Templates

Save Template

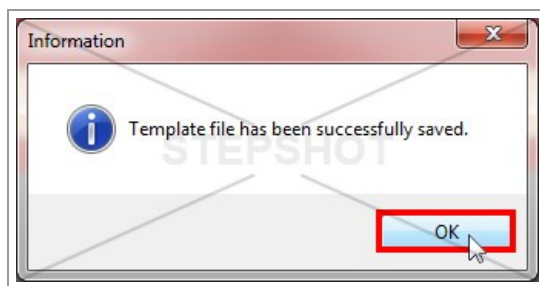


Click on "Save Template" button to save the current values of all parameters to a file.



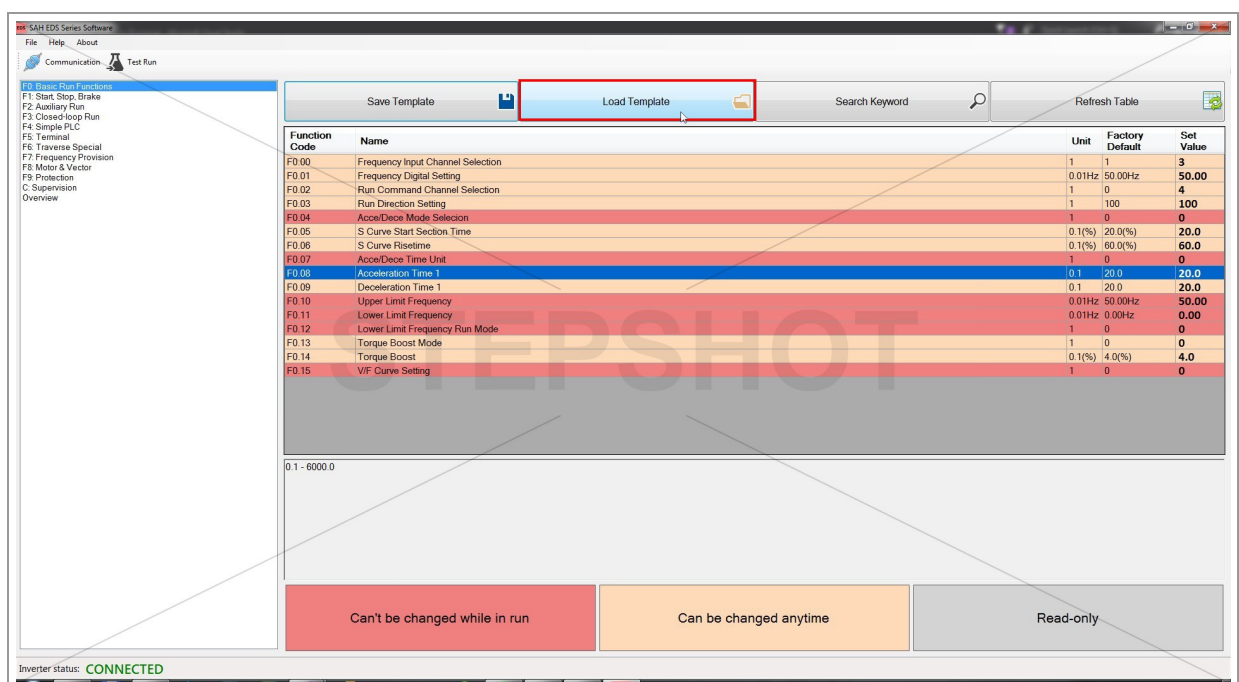
After naming the file click on "Save" button.

It will be saved on the chosen destination with the unique .eds extension (default destination is "Documents" folder).

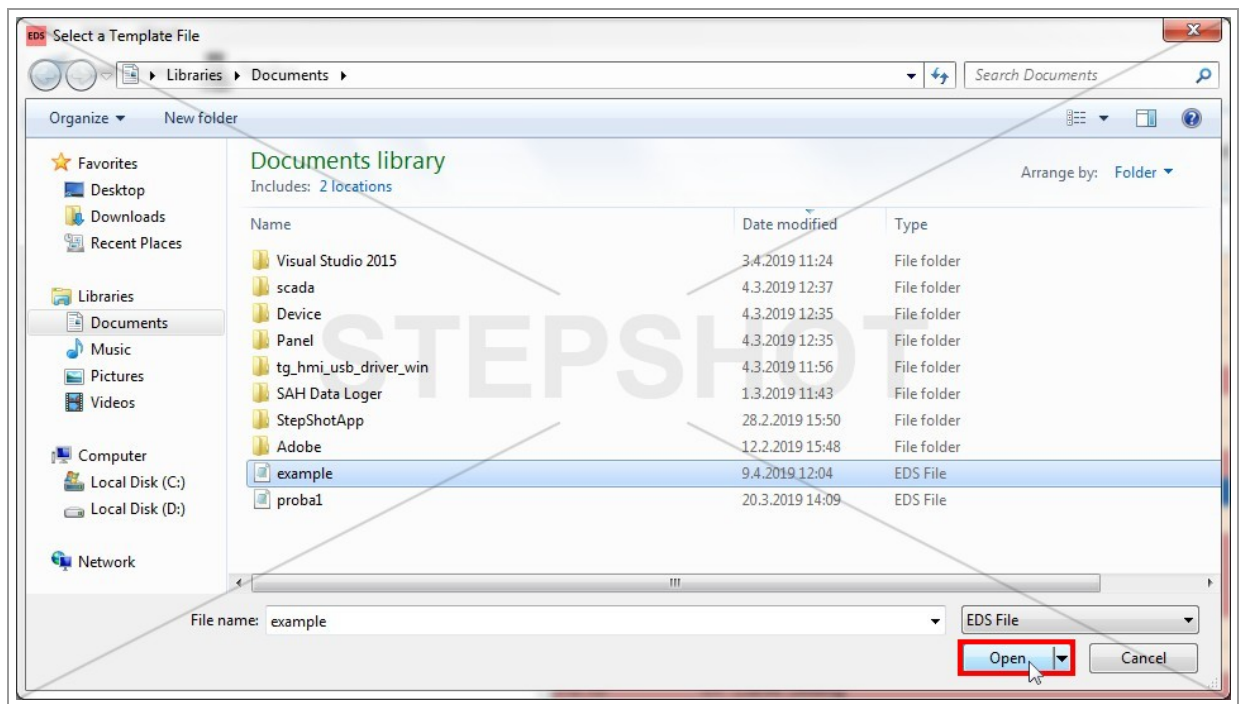


You should get the information message above. Click on "OK" button.

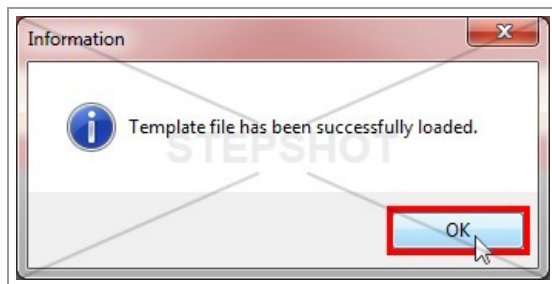
Load Template



Click on "Load Template" button to load the parameters from previously saved template file.



After selecting the desired EDS file, click on "Open" button.

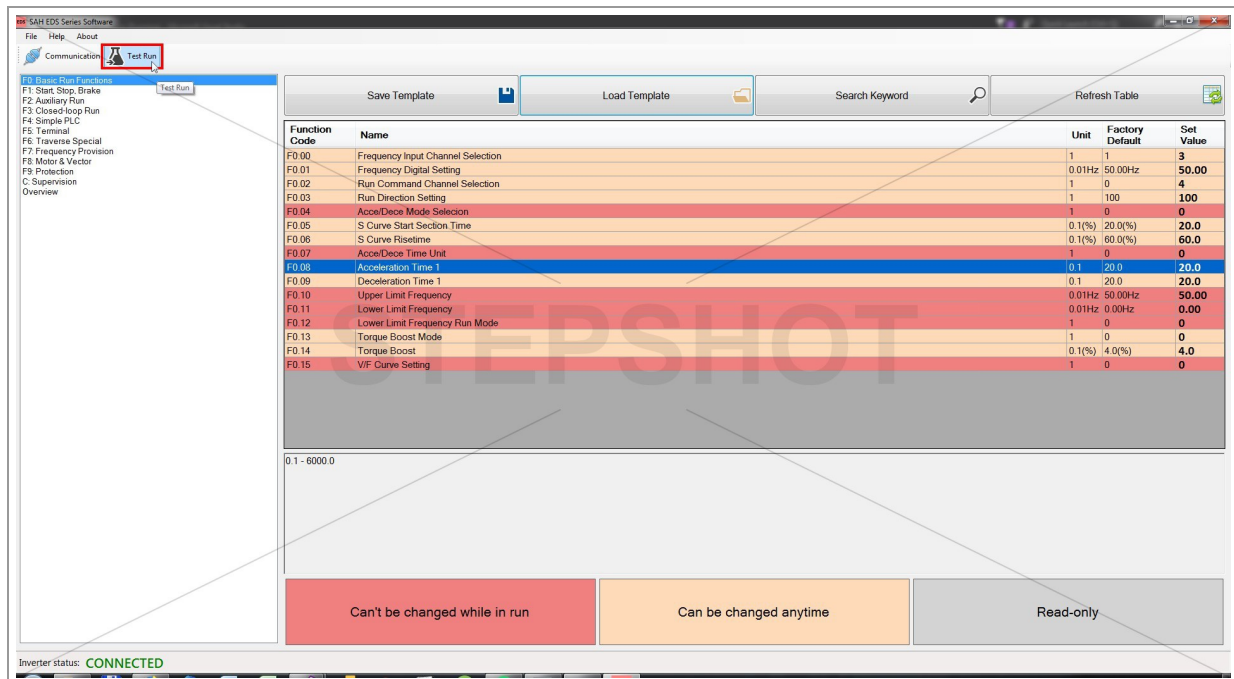


You should get the information message shown above.

After clicking on "OK" button, you will have to wait for about 10 seconds until all the parameters are written successfully to the inverter.

Run, Stop, Change Frequency

Test Run



Click on "Test Run" button to get the window with all RUN/STOP commands and frequency setting.

Motor Status



Current motor status is shown in the status bar.

Its values can be: STOP, RUNNING FORWARD, RUNNING REVERSE or ALARM.

Frequency Modification



You can click on either UP or DOWN arrow to adjust the frequency by 1.00.

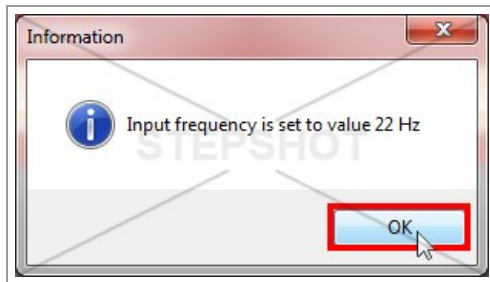
If you exceed the lower or upper frequency limit shown above the textbox, you'll get the warning message.



You can also set the frequency manually, by entering the desired value with maximum 2 decimals (decimal separator is only '.').

Note: You don't have to use the decimal separator if you want to enter the whole number (e.g. 22 will be considered as 22.00).

The set value is changed once you click on "SET" button and get the message shown below.



Once you get the message above, the set frequency is changed.

RUN/STOP Commands



You can use the command buttons to RUN and STOP the inverter in normal or jog mode.

Jog Commands have the priority over the Run Commands, but "STOP" button has the overall highest priority.

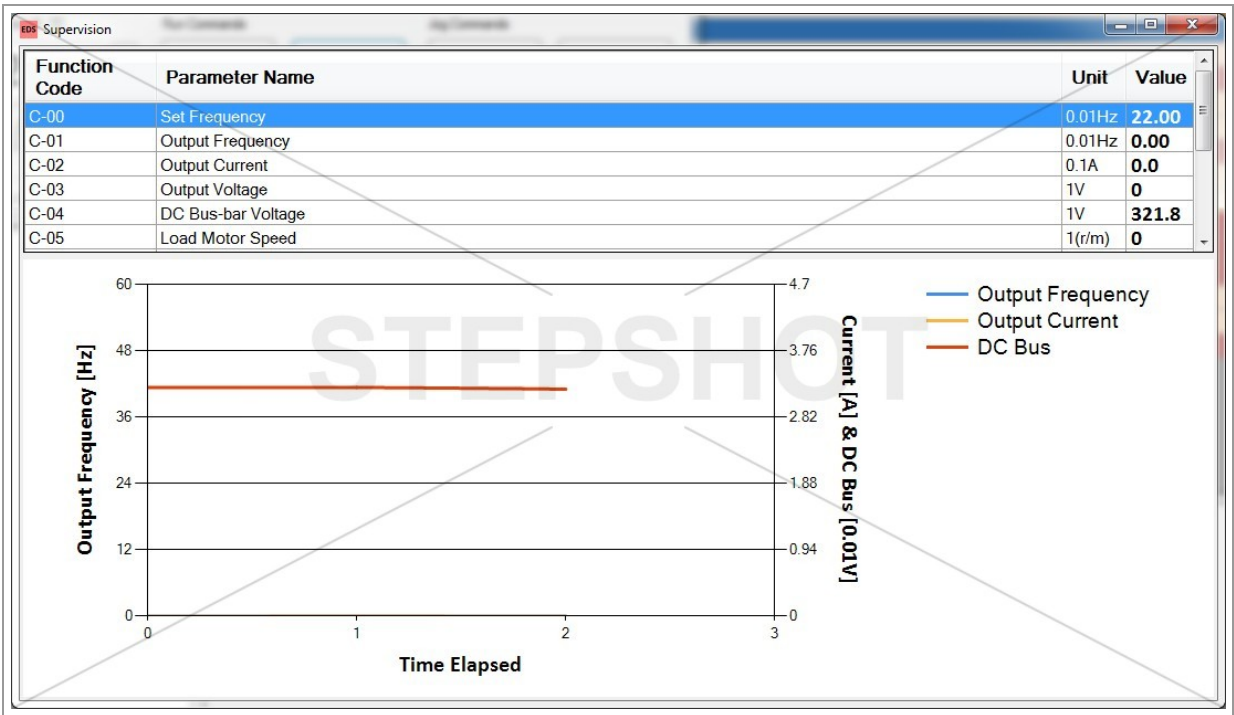
"RUN" and "Jog RUN" buttons run inverter in set direction (defined by F0.03 - forward direction by default).

Supervision



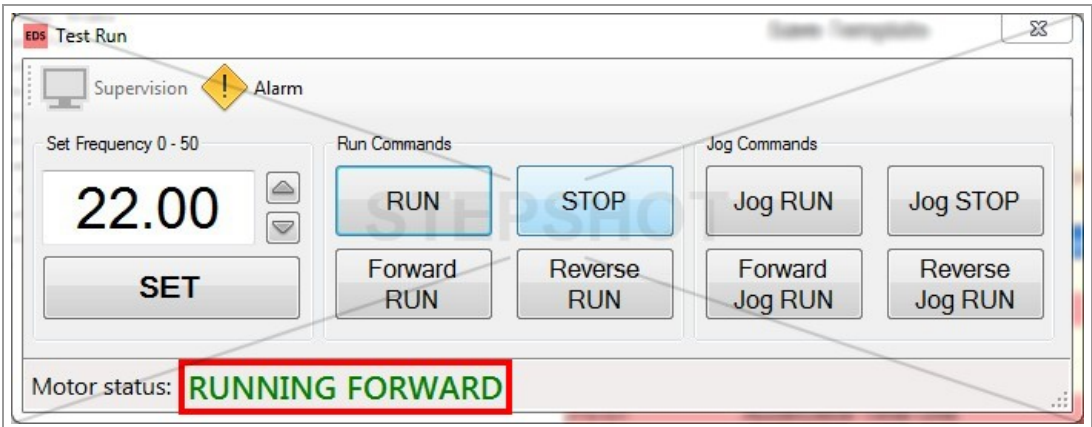
Click on "Supervision" button from toolbar menu to get the real-time insight of the supervision parameters change (C parameter group) tabular and graphically.

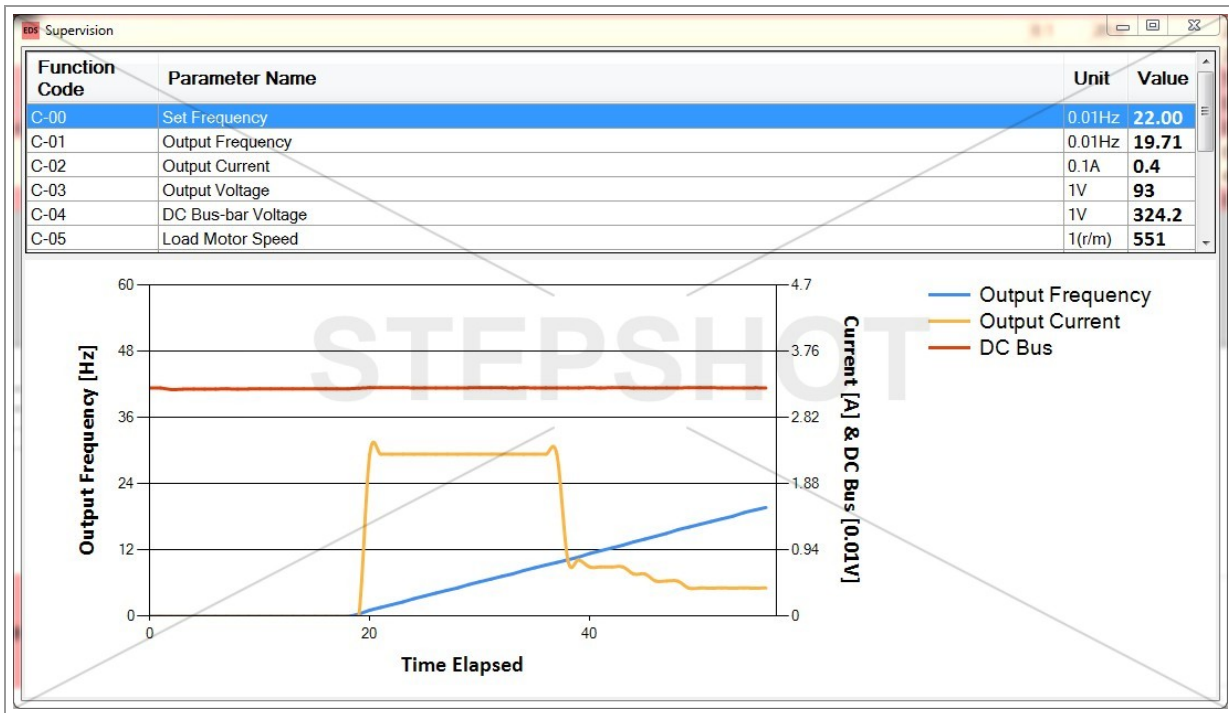
Tabular and Graph Real-Time View

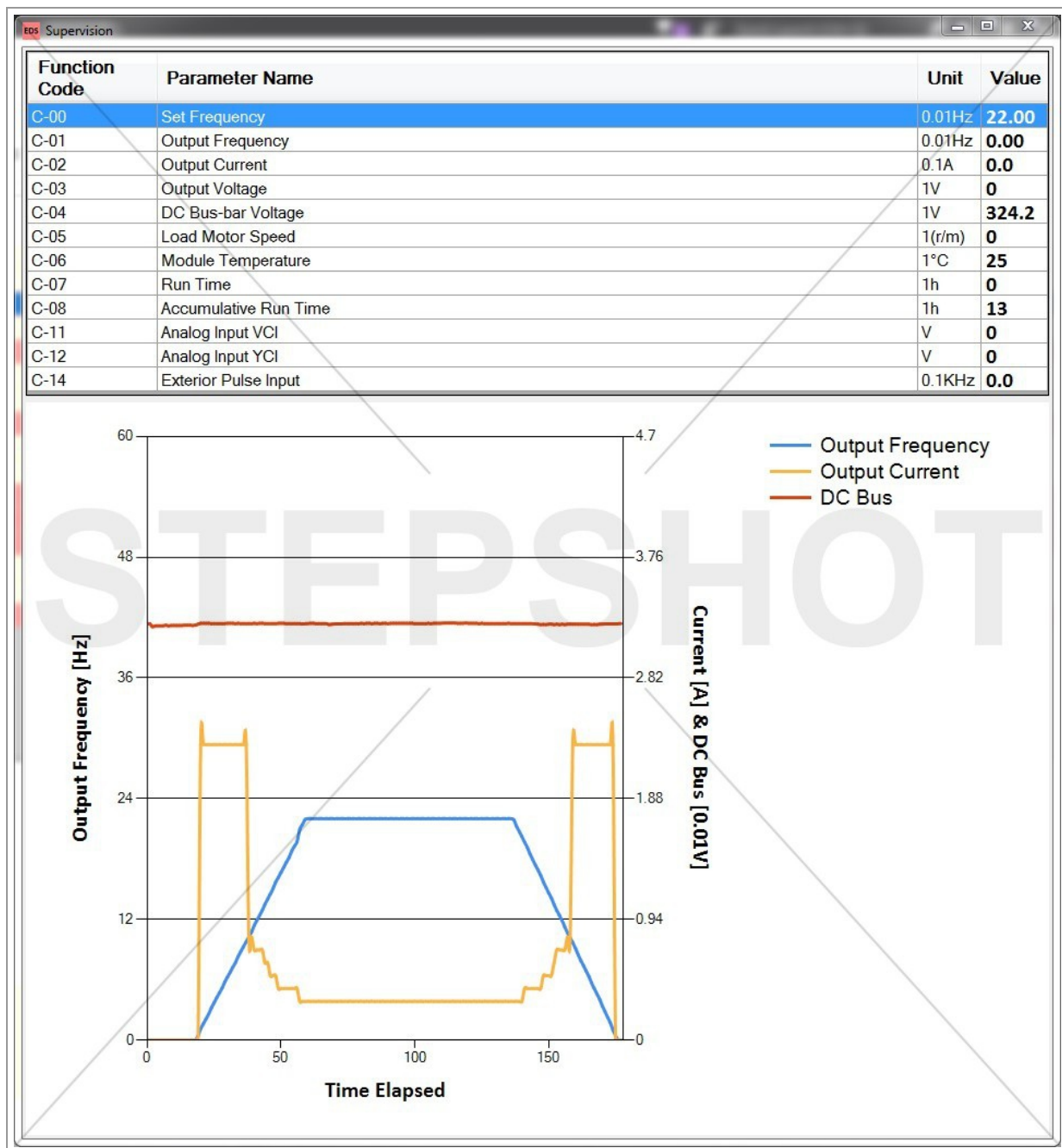


The new window appears with the table that contains all the supervision parameters and the real-time chart graph with output frequency, output current and DC bus voltage.

Note: Refresh rate is set to 1 second while the inverter is not in running state, but it gets faster (100 ms) as soon as the output frequency rises from 0.







You can resize the supervision window as you wish.

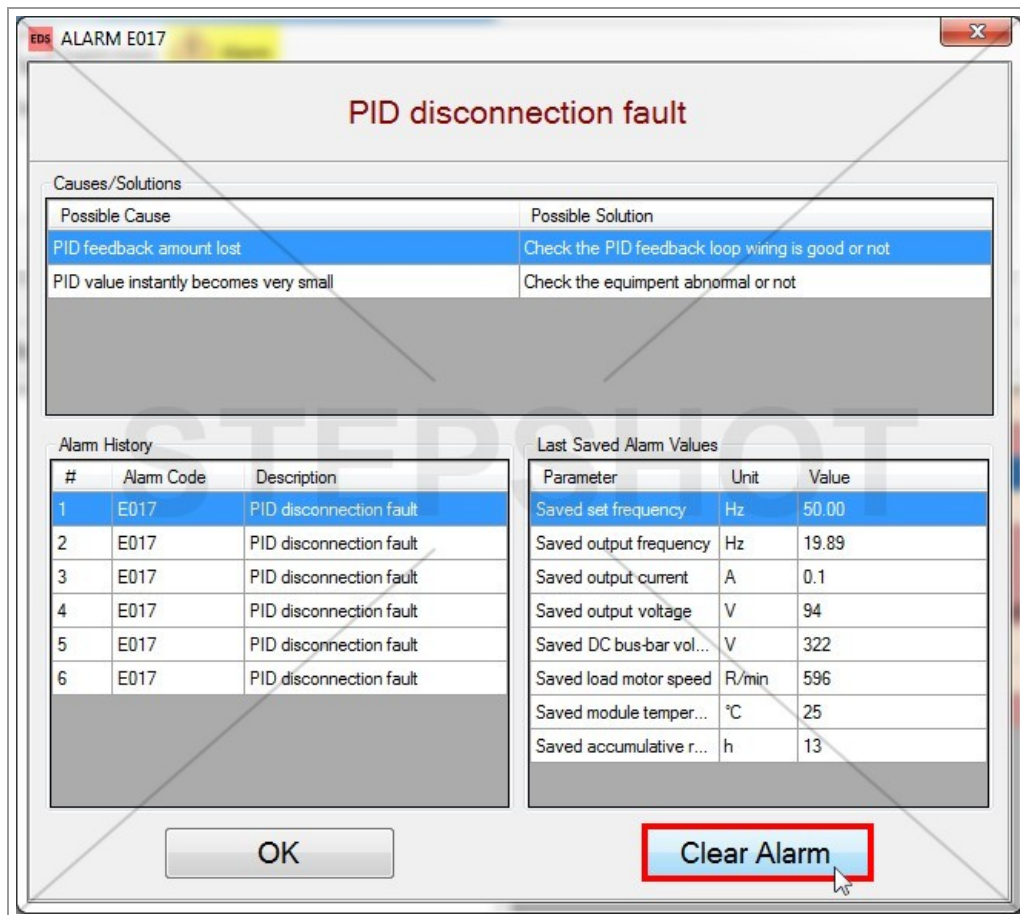
Alarm

Alarm Status

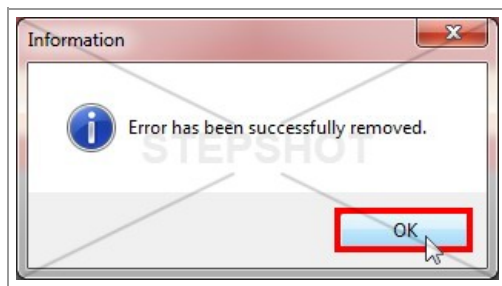


Once you get the alarm status, background of "Alarm" toolbar menu icon will become colored in yellow.

Click on it to get the window with more information about the cause of alarm with the shown alarm code and eventually clear it.



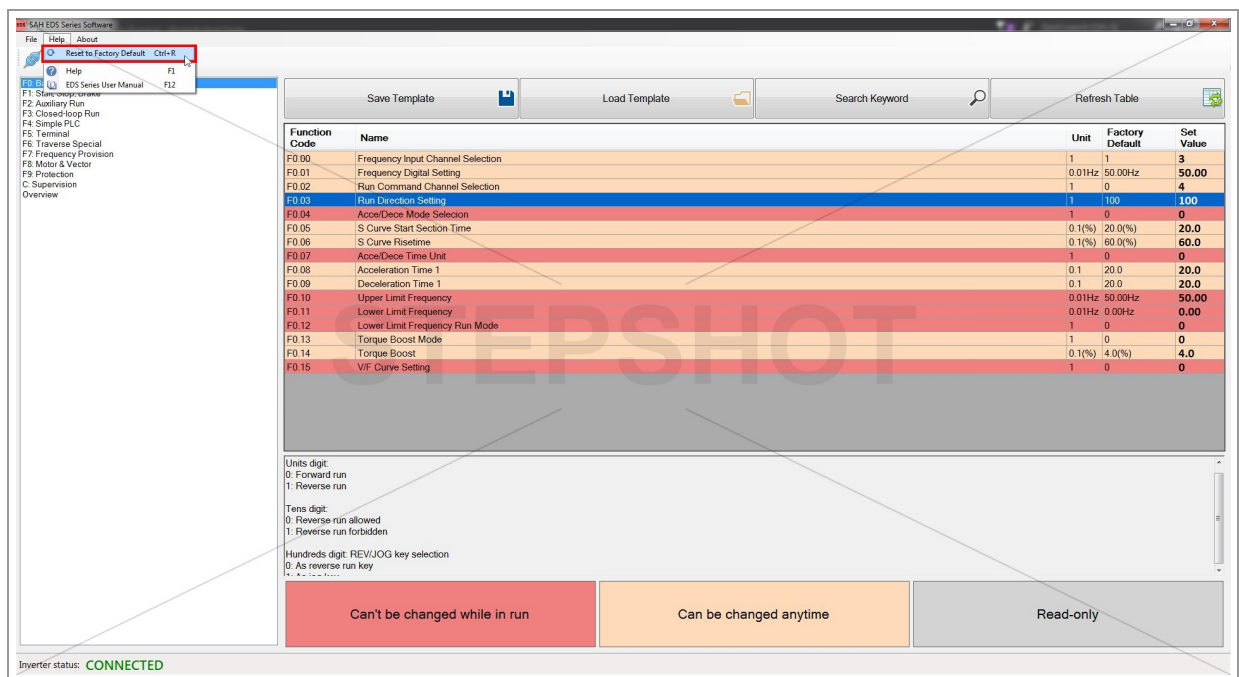
After getting noticed about possible causes and solutions, alarm history and last saved alarm values, click on "Clear Alarm" button to reset fault and continue working normally.



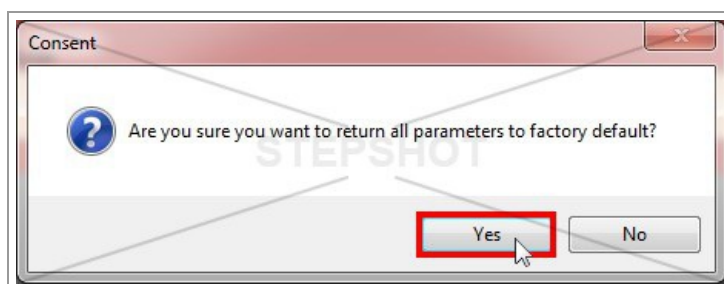
You should get the information message as shown above.

Troubleshooting

Reset to Factory Default



You can revert all the parameters to their factory default values anytime, by clicking on "Reset to Factory Default" button from "Help" menu.

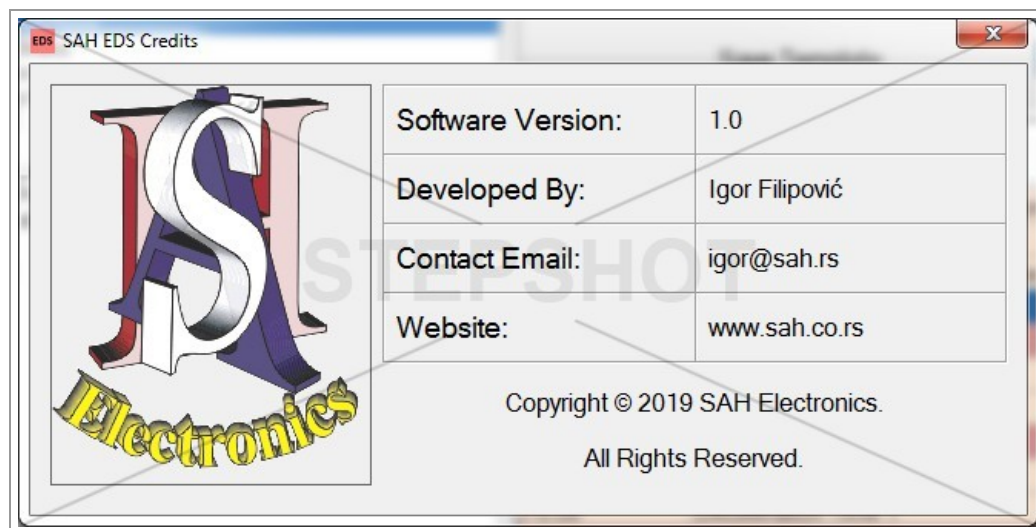


For security reasons, you'll be asked for the confirmation.

Click "Yes" to confirm your choice.

After that, you should wait for about 10 seconds until all the parameters are loaded from inverter successfully.

Credits



For any additional help visit our official website or write to email showed above.