Configuration Instructions
ACT-MAN-01-04-EN Rev. A
September 2018

TEC2 Configuration file convert from TEC2000 (Model 500 Discontinued)

Using DCMlink™

EMERSON™

Table of Contents

Section 1: Document Purpose

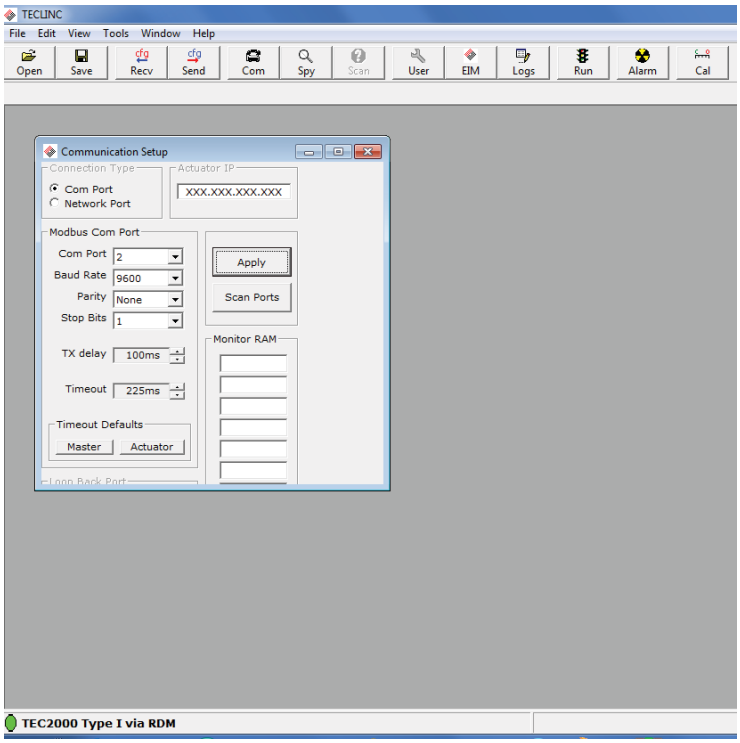
1.1 Export TEC2000 configuration (Method: TEClink)..... 1
1.2 Export TEC2000 configuration (Method: DCMlink™)..... 3
1.3 Import configuration to TEC2 unit (Method: DCMlink™) 8

Section 1: Document Purpose

This document is to show TEC user (1) how to export the configuration file from TEC2000 before perform the “TEC2 covert” which is changing electronics device inside TEC2000 unit into TEC2 electronics. (2) how to import TEC2000 configuration files into TEC2 electronics. There are two tools can be used to export the configuration from TEC2000 electronics actuator. First one is TEClink and second one is DCMlink™. Since TEClink is no longer support TEC2, DCMlink™ becomes only available tools to access network to the configuration for configuration import process.Export TEC2000 configuration (Method: TEClink)

1.1 Export TEC2000 configuration (Method: TEClink)

1. Connect unit with RS485 Modbus on STC21/STC23 (RDM) or STC39 to STC44 with Modbus network.
2. TEClink export configuration from unit. (Using TEClink to export configuration file)
   a) Set the comport and speed correct till the “Green” communication light shows at the button status bar which means the communication between TEClink and Unit has built up successfully.

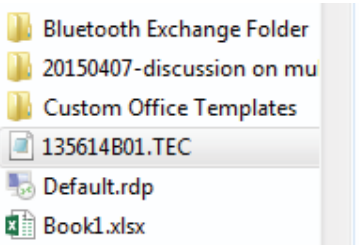


3. Click Recv and wait 10 second till the button color comes back.

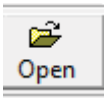
(Not avaliable-it's reading in process) (avaliable-it's finish reading process)

4. Click Save configuration file (.TEC) file at desire location

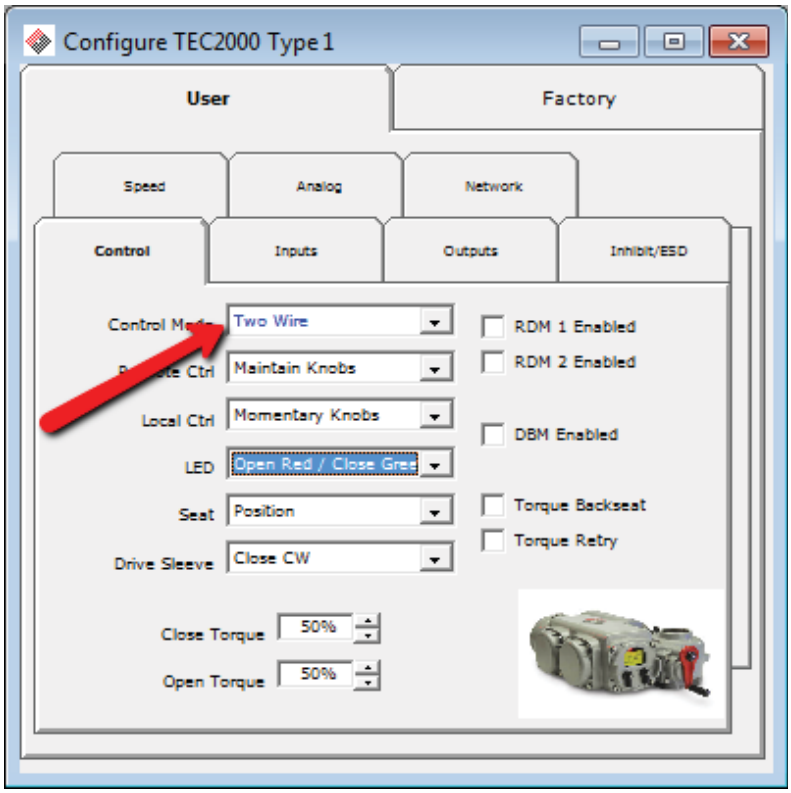
5. Save TEC2000 configuration file as unit serial number. (as example is 135614B01. TEC)



6. To make sure the TEC configuration export correctly, click "User" to read the current parameter from the unit.
7. Open the TEC configuration file from the location you saved.

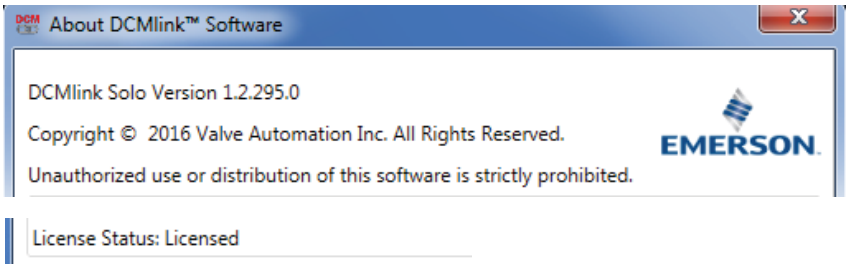


8. If user does not see any column is blue after open the file, the configuration is export correctly.



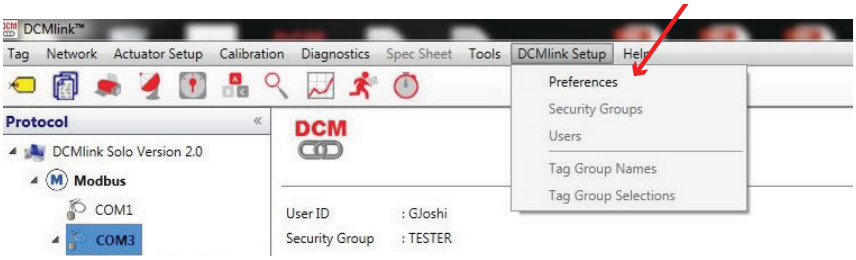
1.2 Export TEC2000 configuration (Method: DCMlink™)

1. Using DCMlink™ to perform the configuration export, it requires the DCMlink™ rev is greater than 1.2 and licensed. To perform export / import process, DCMlink™ application requires to grand Emerson license.
(Please consult Emerson Sales Team for more information).

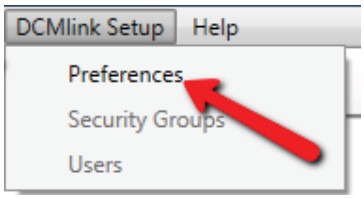


2. Build up communication channel.

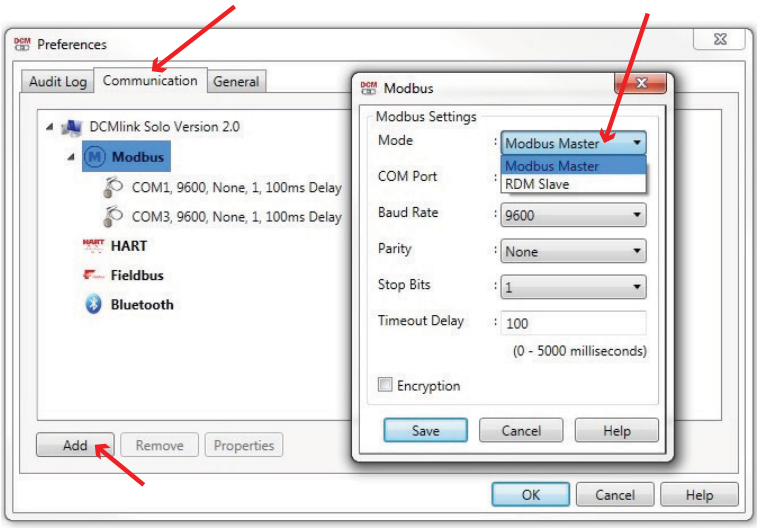
   a) Click tool bar "DCMlink™ Setup"



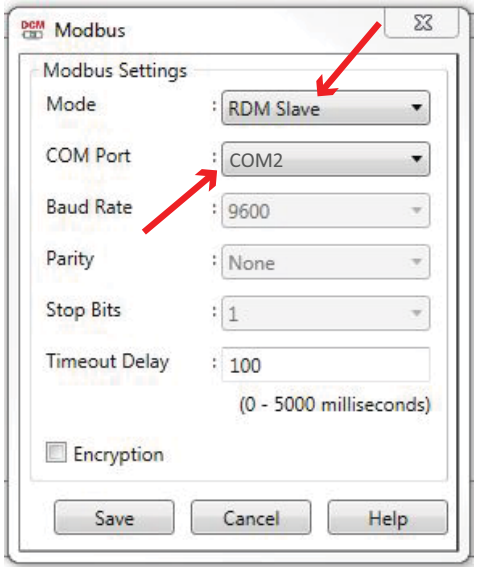
   b) Click "Preference"



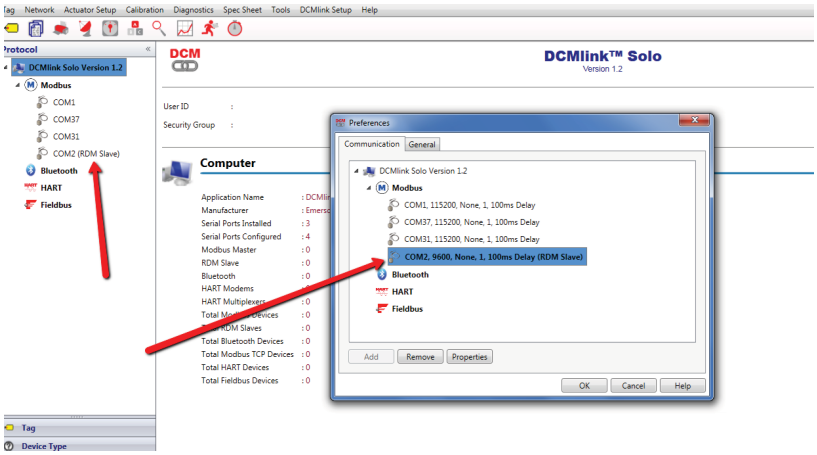
c) High light the Modbus option and click “Add” button.



d) In the Pop-up screen, Choose RDM Slave for TEC2000 and Choose COM port same as RS485 converter. The Baud Rate/ Parity/Stop Bits will be default as below number. Then Click the same button.

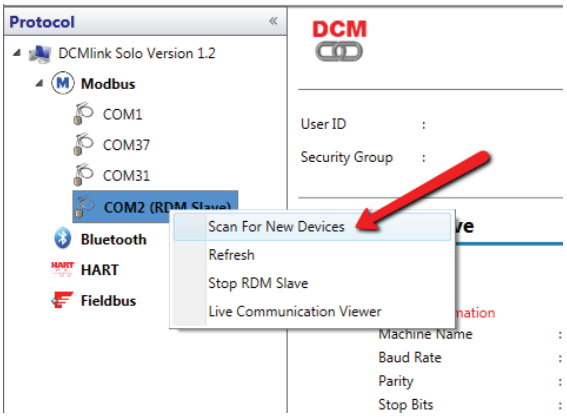


e) User should see the communication channel has built(RDM Slave) from DCMlink™ as below. *note: Only TEC2000 in DCMlink™ will be required to use Slave mode to communicate unit.



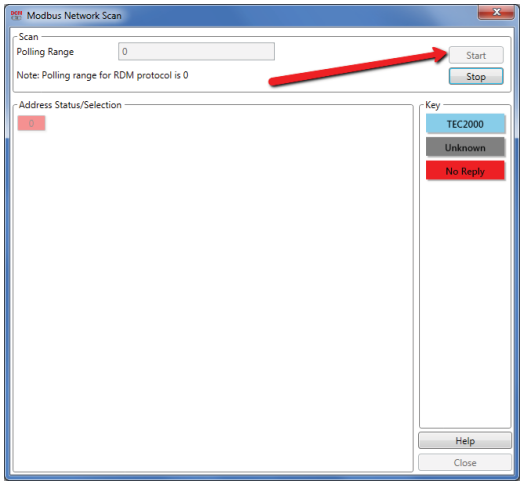
3. Scan unit under communication channel

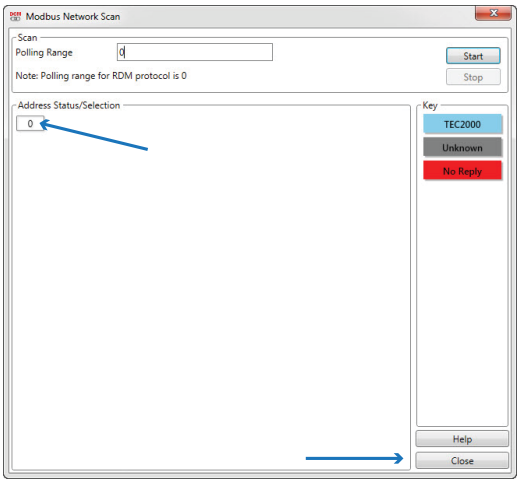
a) Right click on Comport and choose “Scan for New Device”



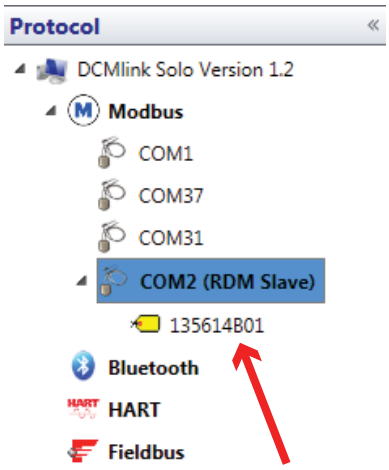
b) Enter the unit choose to 0 and click start to scan network.

- The red color of 0 which means the unit is not available at the network.
- The blue color of 0 which means the unit is available at the network.



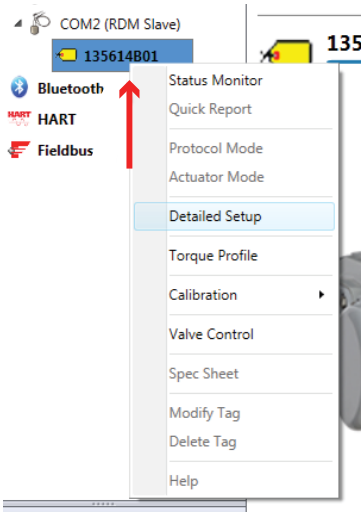


c) Once unit found in the network and close the pop-up screen of MODBUS, user should see the unit serial number shows under the "COMPORT (RDM Slave)"

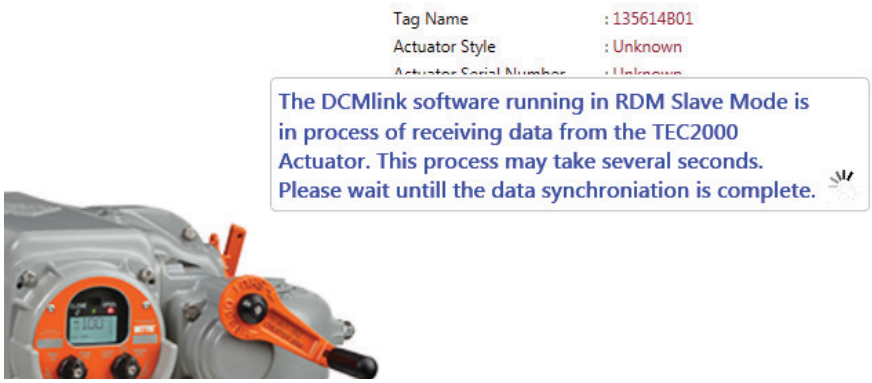


4. Enter unit setup menu to export the configuration file.

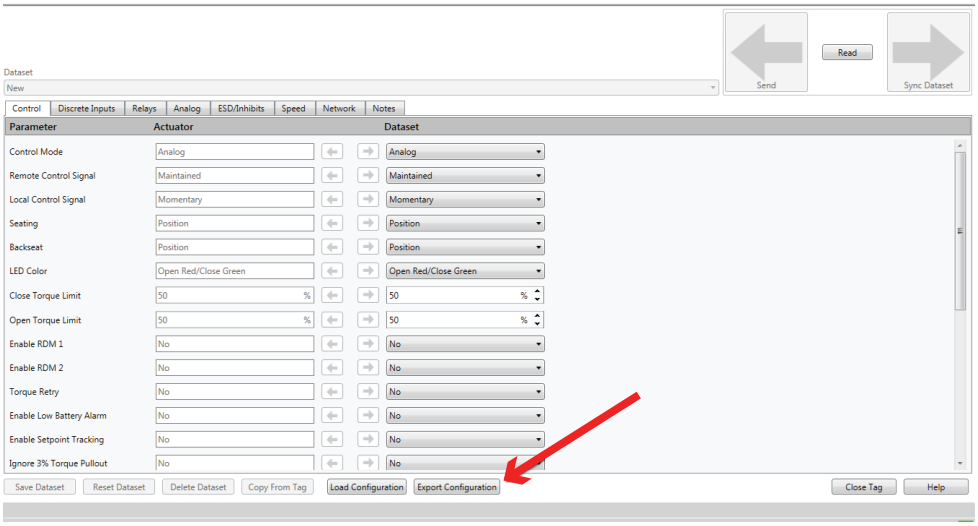
a) Right click on the unit S/N and choose the "Detailed Setup"



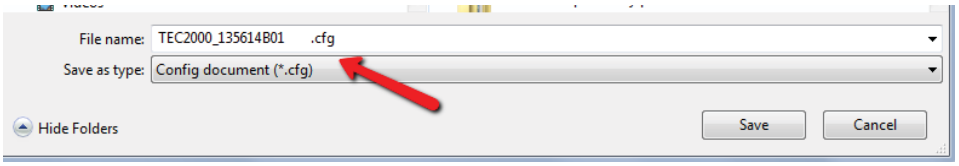
b) Processing of communication to TEC2000 unit will show below prompt



c) Location the “Export configuration” and click to save the configuration



d) Save file with unit serial number.

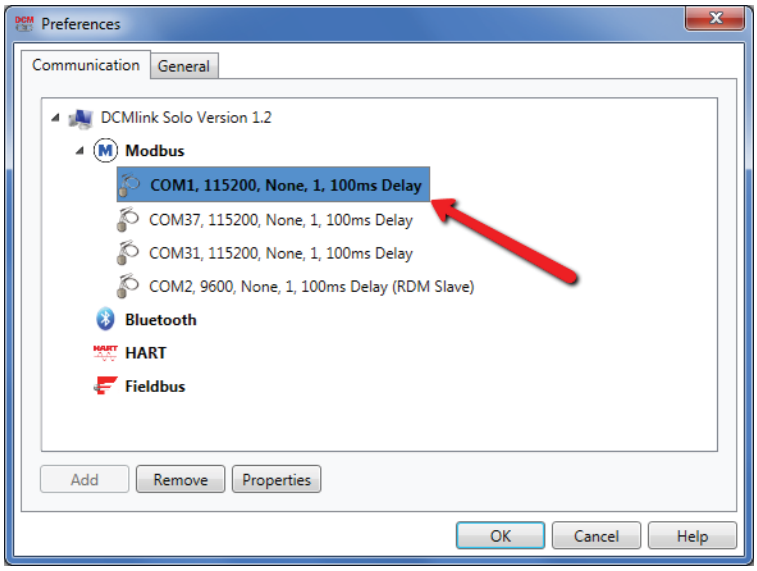


NOTE:

During the export process, the format of configuration file generate from TEClink is *.TEC and the format of configuration file generate from DCMlink™ is *.cfg. the contents of configuration file are same either it’s generated from TEClink or DCMlink™.

1.3 Import configuration to TEC2 unit (Method: DCMlink™)

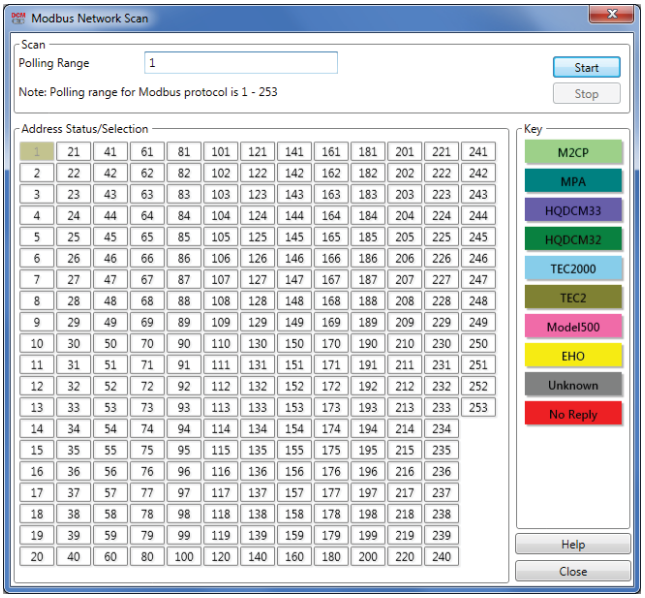
1. Set the comport with baud rate 115200 (Modbus Master)-if go through STC36 / STC38. Set the comport with baud rate 9600 (Modbus-bus/Modbus repeater)-if go through STC 39 to STC44, Modbus Network channel A and B.



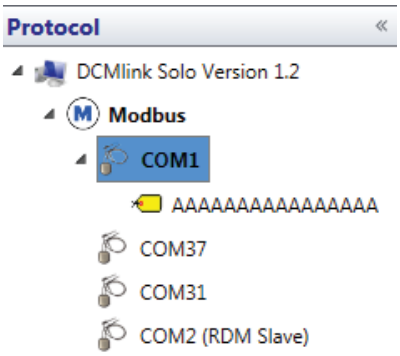
2. Scan the unit through comport with unit address 1.

   a) The dark green color as below is recongized as TEC2 unit.

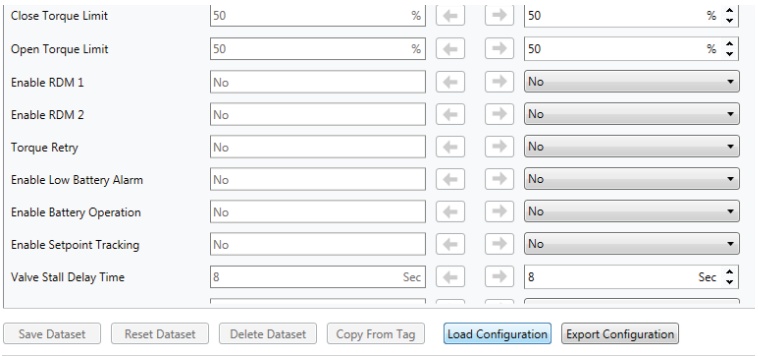
   b) The Pink color as below is recongized as MODEL500 unit. (Default) (Model 500 Discontinued)



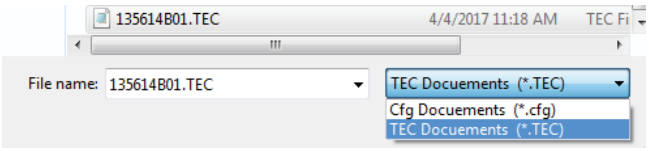
3. Click stop and Close after the unit is able to identified by DCMlink™ and at the protocol area, the unit tag will appear under comport.



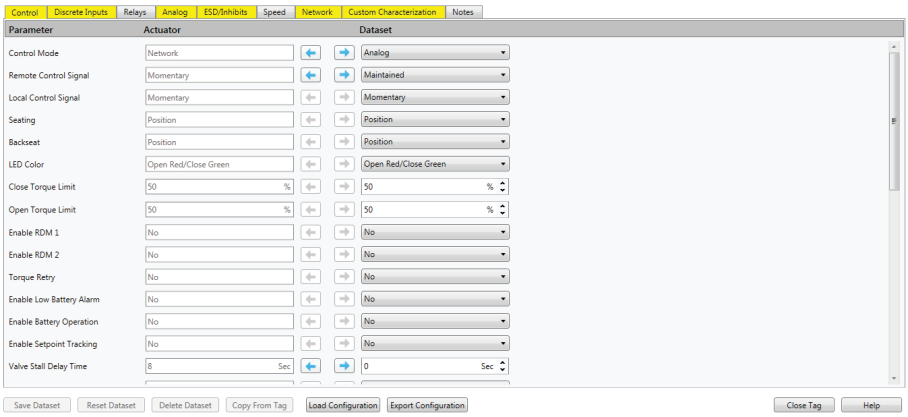
4. Right click on the unit with “Detail Setup” and find the “Load configuration” button.



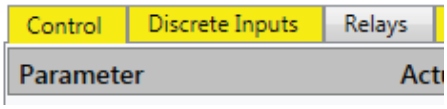
5. Load the configuration file from TEC2000 configuration file (*.TEC or *CFG)



6. After loading the configuration file, user will see the color changes through the load process.

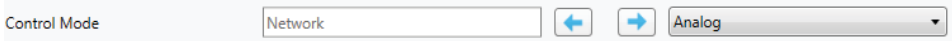


a) Yellow Tag (the parameter needs to change after upload configuration file)



b) Blue arrow

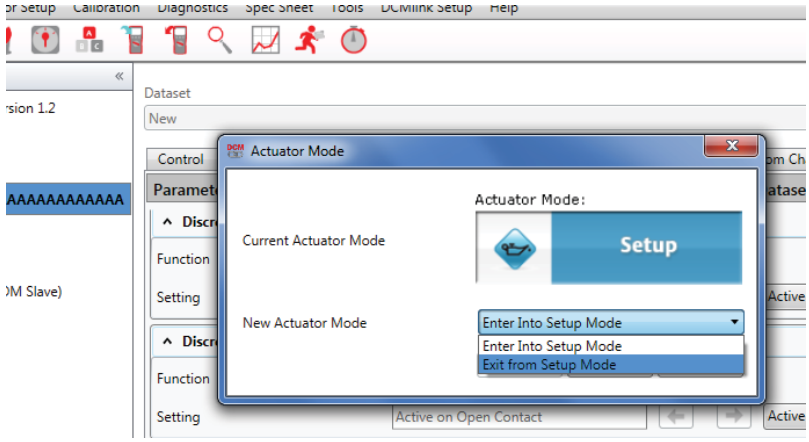
1) (Left arrow means write into configuration file, Right arrow means read from unit to overwrite the upload configuration.)



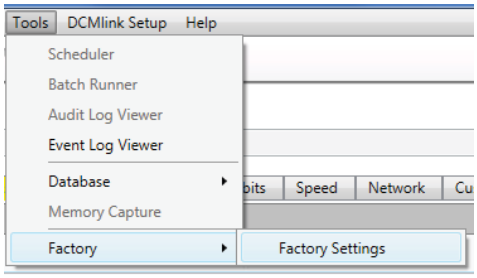
2) In order to upload all of the parameter into actuator, user needs to click all "LEFT ARROW" at each lines and tags.

3) After all "LEFT ARROW" has been click, the tag color will change from "Yellow" to "Gray" which means the configuration has changed but hasn't save yet.

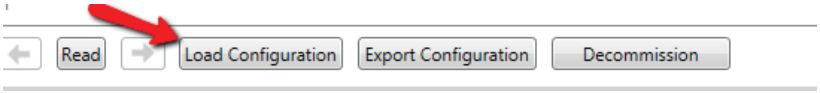
7. After all the changes made, exit out from the Setup.



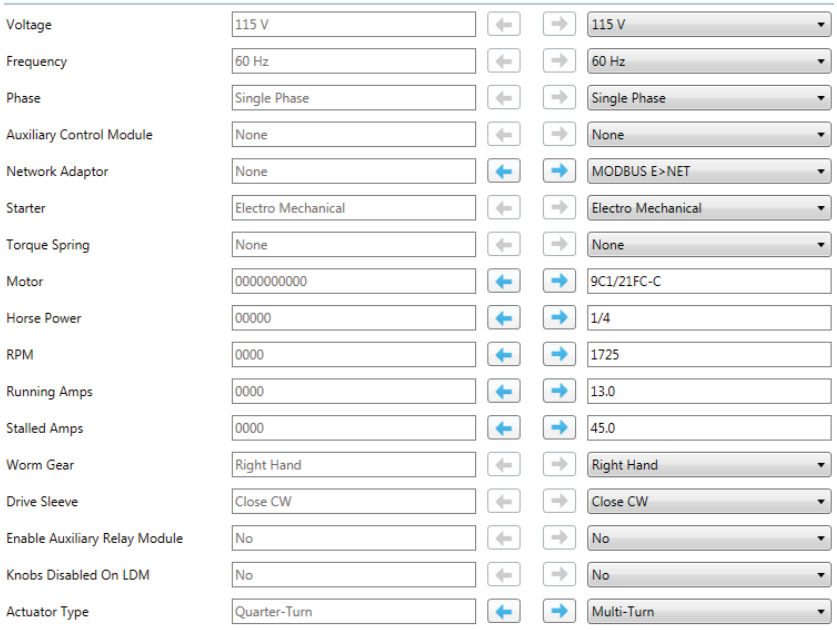
8. After all "Detial Setup" has been made, user needs change the "Factory Setting". It's at Tools/Factory/Factory Settings. * *note: if DCMlink™ has no Emerson licensed, the factory setting will be disable till grant the licensed.



a) Click the button "Load configuration"



b) Click all blue “LEFT ARROW” to make the changes.



c) Verify the critical parameter befor exit from factory setup.

1) Actuator Model (default is Model500, and needs change to TEC2)

2) Drive Sleeve (Close CW/Close CCW)

3) Worm Gear(Right hand/Left Hand)

4) Starter Type(Solid State/Electrical Mech)

5) Phase(Single Phase/Three phase)

6) Reverse Rotation(Yes/No)

7) Firmware CCM/LDM/RDM

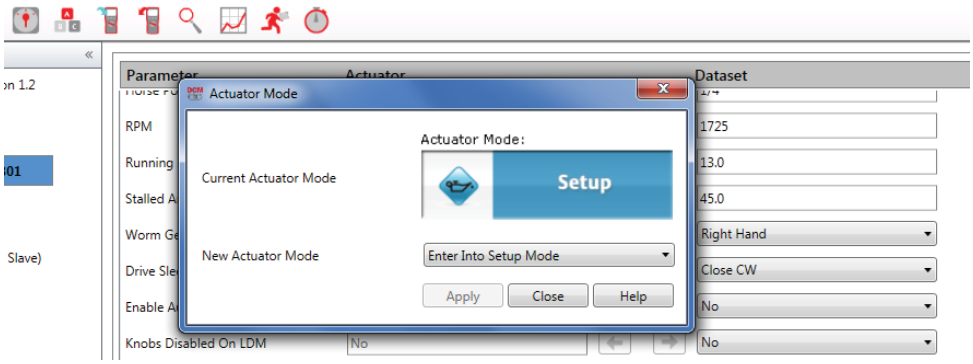
A) CCM: 1.0.4.

B) LDM: 1.0.4.

8) Auxiliary Control Module

9) Network Adapter

d) Exit out the Setup to save the changes.



9. Completed configuration file migration from TEC2000 electronics to TEC2 electronics.
10. Export the final change of configuration file from TEC2 and send the copy of file back to Emerson as archive for future reference.
11. Commisson the unit.

NOTE:
if user has difficulty to hav original TEC file, please consult Emerson team for supporting configuration file.

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ASIA PACIFIC

No. 9 Gul Road
#01-02 Singapore 629361
T +65 6777 8211

No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300

MIDDLE EAST & AFRICA

P. O. Box 17033
Jebel Ali Free Zone
Dubai
T +971 4 811 8100

P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650

24 Angus Crescent
Longmeadow Business Estate East
P.O. Box 6908 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700

EUROPE

Holland Fasor 6
Székesfehérvár 8000
Hungary
T +36 22 53 09 50

Strada Biffi 165
29017 Fiorenzuola d'Arda (PC)
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