Why does the Output's TesysT not switch on ?

I- Type of publication

- [ ] Typical application
- [ ] Best know Method (BKM)
- [x] Troubleshooting guide
- [ ] Level 2 use
- [ ] Internal use
- [x] Customer

II- Product

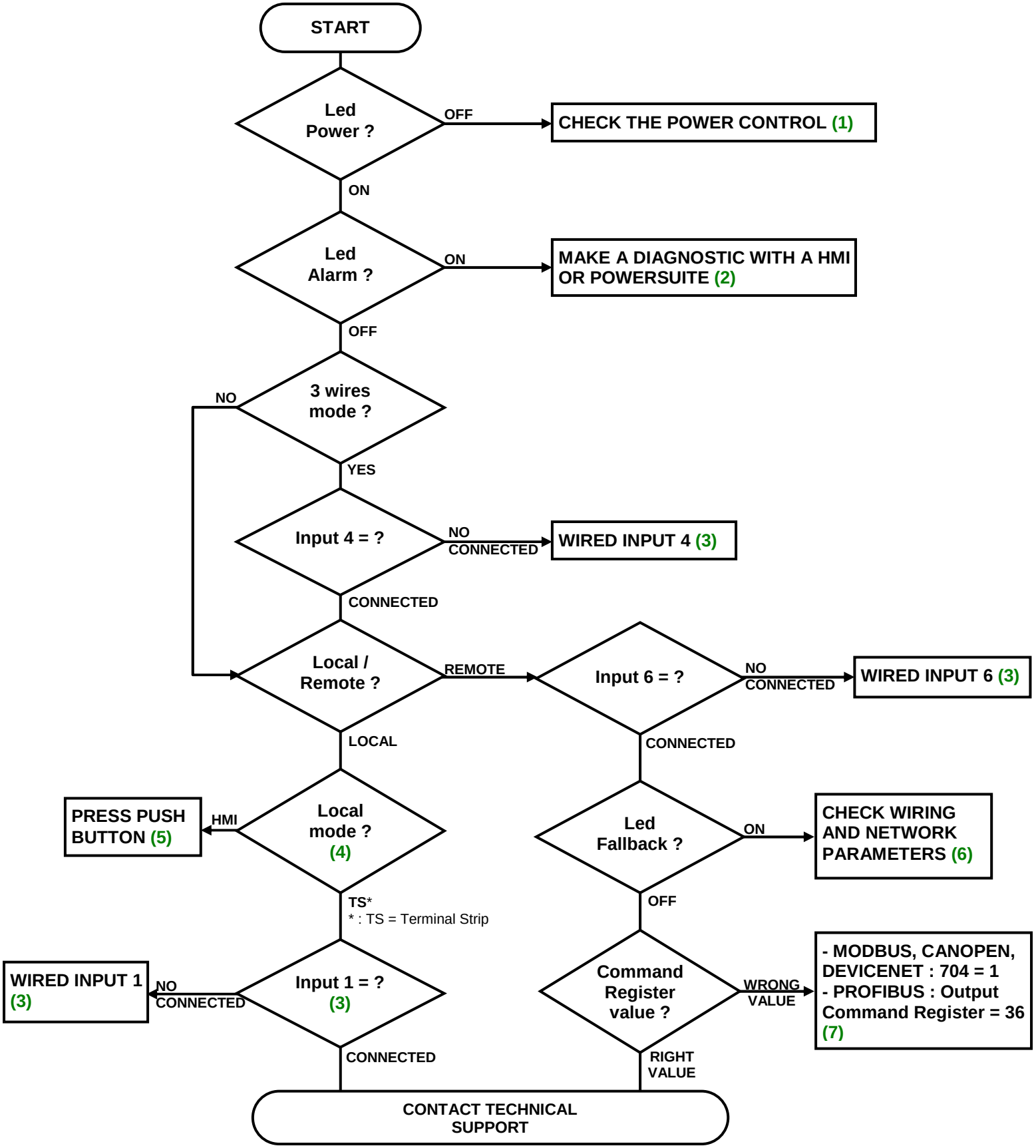
- Product range : TesysT

- Product family : LTMR

III- Introduction

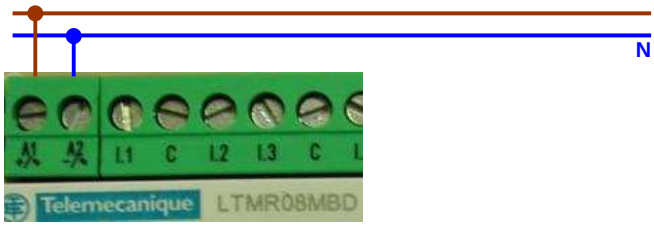
This document describes how to make a diagnostic and understand why you cannot switch on the TesysT Output LO1. The Second page is a flow chart with different steps to solve your problem. The third page is an illustration for each step.

IV- Description



(1) Check the power control

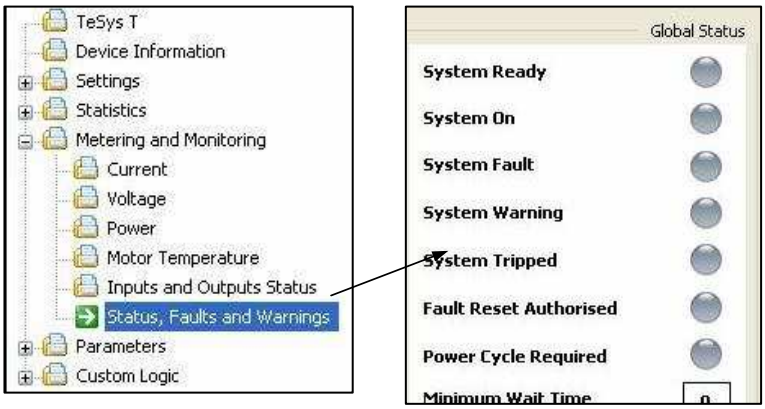
***BD** : Power Supply in DC Current : 24Vdc nominal current.You can supply with a voltage between 20.4Vdc and 26.24 Vdc.



***FM** : Power Supply in AC Current : 100-230Vac nominal current.You can supply with a voltage between 93.5Vac and 264 Vac.

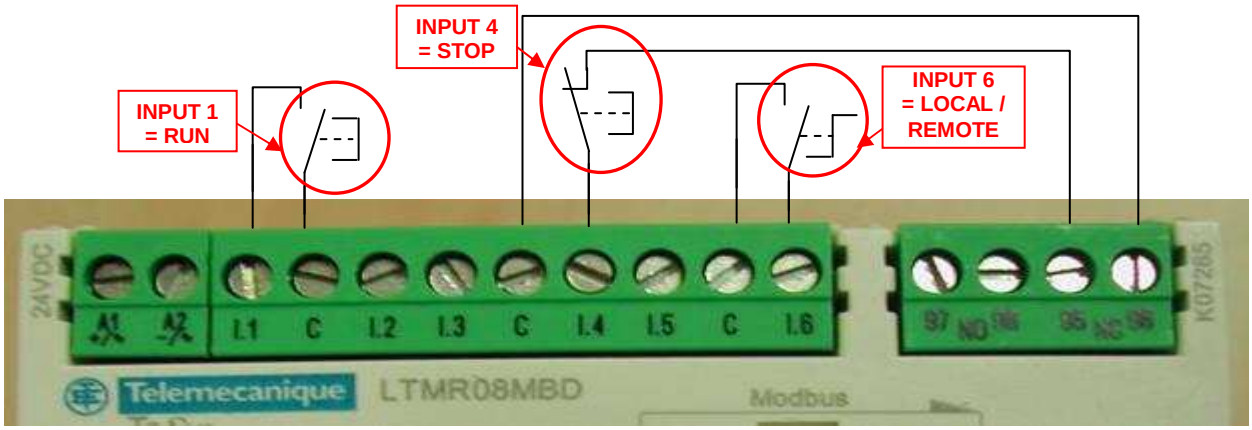
(2) Make a diagnostic with an HMI or PowerSuite

You can use the windows of PowerSuite, XBTN410 or LTMCU. For Powersuite, you should be connected and go on the menu : Monitoring/Status :

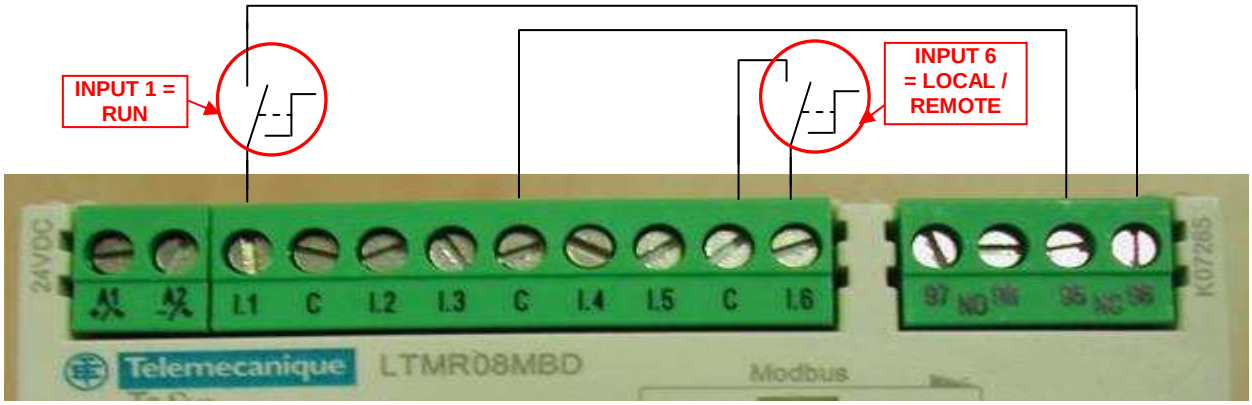


(3) Wired Input 4 (Stop input)

- ***3 wires :***



- ***2 wires :***



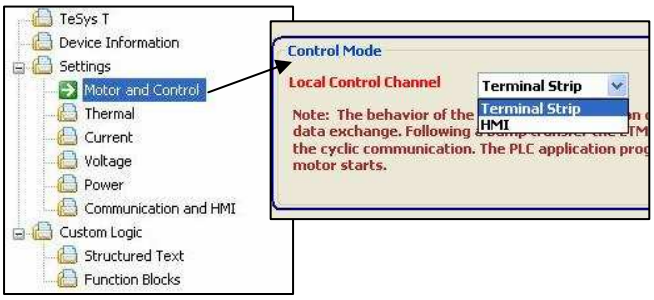
Note : In « 2 wires » you do not have « Stop button ». In the case of using an external power supply to switch on/off a logic input check the current and voltage level put on it (see catalogue of TesysT).

(4) Local mode

Local mode : select “Local mode” by removing the wire on the Input 6 -see point **(3)**-. You control now the TesysT outputs in Local. You have two ways to control the TesysT in Local mode :

- by HMI
- by Terminal Strip (Logic Inputs)

To choose between HMI or Terminal Strip select the mode as indicated below :

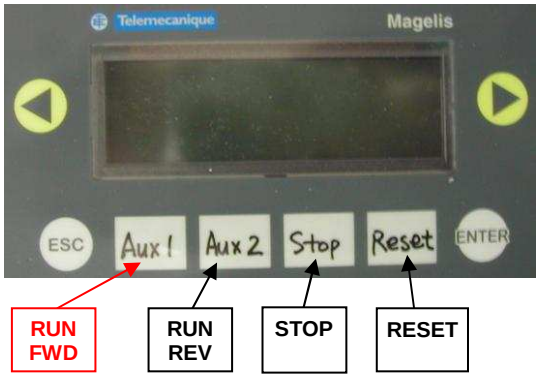


PowerSuite View V2.5 Patch for FW1.8

HMI : XBTN410

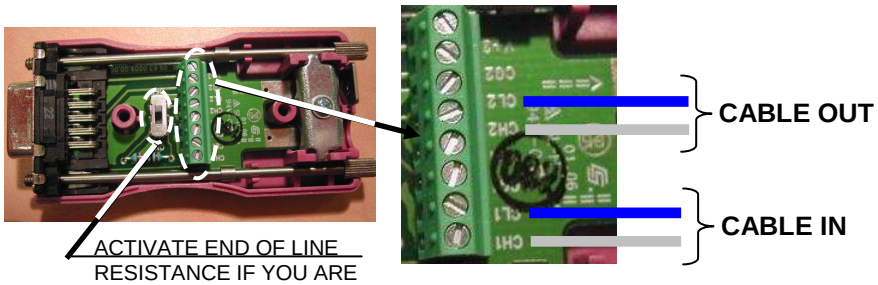
Note : whatever your mode (Local mode by HMI, Terminal Strip or Remote mode) the “Stop” key on HMI can stop the motor in all modes. This is the same if you use an operating mode 3 wires : the Stop input (input 4) can stop the motor in all modes.

(5) Press push button

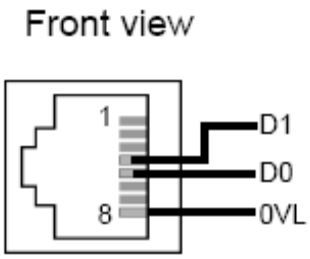


(6) Check wiring and Network parameters

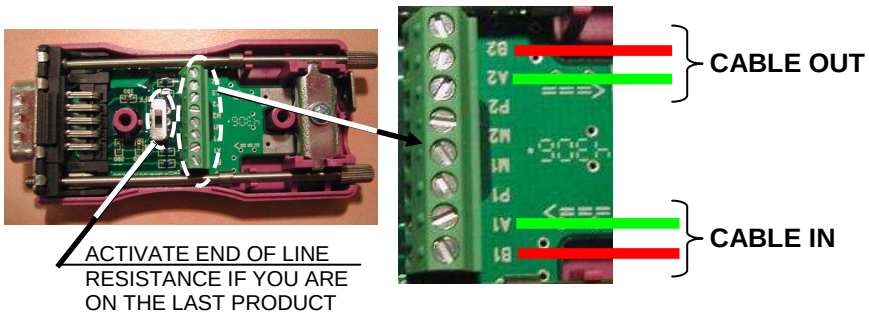
- TSXCANKCDFT180T (CanOpen connector) :



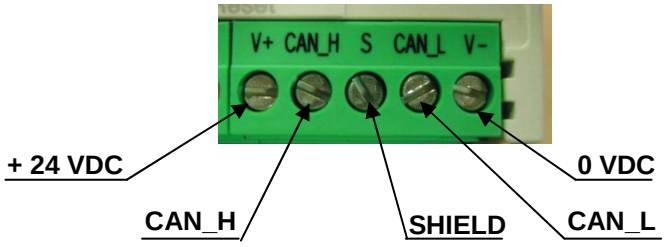
- Modbus connector (port on Right side) :



- LU9AD7 (Profibus connector) :



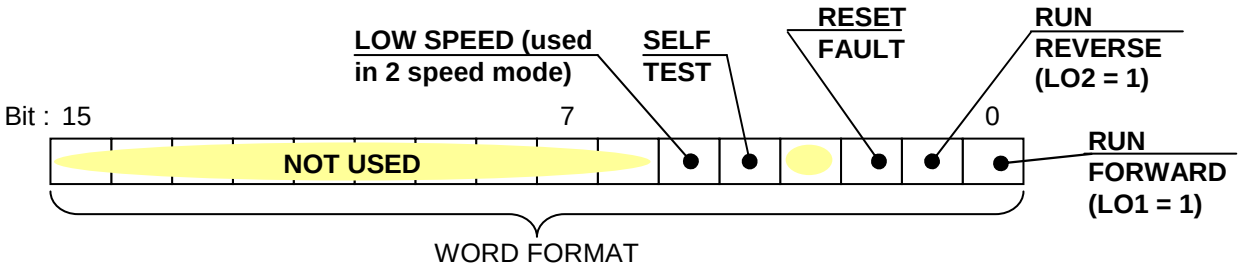
- DeviceNet connector (Phoenix connector) :



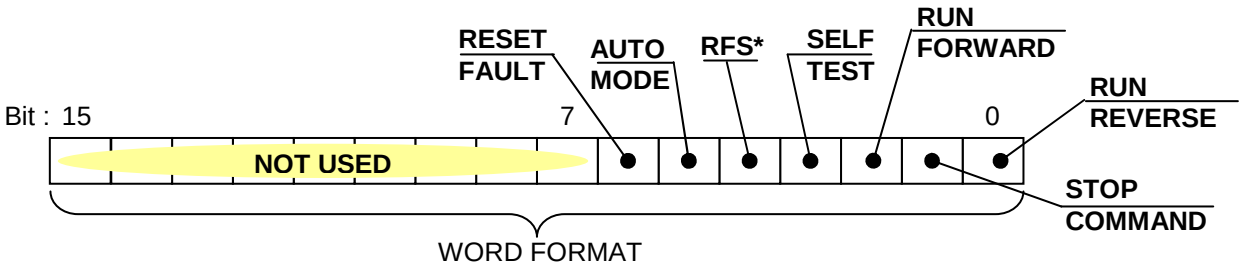
(7) Command register

In Modbus, CanOpen and DeviceNet the register 704 controls the Outputs LO1 and LO2. In Profibus, this is the First Output Word which manages the outputs. TesysT Profibus uses MMS profil (TesysU uses MMS and MS profil).

- Mapping 704 :



- Mapping Command register in Profibus MMS (First Output Word) :



LO1 = 1 : Auto Mode and Run Forward (Command register = 36)
LO2 = 1 : Auto Mode and Run Reverse (Command register = 33)
LO1 = LO2 = 0 : Auto Mode and Stop Command (Command register = 34)

Note : The register 704 works on state and the command register works on rising edge.

*RFS: Return to Factory Settings

V- Limitation

This technical resolution was written for the Output LO1. You can use this document for the output LO2. In this case (for output LO2), you should control :

- The register 704 = 2 or First Output word = 33 for Profibus (see point -7-)
- The terminal strip Input 2 (see point -3-)
- Push button for HMI (see point -5-)