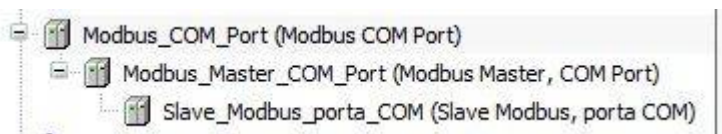


# MODBUS Communication with CODESYS

## CODESYS General configuration

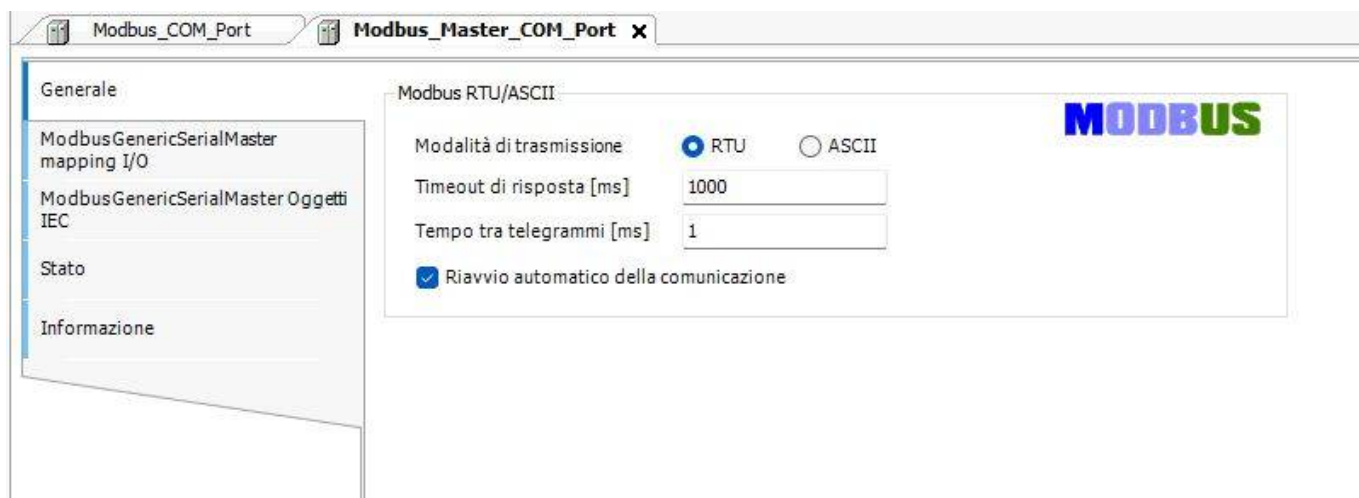
In order to communication with NLi motor using MODBUS RTU interface please add to your codesy project these devices:



Please use the right baudare speed (do not forget to configure the NLi motor with the NiLAB starter with the baurate of 115200.



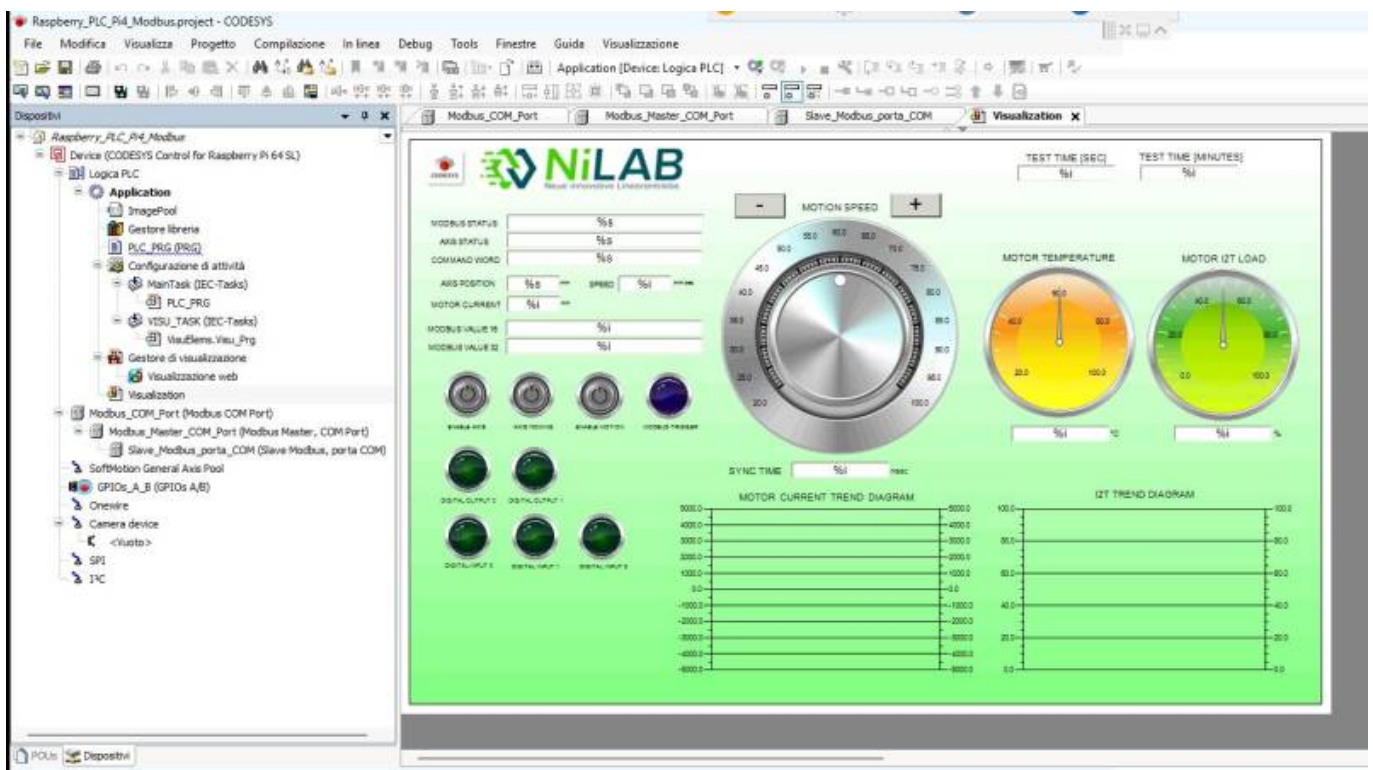
Then specify the timeout and the time bewteen telegrams.



Then configure the slave channels, here an example:

Nome	Tipo di accesso	Trigger	Offset di LETTURA	Lunghezza	Trattamento errore	Offset di SCRITTURA	Lunghezza	Commento
0 Channel 4	Write Single Register (Codice funzione 06)	Ciclo, t#2ms				16#120E	1	Modbus_trigger
1 Channel 1	Write Single Register (Codice funzione 06)	Ciclo, t#2ms				16#1000	1	Command_Word
2 Channel 2	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#121A	2	Mantieni ultimo valore			Axis_position
3 Channel 3	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#1200	1	Mantieni ultimo valore			Status_word
4 Channel 7	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#0008	2	Mantieni ultimo valore			Modbus_value_1
5 Channel 11	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#1218	1	Mantieni ultimo valore			Motor_speed
6 Channel 12	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#1020	1	Mantieni ultimo valore			Motor current
7 Channel 8	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#06FE	1	Mantieni ultimo valore			Modbus_value_2
8 Channel 9	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#1021	1	Mantieni ultimo valore			I2T_calc
9 Channel 10	Read Holding Registers (Codice funzione 03)	Ciclo, t#2ms	16#0007	1	Mantieni ultimo valore			Motor temperature

## Example



Project example using Raspberry CODESYS PLC: [:nilab\\_starter:raspberry\\_plc\\_pi4\\_modbus.zip](https://dokuwiki.nilab.at/doku.php?id=integrated_drive_motors:codesys_modbus)

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Last update: 2025/11/19 14:05

