

29/11/16

CROUZET TOUCH - MILLENIUM3 XN06 MODBUS RTU ADDRESSING CROUZET TOUCH TUTORIAL



SUMMARY

- Terminology
- Crouzet Touch to M3 XN06 Modbus RTU Wiring
- Crouzet Touch Soft ⇔ M3 XN06 Modbus Addresses
- Crouzet Touch Soft ⇔ Defining the Modbus RTU Network
- Modbus RTU: CTS ⇔ M3 XN06 Word Addressing Example
- Modbus RTU: CTS ⇔ M3 XN06 Bit Addressing Example

TERMINOLOGY

- M3 → Millenium 3
- XN06 → M3 Modbus Slave communication expansion (8 word R/W In, 8 word R Out)
- Crouzet Touch → Touchscreen of the Crouzet Automation nano-PLC range
- CTS = Crouzet Touch Soft → Programming software of the Crouzet Touch range

CROUZET TOUCH TO M3 XN06 MODBUS RTU WIRING

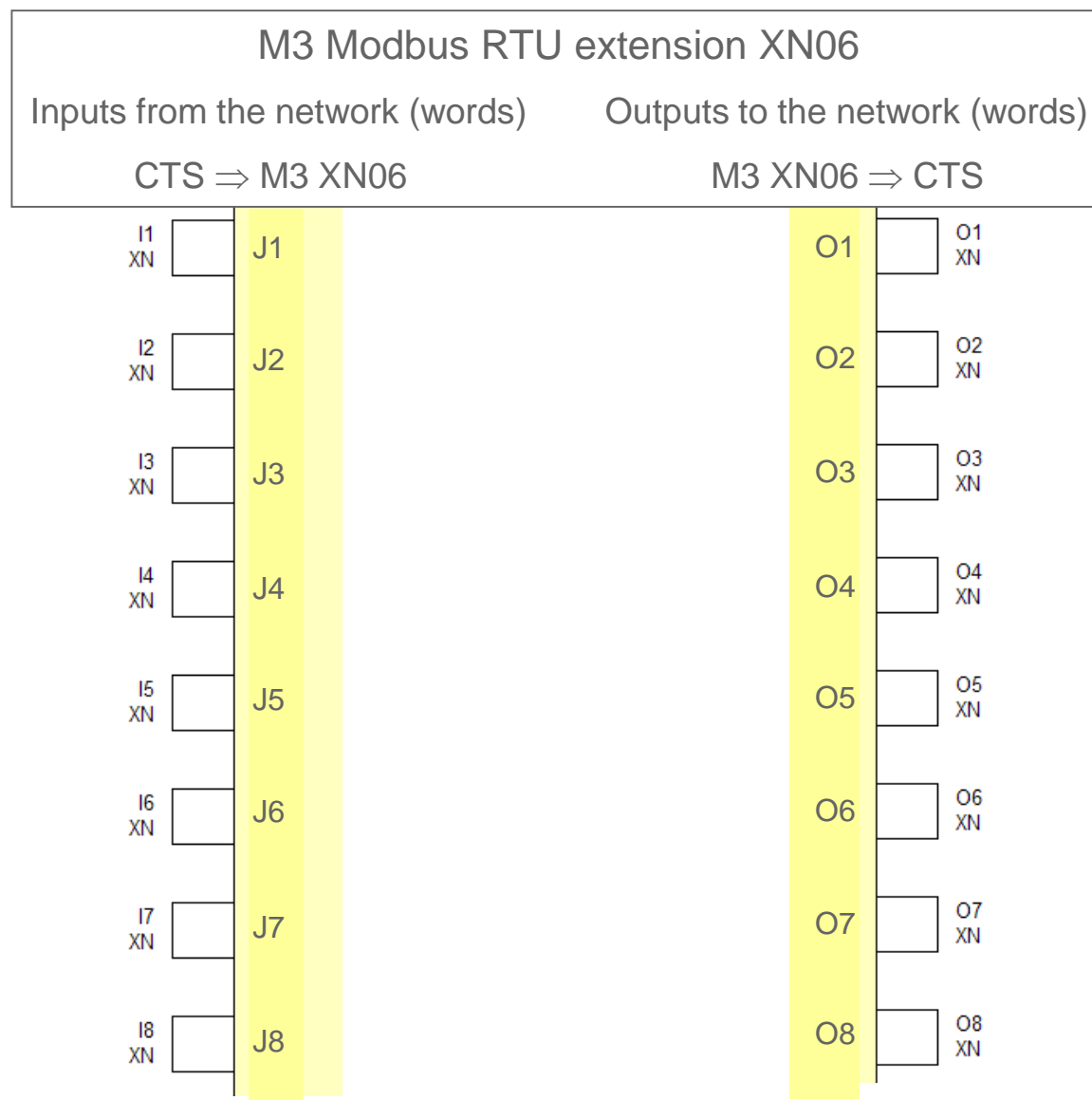
Crouzet Touch to M3 Modbus RTU Wiring



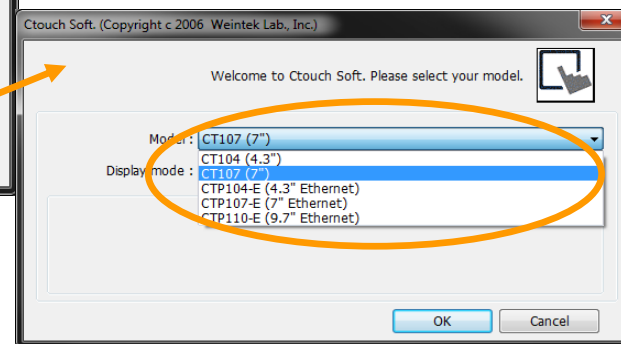
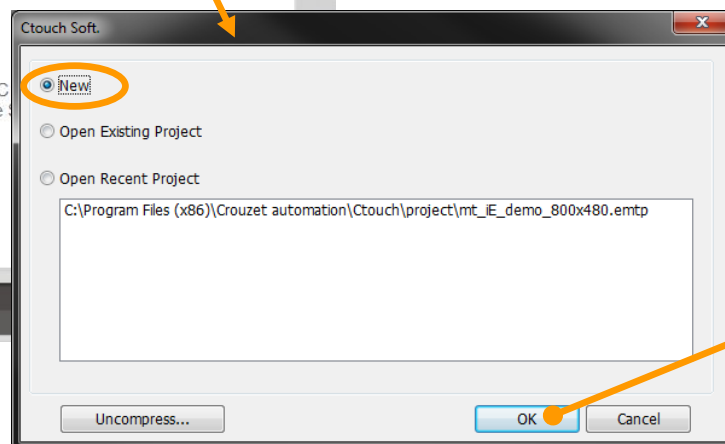
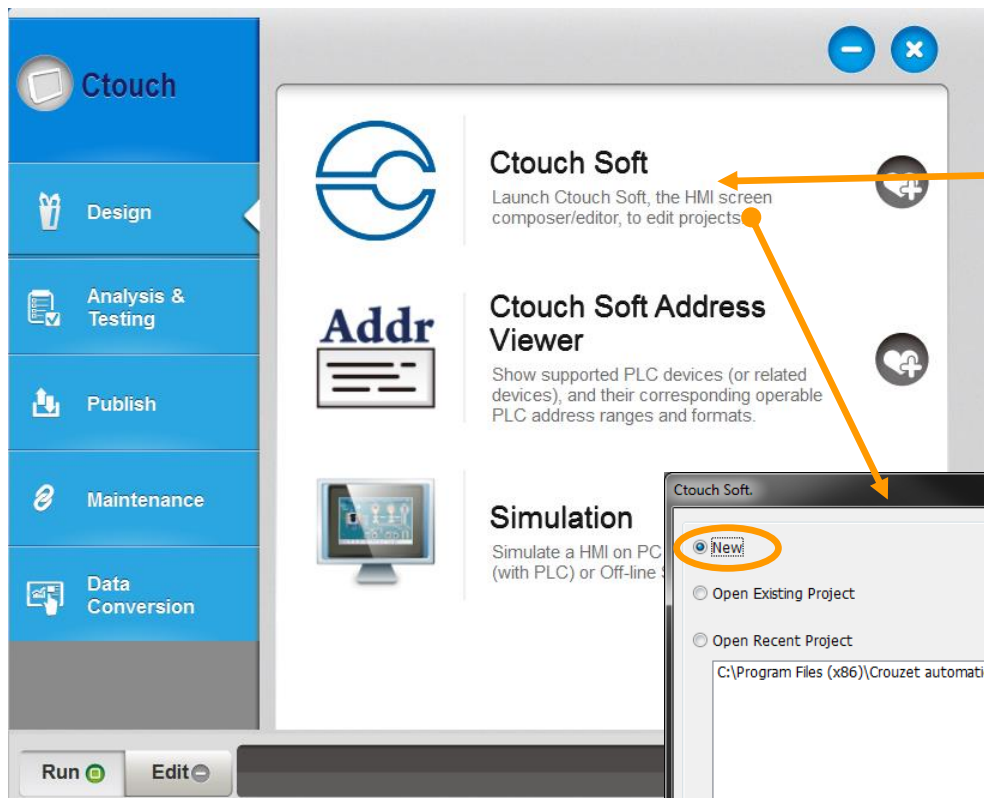
- Use the 88 970 503 Modbus adapter cable for the serial (RS485) port of the Crouzet Touch CT104, CT107 or CTP104-E
- Use the 88 970 504 Modbus adapter cable for the serial (RS485) port of the Crouzet Touch CTP107-E or CTP110-E
- The RJ45 is inserted into the M3 XN06 Modbus expansion

CROUZET TOUCH SOFT ⇔ M3 XN06 MODBUS RTU ADDRESSES

CTS ⇔ M3 XN06 Modbus Addresses

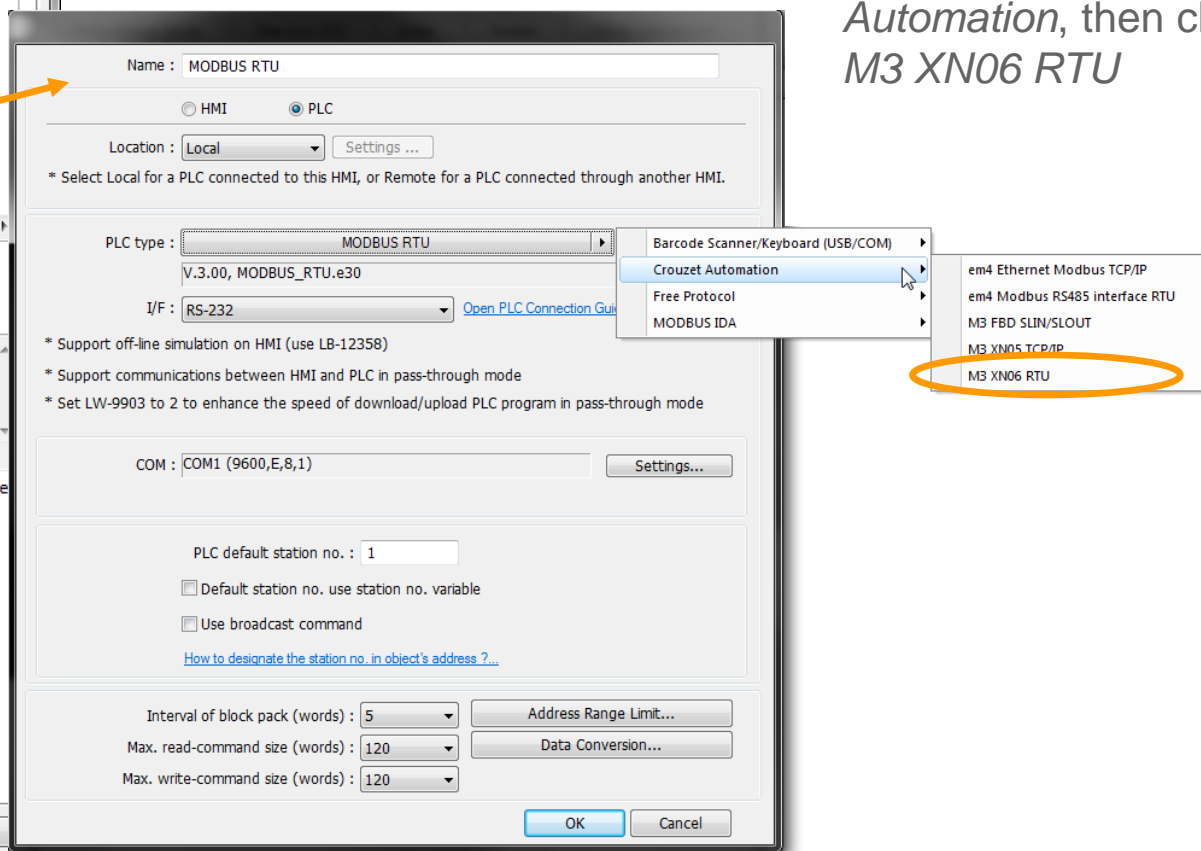


CROUZET TOUCH SOFT- DEFINING THE MODBUS RTU NETWORK



In order to define the Modbus network in the *Crouzet Touch Soft*.

- Click on *Ctouch Soft* in the *Utility Manager*
- Select *New* to create a new project
- Click *OK*
- Then select the *Crouzet Touch* screen version that is to be used and confirm by click on *OK*



In the *System Parameter Settings* window that opens click *New* to define the *Device* (the network)

- In *PLC type* select *Crouzet Automation*, then click on *M3 XN06 RTU*

Name :

☐ HMI ☒ PLC

Location : [Settings ...](#)

* Select Local for a PLC connected to this HMI, or Remote for a PLC connected through another HMI.

PLC type :

I/F : [Open PLC Connection Guide...](#)

* Support off-line simulation on HMI (use LB-12358)

* Support communications between HMI and PLC in pass-through mode

* Set LW-9903 to 2 to enhance the speed of download/upload PLC program in pass-through mode

COM : [Settings...](#)

PLC default station no. :

☐ Default station no. use station no. variable

☐ Use broadcast command

[How to designate the station no. in object's address ?...](#)

Interval of block pack (words) :

Max. read-command size (words) :

Max. write-command size (words) :

- Click *Settings* to define the communication parameters (Speed, Parity, ...)
- Confirm with *OK*

These parameters have to be *identical* in the Crouzet Touch (**Master**) and the M3 XN06 Modbus (**Slave**) settings!

COM Port Settings

COM :

Baud rate :

Data bits :

Parity :

Stop bits :

Timeout (sec) :

Turn around delay (ms) :

The number of resending commands :

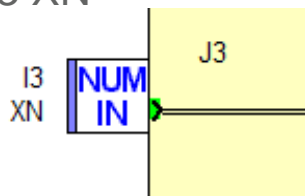
* 76800 baud rate requires OS version 20160824 or later.

The COM Port number used for RS485 communication depends on the screen type selected.

MODBUS RTU: CROUZET TOUCH SOFT M3 XN06 WORD ADDRESSING EXAMPLE

Writing a value from Crouzet Touch to M3 XN06 (slave n° 5)

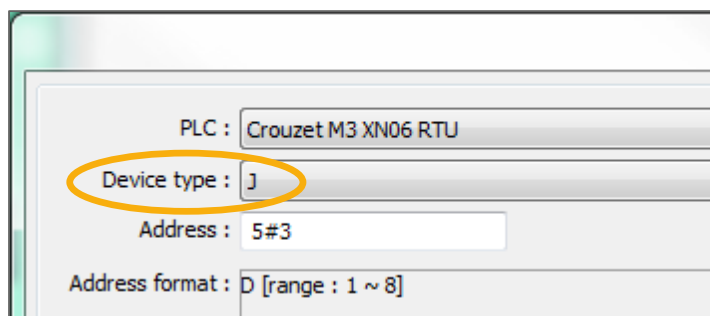
M3: I3 XN



⇒ CTS: *Device type* J

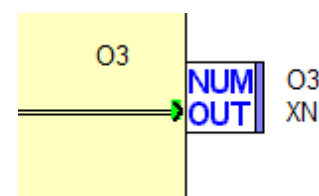
Address 5#3

Slave n°5, write address I3 XN



Reading a value from M3 XN06 (slave n° 5) by the Crouzet Touch

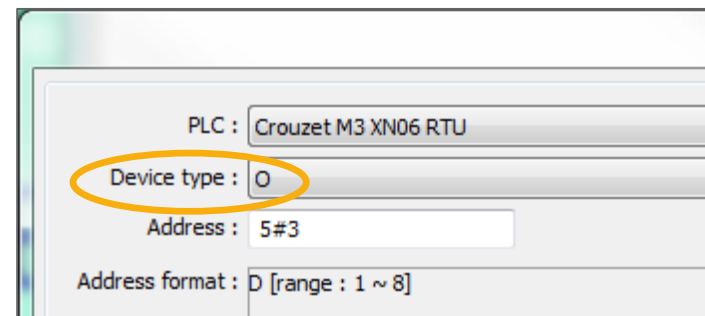
M3: O3 XN



⇒ CTS: *Device type* O

Address 5#3

Slave n°5, read address O3 XN

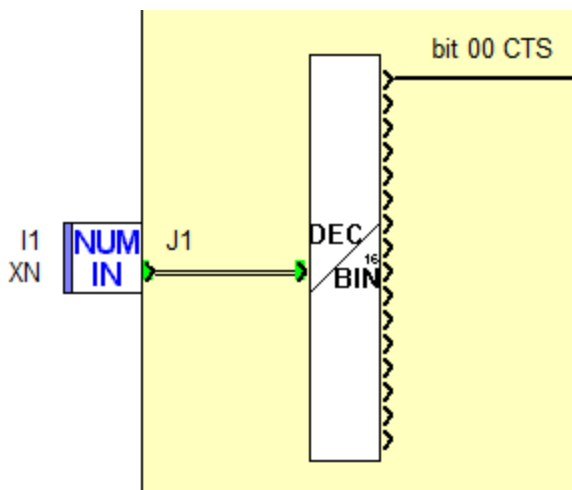


MODBUS RTU: CTS \Leftrightarrow M3 XN06 BIT ADDRESSING EXAMPLE

Modbus RTU: CTS \Leftrightarrow M3 XN06 Bit Addressing Example

Writing a bit from the Crouzet Touch to M3
(slave n°5)

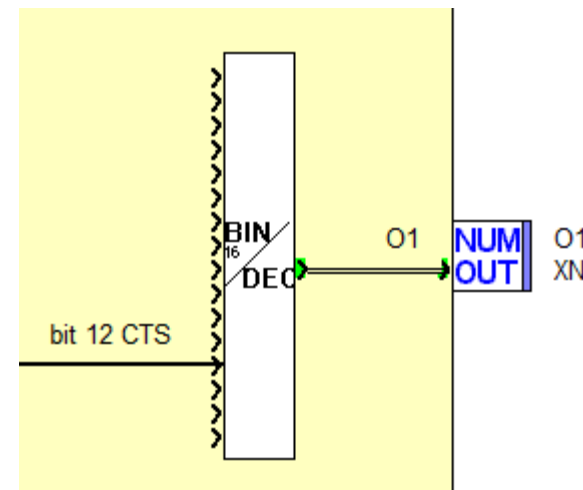
M3: I1 XN, bit 01 \Rightarrow CTS: *J_Bit* 5#100



PLC :	Crouzet M3 XN06 RTU
Device type :	J_Bit
Address :	5#100
Address format : Ddd [range : 100 ~ 815, dd (bit no.) : 00 ~ 15]	

Reading an M3 bit (slave n°5) by
the Crouzet Touch

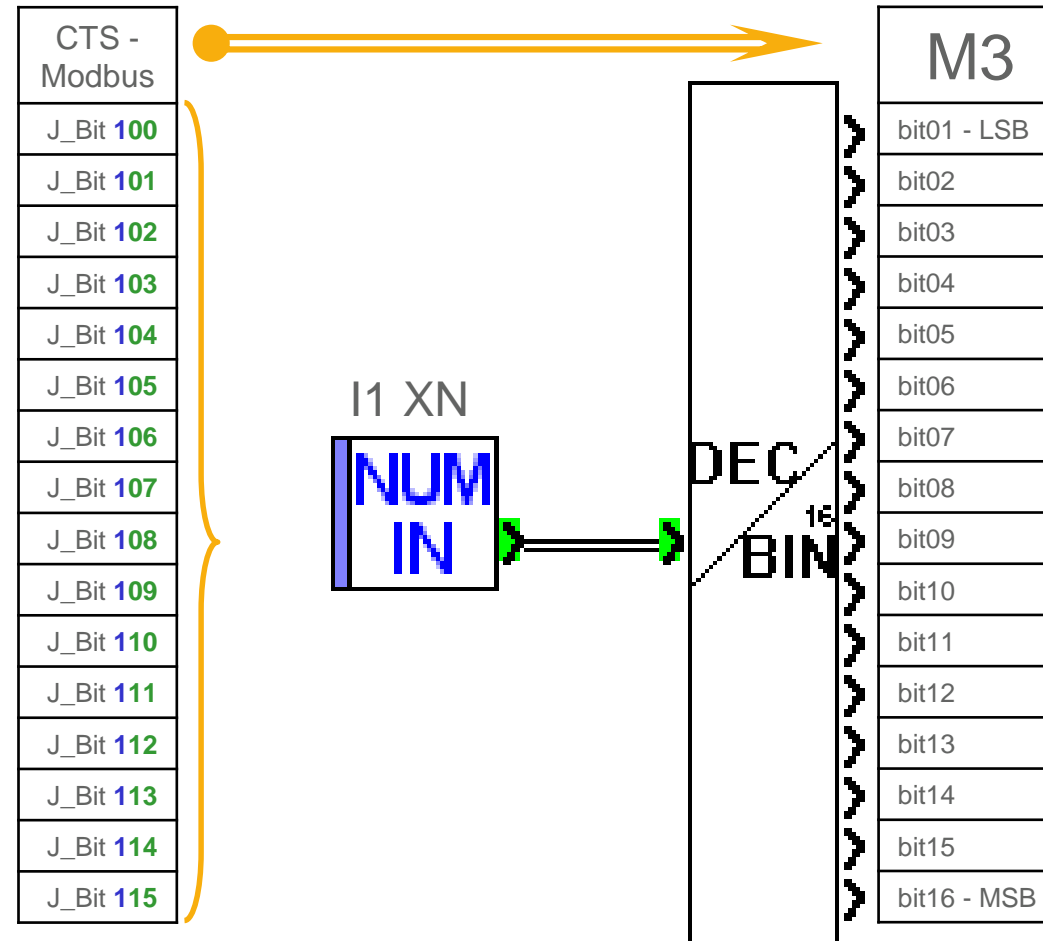
M3: O1 XN, bit 13 \Rightarrow CTS: *O_Bit* 5#112



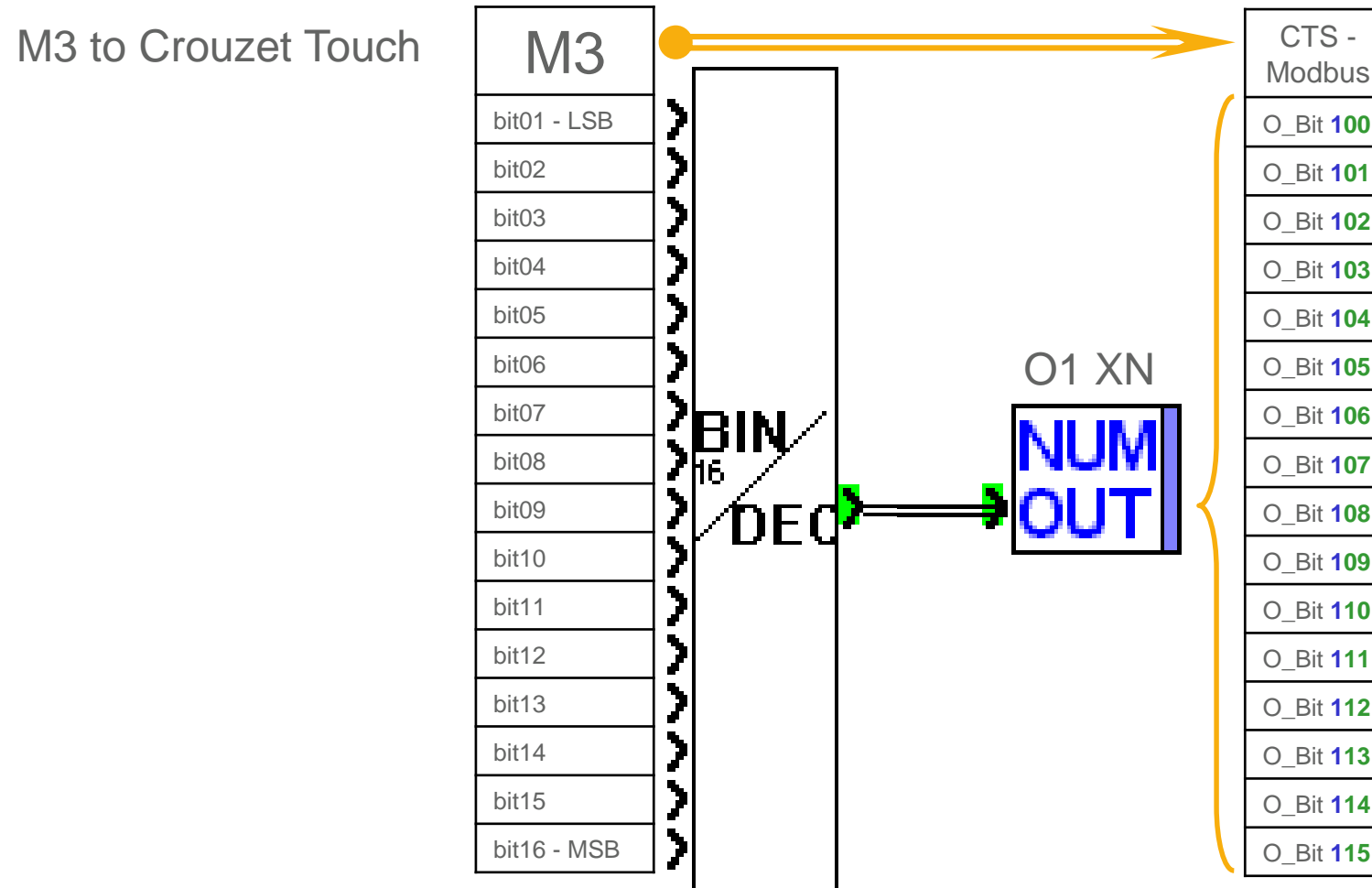
PLC :	Crouzet M3 XN06 RTU
Device type :	O_Bit
Address :	5#112
Address format : Ddd [range : 100 ~ 815, dd (bit no.) : 00 ~ 15]	

CTS: writing/reading an M3 XN06 bit via *Crouzet M3 XN06 RTU*

Crouzet Touch to M3



CTS: reading a bit from M3 XN06 via *Crouzet M3 XN06 RTU*



THANK YOU FOR YOUR ATTENTION

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