



Nota de aplicação

Leitura de pulsos do medidor PM5500 através do módulo de contagem rápida TSXCTY2A – TSX Premium (UnityPro)

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Data: 14/6/16

Versão: V1.0

Especificações técnicas

Especificações Técnicas

Hardware

TSXP574634M
PM5500

Firmware

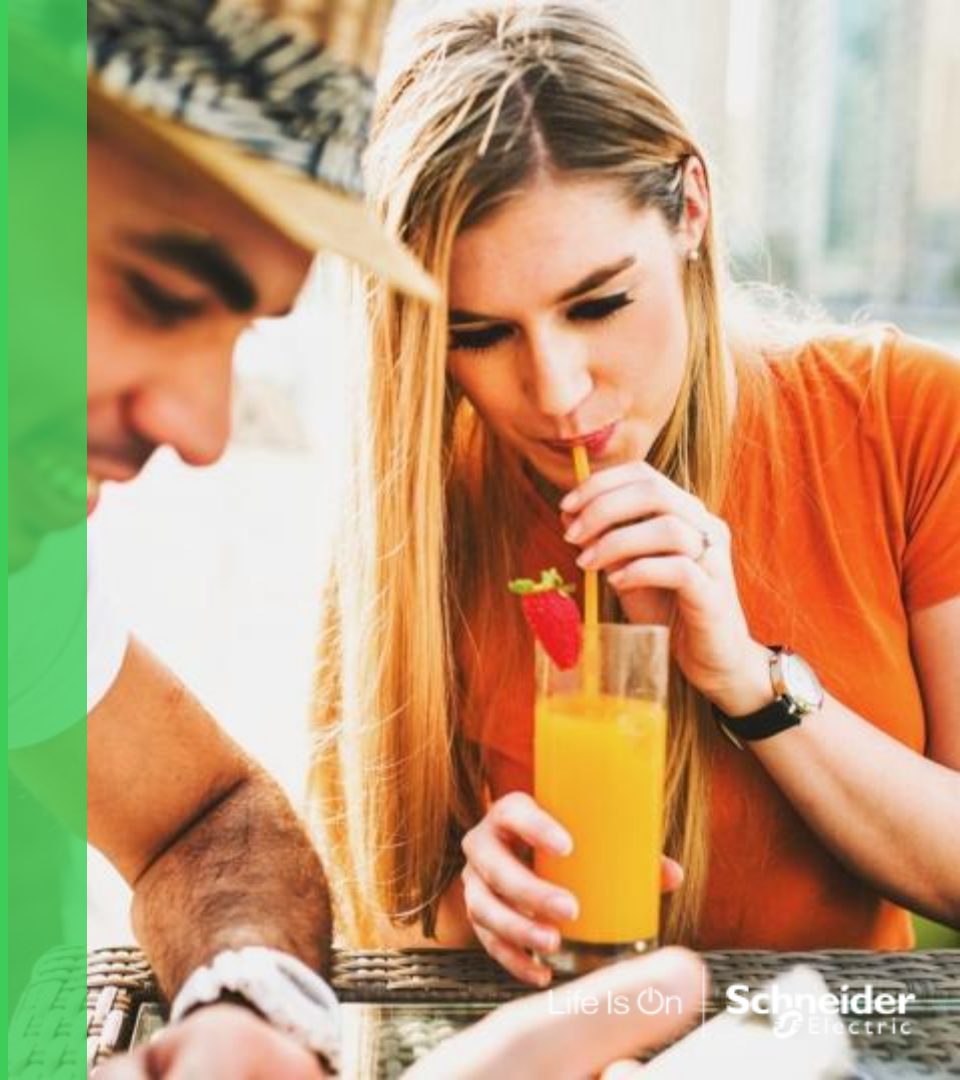
V2.6
V2.01

Software

UnityPro

Versão

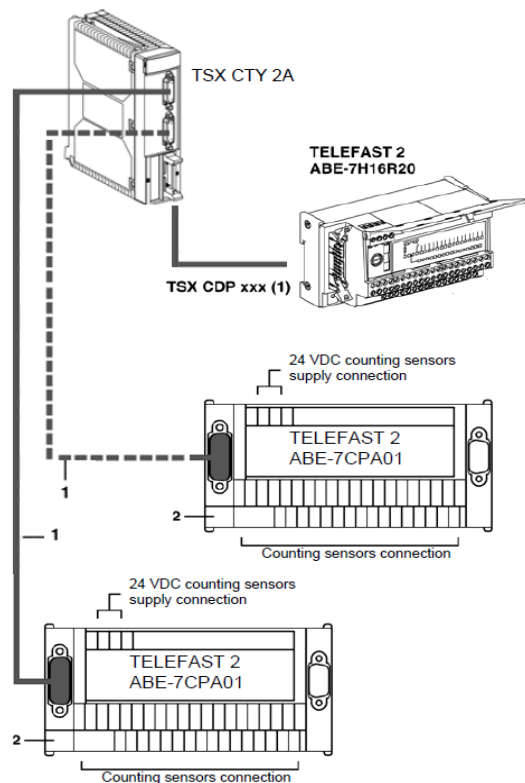
V11.0.151207



Arquitetura

Arquitetura

Leitura de pulsos do medidor PM5500 através do módulo de contagem rápida TSXCTY2A – TSX Premium (UnityPro)



(1) TSX CDP ••2 or TSX CDP ••3 cable.

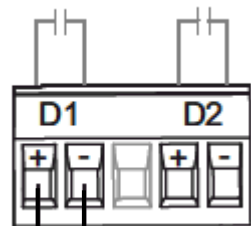
Number	Description
1	TSX CCP S15 cable (2.5m long) or TSX CCPS15050 (0.5m long) or TSX CCP S15100 (1m long), equipped with a high-density 15-pin SUB-D connector and a standard 15-pin SUB-D connector. This cable is used to connect the counting channel to the TELEFAST 2 (ABE-7CPA01) base. It carries the various relevant signals to the counter channel.
2	TELEFAST 2 connection base, reference ABE-7CPA01: Used to connect the count sensors to their supply for the relevant channel.

Diagrama de Ligações

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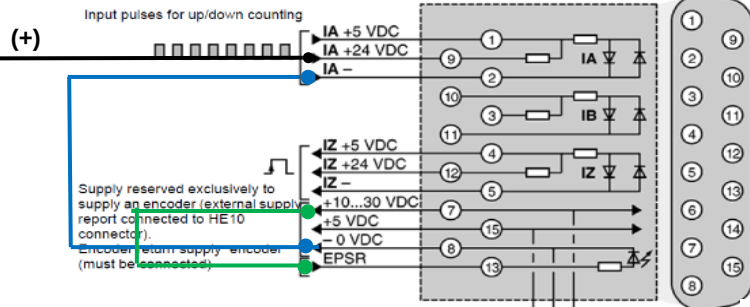
Leitura de pulsos do medidor PM5500 através do módulo de contagem rápida TSXCTY2A – TSX Premium (UnityPro)

Canal 0 – CH0 / D1



Using a physical up/down counting input, and determining the direction (up counting or down counting) with the application.

Standard 15-pin SUB-D connector to link up counting sensor



Encoder supply
5 VDC or 10...30 VDC
according to encoder type

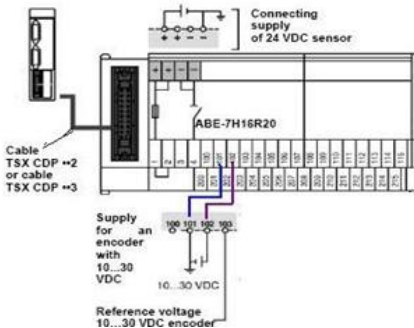
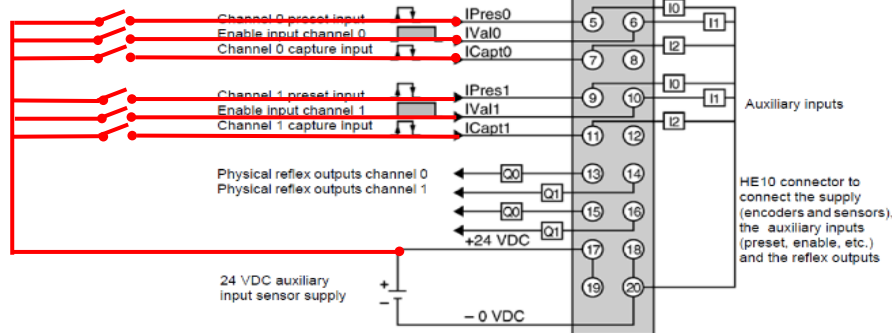
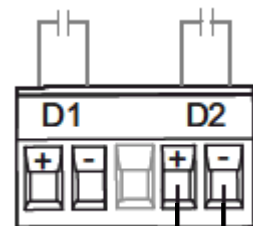


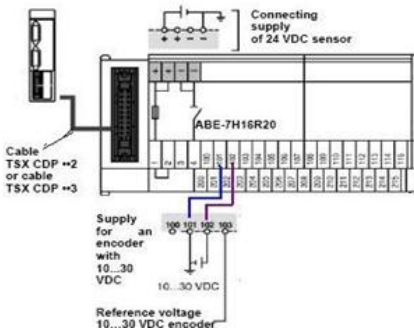
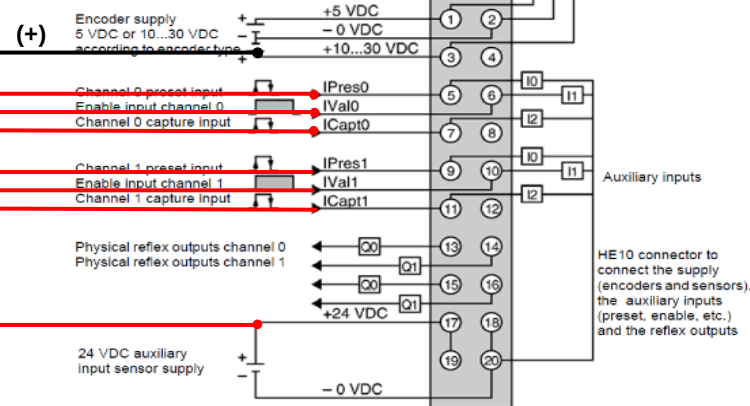
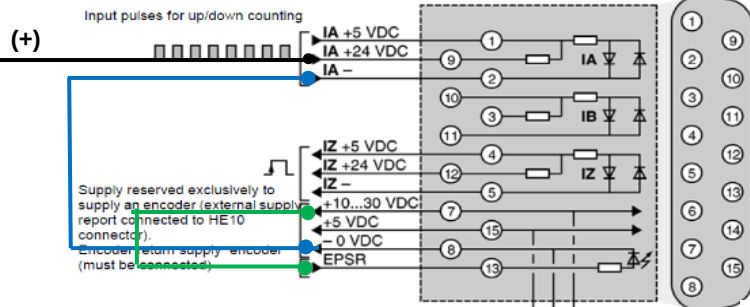
Diagrama de Ligações

Leitura de pulsos do medidor PM5500 através do módulo de contagem rápida TSXCTY2A – TSX Premium (UnityPro)

Canal 1 – CH1 / D2



Using a physical up/down counting input, and determining the direction (up counting or down counting) with the application.
Standard 15-pin SUB-D connector to link up counting sensor



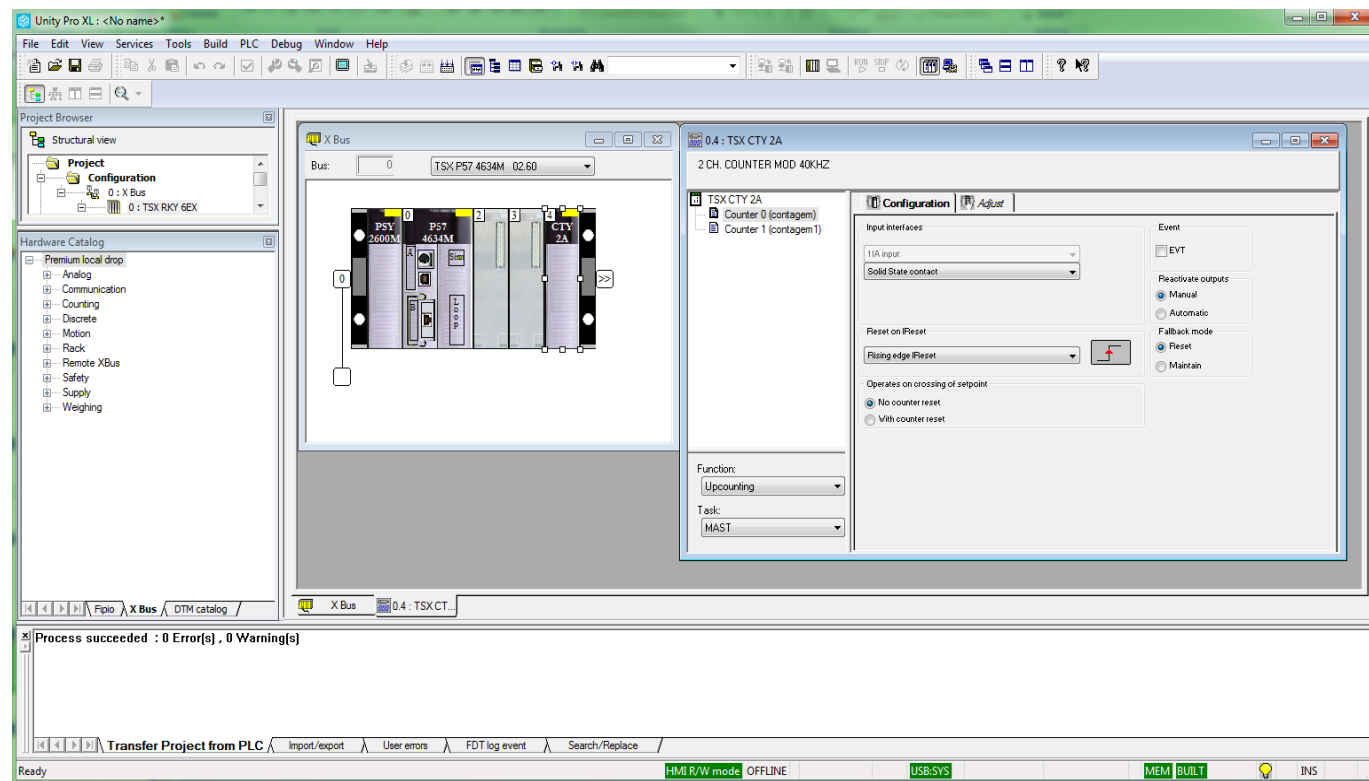
Configuração

UnityPro

Configuração

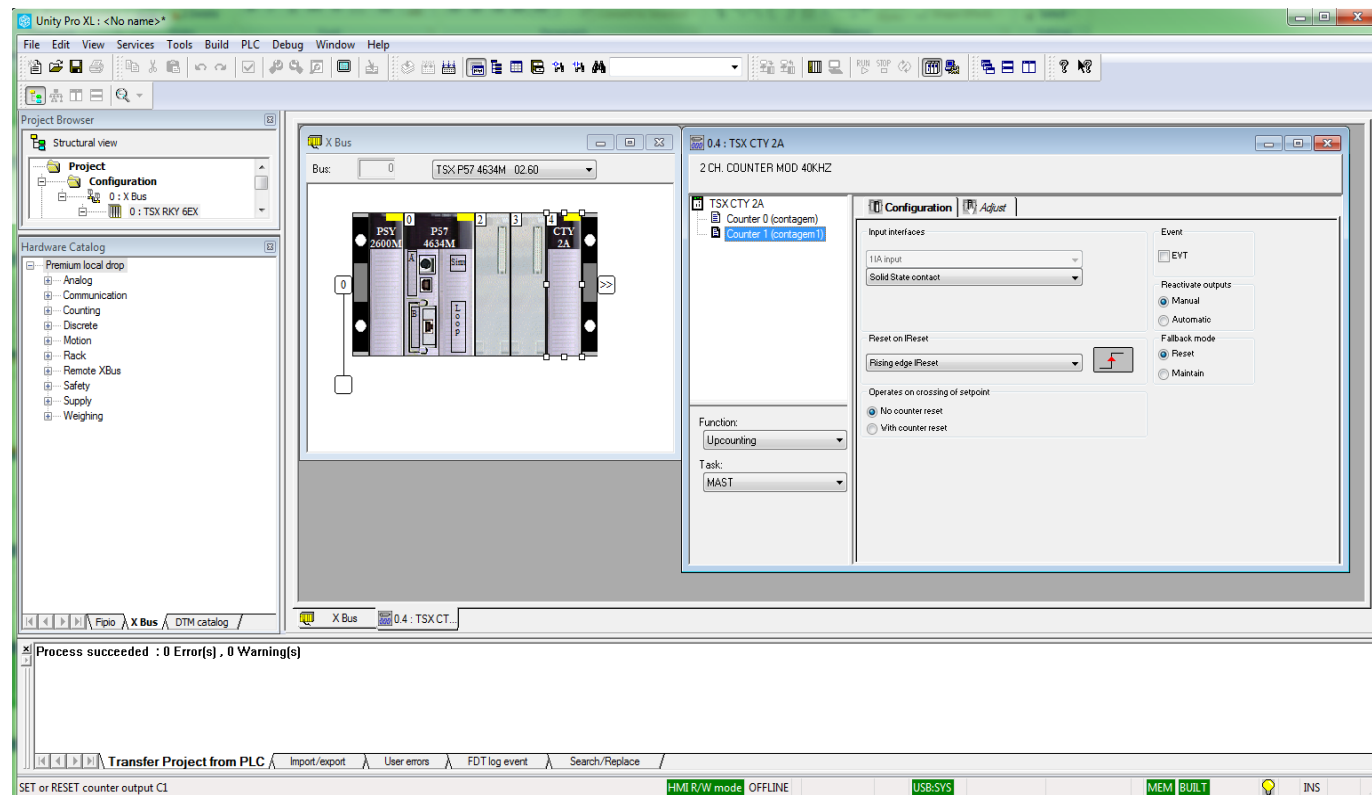
UnityPro

Canal 0 – TSXCTY2A



UnityPro

Canal 1 – TSXCTY2A



PM5500

Configuração

PM5500

Configuração pelo display frontal

Acessar o menu **Maint**, escolher a opção **Setup** e digitar a senha;

No menu **IO**, escolher a opção **Dout** e editar (**Edit**);

Em **Control Mode**, escolher a opção **Energy**;

Na opção pulsos por KWh (**pulses per KWh**), escolher a quantidade de pulsos que será gerada a cada KWh;

Na opção canal (**Channel**), escolher a grandeza elétrica (Ex.: Potência Ativa, Potência Reativa, etc);

Sair deste menu e salvar as configurações realizadas.

Monitoração On-Line

UnityPro

Monitoração On-Line

UnityPro

Canal 0 – TSXCTY2A

The screenshot displays the UnityPro XL software interface for configuring a PLC system. The main window is titled "0.4 : TSX CTY 2A" and shows the configuration for a 2-channel counter module. The interface includes a Project Browser on the left, a central configuration area, and a status bar at the bottom.

Project Browser: Shows the project structure, including Configuration, Derived Data Types, Variables & FB Instances, Motion, Communication, Program, and Documentation.

Configuration Area: Displays the physical layout of the PLC rack with modules: PSY 2600M, PSY 4634M, and CTY 2A. The configuration parameters for the CTY 2A module are shown in the right pane.

Configuration Parameters:

- Counter enable:** Active, Ina, Enable, Direct.
- Reset:** Done, IReset, Enable, Direct, Reset.
- Function:** Upcounting.
- Task:** MAST.
- Comparison:** Threshold 0 (200), Threshold 1 (3,000), Setpoint (10,000).
- Counter outputs:** C0, C1.
- Outputs:** Q0, Q1.

Status Bar: Shows the process status: "Process succeeded : 0 Error(s) , 0 Warning(s)". The bottom status bar indicates the current mode: "HMI R/W mode", "EQUAL", "RUN", "UPLOAD INFO OK", "USB-SYS", "MEM", "BUILT", and "INS".

UnityPro

Canal 1 – TSXCTY2A

The screenshot displays the UnityPro XL software interface for configuring a TSXCTY2A counter module. The interface is divided into several panes:

- Project Browser (Left):** Shows the project structure, including Configuration, Derived Data Types, Variables & FB Instances, Motion, Communication, Program, Animation Tables, and Documentation.
- X Bus (Top Left):** Displays the bus configuration, showing the TSX P57 4634M module and the TSXCTY 2A module.
- 0.4: TSXCTY 2A (Right):** Shows the configuration for the TSXCTY 2A module, including the Counter enable, Current Value, Comparison, Counter outputs, and Outputs.

The Counter enable section includes the following settings:

- Counter enable: ☒
- Active: ☒
- Enable: ☐
- Direct: ☒
- Reset: ☐
- Done: ☐
- IPreset: ☐
- Enable: ☐
- Direct: ☐
- Reset: ☐

The Current Value section shows a value of 89.

The Comparison section shows the following settings:

- Threshold 0: 230
- Threshold 1: 270
- Setpoint: 12,000
- Current val:

The Counter outputs section shows the following settings:

- Counter outputs: C0, C1
- State: ☐
- Set to 1: ☐
- Set to 0: ☐

The Outputs section shows the following settings:

- Outputs: Q0, Q1
- State: ☐
- Auto enable: ☐
- Auto mode: ☐
- Manual control: ☐
- Reset Q0 and Q1: ☐

The bottom status bar shows the following information:

- Process succeeded : 0 Error(s) , 0 Warning(s)
- Transfer Project from PLC
- Input/export
- User errors
- FDT log event
- Search/Replace
- SET or RESET counter output C1
- HMI R/W mode
- EQUAL
- RUN
- UPLOAD INFO OK
- USB:SYS
- MEM
- BUILT
- INS

Avisos Importantes

- Equipamentos elétricos devem ser instalados, operados e manuseados apenas por profissionais qualificados;
- Um profissional qualificado é aquele que possui habilidades e conhecimentos relacionados com a construção, instalação e operação que equipamentos elétricos, e recebeu treinamento adequado para reconhecer e evitar os perigos envolvidos;
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