CONVERTER
USB / RS485
Operating instructions

GB

MAKE YOUR BUSINESS SAFE

SOCOMEC GROUP SWITCHING PROTECTION & UPS

SOCOMEC
Systèmes de Coupure et de Protection
Industrial Switching & Protection Systems

Contents

GENERAL INFORMATION
USB/RS485

Safety

IMPORTANT NOTE TO BE READ BEFORE INSTALLATION

Read the manual carefully and ensure you have fully understood its contents before operating this equipment for the first time.

Check that your application meets the equipment's technical specifications for operation.

You are recommended to ground yourself to avoid electrostatic discharge (ESD) damage to internal components (e.g.: wear an electrostatic bracelet).

BEFORE INSTALLATION

This equipment must only be installed by qualified technicians.

Ensure that the installation complies with current national regulations.

Maintenance

No maintenance is required provided that the equipment is used under the conditions specified.

Introduction

The USB/RS485 converter has been designed to convert signals between a USB interface and an RS485 interface.

This module is self-supplied via the PC's USB port. A Windows 2000 or Windows XP operating system is required.

SPECIFICATIONS
USB/RS485

Description	USB <=> RS485 Converter
USB standard	USB 1.1 full speed compatible USB2.0 Hot Plug & play
Speed	Up to 921.6 Kbps
Interface	RS485 2 wires
Input supply	Via USB port
Serial port	Windows Compatible COM Port with driver supplied
Insulation	1.5 Kv ESD Protection
Temperature range	-10 to +60°C
Consumption	0.4 W max
Unit	Metal alloy
Dimensions	73 x 25 x 21 mm
Weight	32.6 g
EMC compatibility	EC Industrial Standards
Operating System required	Windows 2000 and XP

APPROVALS AND CONFORMITY
USB/RS485

DECLARATION OF CONFORMITY

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ATTESTATION OF CONFORMITY CE No AC 9853 PRO

Following specifications :
Manufacturer's specifications

TESTED MATERIAL

Designation :	System ensuring the control, management and protection of electrical networks
Type :	External USB / RS485 interface unit
Reference :	4899 0110
Manufacturer :	SOCOMEC S.A. 67230 BENFELD FRANCE

Rated characteristics :

The above-mentioned materials,

-subject to installation, maintenance and use according to its intended purpose, to its regulations, to the standards in force and to the manufacturer's instructions and rules-

Satisfy to the European Low voltage directive n° **73/23/CEE dated 19/02/73** modified by the directive n° **93/68/CEE dated 22/07/93,**

and to the European EMC directive n° **89/336/CEE dated 03/05/89** modified by the directive n° **92/31/CEE dated 28/04/92** modified by the directive n° **93/68/CEE dated 22/07/93**

and to the NF EN 61000-6-4 ; NF EN 55022(01/99) ; NF EN 61000-6-2 ; NF EN 55024(01/99) ; NF EN 61000-4-x ; NF EN 60950(01/93) + amendments A1, A2, A3 et A4

Year of the CE mark apposition : **2006**

Date : October 17th , 2006

The Writer

Nadine METZ

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PCD 03 010585

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DIP SWITCH CONFIGURATION
USB/RS485

Interface configuration

INTERFACE		SW-1	SW-3	SW-6	SW-7	SW-8
RS485 without echo - 2 Wire		ON	ON	ON	ON	ON

The RS485 2 wire without echo mode is designed for a standard RS485 connection.

Configuration of polarisation resistors and terminations

- The RS485 line must be polarised and there must be a polarisation resistor at both ends of the bus.
- The termination resistor limits reflections on the transmission line when there is a large distance between equipment. The termination must be fitted to both ends of the bus.

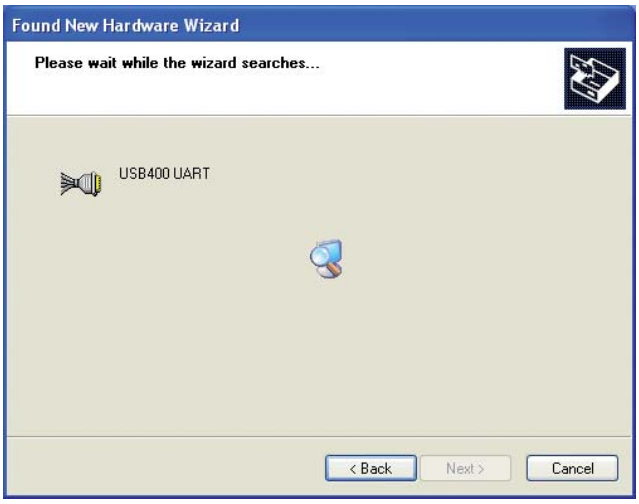
Polarisation	SW-2	SW-5
Active	ON	ON
Inactive	OFF	OFF

Termination	SW-4
Active	ON
Inactive	OFF

DRIVER INSTALLATION
USB/RS485

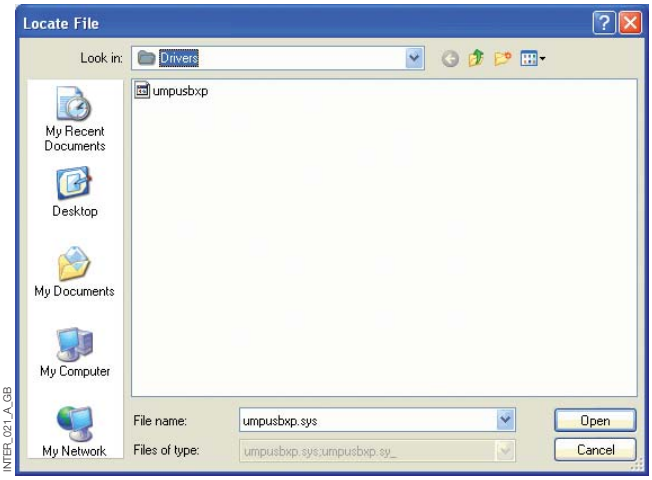
- Connect the interface to the PC after ensuring that the DIP switch configuration corresponds to your application.
- Insert the CD supplied with the interface.

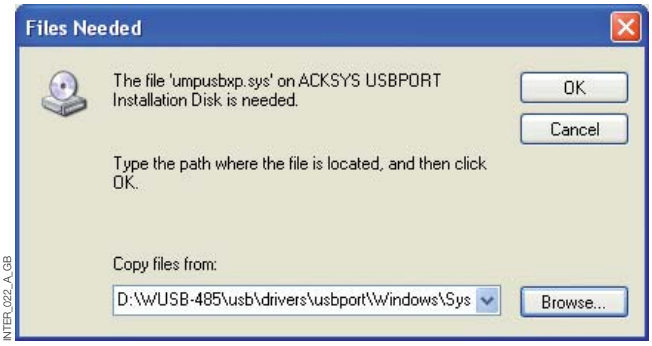
=> Next



DRIVER INSTALLATION
USB/RS485

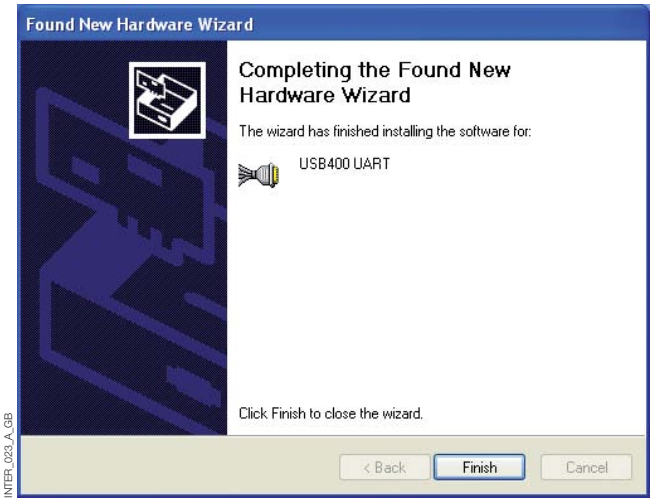
=> Continue





=> Browse

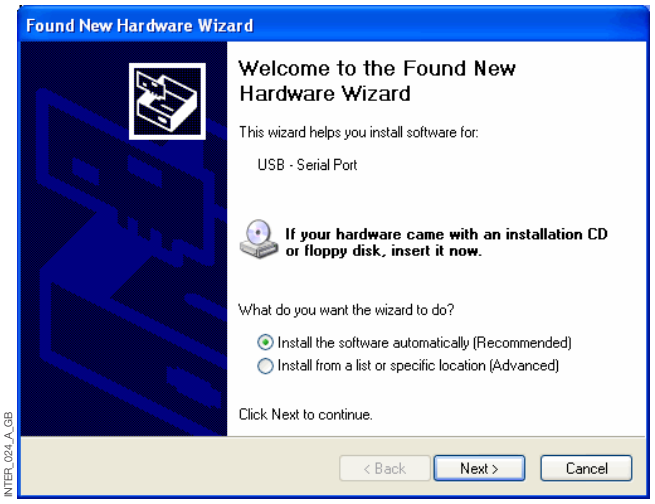
- Browse E/WUSB-485/USB/drivers/USBPORT/Windows/System32/Drivers for file 'umpusbxp.sys'. **=> OK**



=> Finish

- The interface is composed of several components which will also need to be installed.

The installation procedure must therefore be carried out twice.



=> Next

DRIVER INSTALLATION
USB/RS485

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=> Continue

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=> Finish

- Your system is now equipped with an additional serial port. You can check that this COM port has been installed by Windows by going to Start/Control Panel/System/ Hardware/Device Manager/Ports (COM & LPT).

  The number of this COM port can be modified by editing the USB port properties.

  Right click on the port concerned and go to properties/port parameters/advanced.

  Select the required port number.

=> OK

CONNECTIONS
USB/RS485

5-PIN TERMINAL BLOCK - RS485 INTERFACE

INTER_004_A

TERMINAL BLOCK ALLOCATION

RS485 MODE		
Pin	**Signal**	**Function**
1	RES	Reserved
2	RES	Reserved
3	AA'	Transmission/Reception (TXA/RXA) (-)
4	BB'	Transmission/Reception (TXB/RXB) (+)
5	GND	Earth

HEAD OFFICE

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