EMERSON™
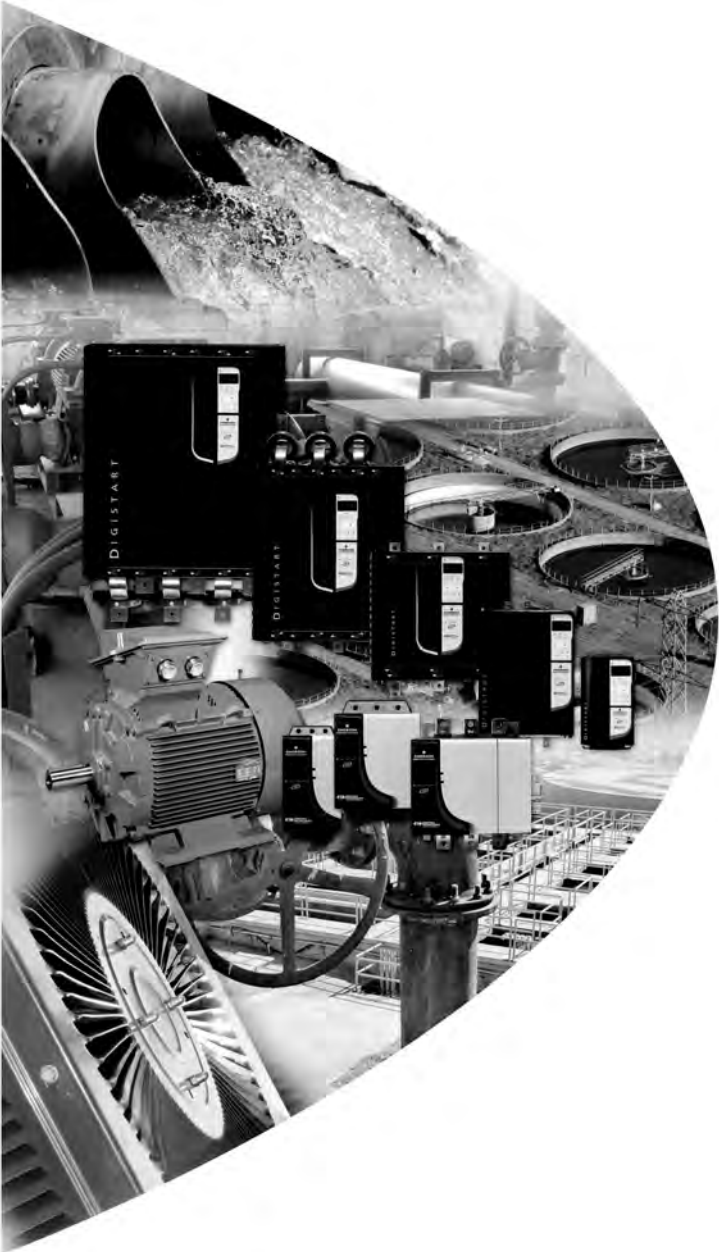**Industrial Automation**

User Guide

USB Interface

For Digistart soft starters

Part Number: 0477-0022-02
Issue: 2

CONTROL TECHNIQUES

www.controltechniques.com

General Information

The manufacturer accepts no liability for any consequences resulting from inappropriate, negligent or incorrect installation or adjustment of the optional parameters of the equipment or from mismatching the starter with the motor.

The contents of this guide are believed to be correct at the time of printing. In the interests of commitment to a policy of continuous development and improvement, the manufacturer reserves the right to change the specification of the product or its performance, or the content of the guide without notice.

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Contents

1.   Introduction

The USB Module can be used in conjunction with DSSoft to manage Control Techniques soft starters.

These instructions detail the installation, set-up and configuration of the USB Module. For details on using DSSoft, refer to the DSSoft help file.

2.   Important User Information

Observe all necessary safety precautions when controlling the soft starter remotely. Alert personnel that machinery may start without warning.

It is the installer's responsibility to follow all instructions in this manual and to follow correct electrical practice.

3.   Installation

⚠ CAUTION	Remove mains and control voltage from the soft starter before attaching or removing accessories. Failure to do so may damage the equipment.

Install the USB Module using the following procedure:

1.   Fully pull out the top and bottom retaining clips on the module.
2.   Line up the module with the comms port slot.
3.   Push in the top and bottom retaining clips to secure the module to the starter.

Figure 3-1 Attach the module to the starter
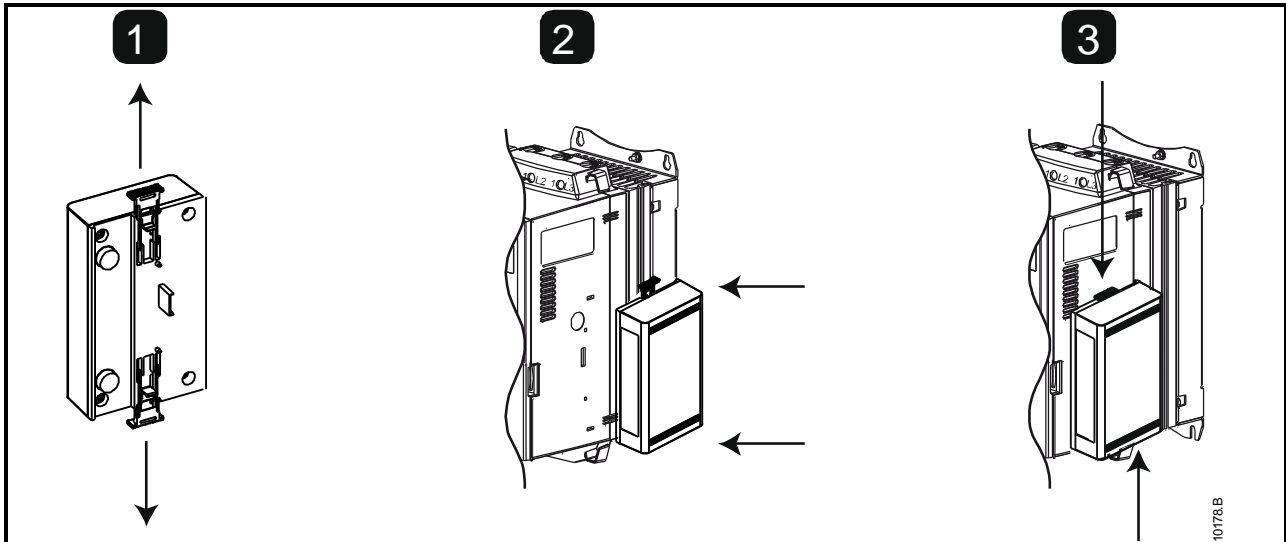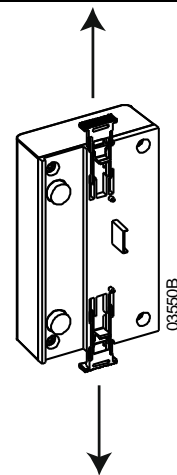

Figure 3-2 Remove the module from the starter

Remove the USB Module using the following procedure:
1.   Remove control power and mains supply from the soft starter.
2.   Disconnect all field wiring from the module.
3.   Fully pull out the top and bottom retaining clips on the module.
4.   Pull the module away from the soft starter.

4. Connection

Figure 4-1 USB Module connections

Digistart CS	Digistart IS

1	Digistart CS	**1**	Digistart IS (Remote mode)	
2	USB Module		DI2, +24V: Stop input	
3	USB port		DI3, +24V: Reset input	
		2	USB Module	
		3	USB port	

Digistart CS: For the USB Module to accept serial commands, a link must be fitted across terminals CSL-DI2 on the soft starter.

If emergency stop is not required, change the setting of Pr 3A or connect a link across DI4, +24V.

Digistart IS: Input links are required across the stop and reset inputs if the soft starter is being operated in Remote mode. In Local mode, links are not required.

NOTE	Digistart IS Pr **3O** *Comms in Remote* selects whether the soft starter will accept Start, Stop or Reset commands from the Serial Network Master while in Remote mode. See the Digistart IS User Manual for parameter details.

5. Configuration

To bring the USB Module on-line:

1. Remove control power and mains supply from the soft starter.
2. Attach the module to the soft starter as illustrated.
3. Connect the module to the PC via a USB cable. The PC should detect the module and the Hardware Update Wizard will open.
4. Install the USB driver to operate the module as follows.

The driver can be downloaded from www.controltechniques.com.
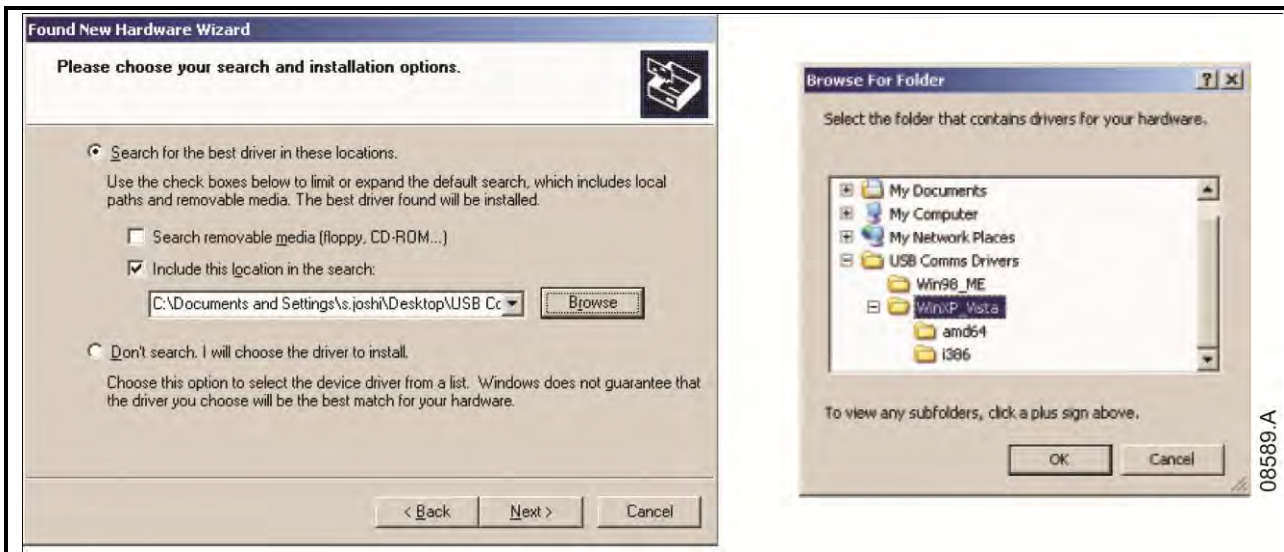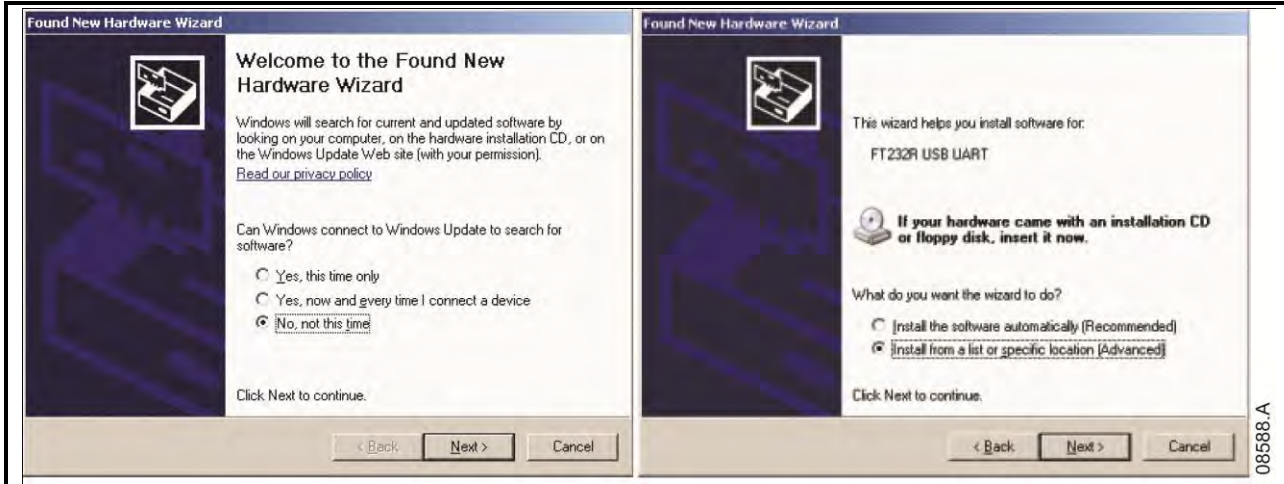
Click on Ok, then Next. The software will install. If you see a prompt, click Continue Anyway. Once installation is complete, click Finish.

5. The PC will prompt you to install serial port driver software. Repeat the procedure in Step 4. You may need to restart your PC once the driver software is installed.
6. Identify the USB Serial Port assignment by checking Control panel > System > Hardware > Device Manager > Ports (COM & LPT).

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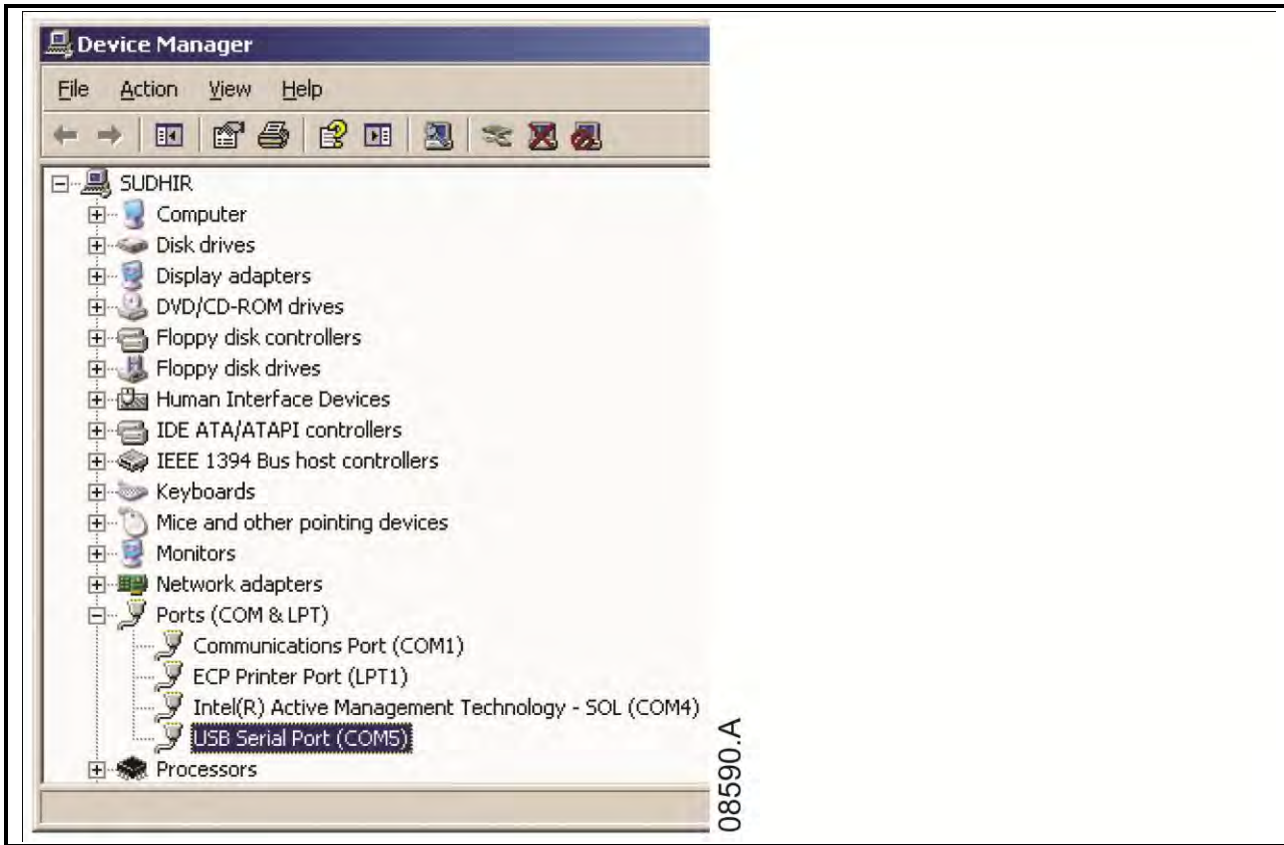
NOTE   If the USB port is not shown, disconnect then reconnect the cable. If the problem persists, restart your PC.

7. Open DSSoft and change the settings as follows:
   Protocol: Digistart CS = ASCII; Digistart IS = Binary
   Baud rate: 9600
   Address: 20
   Port: Use the serial port number identified above
8. Apply control voltage to the soft starter and bring the Master on-line.

NOTE   The starter may trip on Starter Comms while the Master is off-line. Reset the soft starter and place the Master on-line.

NOTE   The drivers will configure the USB port that the module is connected to. You must use the same physical USB port every time you connect the module to the PC.

6.   Specifications

Enclosure
Dimensions .... 40 mm (W) x 166 mm (H) x 90 mm (D)
Weight .... 250 g
Protection IP20

Mounting
Spring-action plastic mounting clips (x 2)

Connections
Soft starter .... 6-way pin assembly
Network .... USB-B
Maximum cable length .... 3 metres (not supplied)

Settings
Protocol .... AP Binary or AP ASCII
Address 20
Data rate (bps) 9600

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