Temperature Controller Configuration Software BC-SET User Manual

Revision History

Version	Description	Date
UMBCSET01B	Supported devices updated.	July, 2021

Warning Symbol

This document contains notices that you should observe to ensure your own personal safety, as well as to protect the product and connected equipment. These notices are highlighted in the manual by a warning triangle and are marked as follows.

The danger symbol indicates that death or severe personal injury may result if proper precautions are not taken. Do not proceed beyond a warning symbol until the indicated conditions are fully understood and met.

Preface

Original equipment manufacturer reserves the right to change information available in this document without notice. The manufacturer is not liable for any damages incurred to equipment/personal during installation or use of equipment as explained in this document. User must acquire sufficient knowledge & skills prior to using equipment in the application and follow all the local standards & regulations to meet safety requirements.

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1 BC-SET Software

1.1 Introduction

BC-SET Software is used to configure different types of temperature controllers. The software will connect with controllers via the programming port or serial communication port. It read and write the parameters from the controllers. The software can read and write parameters from more than one controller.

1.2 System Requirements

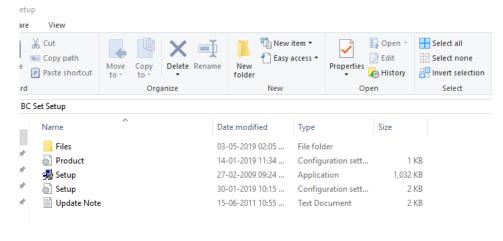
The PC must have at least the below configuration to install BC SET software.

Item	Minimum Requirements
System	IBM PC compatible computer with Intel Pentium IV or above
Operating System	Windows XP or above
Memory	256MB
Hard Disk	50 GB Free Space on the hard disk
Communication Ports	RS232 or RS485 or USB Port

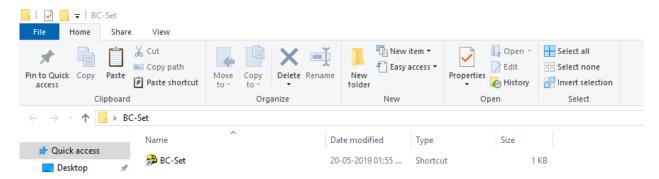
1.3 Software Installation

BC-SET software can be installed by following the below procedure.

- 1. Download BC SET software from the manufacturer's website.
- 2. Install latest Dot Net software from Microsoft website
- Install the software by double-clicking the setupwizard.exe from BC-Set Setup folder.



- 4. Follow the on-screen instruction to complete the installation.
- 5. Now BC-SET Software can be started by using the selecting the BC-Set application shortcut in BC-SET folder on the desktop.



1.4 Supported Devices

The below controllers can be connected with BC-SET Software by using program port cable or serial port (RS232 or RS485) cable to PC.

Controller	Port	Required Accessories
C22, C62, C72, C82, C83, C42, R22, C72P, C82P, C83P, C42P Note: P denotes Profile Version	Programming Port or RS485 Port	Programming Port:PA98-1+CC98-1 RS485: RS485 Interface Cable
B62	Programming Port or RS485 Port	Programming Port:PA98-1+CC98-1 RS485: RS485 Interface Cable
BTC-2500, BTC-4300, BTC-8300, BTC-9300	Programming Port or RS232 or RS485	Programming Port: CC91-3 +SNA12A Serial Port: RS232 or RS485 Interface Cable
BTC-4100, BTC-7100, BTC- 8100, BTC-9100, C21, P41, P91	Programming Port or RS232 or RS485	Programming Port:CC91-1 +SNA12A or CC91-4+SNA12A Serial Port: RS232 or RS485 Interface Cable
C91, L91	Programming Port or RS485	Programming Port: CC91-2 +SNA12A RS485: RS485 Interface Cable

1.5 Power Requirement

The controller needs to be powered before connected with BC-Set Software.

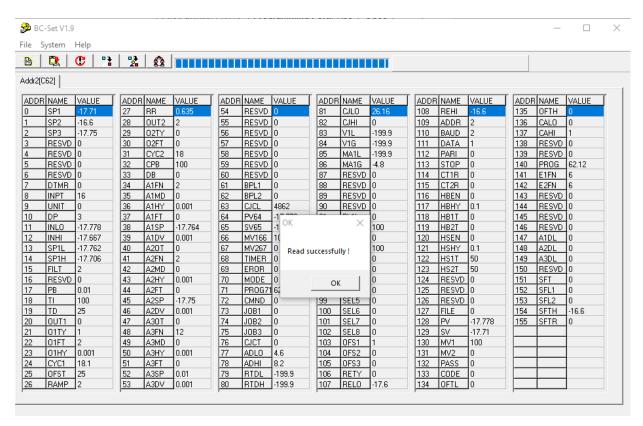
1.6 Network connection

The BC-Set software uses RS232 or RS485 or Programming port to connect with the controllers. For Programming port connection, the programming port adaptor SNA10A or PA98-1 is required. If the PC is not equipped with RS232 or RS485 port then USB to RS232/RS485 converters can be used.

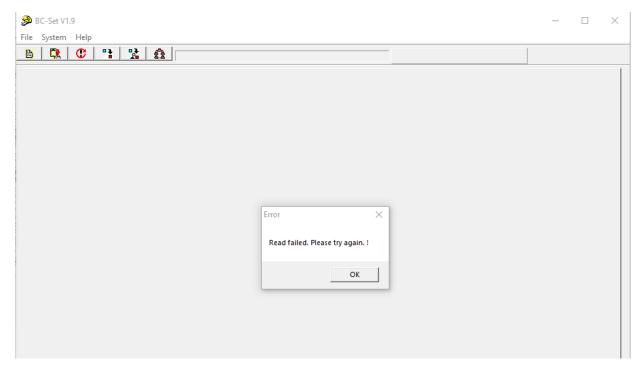
1.7 Setup and Use

Once the software is started, it will prompt the user to configure the starting and end node address needs to be connected. After the configuration of the starting and end node address, the software will try to connect with the controller with the default communication setup.

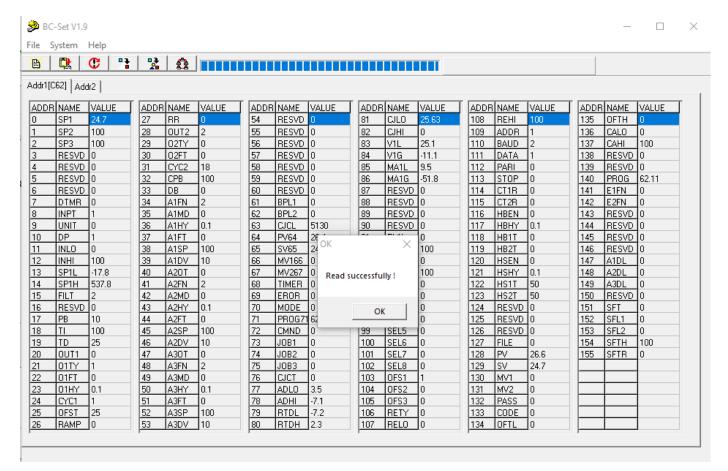
If the communication is successful the software will display the parameters list of the connected controllers else the software will show an error message.



1-1 Successful communication Single Controller



1-2 Communication Failure

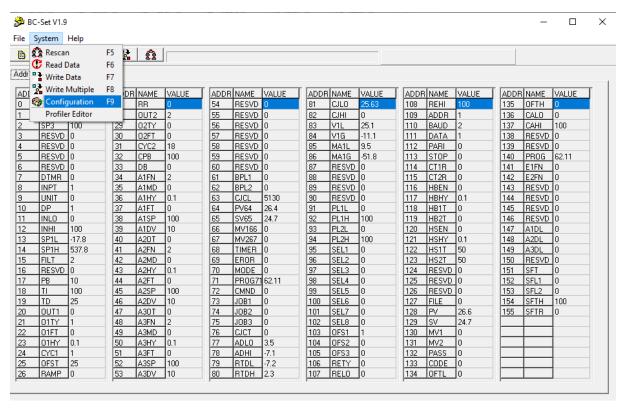


1-3 Successful Communication Multiple Controllers

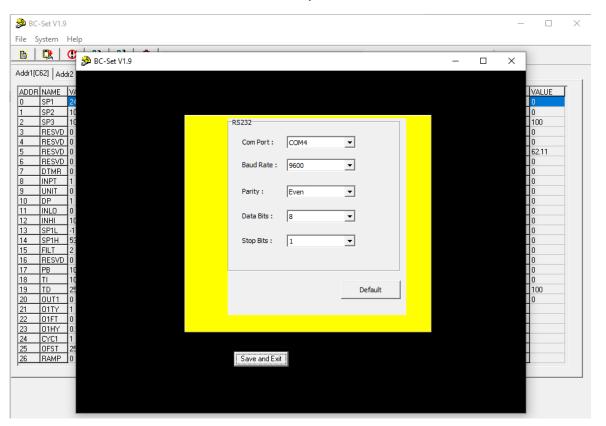
Once the parameters are listed the user can edit the parameters and write them to controllers. If the same type of controllers connected then the parameters can be read and write at once by selecting the range of node addresses.

1.8 Configuration of Communication parameter for RS485 and RS232

The communication parameter setup of software can be configured by using the configuration menu in the system menu. In the configuration, all parameters have to be configured as per the connected controller's connection and configuration. If multiple controllers are connected then all the controllers have to be configured with the same communication parameters.



1-4 System Menu



1-5 Communication Configuration

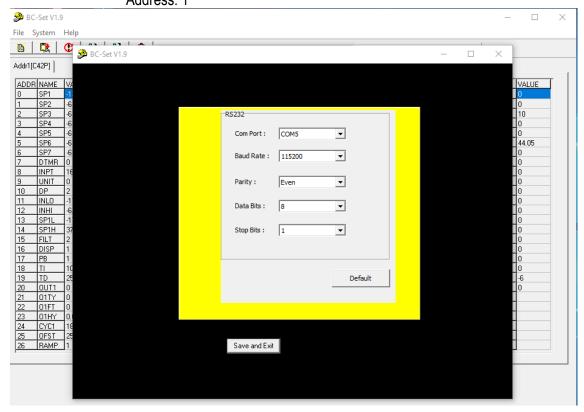
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1.9 Configuration of Communication parameter for Programming port

If the programming port is used for communication, then the communication parameter needs to be configured as below.

Baud Rate: 115200BPS or 9600 BPs

Parity: Even
Data Length: 8 Bit
Stop Bit: 1 Bit
Address: 1



1-6 Programming Port Configuration

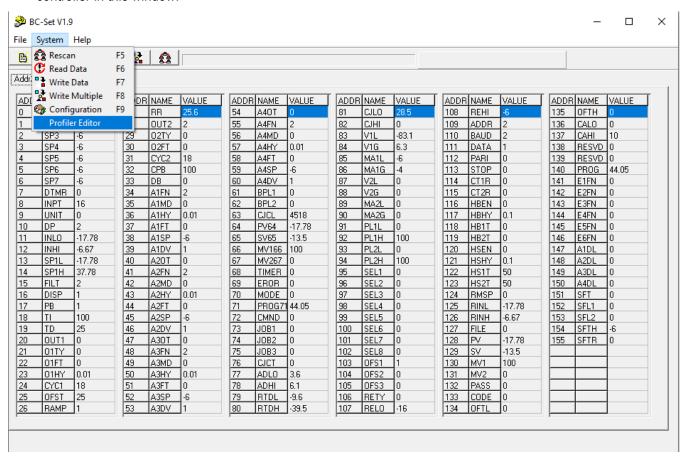
1.10 Guideline for Communication Failure

If the software can't read the parameters from the controller then check the below guidelines.

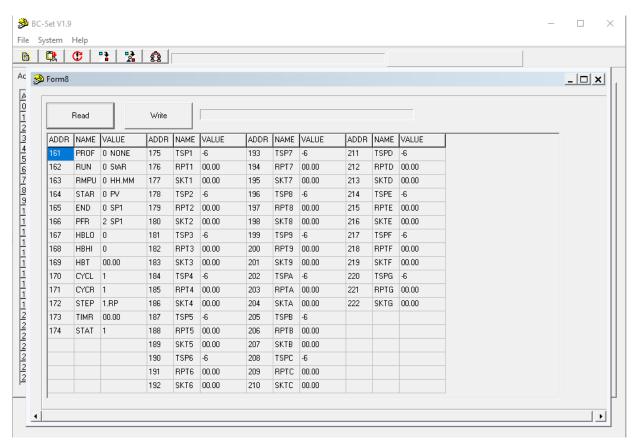
- 1. Check the communication cable is connected properly or not.
- 2. Check the communication port configuration of the controller and the software are the same or not.
- 3. If RS485 or RS232 communication is used for communication then check the controller has proper communication module on it or not
- 4. If the programming port is used for communication then the programming port cable is connected properly or not.
- 5. If the problem still can't be resolved then there might be a problem on hardware. Contact the supplier for assistance.

1.11 Profile Configuration

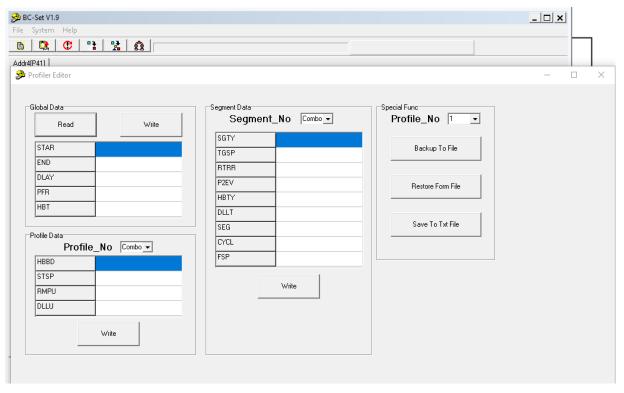
If the connected controller has a profile function, then the profile can be configured by using the profile configuration option in the system menu. The profile parameters can be read and write from the controller in this window.



1-7 Profile Editor



1-8 C Series Profile Configuration



1-9 Profile Editor for P41

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1.12 File Menu

1.12.1 Open-File (F2)

Open the parameter list of the connected controller from the existing file. By pressing F2 on the keyboard also to open the file.

1.12.2 Save File As (F3)

Save the parameter list to the file. By pressing F3 on the keyboard also to save the file.

1.12.3 Exit (F4)

Close the application. By pressing F4 on the keyboard also to close the file.

1.13 System Menu

1.13.1 Rescan (F5)

Rescan will scan the connected controllers again for communication. By pressing the key F5 on the keyboard also will read the data.

1.13.2 Read Data (F6)

Read data will read the data again from the controller. By pressing the key F6 on the keyboard also will read the data.

1.13.3 Write Data (F7)

Write the data to the connected controller. By pressing the key F7 on the keyboard also write the data.

1.13.4 Write Multiple data (F8)

Write the data to multiple controllers connected. By pressing the key F8 on the keyboard also write the data to multiple controllers.

1.13.5 Configuration (F9)

Open the window to configure the communication settings of the software. By pressing F9 on the keyboard also to open the configuration window.

1.13.6 Profile Editor

Open the profile editor for the controllers with profile function.

1.14 Help Menu

1.14.1 Help (F10)

Open the user manual of the software. By pressing the key F10 on the keyboard also will open the user manual.

1.14.2 About (F11)

Provide information about the software version. By pressing the key F11 on the keyboard also provide the information about the software version.