



MICROELETTRICA SCIENTIFICA
MILANO ITALY

DIN61 Com

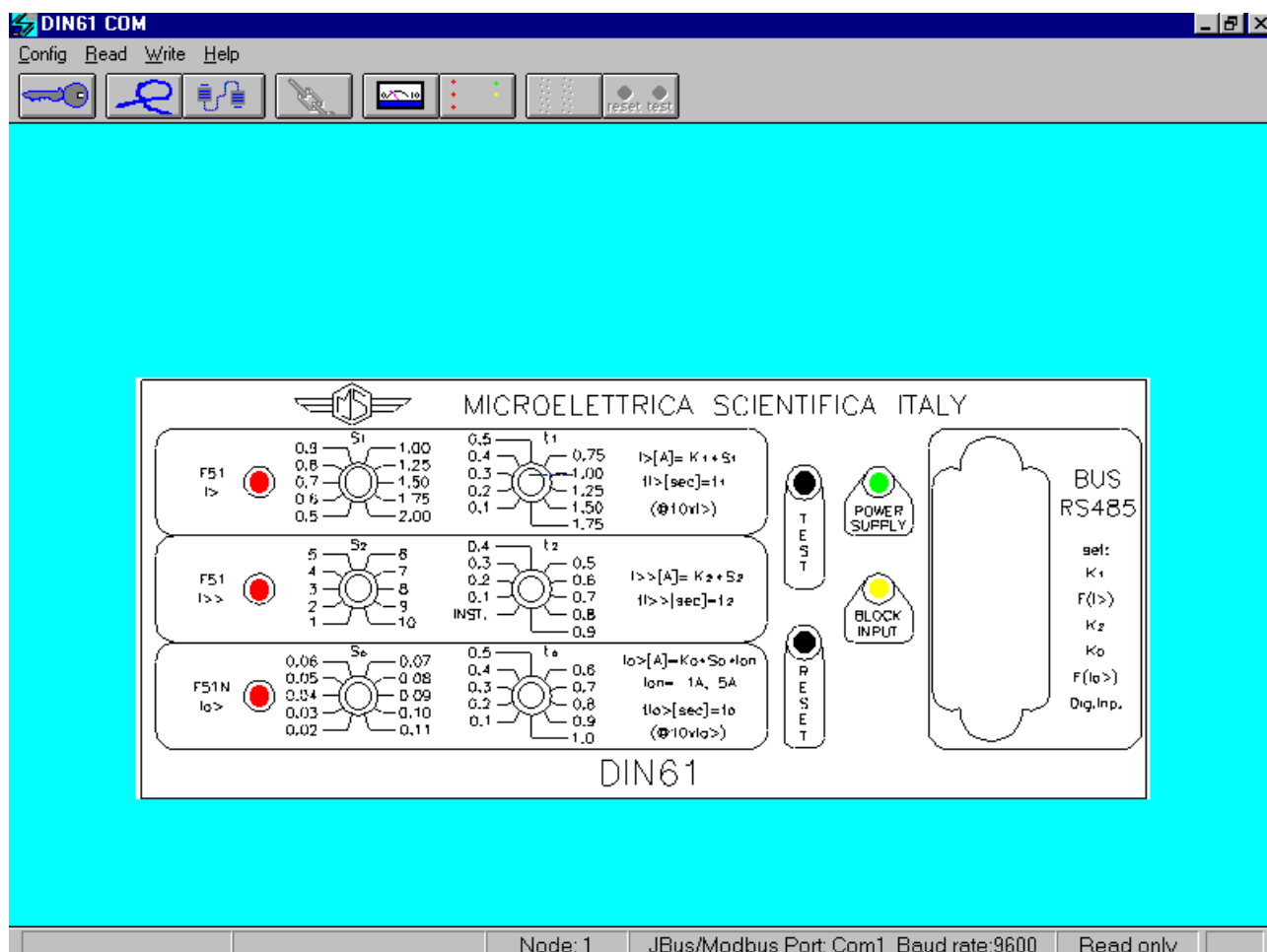
Doc. N° MO-0049-ING

Rev. 0
Pag. 1 of 7


DIN61 Com 1.00

Program for management of Din 61
on serial communication bus.

INSTRUCTION MANUAL




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 MICROELETRICA SCIENTIFICA MILANO ITALY	DIN61 Com	Doc. N° MO-0049-ING
		Rev. 0 Pag. 2 of 7

INDEX

	Page
1. General	3
2. Program installation	4
3. User interface	5
4. Use	
4.1 Password and Read/write status	6
4.2 Error condition	6
4.3 Normal operation mode	7

<div></div> <div>MICROELETTTRICA SCIENTIFICA MILANO ITALY</div>	<div>DIN61 Com</div>	Doc. N° MO-0049-ING
		Rev. 0 Pag. 3 of 7

1. GENERAL

DIN61 Com is a Microelettrica Scientifica's program operating in Windows environment, dedicated to the management of the overcurrent protection relay DIN 61.

The minimal performances required for the system are:

Personal computer type 486

4 Mbytes of ram

2 Mbytes available on the Hard Disk

Mouse (recommended)

MS-DOS 5.0 or later

Windows 3.1 or later

The interface used for connection is RS-485 (half-duplex), which allows to connect in parallel up to 31 units.

The communication bus can be long up to and over 1000m if shielded pairs of wires are used for connection.

Using a simple twisted pair the recommended length is reduced to 500m.

Using a fiber optic transmission, up to 200 units can be connected on the same bus with distance up to 2Km between units (glass fiber optic).

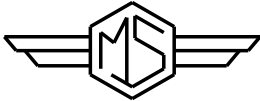
An RS232/485 adapter is needed to use one of the serial ports available on the personal computer for the relay management.

Microelettrica Scientifica's 232/485 converter automatically recognizes the data flow so no configuration is needed.

The use of a P.C. serial port fitted with a UART type 16550 is recommended; normally high speed serial port (baud rate over 9600bps) use that component.

If more than 2 serial ports are available on the P.C., pay attention that normally the ports COM1 and COM3 share the same interrupt(likewise for COM2 and COM4): therefore if for instance the mouse is connected to COM1, the relay management bus shall not be connected to COM3 but to COM2 or COM4 only.

If a 485 interface card has to be installed in the computer, make sure it is configured so that transmission is enabled by the RTS signal and that it does not clash with existing communication ports.

 <p>MICROELETTICA SCIENTIFICA MILANO ITALY</p>	<p>DIN61 Com</p>	<p>Doc. N° MO-0049-ING</p>
		<p>Rev. 0 Pag. 4 of 7</p>

2. PROGRAM INSTALLATION

The program is supplied on a 3,5" HD diskette.

To install the program proceed as follows:

Windows 3.1 or 3.11

- Load Windows.
- From menu "File" select "Execute" and type into the dialog box "A:\setup"
- Confirm by pressing "OK" button.

Windows 95

- From Start programs Menu select "Execute" and type into the dialog box "A:\setup"
- Confirm by pressing "OK" button.

At this stage the program will be installed as a Windows application.

To enter the program double click the relevant icon "DIN61COM" in the folder "Microelettrica Din61".





3. USER INTERFACE

The program has four of *Pull-Down menus*:



- **Config**
- **Read**
- **Write**
- **Help**

On the *tool bar* you can find the same functions available in the menus.



- The **Config** menu contains the following options:

- | | | |
|----------------------------------|--|--|
| <u>P</u> assword | : to insert the password to enable Write Menu |  |
| <u>N</u> ode selection | : to change the modbus node |  |
| <u>C</u> ommunication parameters | : to change the serial port |  |
| <u>R</u> etry connection | : to put on line the program after a communication error |  |
| <u>E</u> xit | : to end program execution | |

- The **Read** menu contains:

- | | | |
|-----------------------------|---|---|
| <u>A</u> ctual measurements | : to display actual current measurements |  |
| <u>S</u> tatus | : to display the relay status (alarms, trips, blocking input) |  |

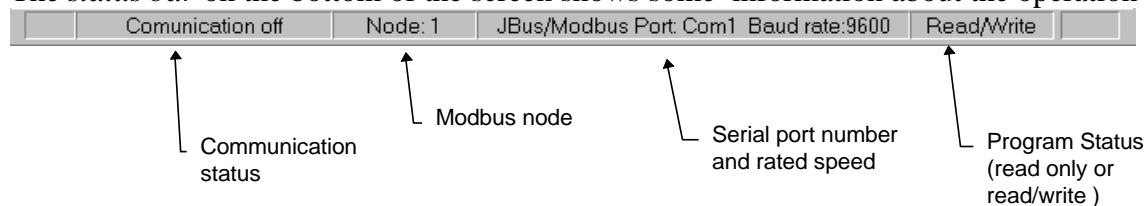
- The **Write** menu contains:


- | | | |
|------------------|---|---|
| <u>S</u> ettings | : to display and change the protection settings |  |
| <u>C</u> ommands | : to send the <i>Test</i> and <i>Reset</i> commands |  |

- The **Help** menu contains:

- | | |
|---------------|---|
| <u>A</u> bout | : to display the program version and logo |
|---------------|---|

The *status bar* on the bottom of the screen shows some information about the operation mode:



 MICROELETRICA SCIENTIFICA MILANO ITALY	DIN61 Com	Doc. N° MO-0049-ING
		Rev. 0 Pag. 6 of 7


4. USE

4.1) Password and Read/write status

When the program has been loaded the screen shows the menus described at §3.


The default program status is *Read only* so the *Write* menu is disabled. All the options are grayed and

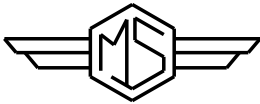
on the *tool bar* they looks like this . To enable the *Write* menus you have to insert the

password by selecting  or the menu *Config/ Password*. The default password is a void string so that you have only to push the OK button. The program status in the *Status Bar* will change in *Read/Write*. To change the password you have to select the menu *Config/Change password*. The program will ask to confirm the new password. The password is saved in a file named *config.buf*. If you delete *config.buf* or if you forget your password you can insert the password “DIN61Help”.

4.2) Error condition


If the program can't communicate with the relay it will show a message describing the communication error and asking if you want to retry; if you don't the program it will work off line. In the *status bar* the message *Communication off* will appear and the values in *Status window* and *Actual measurements window* won't be updated. To recreate the link between the communication program and the relay

push the button  or select the menu *config/retry connection*.

 MICROELETTRICA SCIENTIFICA MILANO ITALY	<h1>DIN61 Com</h1>	Doc. N° MO-0049-ING
		Rev. 0 Pag. 7 of 7

4.3) Normal operation mode

Check the physical connection and activate whatever window . The program create a link with the relay.

Status window (push ) and

Status

Input

☐ Blocking input

Alarm

☐ I > ☐ Io >
☐ I >>


Done

Output

☐ Trip I> ☐ Trip Io>
☐ Trip I>> ☐ Trip test

Error

☐ E2prom fault
☐ Calibration error

Actual measurements window (push )

will update automatically the values showed with the values downloaded from the relay .

Actual Measurements

Ia

0 A

Ib

0 A

Ic

0 A


Earth fault (% On)

0 On

Scan time

1 s

Done

Settings window(push ) loads the settings value from the relay when you open the window. To reload the settings from the relay you have to push the button *Update*. For changing a setting of the relay you have to push the button *Send* to transfer the new values.

Settings

Phase

F (I>)

Dis

I >

24.63 A

tl>

197.6 sec

Dis

I >>

21.43 A

tl>>

300.5 sec

Ground

F (Io>)

Dis

Io>

0.6923 On

tIo>

285 sec

Blocking input

I >

☐

I >>

☐

O >

☐

TBI

0.4 sec

Node number

1

☐ AutoReset ☐ Blocking input

UpDate

Send

Done