Interface N 148
RS 232

5WG1 148-1AB02

Product and Applications Description

The N 148 interface with its built-in Sub D 9-pin plug-and-socket device, enables a personal computer (AT compatible PC) to be connected for addressing, parameterising, visualising, logging and diagnosis of bus devices.

With the N 148 interface it is possible to operate all bus devices in the whole bus system.

It allows devices isolated access to the bus line when a specified transmission protocol has to be adhered to.

The N 148 interface is a device of N-system dimensions designated to be installed in standardised terminal boxes.

The connection to the bus line is realised via the pressure contact system at the built-in bus coupling unit.

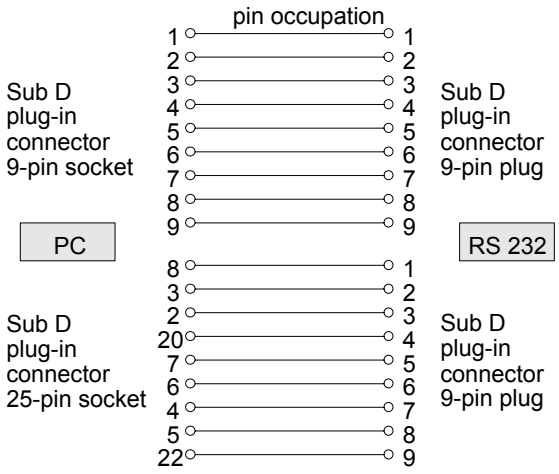
The connection to the PC is arranged between the 9-pin SUB D-socket of the interface N 148 and the COM 1 or COM 2 interface.

Application Programs

10 CO Dummy 700002

- Sets the internal bus coupling unit to interface mode and erases its memory.

Example of Operation



Installation Instructions

- The device may be used for permanent interior installations in dry locations within distribution boards.

⚠ WARNING

- The device may be built into distribution boards (230/400 V) together with appropriate VDE-devices and must be mounted and commissioned by an authorised electrician.
- The 9-pin Sub D socket must be covered! (cover included)
- Free DIN rail areas with sticked-in data rails must be covered with covers, order no. 5WG1 192-8AA01.
- The prevailing safety rules must be heeded.
- The device must not be opened. A device suspected faulty should be returned to the local Siemens office.

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Technical Specifications

Power supply
via bus cable

Transmission rate
9600 bit/s

Control elements
1 learning button:
for switching between normal operating mode and addressing mode

Display elements
1 red LED:
for monitoring bus voltage and displaying mode, selected with the learning button

Connections
- bus line, pressure contacts on data rail
- RS 232 interface: 9-pin SUB-D socket
  length of data cable: max. 15 m
- connection cable available from authorised electronics stores (see example of operation)

Physical specifications
- housing: plastic
- N-system DIN-rail mounted device,
  width: 3 SUs (1SU = 18mm)
- weight: approx. 180 g
- fire load: approx. 3000 kJ ± 10 %
- installation: rapid mounting on
  DIN EN 50022-35 x 7,5 rail

Electrical safety
- fouling class (according to IEC 664-1): 2
- protection (according to EN 60529): IP 20
- protection class (according to IEC 1140): III
- overvoltage class (according to IEC 664-1): III
- bus: safety extra low voltage SELV DC 24 V
- the device complies with
  EN 50 090-2-2 and IEC 664-1: 1992

Reliability
rate of failure: 736 fit at 40 °C

Electromagnetic compatibility
complies with
EN 50081-1, EN 50082-2 and EN 50 090-2-2

Environmental specifications
- climatic conditions: EN 50090-2-2
- ambient temperature operating: - 5 ... + 45 °C
- ambient temperature non-op.: - 25 ... + 70 ° C
- relative humidity (non-condensing): 5 % to 93 %

Certification
EIB certificate

CE norm
complies with the EMC regulations (residential and functional buildings), and low voltage regulations

Location and Function of the Display and Operator Elements

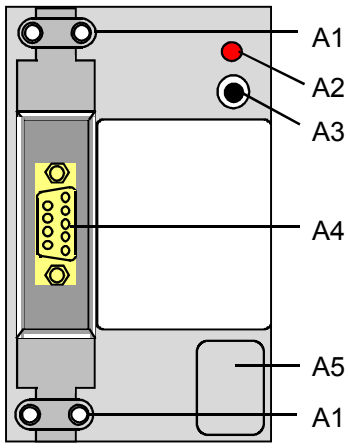

Figure 1: Location of the display and operator elements

A1 Clamp for connection cable (max. ∅ 8 mm)
A2 LED for indicating normal operating mode (LED off) and addressing mode (LED on); upon receiving the physical address the device automatically returns to normal operating mode
A3 Learning button for switching between normal operating mode and addressing mode for receiving the physical address
A4 9-pin Sub D socket
A5 Label for noting the physical address

Mounting and Wiring

General description
The N-system DIN-rail device (3 SUs) can be installed to N-system distribution boards, surface or flush mounted, or to any DIN-rail EN 50022-35 x 7,5 available that has a data installed.
The connection to the bus line is established by clicking the device onto the DIN-rail (with a data rail installed).
Take care that the type plates of all devices on a DIN-rail can be read in the same direction, guaranteeing the devices are polarised correctly.

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Mounting DIN-rail devices (Figure 2)
- Slide the device (B1) onto the DIN-rail (B2) and
- swivel back the device (B1) until the slide clicks into place audibly.

Dismounting DIN-rail devices (Figure 2)
- Remove the cover.
- Remove the clamps for connection cables.
- Unplug the 9-pin Sub D connector.
- Press down the slide (C3) with a screw-driver, click it into place by a slight pressure and
- swivel the device (C1) from the DIN-rail (C2).

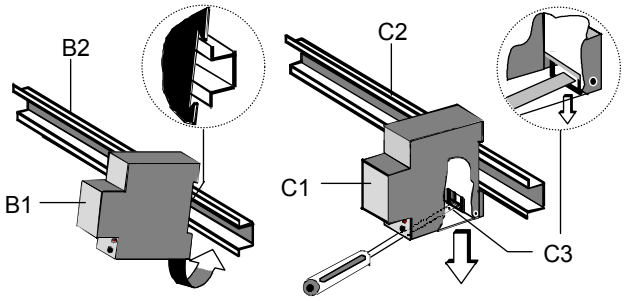
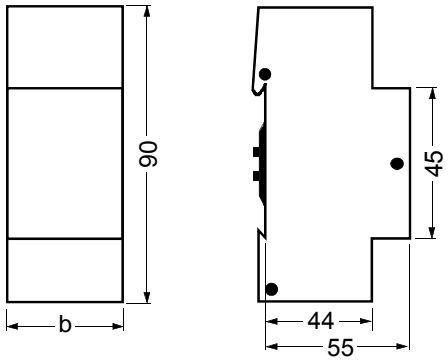


Figure 2: Mounting and dismounting a DIN-rail device

Dimension Diagram

Dimensions in mm



b = 3 TE

1 Spacer unit (1 SU) = 18 mm

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Notes

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