



Product and Applications Description

The RS232 interface N 148/04 is a N-system DIN-rail mounted device.
The device with integrated bus coupling unit 2.1 is connected to the bus line via the pressure contact system. The N 148/04 interface provides a galvanically separated connection to the bus system via its built-in Sub D 9-pin connector socket. The connection to the PC is made between the 9-pin SUB D-socket of the interface N 148/04 and the COM 1 or COM 2 interface of the PC. A DB-9 (male female) serial cable is needed for this connection. It enables a personal computer (AT compatible PC) to be connected for addressing, configuring, visualising, logging and diagnosis of bus devices.
With the N 148/04 interface it is possible to operate all bus devices in the whole bus system with one of two selectable protocols: the standard protocol and the FT1.2 protocol. The standard protocol is used e.g. by ETS. The FT1.2 protocol is used by various operator software packages and software interfaces.

Application Program

10 CO Dummy 700002

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

Note:

Set the slider switch to the position „Standard“ to download the application program with ETS.
Set the slider switch to the position „FT 1.2“ for a minimum of two seconds after completion of the download.

Technical Specifications

Rated voltage

- bus line: DC 24V (DC 21...30V)

Transmission rate

9600 bit/s, 19200 bit/s

Control elements

- 1 learning button for switching between normal operating mode and addressing mode
- 1 slider switch for switching between standard and FT1.2 protocols

Display elements

- 1 red LED for controlling bus voltage and displaying mode, selected by the learning button

Connections

- bus line: pressure contacts on data rail
- RS232 interface: 9-pin Sub D socket
length of data cable: max. 15 m (45 ft.)
- serial connection DB-9 (male female) cable available in electronics stores

Physical specifications

- polymer casing
- DIN-rail mounted device, width: 3 SU
(1 SU = 18mm)
- weight: approx. 160 g (6oz)
- installation: rapid mounting on
EN 60715-TH35-7,5 rail

Electromagnetic compatibility

complies with Part 15 of the FCC rules pursuant to the limits for a Class A digital device

Environmental specifications

- ambient temperature operating: - 5 ... + 45° C (23...113°F)
- maximum ambient temperature range: - 25 ... + 70° C (-13...158°F)
- relative humidity (non-condensing): 5 % to 93 %

Listings and Certifications

UL listed (E173 174)

UL 916, Energy Management Equipment Accessory

CSA certified

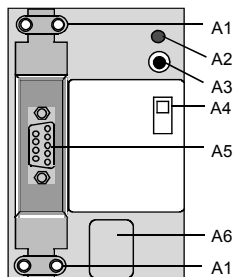
(pending)

CE marked

complies with EMC regulations (residential and non-residential buildings), and low voltage regulations

EIB certified

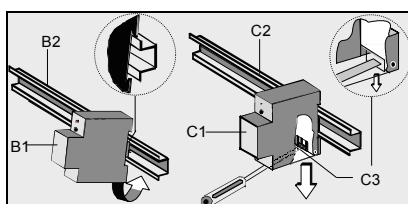
Location and Function of the Display and Control Elements



- A1 Clamp for connection cable (max. Ø 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 Slider switch to change between the protocols standard (bottom position) and FT1.2 (top position)
- A5 9-pin Sub D socket
- A6 Label for noting the physical address

Installation Instructions

The device may be used for permanent interior installations in dry locations within distribution boards or small casings with DIN rail EN 60715-TH35-7,5.



Mounting

General description

The DIN-rail device can be installed in the *instabus* EIB lighting control panel, to surface or flush mounted, and snapped onto the DIN-rail that has a data rail stuck to it.

The connection to the bus line is established by clicking the device onto the DIN-rail (with glued-in data rail). Take care that the type plates of all devices on a DIN-rail can be read in the same direction, guaranteeing the devices are polarized correctly.

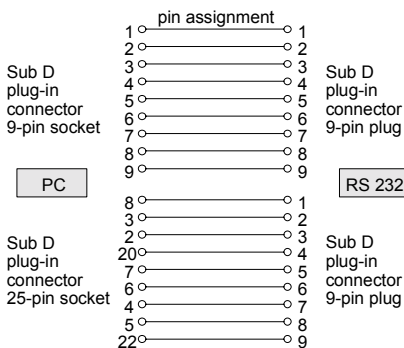
Mounting the device to a DIN-rail

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

Dismounting DIN-rail devices

- Press down the slide (C3) with a screw-driver and swivel the DIN-rail device (C1) from the DIN-rail (C2).

Typical cable circuit



WARNING

Disconnect and lock off power before installing or working on the device.

The device must be mounted and commissioned by an authorized electrician.

Unassigned sections of DIN rail with inserted data rail must be covered using 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 sales office or distributor.

DB-9 Serial Cable connectors:



9 Pin F – 9 Pin Male



25 Pin Male – 9 Pin Female



Adapter needed for 25 Pin cable