

## Data rails 190 with connector for: flat DIN rails deep DIN rails

5WG1 190-8AB\_2  
5WG1 190-8AB\_4

As at: March 2001

### Product and functional description

A data rail with a soldered connector can be implemented instead of using a data rail 190 without connector (order no. 5WG1 190-8AB\_1) plus an additional connector N 191/01 or N 191/11. Data rails with connectors are available in several lengths, both for insertion in flat DIN rails in accordance with EN 50022 (internal width  $25 \pm 0.24$  mm, external height 7.5 mm) and in deep DIN rails with a material thickness of 1.5 mm (internal width  $24 \pm 0.25$  mm, external height 15 mm).

**Note:** The data rails with connectors for deep DIN rails cannot be used for deep DIN rails in accordance with EN 50022 that have a material thickness of 2.5 mm.

#### Data rails with connector for flat DIN rails:

Length	Usable module units	Order no.
214 mm	11	5WG1 190-8AB02
243 mm	12	5WG1 190-8AB12
277 mm	13*	5WG1 190-8AB22
324 mm	17	5WG1 190-8AB32
428 mm	23	5WG1 190-8AB42
464 mm	25*	5WG1 190-8AB52

#### Data rails with connector for deep DIN rails:

Length	Usable module units	Order no.
214 mm	11	5WG1 190-8AB04
243 mm	12	5WG1 190-8AB14
277 mm	13*	5WG1 190-8AB24
324 mm	17	5WG1 190-8AB34
428 mm	23	5WG1 190-8AB44
464 mm	25*	5WG1 190-8AB54

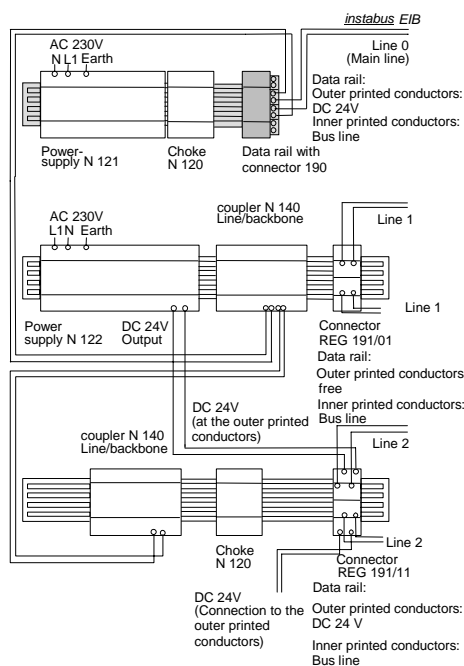
\* Note: If required, 1 less module unit can be used dependent on the type of the Siemens distribution board.

A printed circuit-board with 4 pins and a 4-pole bus terminal is soldered onto the right end of the data rail with connector. The printed circuit-board is supported against the data rail via a plastic component. A cover is placed on top to protect the individual cores of the bus cable.

### Application programs

None

### Connection example



### Technical data

#### Connections

- Bus cable: Screwless bus terminal, 4-pole, 0.6... 0.8 mm  $\varnothing$  single core

#### Mechanical data

- Housing: plastic
- Dimensions of connector housing with cover: 16.5x38.5x37.5 mm (LxVxH)
- Dimensions of data rails: Length 214... 464 mm, width 23 mm (data rails for 15 mm deep DIN rails) or width 24 mm (data rails for 7.5 mm deep DIN rails)
- Weight: Data rails for flat DIN rails: approx. 35...50 g Data rails for deep DIN rails: approx. 55...110 g
- Installation: inserted in the DIN rail with the adhesive strip on the underside of the data rail

#### Electrical safety

- Degree of pollution (in accordance with IEC 60664-1): 2
- Overvoltage category (in accordance with 60664-1): III
- Bus: safety extra-low voltage SELV DC 24 V
- Device complies with EN 50090-2-2 and IEC 60664-1

#### Environmental conditions

- Climatic withstand capability: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
- Relative humidity (not condensing): 5 % to 93 %

#### Approval

EIB certified

#### CE mark

in accordance with the low voltage guideline

### Position of the terminals

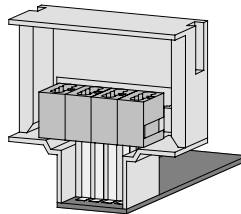


Diagram 1: Position of the terminals

The correct polarity of the bus voltage is achieved if the connector terminal is on the right hand side during insertion. If it is mounted on the left, the order of the terminals must be changed.

- Terminals from top to bottom:
- + 24 V without choke = yellow
  - + 24 V with choke = red
  - 0 V with choke = black
  - 0 V without choke = white

### Installation instructions

- The data rail with connector may be used for permanent interior installations in dry rooms and for insertion in distribution boards or miniature housing.
- The cables should be connected free from any draughts.

### WARNING

- The data rail with connector may be inserted in a distribution board (230/400V) together with the appropriate, VDE-approved devices. It may only be installed and commissioned by an authorised electrician.
- The prevailing safety and accident regulations must be observed.
- Unoccupied sections of DIN rail containing data rail should be protected with cover strips 5WG1 192-8AA01.
- The data rail may not be modified. Any faulty data rails should be returned to the local Siemens office.

### Dimension drawings of usable DIN-rails

