**Module and Application Description**

**PROCONTROL P**
Modules of the Turbine Control System

**Module Link**
( Passive )

**88GV31/R1000/R1100**

**Application**
The 88GV31 module is used as a passive local—parallel—bus coupling module in case more than one subrack are used. In cooperation with central control module 88GV30, the 88GV31 is designed for forwarding the data to the local—parallel—bus subracks connected.

**Use**

- **Station bus**
  - 83SR30
  - 83GS30

- **Local parallel bus**
  - 1st subrack with local parallel bus
    - 88GV31 R1000
    - 83SR31
    - I/O

- **2nd subrack**
  - 88GV30
  - 83SR31
  - I/O

- **3rd subrack**
  - 88GV31 R1100
  - 83SR31
  - I/O

The 88GV31 module shall always be installed on the far right of a subrack.

88GV31 coupling modules are intended to amplify the signals among the subracks connected. 88GV31 modules are connected to the central coupling module 88GV30 via the 89IT31 system cable.

Version R1000 of module 88GV31 has the parallel—bus connection at the lower edge connector, for use in a PROCONTROL station (with the station bus at the top).

Version R1100 of module 88GV31 has the module bus connection at the upper edge connector.

**Note:**
On the first (station bus) subrack, the local parallel bus is mounted at the bottom, on the second and third subrack at the top. Accordingly,
- module 88GV31/R1000 is to be used **always** on the station bus subrack for connecting one or several 83SR30,
- module 88GV31/R1100 is to be used **always** on the 3rd bus subrack for connecting one or several 83SR31.
Technical data

In addition to the system data, the following values apply:

Parity: 1 parity bit each for 24 address bits and 16 data bits
Operating voltage: +5 V
Power consumption: 1.8 A

Module bus connection

On the local parallel bus, the 88GV31/R1000/R1100 modules behave like an appropriate slave module regarding all bus signals. No interrupt lines are affected in any active way.

Initialization

When connecting or disconnecting the supply voltage Ud (drop by < 4.5 V), the 88GV31 modules generate an INIT signal for the module and the module subrack connected.

Front plate earthing

The front plate is not electrically connected with the module. Appropriate front–plate earthing for shielding against electromagnetic interferences is done by means of the subrack/module fixing bolts.

Pull–out tool

Pull–out tool XN 400 776 is required for withdrawing the module (part of the scope of supplies).

Mechanical design

Board size: 6 units, 1 division, 160 mm deep
Connectors: to DIN 41612
1 x for local parallel–bus connection
96–pole edge connector, type C (connector X11 or X21)
1 x for 89IT31 cable
96–pole edge–connector, type C (connector X1 or X2)

Weight: approx. 0.26 kg

ORDERING DATA

Order No. for complete module:
Parallel bus connection at the bottom:
Type: 88GV31/R1000 Order No.: GJR2371700R1000

Module bus connection at the top:
Type: 88GV31/R1100 Order No.: GJR2371700R1100

Technical data subject to change without notice!