Module and
Application Description

BBC
BROWN BOVERI

PROCONTROL 44
Transfer

IO-BUS Termination Module

GKWE 705 325 E, edition 09/86

88 QB02 /R0100

Application

The IO-bus termination module is used to terminate the IO-bus by its characteristic impedance. It is used within the PROCONTROL multi-purpose processing station.

The module 88 QB02 is only used in connection with station bus backplane GKWE 852 810/R0100, in place of termination module 88 QB01.

In contrast to the station bus backplanes GJR2315400Rxxxx, the station bus backplane GKWE 852 810/R0100 allows the accommodation of up to 6 IO-bus coupling modules 88 QT02 in one subrack.

When using station bus backplane GKWE 852 810 /R0100, the IO-bus must always be terminated at both ends if its length exceeds one subrack.

Features

The termination module 88 QB02 is mounted via spacer bolts on the station bus backplane. It is equipped with three connectors.

The 6-pole connector serves to connect the module to the IO-bus, while the two single-pole connectors serve to supply the voltage.

W a r n i n g:
Incorrect insertion of the 6-pole connector may lead to the destruction of modules.

Description

The IO-bus lines DAT, $\overline{\text{DAT}}$, ADR, CLK and QUT are each terminated by the module with 100 ohm with respect to +10 V.

For this, the auxiliary voltage UH is derived from the station bus backplane and switched to the bus lines via diodes and resistors.

The voltage can also be supplied via IO-bus cables.

The bus drivers of the IO-bus modules which are connected via their standard interface to the IO-bus SEA operate as transistor switches with respect to 0 V.

The bus line SME is not terminated and is not supplied via the IO-bus termination module.

The bus line SME operates with a voltage level of 24 V.

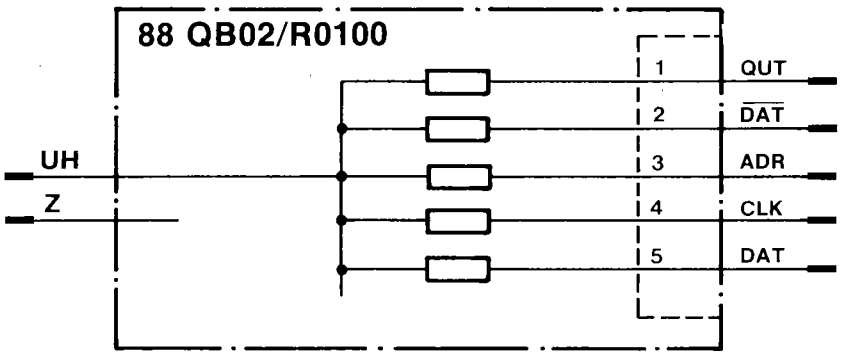
The 24 V voltage for the SME signal is formed by the module signalling the disturbance.

Functional diagram

The module consists of a printed circuit board which is equipped with one 6-pole and two 1-pole connectors.
The supply voltage is fed via both 1-pole connectors (UH and Z).

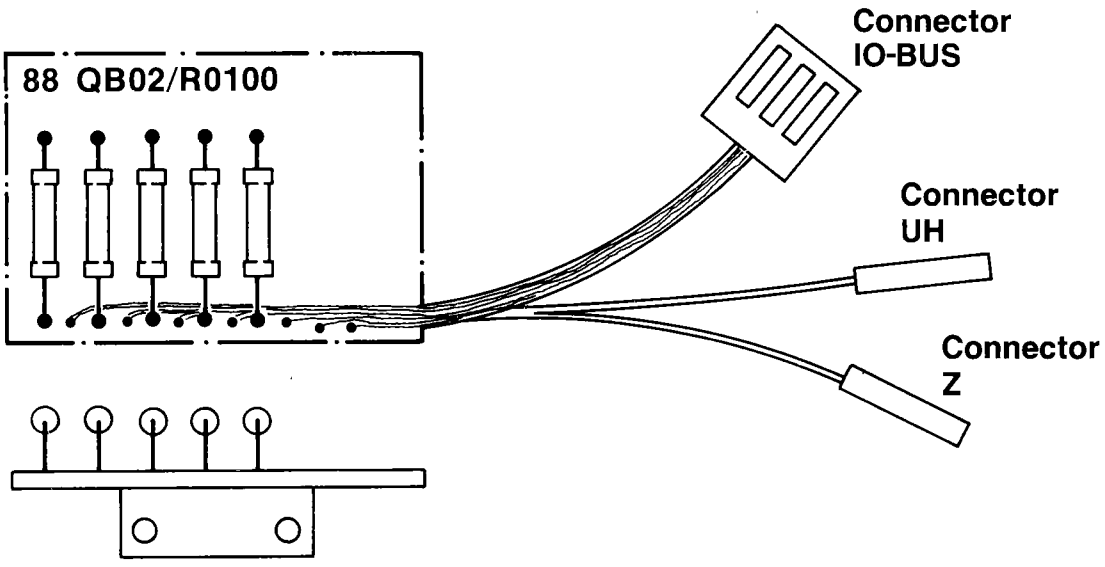
The 6-pole connector serves for connection to the IO-bus.

Warning:
Incorrect insertion of the 6-pole connector may lead to the destruction of modules.



Mechanical design

Board size:	5.5 cm x 3.7 cm
Connectors:	1 x for connection to the IO-bus, 6-pole 2 x for connection of the voltage supply, 1-pole
Weight:	approx. 0.02 kg



Technical data

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

POWER SUPPLY

Operating voltage UH:	10.7 +/- 0.5 V
Current consumption I_{typ}:	20 mA
Power dissipation P_{vtyp}:	0.2 W
Reference potential IO-bus Z:	0 V

CONNECTED SIGNALLING LINES

The following signalling lines are included in the module descriptions of the IO-bus modules under the designation "Standard interface to the IO-bus", and are each terminated by 100 ohm.

CLK:	Clock (500 kHz)
ADR:	Address
DAT:	True data
$\overline{DAT}$:	Inverse data
QUT:	Acknowledgement of output data

PERMISSIBLE TEMPERATURE RANGES

Operating temperature:	0 °C ... 70 °C
Storage temperature	-40 °C ... 85 °C

ORDERING DATA

Complete module:

Type designation: 88 QB02/R0100

Order number: GKWE 852 900 R0100

Technical data are subject to change without notice!

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