15.14 NW150

15.14.1 General Information

The PROFIBUS network (FMS) is used for communication between PROFIBUS capable I/O components, such as PLC components, panels and industrial PCs (e.g. PROVIT from B&R).

The NW150 PROFIBUS module is operated using software, which is available from B&R.

15.14.2 Order Data

Model Number	Short Description	Image
	PROFIBUS network module	
3NW150.60-1	2005 PROFIBUS network module, electrically isolated RS485 interface used to connect to PROFIBUS networks	allower and the second second
	Accessories	
0G1000.00-090	Bus Connector, RS485, for PROFIBUS networks, remote I/O	
0AC916.9	Bus termination, RS485, active, for PROFIBUS networks, remote I/O, standard mounting rail installation, supply voltage: 120 / 230 VAC	CONNECT
Additional accessories see sections "Accessories" and "Manuals".		CONVECT COMM Tx Rx NW150

Table 365: NW150 order data

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15.14.3 Technical Data

Product ID	NW150
C-UL-US Listed	Yes
B&R ID Code	\$10
Serial Interface Design Electrical Isolation Baud Rates 9.6 kBit/s 19.2 kBit/s 93.75 kBit/s 187.5 kBit/s 500 kBit/s	RS485 9-pin DSUB socket Yes Depends on the distance Max. 1,200 m Max. 1,200 m Max. 1,200 m Max. 1,000 m
PROFIBUS Data Transfer Protocol Access Procedure Number of Stations Topology Connection to the Bus Transfer Media	According to PROFIBUS standard, DIN 19245 parts 1 and 2 (FMS) Token passing principle with underlying master/slave principle Max. 127 (with repeater) Physical bus Direct Shielded, twisted pair
Power Consumption 5 V 24 V Total	Max. 7 W Max. 7 W
Dimensions	B&R 2005 single-width

Table 366: NW150 technical data

15.14.4 Status LEDs

Image	LED	Description
	RUN	Network processor is initialized by CPU's PLC.
	ERROR	Error
	CONNECT	At least one connection is established.
	COMM	Connection is established and PROFIBUS services are being processed.
O RUN	Tx	Data is being sent.
CONNECT	Rx	Data is being received.
TX RX NW150		

Table 367: NW150 status LEDs

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15.14.5 Operational and Connection Elements

The number switch for setting the station address, the baud rate and the connection socket for the RS485 interface are located behind the module door.



Figure 195: NW150 operational and connection elements

15.14.6 Number Switch



Figure 196: NW150 number switch

Baud Rate

The lower number switch is used to set the baud rate which allows the transfer to take place via PROFIBUS.

The following baud rates can be set:

Baud Rate Switch			
Position	Baud Rate		
0	9.6 kBit/s		
1	19.2 kBit/s		
2	93.75 kBit/s		
3	187.5 kBit/s		
4	500 kBit/s		

Table 368: NW150 baud rates

Station Address

The two upper number switches are used to set the station address for the network module. The station is accessed using this address.

15.14.7 RS485 Interface

The interface is electrically isolated. The status LEDs Rx and Tx are lit during data transfer via the RS485 interface.

Maximum Transfer Rate: 2 MBit/s Max. Distance: 1,200 m



Table 369: NW150 RS485 interface

15.14.8 Wiring a PROFIBUS System

The wiring for PROFIBUS is also used for the remote I/O bus. Information concerning specifications for the bus cable and wiring can be found in Chapter 2 "Installation", Section 2.1.3 "Remote I/O Bus", on page 58.