

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6SE3290-0XX87-8BF0

OPM2 CLEAR-TEXT OPERATOR MODULE

Used with the applicable COMBIMASTER / MICROMASTER Integrated configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens manufacturer documentation for 6SE3290-0XX87-8BF0

RS232 Interface

The Clear text Display is fitted with an RS232 interface to allow the drive to be connected to a PC.

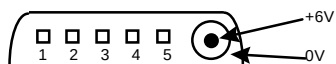


Figure 10: Pin Layout of the RS232 Edge Connector

Terminal	Function, information
1	NC (not connected)
2	External TxD
3	External RxD
4	External RTS
5	Isolated 0V

Table 2: Terminal functions of the RS232 connector

Table 3 gives the ordering information for the OPM2 Clear Text Display Module.

The RS232 interface requires an external power supply to operate. The specification of the power supply interface is as follows:

- Voltage tolerance $6V \pm 0.5V$
- Max Supply Current when connected to drive 50mA, when not connected to drive 250mA
- Connecting Plug
- - Outside diameter 3.5mm
- - Inside diameter 1.35mm

Designation	Order No.
OPM2 Clear Text Display Module	6SE 3290-0XX87-8BF0
Connecting cable OPM 3m	6SE 9996-0XA31

Table 3: Ordering Information

7.2 PROFIBUS CB155



This option allows the COMBIMASTER to be controlled via a PROFIBUS-DP serial bus (SINEC L2-DP).

PROFIBUS-DP is a cost-effective high speed serial communication system optimised for the actuator/sensor area where very short system reaction times are critical. It operates as a decentralised I/O system whereby the traditional wiring to the sensors and actuators is replaced by an RS485 serial bus system linking the stations together.

The suitability of the system for such applications has been recently enhanced by the extension of the bus speed up to 12MBd. The protocol is defined as DIN19245 and also as EN50170 guaranteeing open, multi-vendor communications between PROFIBUS-DP stations.

Up to 125 stations can be networked together using this single bus system and a very flexible data structure allows the system to be optimised to exactly match the requirements of each device.

PROFIBUS-DP lies at the heart of the new generation of SIMATIC S7 automation systems offered by Siemens. Using this single bus system, all engineering, visualisation and PLC control operations can be integrated. To configure a SIMATIC based automation system, all that is required is the associated STEP7 configuration tool running on a PC. Bus configuration is performed by using a drag and drop technique in a graphically displayed PROFIBUS-DP network.

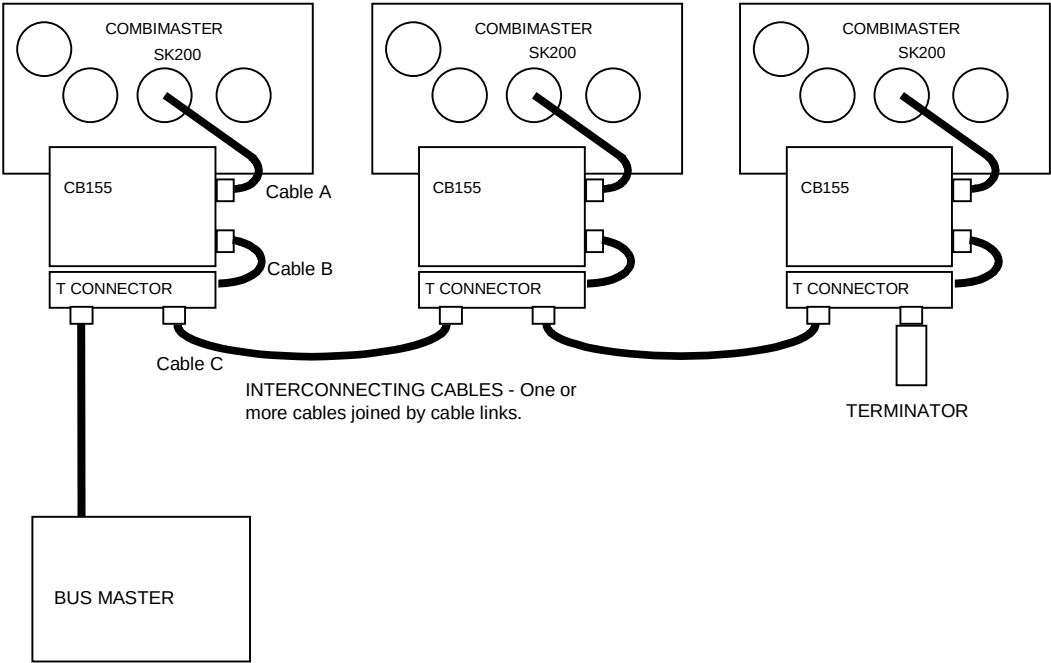


Figure 11 Typical PROFIBUS Installation, Showing Use Of Accessories

PROFIBUS Component	Order Number	Drawing Reference
CM PROFIBUS module CB155 <i>Note: For CS B Issue A units :-</i>	6SE9996-0XA18 6SE9996-0XA20	Includes Cable A
CM PROFIBUS T connector	6SE9996-0XA21	Includes Cable B
CM PROFIBUS terminator	6SE9996-0XA22	
CM PROFIBUS cable 1m	6SE9996-0XA23	Cable C
CM PROFIBUS cable 5m	6SE9996-0XA24	Cable C
CM PROFIBUS cable 10m	6SE9996-0XA25	Cable C
CM PROFIBUS cable link	6SE9996-0XA26	Used for joining lengths of cable C



1. A clear text operator panel (OPM2) is required to set the COMBIMASTER parameters prior to connecting the PROFIBUS module.
2. The PROFIBUS Module may only be connected or disconnected from the drive when the drive is powered off.
3. The PROFIBUS module must only be connected to the drive with the cable supplied for the purpose.
4. The PROFIBUS module cannot be used simultaneously with the Clear Text Display module.

Parameter data exchange may, however, be blocked if bus or PLC memory space is at a premium. The data structure and thus the PPO type is normally specified by the bus master. If no PPO type is specified (e.g. if a combined DP/FMS bus master is used), then the default PPO type is type 1 (parameter data enabled). Parameter write access over the serial link can be enabled or blocked as required.



For more detailed Information ,
refer to Profibus Manual

The data structure for communication over PROFIBUS-DP can be either PPO type 1 or PPO type 3 as specified in VDI/VDE 3689. This means in practice that process data (control words, set-point in the transmitted telegram and status words, actual values in the received telegram) is always sent.