
PROFIBUS-DP Interface

The PROFIBUS-DP Interface allows the Elite or Xtravert Series of AC motor controllers to be connected directly to a PROFIBUS network.

The interface is based around the Siemens SPC-3 ASIC (PROFIBUS-DP slave ASIC), this in combination with the latest bus interface components ensures device compatibility with the latest 12 Mb technology. Use of the standard D-SUB 9 connector on the bus interface reduces the wiring effort by allowing standard 12Mb Bus connectors to be used.

The I/O data interface has also been simplified by the users of the PROFIDRIVE profile for AC Drives. This ensures that users need only learn one common interface for products from multiple vendors.

Configuration

Full use of the PROFIBUS GSD file is made to simplify the setup and commissioning of the interface during the network configuration stage. Standard PROFIBUS configuration tools such as COM PROFIBUS from Siemens use the GSD file to present the user with plain English messages of the available configuration options.

Configurations options available on the PROFIBUS-DP interface include the following

- Drive type selection
- I/O data length
- Parameterisation options

There are no DIP switches for the user to adjust. All user settings are done with the configuration tool and are stored in internal EEPROM.

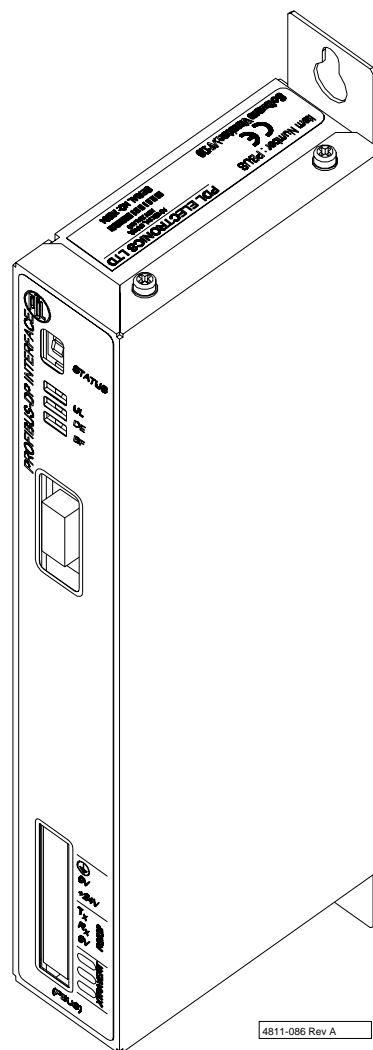
Diagnostics

Extensive use has been made of the PROFIBUS Diagnostic telegrams to indicate both module and drive faults back to the PROFIBUS master immediately, this significantly simplifies any remote fault finding effort. Based on the diagnostic information the PROFIBUS master can determine the appropriate response required thereby minimising any production down time.

Three Local LED indicators provide power and PROFIBUS status information while an additional seven segment status display is used to indicate the interface status. The local status display provides indication of the node address number, drive fault codes, hardware fault codes and the status of the communication link from the drive to the interface.

Key Features

- SPC-3 ASIC
- 12Mb bus interface
- PROFIDRIVE interface
- Extensive Diagnostics both local and remote



TECHNICAL DATA

MECHANICAL CONSTRUCTION

Format (height x width x depth)	281 x 35 x 87.5mm, metal enclosure
Type of mounting	DIRECT
Degree of ingress protection	IP20

INTERFACES

PROFIBUS-DP	9 Pin D-SUB / F
Power	3 way 45° screw terminal/plug
RS232	3 way 45° screw terminal/plug
Xtravert	3 way 45° screw terminal/plug

POWER SUPPLY

Nominal value	24Vdc
Allowable range (including ripple)	18 to 28Vdc
Maximum power consumption	250mA

ELECTRICAL INSULATION

PROFIBUS-DP / RS232 connection	500Vac
PROFIBUS-DP / Xtravert connection	500Vac

LOCAL INDICATIONS

Operating voltage	green LED (UL)
Data Exchange	green LED (DE)
Bus Fault	red LED (BF)
Interface status	7 segment red LED

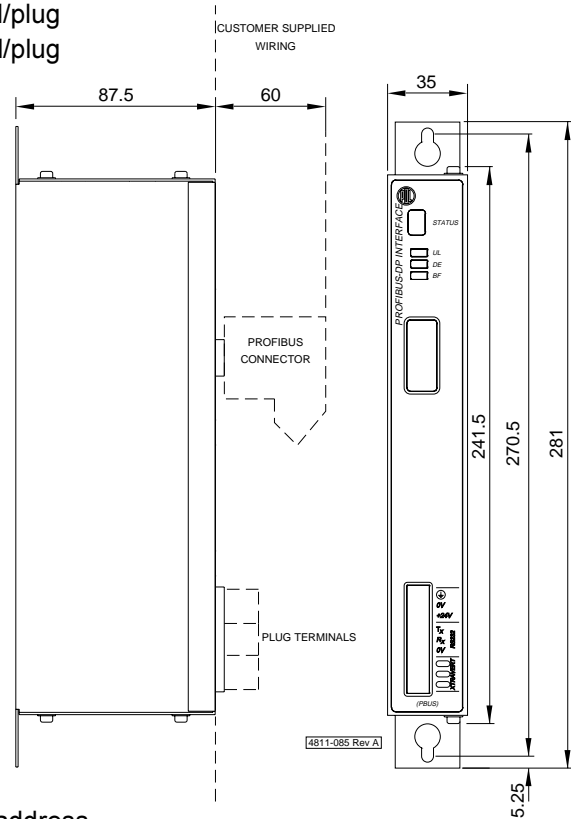
PROFIBUS-DP INTERFACE

Interface	PROFIBUS-DP
Baudrate	Auto detected to 12 Mb
Diagnostic Data Length	13 Bytes (max.)
Parameterisation Data Length	230 Bytes (max.)
Configuration Data Length	1 Byte (max.)
Polled Data Length	12 Bytes (max.)
Supported services	Freeze, Sync, Set slave address
GSD file	PDL-04B6.GSD
Profile	PROFIDRIVE

MOTOR CONTROLLERS SUPPORTED

E Series, software revision 2.5 or greater.

Xtravert Series, software revision 2.1 or greater.



Specifications are subject to change without notice.