

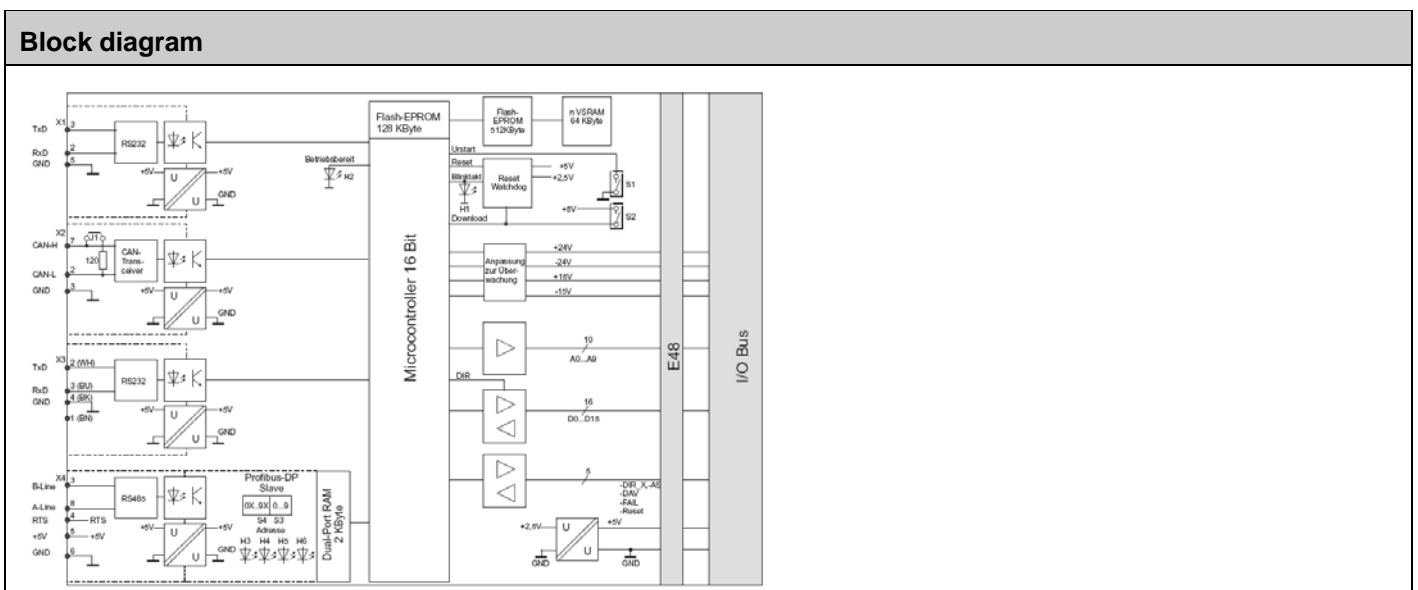


View	Application/functional description
 <p>Old device: PPROFIBUS interface card PDP 01.1</p>  <p>Replacement device: Micro Controller Unit MCU 24.2 with integrated PROFIBUS-DP fieldbus interface</p>	<p><b>Old device:</b> Insert cards PDP01 and PDP01.1 have been used as a PROFIBUS-DP slave fieldbus interface in conjunction with digital control amplifiers (type UMC 16, SPC 16 and SPC 16+).</p> <p><b>Replacement device:</b> The Micro-Controller Unit MCU 24.2 insert card is used in the UMC 16/SPC 16 system as a central processing unit. The application programme for control and regulation is processed here in its entirety. The Micro-Controller Unit MCU 24.2 simultaneously integrates the fieldbus interface into the Profibus network. The control functions are programmed using the EMG Logicad32 planning and diagnostics software.</p> <p><b>Colour/weight:</b> RAL 7032 Weight: approx.: 0.30 kg</p> <p><b>Function description:</b> The central processing unit consists of the controller XC167CI complete with user and data memory, an RS-232 interface X1 for downloading the application programme or online test under logiCAD/32, a second RS-232 interface X3 for connecting the control-display unit ECU 01, a CAN-bus interface X2 for connecting external sensors and an I/O bus interface for controlling expansion plug-in cards in the UMC 16/SPC 16 system. A PROFIBUS-DP slave interface (X4) is implemented for communication with other fieldbus participants.</p> <p><b>Important:</b> When replacing fieldbus interface PDP 01 or PDP 01.1 it is not only necessary to exchange the Micro-Controller Unit (including specific application software), but also the external control unit as well because of limited combination possibilities (see the selection table on page 2).</p>



Technical data		
<b>Operation/display</b>	S1: Initial start (standardise memory, logiCAD/32) S2: Download S3: Address PROFIBUS 0 ... 9 S4: Address PROFIBUS 0x ... 9x	H1: Flashing cycle H2: Operational H3: Error message fieldbus side (PROFIBUS-DP) H4: not used H5: PROFIBUS OFFline H6: PROFIBUS ONline
<b>Monitoring</b>	Internal Watchdog controller, ext. Watchdog via flashing cycle Undervoltage +2.5 V, +5 V, ±15 V, ±24 V Overvoltage ±15 V, ±24 V automatic reset in the event of undervoltage (+2.5 V, +5 V) or activation of Watchdog; with a reset procedure all outputs of the connected expansion plug-in cards are locked	
<b>Power supply</b> (E48 I/O-Bus)	+5 V DC ±0.2 V / I <sub>typ</sub> = 500 mA I <sub>max</sub> = 600 mA +15 V DC max 5 mA ±24 V DC max. 5 mA	
<b>RS 232-interface</b> X1	according to EIA RS 232E 9-pin D-Sub connector permitted cable length : ≤ 15 m	full duplex potential isolated
<b>CAN-Bus interface</b> x2	according to CAN-ISO 11898 9-pin D-Sub connector Jumper J1 inserted: permitted cable length:	protocol: CANopen DS301 potential isolated Terminating resistor 120 Ω depending on baud rate up to 320 m
<b>RS 232-interface</b> X3	according to EIA RS 232E M8 sensor connector permitted cable length : ≤ 15 m	full duplex 4-pin socket, potential isolated
<b>PROFIBUS interface</b> X4	PROFIBUS-DP Slave EN50170 9-pin D-Sub connector Address setting (S3, S4): Baud rate: permitted cable length:	potential isolated 0 .. 99 9.6 kBit/s ... 12 MBit/s depending on baud rate
<b>Memory capacity</b>	640 kByte Flash-EEPROM 64 kByte nvSRAM (permanently stored)	
<b>Number of expansion plug-in cards</b>	max. 16 (from UMC 16/SPC 16 system) max. 31 with IBK 01/02 and BGT expansion	
<b>Temperature range</b>	0 ... +50 C	

## Important information:

The following details are required from the customer in the event of a 100% replacement of the fieldbus interface:

Fieldbus interface	Micro Controller Unit	Display unit	Software specification (customer specification e.g. STxxxx)	Device serial number Control amplifier (customer specification)	Replacement components
PDP 01	MCU 03	TDA 02			MCU 24.2 with ECU 01.2
PDP 01.1	MCU 03	TDA 02			MCU 24.2 with ECU 01.2
PDP 01.1	MCU 22	TDA 02			MCU 24.2 with ECU 01.2
PDP 01.1	MCU 16	TEA 16			MCU 24.2, ECU 01.2 and DEA 01
PDP 01.1	MCU 16.1	TEA 16			MCU 24.2 and ECU 01.2

Connecting cable assemblies are also required in addition to the replacement components.