

SIPLUS ET 200SP CM DP -40...+60°C with conformal coating based on 6ES7545-5DA00-0AB0 . CM PROFIBUS DP for ET 200SP CPU Module w. PROFIBUS DP interface (9-pole D-sub socket) DP master for 125 DP slaves



Figure similar

General information	
Product type designation	CM PROFIBUS DP
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Interfaces	
Number of PROFIBUS interfaces	1
1. Interface	
Interface types	
<ul style="list-style-type: none"> <li>• RS 485</li> </ul>	Yes
Protocols	
<ul style="list-style-type: none"> <li>• PROFIBUS DP master</li> <li>• PROFIBUS DP slave</li> <li>• SIMATIC communication</li> </ul>	Yes Yes Yes

## Interface types

### RS 485

- |                           |           |
|---------------------------|-----------|
| • Transmission rate, max. | 12 Mbit/s |
| • Cable length, max.      | 100 m     |

## Protocols

### PROFIBUS DP master

#### Services

- |  |     |
|--|-----|
| — PG/OP communication                  | Yes |
| — S7 routing                           | Yes |
| — Data record routing                  | Yes |
| — Isochronous mode                     | No  |
| — Equidistance                         | No  |
| — Number of DP slaves                  | 125 |
| — Activation/deactivation of DP slaves | Yes |

### PROFIBUS DP slave

- |                                    |           |
|------------------------------------|-----------|
| • Transmission rate, max.          | 12 Mbit/s |
| • automatic baud rate search       | Yes       |
| • Address area, max.               | 120       |
| • User data per address area, max. | 128 byte  |

#### Services

- |   |  |
|---|--|
| — PG/OP communication                                 | Yes; Only with active interface                      |
| — Routing   | Yes; Only with active interface                      |
| — S7 communication                                    | Yes; Only with active interface                      |
| — Direct data exchange (slave-to-slave communication) | Yes; No subscriber possible - only passive publisher |
| — DPV1  | Yes  |

#### Transfer memory

- |           |          |
|-----------|----------|
| — Inputs  | 244 byte |
| — Outputs | 244 byte |

## Interrupts/diagnostics/status information

Diagnostics function	Yes
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### Diagnostics indication LED

- |                          |                         |
|--------------------------|-------------------------|
| • for module diagnostics | Yes; green/red DIAG LED |
|--------------------------|-------------------------|

## Potential separation

between backplane bus and interface	Yes
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## Ambient conditions

### Ambient temperature during operation

- |                                 |  |
|---------------------------------|--|
| • horizontal installation, min. | -40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C |
| • horizontal installation, max. | 60 °C; = Tmax  |
| • vertical installation, min.   | -40 °C; = Tmin; Startup @ -25 °C                             |

• vertical installation, max.	50 °C; = Tmax
<b>Altitude during operation relating to sea level</b>	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Coolants and lubricants</b>	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
<b>Use in stationary industrial systems</b>	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
— Against mechanical environmental conditions acc. to EN 60721-3-3	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
<b>Use on ships/at sea</b>	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
— Against mechanical environmental conditions acc. to EN 60721-3-6	Yes; Class 6M4 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
<b>Usage in industrial process technology</b>	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
<b>Remark</b>	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Conformal coating</b>	
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability

- Protection against fouling acc. to EN 60664-3
- Military testing according to MIL-I-46058C, Amendment 7
- Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A

Yes; Type 1 protection  
 Yes; Discoloration of coating possible during service life  
 Yes; Conformal coating, Class A

#### Dimensions

Width	35 mm
Height	117 mm
Depth	75 mm

#### Weights

Weight, approx.	80 g
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**last modified:** 03/14/2020