## Data sheet

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	
0 - 1 - 16		
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	
1. Interface		
Interface types		
• RS 485	Yes	
Protocols		
PROFIBUS DP master	Yes	
<ul> <li>PROFIBUS DP slave</li> </ul>	Yes	
SIMATIC communication	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
<ul> <li>Data record routing</li> </ul>	Yes
— Isochronous mode	No
— Equidistance	No
<ul> <li>Number of DP slaves</li> </ul>	125
<ul> <li>Activation/deactivation of DP slaves</li> </ul>	Yes
PROFIBUS DP slave	
Transmission rate, max.	12 Mbit/s
automatic baud rate search	Yes
<ul> <li>Address area, max.</li> </ul>	120
<ul> <li>User data per address area, max.</li> </ul>	128 byte
Services	
— PG/OP communication	Yes; Only with active interface
— Routing	Yes; Only with active interface
— S7 communication	Yes; Only with active interface
<ul> <li>— Direct data exchange (slave-to-slave communication)</li> </ul>	Yes; No subscriber possible - only passive publisher
— DPV1	Yes
Transfer memory	
— Inputs	244 byte
— Outputs	244 byte
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnostics indication LED	
• for module diagnostics	Yes; green/red DIAG LED
Potential separation	
between backplane bus and interface	Yes
Ambient conditions	
Ambient temperature during operation	
<ul><li>horizontal installation, min.</li></ul>	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
<ul><li>horizontal installation, max.</li></ul>	60 °C; = Tmax
• vertical installation, min.	-40 °C; = Tmin; Startup @ -25 °C
<ul> <li>vertical installation, max.</li> </ul>	50 °C; = Tmax
Altitude during operation relating to sea level	

<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m
<ul> <li>Ambient air temperature-barometric pressure- altitude</li> </ul>	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)
Relative humidity	
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
<ul> <li>Resistant to commercially available coolants and lubricants</li> </ul>	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
<ul> <li>to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); $^{\star}$
<ul> <li>to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
<ul> <li>Against mechanical environmental conditions acc. to EN 60721-3-3</li> </ul>	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
Use on ships/at sea	
<ul> <li>to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); $^{\star}$
<ul> <li>to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
<ul> <li>Against mechanical environmental conditions acc. to EN 60721-3-6</li> </ul>	Yes; Class 6M4 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04</li> </ul>	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)
Remark	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
<ul> <li>Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection

• 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; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Dimensions		
Width	35 mm	
Height Depth	117 mm	
Depth	75 mm	
Weights		
Weight, approx.	80 g	

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