



SIMATIC DP, Electronic modules for ET 200 PRO 4 DIO/4 DO 24 V DC, 0.5A
Module diagnostics; incl. bus module, Connection module IO 6ES7194-4CB50-0AA0 order separately

Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes; Against destruction; encoder power supply outputs applied with reversed polarity
Load voltage 2L+	
• Rated value (DC)	24 V
• Short-circuit protection	Yes
• Reverse polarity protection	Yes; against destruction; load increasing
Input current	
from supply voltage 1L+, max.	20 mA
from load voltage 2L+ (without load), max.	20 mA
from backplane bus 3.3 V DC, max.	30 mA
Encoder supply	
Short-circuit protection	Yes; per module, electronic
Output current	
• up to 55 °C, max.	1 A
Power loss	
Power loss, typ.	3 W
Digital inputs	
Number of digital inputs	4; 4 DIOs can be parameterized
Sourcing/sinking input	P-reading
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	4
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	+11 to +30V
Input current	
• for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
• unshielded, max.	30 m

Digital outputs	
Number of digital outputs	8; 4 DO fixed, 4 DIO parameterizable
• in groups of	4; 2 load groups for 4 outputs each
Current-sourcing	Yes
output type acc. to IEC 61131, type 0.5	Yes
Short-circuit protection	Yes; per channel, electronic
• Response threshold, typ.	0.7 A
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	2L+ (-0,8 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	0.5 mA
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 55 °C, max.	2 A
Cable length	
• unshielded, max.	30 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Diagnostic information readable	Yes
• short-circuit	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
between backplane bus and all other circuit components	Yes
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Potential separation digital outputs	
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety-related tripping of standard modules	Yes
Highest safety class achievable for safety-related tripping of standard modules	
• Performance level according to ISO 13849-1	PL d

- Category according to ISO 13849-1
- SIL acc. to IEC 62061
- remark on safety-oriented shutdown

Cat. 3
SIL 2
<https://support.industry.siemens.com/cs/de/en/view/39198632>

Dimensions

Width	45 mm
Height	130 mm
Depth	35 mm

Weights

Weight, approx.	140 g
-----------------	-------

Classifications

		Version	Classification
	eClass	16	27-24-26-04
	eClass	14	27-24-26-04
	eClass	12	27-24-26-04
	eClass	9.1	27-24-26-04
	eClass	9	27-24-26-04
	eClass	8	27-24-26-04
	eClass	7.1	27-24-26-04
	eClass	6	27-24-26-04
	ETIM	10	EC001599
	ETIM	9	EC001599
	ETIM	8	EC001599
	ETIM	7	EC001599
	IDEA	4	3566
	UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval



General Product Approval	EMV	Test Certificates	Maritime application
--------------------------	-----	-------------------	----------------------



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Maritime application	other
----------------------	-------



[Miscellaneous](#)

other	Railway	Environment
-------	---------	-------------

[Confirmation](#)

[Confirmation](#)



[Special Test Certificate](#)

[Environmental Confirmations](#)



last modified:

10/23/2025

