SIEMENS

Data sheet 6ES7142-4BD00-0AB0



SIMATIC DP, Electronic modules for ET 200 PRO 4 DO 24 V DC, 2.0A High Feature, Channel diagnostics; short-circuit and wire break; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately

Supply voltage	
Load voltage 2L+	
● Rated value (DC)	24 V
● Short-circuit protection	Yes; per channel, electronic
● Reverse polarity protection	Yes; against destruction; load increasing
Input current	
from load voltage 2L+ (without load), max.	40 mA
from backplane bus 3.3 V DC, max.	30 mA
Power loss	
Power loss, typ.	2.5 W
Address area	
Address space per module	
● Address space per module, max.	1 byte
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes
● Response threshold, typ.	2.8 A
Limitation of inductive shutdown voltage to	2L+ (-47 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
● on lamp load, max.	10 W
Load resistance range	
● lower limit	12 Ω
● upper limit	4 kΩ
Output voltage	
● for signal "1", min.	2L+ (-0,8 V)
Output current	
● for signal "1" rated value	2 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.	4 A
Cable length	

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● shielded, max.	30 m
● unshielded, max.	30 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnoses	
● Diagnostic information readable	Yes
● Wire-break	Yes; channel by channel
● Short-circuit	Yes; channel by channel
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes
● Channel fault indicator F (red)	Yes
Potential separation	
between backplane bus and all other circuit components	Yes
Potential separation digital outputs	
● between the channels	No
● 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	Cat. 3
● SIL acc. to IEC 62061	SIL 2
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm; without terminal module
Weights	
Weight, approx.	140 g

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