SIEMENS

Data sheet

6ES7142-4BD00-0AA0



SIMATIC DP, electronic module for ET 200 PRO, 4 DO 24 V DC, 2.0A; Module diagnostics; 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.	20 mA
from backplane bus 3.3 V DC, max.	20 mA
Power loss	
Power loss, typ.	2 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	

shielded, max.	30 m	
• unshielded, max.	30 m	
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 output (green) 	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	
Weights		
Weight, approx.	140 g	

3/7/2022

6ES71424BD000AA0 Page 2/2

last modified: