SIEMENS

Data sheet

6ES7142-4BF00-0AA0

SIMATIC DP, Electronic modules for ET 200 PRO 8 DO 24 V DC, 0.5 A 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.	30 mA	
from backplane bus 3.3 V DC, max.	30 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	8	
Short-circuit protection	Yes	
 Response threshold, typ. 	0.7 A	

Limitation of inductive shutdown voltage to 2L+ (-47 V) Controlling a digital input Yes; Isolation between 1L+ and 2L+ is no longer provided, as 1M and 2M are jumpered Switching capacity of the outputs 5 W Load resistance range 48 Ω • lower limit 48 Ω	1
Switching capacity of the outputs • on lamp load, max. 5 W Load resistance range • lower limit 48 Ω	
 on lamp load, max. Load resistance range lower limit 48 Ω 	
Load resistance range ● lower limit 48 Ω	
• 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.	
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	
Diagnostic messages	
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 Yes	
components	
Potential separation digital outputs	
• between the channels No	
• between the channels and backplane bus Yes	

Isolation		
Isolation tested with	707 V DC (type test)	
	(4)	
Standards, approvals, certificates		
Suitable for safety-related tripping of standard	Yes	
modules		
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	
 SILCL according to IEC 62061 	SILCL 2	
Dimensions		
Width	45 mm	
Height	130 mm	
Depth	35 mm	
M/-:		
Weights	440	
Weight, approx.	140 g	
last modified:	03/03/2020	