SIEMENS

Data sheet

6ES7142-4BF00-0AA0

SIMATIC DP, ELECTRONIC MODULES FOR ET200PRO 8 DO DC 24V, 0.5A MODULE DIAGNOSTICS; INCLUSIVE BUS MODULE, CONNECTING MODULE IO 6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY



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	
 with packing 	8 bit
 without packing 	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	
 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.	4 A
Cable length	
• shielded, max.	30 m
• unshielded, max.	30 m
nterrupts/diagnostics/status information	
Diagnostic functions	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 	
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Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety-oriented group deactivation	Yes
Highest safety class achievable in safety mode	
 Performance level according to ISO 13849-1 	d
• SIL acc. to IEC 61508	2
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weights	
Weight, approx.	140 g
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Yes