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	
• shielded, max.	30 m
• unshielded, max.	30 m
nterrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
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	Yes
between backplane bus and all other circuit components	Yes

Potential separation digital outputs No • between the channels Yes • between the channels and backplane bus Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety-related tripping of standard Yes modules Highest safety class achievable for safety-related tripping of standard modules PL d • Performance level according to ISO 13849-1 Cat. 3 • Category according to ISO 13849-1 SILCL 2 • SILCL according to IEC 62061 Dimensions Width 45 mm Height 130 mm Depth 35 mm; without terminal module Weights Weight, approx. 140 g 03/16/2020

last modified: