6ES7142-4BF00-0AA0

Data sheet



SIMATIC DP, Electronic modules for ET 200 PRO 8 DO 24 V DC, $0.5~\mathrm{A}$ 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	
• 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
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
 SILCL according to IEC 62061 	SILCL 2
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weights	
Weight, approx.	140 g
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