

SIEMENS

Product data sheet

6ES7142-4BD00-0AB0


SIMATIC DP,
ELECTRONIC MODULES FOR ET200PRO 4 DO DC
24V,
2.0A HIGH FEATURE, CHANNEL DIAGNOSTICS;
SHORT CIRCUIT AND WIRE BREAK;
INCLUSIVE BUS MODULE CONNECTING MODULE
IO 6ES7194-4..00-0AA0 MUST BE ORDERED
SEPERATELY

FH technology

Module for failsafe applications

No

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.

40 mA

Power losses

Power loss, typ.

2.5 W

Address area

Address space per module

with packing

4 bit

without packing	1 byte
Digital outputs	
Number/binary outputs	4
Functionality/short-circuit strength	Yes ; per channel, electronic
Response threshold, typ.	3
Limitation of inductive shutdown voltage to	2L+ (-47 V)
Lamp load, max.	10 W
Controlling a digital input	Yes
Load resistance range	
lower limit	12 Ω
upper limit	4 k Ω
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 2 outputs	
for increased power	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
Aggregate current of outputs (per group)	
all mounting positions	
up to 55 °C, max.	4 A
Cable length	
Cable length, shielded, max.	30 m
Cable length unshielded, max.	30 m
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes

Diagnostic messages	
Diagnostic functions	Yes
Diagnostic information readable	Yes
Wire break	Yes
Short circuit	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Status indicator digital output (green)	Yes
Channel error indicator F (red)	Yes
Parameter	
Diagnosis: wire break	channel by channel
Diagnosis: short circuit	channel by channel
Behavior on CPU/Master STOP	channel by channel
Galvanic isolation	
between backplane bus and all other circuit components	Yes
between the channels and backplane bus	Yes
Galvanic isolation digital outputs	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm ; without terminal module
Weight	
Weight, approx.	140 g
Status	Jul 17, 2012