MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7138-4FB04-0AB0

4 F-DO 24 V DC/2 A PROFISAFE MODULE

Used with the applicable SIMATIC ET 200S configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens technical documentation for 6ES7138-4FB04-0AB0

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Data sheet 6ES7138-4FB04-0AB0



*** Spare part *** SIMATIC DP, Electronics module for ET 200S, 4 F-DO PROFIsafe, 24 V DC/2 A, 30 mm overall width, up to PL E (ISO 13849), up to SIL 3 (IEC 61508), can also be used in PROFINET configuration with IM 151-3 HF

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	No
Input current	
From load voltage L+ (no load), typ.	100 mA
from backplane bus 3.3 V DC, max.	28 mA
Power loss	
Power loss, typ.	3.5 W
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	4
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	Typ. (2L+) -47 V
Controlling a digital input	No
Switching capacity of the outputs	
• on lamp load, max.	10 W
Load resistance range	
• lower limit	12 Ω
• upper limit	1 kΩ
Output voltage	
• for signal "1", min.	L+ (-2,0 V), current sourcing switch: L+ (-1,5 V), voltage drop on current sinking switch: max. 0.5 V
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range, min.	20 mA
• for signal "1" permissible range, max.	2.4 A
• for signal "0" residual current, max.	0.5 mA; Current-sourcing and current-sinking switches
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	No
Switching frequency	
• with resistive load, max.	30 Hz; Symmetrical
• with inductive load, max.	0.1 Hz; Symmetrical
• on lamp load, max.	10 Hz; Symmetrical
Total current of the outputs	
• Current per module, max.	6 A
Total current of the outputs (per group)	
horizontal installation	

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— up to 40 °C, max.	6 A
— up to 55 °C, max.	5 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
• shielded, max.	500 m
• unshielded, max.	500 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
• Wire break	Yes
• Short-circuit	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
Potential separation digital outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	No
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• acc. to EN 954	4
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 3
Dimensions	
Width	30 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	85 g

Classifications

	Version	Classification
eClass	16	27-24-26-04
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

EG-Konf.

UKCA

Manufacturer Declaration

UL

RCM

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