SIEMENS

Data sheet 6AG1138-4FB04-2AB0



Figure similar

SIPLUS ET 200S F-DQ 24V PROFIsafe based on 6ES7138-4FB04-0AB0 with conformal coating, -25…+60 °C, electronic module for ET 200S, 4 F-DQ PROFIsafe, 24 V DC/2 A, 30 mm overall width, up to category 4 (EN 954-1)/ SIL3 (IEC 61508)/PLE (ISO 13849), can also be used in PROFINET configurations 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)	

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horizontal installation	
— 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
Ambient conditions	
Ambient temperature during operation	
● min.	-25 °C
● max.	60 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	2 000 m
● Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity	
● With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!

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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

CE EG-Konf. | Manufacturer Declaration | UKCA | China RoHS | TUEV | UL

General Product Approval	EMV	For use in hazardous locations			
EAC	KC	RCM	IECEx	ATEX	CCC-Ex

Functional Saftey	Test Certificates
TUEV	TUEV

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