SIEMENS

Data sheet 6AG1322-8BF00-2AB0



Figure similar

spare part SIPLUS S7-300 SM 322-20-pole based on 6ES7322-8BF00-0AB0 with conformal coating, -25…+60 °C,

General information	
based on	6ES7322-8BF00-0AB0
Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	90 mA
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	5 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes; Electronic
● Response threshold, typ.	0.75 to 1.5 A
Limitation of inductive shutdown voltage to	L+ (-45 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
● on lamp load, max.	5 W
Load resistance range	
● lower limit	48 Ω
● upper limit	3 kΩ
Output voltage	
● for signal "1", min.	L+ (-0.8 to -1.6 V)
Output current	
● for signal "1" rated value	0.5 A
● for signal "1" permissible range for 0 to 40 °C, min.	10 mA
● for signal "1" permissible range for 0 to 40 °C, max.	0.6 A
● for signal "1" permissible range for 40 to 60 °C, min.	10 mA
● for signal "1" permissible range for 40 to 60 °C, max.	0.6 A
● for signal "1" minimum load current	10 mA
● for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
● "0" to "1", max.	180 µs
● "1" to "0", max.	245 µs
Parallel switching of two outputs	
● for uprating	No

© Copyright Siemes

● for redundant control of a load	Outputs with series diodes only
Switching frequency	
● with resistive load, max.	100 Hz
● with inductive load, max.	2 Hz
● with inductive load (acc. to IEC 60947-5-1, DC13), max.	2 Hz
● on lamp load, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
— up to 70 °C, max.	2.5 A; (without diode) & 1.5 A (with diode)
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
● Diagnostic alarm	Yes; Parameterizable
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	Yes
● Short-circuit	Yes
● Fuse blown	No
● Missing load voltage	Yes
Diagnostics indication LED	
● Rated load voltage PWR (green)	No
● Fuse OK FSG (green)	No
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes; per channel
● Channel fault indicator F (red)	Yes
Potential separation	
Potential separation digital outputs	
● between the channels, in groups of	8
● between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Railway application	
● EN 50155	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007 (see SIOS entry 109755985)
Ambient conditions	
Ambient temperature during operation	
● min.	-25 °C; = Tmin
● max.	70 °C; = Tmax; 60 °C @ UL/cUL use
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m
● Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 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	

© Copyright Siemes

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 land craft, rail vehicles and special-purpose vehicles	
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 (ST2); *
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 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!

Connection method	
required front connector	20-pin

Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm

Weights	
Weight, approx.	210 g

Classifications

	Version	Classification
eClass	16	27-24-22-04
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

© Copyright Siemes

EG-Konf.	Manufacturer Declaration	Declaration of Conformity	UKCA	China RoHS	UL

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

last modified: 5/29/2024

© Copyright Siemes