SIEMENS

Data sheet 6AG1322-8BH10-7AB0

spare part SIPLUS S7-300 SM 322 16 DO 24 V DC based on 6ES7322-8BH10-0AB0 with conformal coating, -25…+70 °C, digital output SM 322, 16 DO; 24 V DC/0.5 A, diagnostics-capable, open-circuit detection with 0 and 1 signal, 1x 40-pole, connection IM 153-X HF required

General information	
based on	6ES7322-8BH10-0AB0
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.	88 mA
from backplane bus 5 V DC, max.	80 mA
Power loss	
Power loss, typ.	5.7 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes
● Response threshold, typ.	1.4 A; per channel
Limitation of inductive shutdown voltage to	L+ (-68 V)
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.	L+ (-0.7 V)
Output current	
● for signal "1" rated value	0.5 A
● for signal "1" permissible range, min.	5 mA
● for signal "1" permissible range, max.	0.6 A
● for signal "0" residual current, max.	0.7 mA
Output delay with resistive load	
● "0" to "1", max.	3 ms
● "1" to "0", max.	3 ms
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 (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 60 °C, max.	2 A
— up to 70 °C, max.	0.5 A
vertical installation	
— up to 40 °C, max.	2 A
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m

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Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	Yes
● Short-circuit	Yes
● Missing load voltage	Yes
Diagnostics indication LED	
● Rated load voltage PWR (green)	No
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes
● Channel fault indicator F (red)	Yes
Potential separation	
Potential separation digital outputs	
● between the channels	No
● between the channels, in groups of	4
● between the channels and backplane bus	Yes
● between the channels and the power supply of the electronics	No
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
Ambient conditions	
Ambient temperature during operation	
● min.	-25 °C; = Tmin
● max.	70 °C; = Tmax; @ 60°C for UL/ATEX/FM 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	
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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Connection method	
required front connector	1x 40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	350 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					EMV
EG-Konf.	Manufacturer Declaration	UKCA	China RoHS	EAC	KC

EMV	For use in hazardous locations		
RCM	IECEx	ATEX	CCC-Ex

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