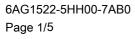
SIEMENS

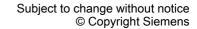
Data sheet

6AG1522-5HH00-7AB0

SIPLUS S7-1500 16DQ 230VAC 2A RLY -40 ... +70°C start up -25 °C with conformal coating based on 6ES7522-5HH00-0AB0. Digital output module DQ 16 X "230VAC / 2A ST; RELAY; 16" channels in groups of 2, 4A per "group; Diagnosois;"

General information	
Product type designation	DQ 16x 230 V AC/2 A ST (relay)
Firmware version	
 FW update possible 	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
Prioritized startup	Yes
Engineering with	
PROFIBUS from GSD version/GSD revision	V1.0 / V5.1
 PROFINET from GSD version/GSD revision 	V2.3 / -
Operating mode	
• DQ	Yes
 DQ with energy-saving function 	No
• PWM	No
 Oversampling 	No
• MSO	Yes
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	150 mA
Power	
Power available from the backplane bus	0.8 W
Power loss	
Power loss, typ.	5 W
Digital outputs	Delaye
Type of digital output Number of digital outputs	Relays
	16 Voc
Current-sinking	Yes





Current-sourcing	Yes	
Digital outputs, parameterizable	Yes	
Short-circuit protection	No	
Controlling a digital input	Yes	
Size of motor starters according to NEMA, max.	5	
Switching capacity of the outputs		
• on lamp load, max.	50 W (230 V AC), 5 W (24 V DC)	
Output current		
● for signal "1" rated value	2 A	
• for signal "1" permissible range, min.	10 mA; 10 V	
• for signal "1" permissible range, max.	2 A; thermal continuous current	
• for signal "0" residual current, max.	0 A	
Parallel switching of two outputs		
• for logic links	Yes	
• for uprating	No	
for redundant control of a load	Yes	
Switching frequency		
with resistive load, max.	1 Hz	
with inductive load, max.	0.5 Hz	
● on lamp load, max.	1 Hz	
Total current of the outputs		
Current per channel, max.	2 A; see additional description in the manual	
Current per group, max.	2 A; see additional description in the manual	
Current per module, max.	32 A; see additional description in the manual	
Relay outputs		
Number of relay outputs	16	
Rated supply voltage of relay coil L+ (DC)	24 V	
Current consumption of relays (coil current of all relays), max.	150 mA	
external protection for relay outputs	Miniature circuit breaker B10 / B16	
Contact connection (internal)	No	
Number of operating cycles, max.	see additional description in the manual	
Relay approved acc. to UL 508	No	
Switching capacity of contacts		
— with inductive load, max.	2 A; see additional description in the manual	
— with resistive load, max.	2 A; see additional description in the manual	
Cable length		
• shielded, max.	1 000 m	
• unshielded, max.	600 m	
Interrupts/diagnostics/status information		
Diagnostics function	Yes	
Substitute values connectable	Yes	



Alarms			
Diagnostic alarm	Yes		
Diagnoses			
Monitoring the supply voltage	Yes		
Wire-break	No		
Short-circuit	No		
Diagnostics indication LED			
• RUN LED	Yes; green LED		
• ERROR LED	Yes; red LED		
 Monitoring of the supply voltage (PWR-LED) 	Yes; green LED		
Channel status display	Yes; green LED		
• for channel diagnostics	No		
• for module diagnostics	Yes; red LED		
Potential separation			
Potential separation channels			
between the channels	No		
 between the channels, in groups of 	2		
 between the channels and backplane bus 	Yes		
 Between the channels and load voltage L+ 	Yes		
Permissible potential difference			
between different circuits	250 V AC between the channels and the supply voltage L+; 250 V AC between the channels and the backplane bus; 500 V AC between the channels		
solation			
Isolation tested with	Between the channels: 2 500 V DC; between the channels and backplane bus: 2 500 V DC; between L+ backplane bus 707 V DC (type test)		
Standards, approvals, certificates			
Suitable for safety functions	No		
Ambient conditions			
Ambient temperature during operation			
 horizontal installation, min. 	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C		
• horizontal installation, max.	70 °C; = Tmax; see Derating BasedOn (e.g. manual), additionally Tmax > 60 °C max. 8 outputs (no adjacent points)		
• vertical installation, min.	-40 °C; = Tmin; Startup @ -25 °C		
• vertical installation, max.	40 °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 in bedewed state), horizontal installation

		nce

Coolants and lubricants

Resistant to commercially available coolants and lubricants

Yes; Incl. diesel and oil droplets in the air

Use in stationary industrial systems

 to biologically active substances according to EN 60721-3-3

— to chemically active substances according to EN 60721-3-3

— to mechanically 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

Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *

Yes; Class 3S4 incl. sand, dust, *

Use on ships/at sea

— to biologically active substances according to EN 60721-3-6

— to chemically active substances according to EN 60721-3-6

— to mechanically active substances according to EN 60721-3-6

Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request

Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *

Yes; Class 6S3 incl. sand, dust; *

Usage in industrial process technology

— Against chemically active substances acc. to EN 60654-4

— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04

Yes; Class 3 (excluding trichlorethylene)

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!

Conformal coating

 Coatings for printed circuit board assemblies acc. to EN 61086

• Protection against fouling acc. to EN 60664-3

 Military testing according to MIL-I-46058C, Amendment 7

 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A Yes; Class 2 for high reliability

Yes; Type 1 protection

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Dimensions Width 35 mm Height 147 mm Depth 129 mm

Weights



Weight, approx.	350 g
	3

last modified: 10/13/2020

