

SIPLUS S7-1500 DQ 8X230VAC/5A S -25 ... +60 DEGREE C WITH CONFORMAL COATING BASED ON 6ES7522-5HF00-0AB0 . DIGITAL OUTPUT MODULE DQ 8 X 230VAC/5A,RELAY; 8 CHANNELS IN GROUPS OF 1, 5A PER GROUP; DIAGNOSIS; SUBSTITUTE VALUE



Figure similar

General information	
Product type designation	DQ 8x230 V AC/5 A ST (relay)
Product function	
• I&M data	Yes; I&M0 to I&M3
Operating mode	
• 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
Input current	
Current consumption, max.	80 mA
Power	
Power available from the backplane bus	0.8 W
Power loss	
Power loss, typ.	3 W

Digital outputs	
Type of digital output	Relays
Number of digital outputs	8
Controlling a digital input	possible
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>• on lamp load, max.</li> </ul>	1 500 W; 10 000 operating cycles
<ul style="list-style-type: none"> <li>• Low energy/fluorescent lamps with electronic control gear</li> </ul>	10x 58 W (25 000 operating cycles)
<ul style="list-style-type: none"> <li>• Fluorescent tubes, conventionally compensated</li> </ul>	1x 58 W (25 000 operating cycles)
<ul style="list-style-type: none"> <li>• Fluorescent tubes, uncompensated</li> </ul>	10x 58 W (25 000 operating cycles)
Output current	
<ul style="list-style-type: none"> <li>• for signal "1" rated value</li> </ul>	5 A
<ul style="list-style-type: none"> <li>• for signal "1" permissible range, min.</li> </ul>	5 mA; 10 V
<ul style="list-style-type: none"> <li>• for signal "1" permissible range, max.</li> </ul>	8 A; thermal continuous current
<ul style="list-style-type: none"> <li>• for signal "0" residual current, max.</li> </ul>	0 A
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>• for logic links</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• for uprating</li> </ul>	No
<ul style="list-style-type: none"> <li>• for redundant control of a load</li> </ul>	Yes
Switching frequency	
<ul style="list-style-type: none"> <li>• with resistive load, max.</li> </ul>	2 Hz
<ul style="list-style-type: none"> <li>• with inductive load, max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>• on lamp load, max.</li> </ul>	2 Hz
Total current of the outputs	
<ul style="list-style-type: none"> <li>• Current per channel, max.</li> </ul>	8 A; Note derating data in the manual
<ul style="list-style-type: none"> <li>• Current per group, max.</li> </ul>	8 A; Note derating data in the manual
<ul style="list-style-type: none"> <li>• Current per module, max.</li> </ul>	64 A; Note derating data in the manual
Relay outputs	
<ul style="list-style-type: none"> <li>• Number of relay outputs</li> </ul>	8
<ul style="list-style-type: none"> <li>• Rated supply voltage of relay coil L+ (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• Current consumption of relays (coil current of all relays), max.</li> </ul>	80 mA
<ul style="list-style-type: none"> <li>• external protection for relay outputs</li> </ul>	With miniature circuit breaker with characteristic B for: $\cos \varphi$ 1.0: 600 A $\cos \varphi$ 0.5 ... 0.7: 900 A with 8 A Diazed fuse: 1000 A
<ul style="list-style-type: none"> <li>• Contact connection (internal)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Size of motor starters according to NEMA, max.</li> </ul>	5
<ul style="list-style-type: none"> <li>• Number of operating cycles, max.</li> </ul>	4 000 000; see additional description in the manual
<ul style="list-style-type: none"> <li>• Relay approved acc. to UL 508</li> </ul>	Yes; 250 V AC/5 A g.p.; 120 V AC TV-4 tungsten; A300, R300
Switching capacity of contacts	
<ul style="list-style-type: none"> <li>— with inductive load, max.</li> </ul>	see additional description in the manual
<ul style="list-style-type: none"> <li>— with resistive load, max.</li> </ul>	see additional description in the manual
Cable length	

- shielded, max.
- unshielded, max.

1 000 m

600 m

### Isochronous mode

Isochronous operation (application synchronized up to terminal) No

### Interrupts/diagnostics/status information

Diagnostics function Yes

Substitute values connectable Yes

### Alarms

• Diagnostic alarm Yes

### Diagnostic messages

• 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 Yes; Switching of different phases permitted

• between the channels, in groups of 1

• between the channels and backplane bus Yes

• Between the channels and load voltage L+ Yes

### Permissible potential difference

between different circuits 75 V DC/60 V AC (base isolation) between backplane bus and the supply voltage L+; 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

### Isolation

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)

### Ambient conditions

#### Ambient temperature during operation

• horizontal installation, min. -25 °C; = Tmin

• horizontal installation, max. 60 °C; = Tmax

• vertical installation, min. -25 °C; = Tmin

• vertical installation, max.	40 °C; = Tmax
<b>Altitude during operation relating to sea level</b>	
• 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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Coolants and lubricants</b>	
— Resistant to commercially available coolants and lubricants	Yes
<b>Use in stationary industrial systems</b>	
— 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, *
<b>Use on ships/at sea</b>	
— 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; *
<b>from supply voltage 1L+</b>	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Decentralized operation</b>	
Fast Startup supported	Yes; 500 ms
<b>Dimensions</b>	
Width	35 mm
Height	147 mm
Depth	129 mm
<b>Weights</b>	
Weight, approx.	200 g
<b>last modified:</b>	05/18/2018