## SIEMENS

## Data sheet

## 6ES7323-1BH01-0AA0



SIMATIC S7-300, Digital module SM 323, isolated, 8DI and 8DO, 24 V DC, 0.5 A Total current 2A, 1x 20-pole

Figure similar	ilar
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Supply voltage	
Load voltage L+	
<ul> <li>Rated value (DC)</li> </ul>	24 V
<ul> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
<ul> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
Input current	
from load voltage L+ (without load), max.	40 mA
from backplane bus 5 V DC, max.	40 mA
Power loss	
Power loss, typ.	3.5 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131,	Yes
type 1	
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	8
vertical installation	
— up to 40 °C, max.	8
Input voltage	
<ul> <li>Type of input voltage</li> </ul>	DC
<ul> <li>Rated value (DC)</li> </ul>	24 V
<ul> <li>for signal "0"</li> </ul>	-30 to +5 V
• for signal "1"	13 to 30V
Input current	
<ul> <li>for signal "1", typ.</li> </ul>	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-53 V)

Controlling a digital input	Yes
Switching capacity of the outputs	103
• on lamp load, max.	5 W
Load resistance range	
lower limit	48 Ω
upper limit	4 kΩ
Output voltage	
<ul> <li>for signal "1", min.</li> </ul>	L+ (-0.8 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
<ul> <li>for signal "1" permissible range, max.</li> <li>for signal "1" minimum load surrout.</li> </ul>	0.6 A
<ul> <li>for signal "1" minimum load current</li> <li>for signal "0" residual current, max.</li> </ul>	5 mA 0.5 mA
Output delay with resistive load	0.5 mA
• "0" to "1", max.	100 µs
• "1" to "0", max.	500 µs
Parallel switching of two outputs	
for uprating	No
• for redundant control of a load	Yes; only outputs of the same group
Switching frequency	
<ul> <li>with resistive load, max.</li> </ul>	100 Hz
<ul> <li>with inductive load, max.</li> </ul>	0.5 Hz
• with inductive load (acc. to IEC 60947-5-1, DC13),	0.5 Hz
max. ● on lamp load, max.	10 Hz
Total current of the outputs (per group)	10112
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
Cable length	
<ul> <li>shielded, max.</li> </ul>	1 000 m
• unshielded, max.	600 m
unshielded, max. Encoder	600 m
Encoder Connectable encoders	
Encoder Connectable encoders • 2-wire sensor	Yes
Encoder Connectable encoders • 2-wire sensor — permissible quiescent current (2-wire sensor),	
Encoder Connectable encoders • 2-wire sensor — permissible quiescent current (2-wire sensor), max.	Yes
Encoder Connectable encoders • 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information	Yes 2 mA
Encoder Connectable encoders • 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms	Yes 2 mA No
Encoder Connectable encoders  2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function	Yes 2 mA
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Encoder Connectable encoders  2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function	Yes 2 mA No No
Encoder Connectable encoders  2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED  Status indicator digital input (green)	Yes 2 mA No No Yes
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Encoder Connectable encoders  2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indicator LED  Status indicator digital input (green)  Status indicator digital output (green) Potential separation	Yes 2 mA No No Yes
Encoder Connectable encoders  2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED  Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs	Yes 2 mA No No Yes Yes
Encoder Connectable encoders  2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indication LED  Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation Potential separation digital inputs between the channels between the channels, in groups of between the channels and backplane bus	Yes 2 mA No No Yes Yes Yes
Encoder Connectable encoders  2-wire sensor permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms Diagnostics function Diagnostics indicator LED  Status indicator digital input (green) Status indicator digital output (green) Potential separation Potential separation digital inputs between the channels between the channels, in groups of between the channels and backplane bus Potential separation digital outputs	Yes 2 mA No No Yes Yes Yes Yes 8 Yes; Optocoupler
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Encoder         Connectable encoders         • 2-wire sensor         — permissible quiescent current (2-wire sensor), max.         Interrupts/diagnostics/status information         Alarms         Diagnostics function         Diagnostics indication LED         • Status indicator digital input (green)         • Status indicator digital output (green)         • Status indicator digital output (green)         • Dotential separation         Potential separation digital inputs         • between the channels         • between the channels, in groups of         • between the channels and backplane bus         Potential separation digital outputs         • between the channels, in groups of         • between the channels         • between the channels and backplane bus         Isolation         Isolation tested with         connection method / header         required front connector         Dimensions	Yes 2 mA No No Yes Yes Yes Yes Solution Yes 8 Yes; Optocoupler Yes 8 Yes; Optocoupler 20-pin

Weights	
Weight, approx.	220 g

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