## **SIEMENS**

## **Data sheet**

## 6ES7321-1BP00-0AA0



\*\*\* spare part \*\*\* SIMATIC S7-300 digital input SM 321, isolated in groups of 16, 64 DI, 24 V DC, 3 ms, sinking/sourcing input terminal blocks 6ES7392-1.N00-0AA0 and cable 6ES7392-4...0-0AA0 required

Figure similar

Supply voltage		
Load voltage L+		
<ul> <li>Rated value (DC)</li> </ul>	24 V	
<ul> <li>Reverse polarity protection</li> </ul>	Yes	
Input current		
from backplane bus 5 V DC, max.	100 mA	
Power loss		
Power loss, typ.	7 W	
Digital inputs		
Number of digital inputs	64	
Input characteristic curve in accordance with IEC 61131, type 1	Yes	
Number of simultaneously controllable inputs		
all mounting positions		
— up to 40 °C, max.	64	
— up to 60 °C, max.	32	
horizontal installation		
— up to 40 °C, max.	64	
— up to 60 °C, max.	32	
vertical installation		
— up to 40 °C, max.	32	
Input voltage		
<ul> <li>Type of input voltage</li> </ul>	DC	
Rated value (DC)	24 V	
• for signal "0"	-30 to +5 V	
● for signal "1"	13 to 30V	
Input current		
● for signal "1", typ.	4.2 mA	
Input delay (for rated value of input voltage)		
for standard inputs		
— parameterizable	No	
— Rated value	4.2 ms	
— 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	
Encoder		

Alarms Diagnostics function No Alarms  Diagnostic alarm Diagnostic alarm Hardware interrupt No Diagnoses  Diagnostic information readable Wire-break No Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green)  Potential separation  Potential separation  Potential separation digital inputs between the channels, in groups of between the channels and backplane bus  Solation  Isolation tested with Sol V DC  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0	Connectable encoders	
Alarms No Diagnostics function No Alarms  Diagnostic alarm No Hardware interrupt No Diagnoses  Diagnostic information readable No Wire-break No Diagnostics indication LED  Group error SF (red) No Status indicator digital input (green) Yes Encoder supply Vs (green) No  Potential separation  Potential separation  Potential separation digital inputs  between the channels, in groups of 16 between the channels and backplane bus Yes; Optocoupler  Isolation  Isolation tested with 500 V DC  connection method  required front connector Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	• 2-wire sensor	No
Diagnostics function  Alarms  Diagnostic alarm Hardware interrupt No  Diagnoses  Diagnostic information readable Wire-break No  Diagnostics indication LED Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green)  Potential separation  Potential separation digital inputs between the channels between the channels No between the channels in groups of between the channels and backplane bus  Solation  Solation tested with Sol V DC  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Interrupts/diagnostics/status information	
Alarms  Diagnostic alarm Hardware interrupt No  Diagnoses  Diagnostic information readable Wire-break No  Diagnostics indication LED  Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green) No  Potential separation  Potential separation digital inputs  between the channels between the channels, in groups of between the channels and backplane bus  Sessionation  Isolation  Isolation tested with Sou V DC  Connection method  required front connector Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Alarms	No
Diagnostic alarm     No     Hardware interrupt     No Diagnoses      Diagnostic information readable     No     Wire-break     No Diagnostics indication LED     Group error SF (red)     Status indicator digital input (green)     Encoder supply Vs (green)  Potential separation  Potential separation digital inputs     between the channels     between the channels, in groups of     between the channels and backplane bus  Isolation  Isolation tested with     Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Diagnostics function	No
Hardware interrupt  Diagnoses  Diagnostic information readable Wire-break No  Diagnostics indication LED  Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green)  Potential separation  Potential separation digital inputs  between the channels between the channels between the channels, in groups of between the channels and backplane bus  Isolation  Isolation tested with Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Alarms	
Diagnoses  Diagnostic information readable Wire-break No  Diagnostics indication LED  Group error SF (red) Status indicator digital input (green) Encoder supply Vs (green)  Potential separation  Potential separation  Potential separation  Potential separation digital inputs  between the channels between the channels between the channels, in groups of between the channels and backplane bus  Yes; Optocoupler  Isolation  Isolation tested with  Connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0	Diagnostic alarm	No
Diagnostic information readable     Wire-break     No  Diagnostics indication LED     Group error SF (red)     Status indicator digital input (green)     Encoder supply Vs (green)  Potential separation  Potential separation  Potential separation digital inputs     between the channels     between the channels, in groups of     between the channels and backplane bus  Isolation  Isolation tested with     Sou V DC  Connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Hardware interrupt	No
No     Diagnostics indication LED     Group error SF (red)     Status indicator digital input (green)     Encoder supply Vs (green)  Potential separation  Potential separation  Potential separation digital inputs      between the channels     between the channels, in groups of     between the channels and backplane bus  Isolation  Isolation tested with  Connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Diagnoses	
Diagnostics indication LED  • Group error SF (red) • Status indicator digital input (green) • Encoder supply Vs (green)  Potential separation  Potential separation  Potential separation digital inputs  • between the channels • between the channels, in groups of • between the channels and backplane bus  Potential separation  Solution  Isolation  Isolation tested with  Connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0	<ul> <li>Diagnostic information readable</li> </ul>	No
Group error SF (red)     Status indicator digital input (green)     Encoder supply Vs (green)  Potential separation  Potential separation digital inputs      between the channels     between the channels, in groups of     between the channels and backplane bus  Isolation  Isolation  Isolation tested with  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Wire-break	No
Status indicator digital input (green) Encoder supply Vs (green)  Potential separation  Potential separation digital inputs  between the channels between the channels, in groups of between the channels and backplane bus  Solation  Isolation  Isolation tested with  connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Diagnostics indication LED	
Encoder supply Vs (green)  Potential separation  Potential separation digital inputs      between the channels     between the channels, in groups of     between the channels and backplane bus  Isolation  Isolation tested with     500 V DC  connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	<ul> <li>Group error SF (red)</li> </ul>	No
Potential separation  Potential separation digital inputs  • between the channels • between the channels, in groups of • between the channels and backplane bus  Isolation  Isolation tested with  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	<ul> <li>Status indicator digital input (green)</li> </ul>	Yes
Potential separation digital inputs  • between the channels • between the channels, in groups of • between the channels and backplane bus  Yes; Optocoupler  Isolation  Isolation tested with  500 V DC  connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	<ul> <li>Encoder supply Vs (green)</li> </ul>	No
between the channels     between the channels, in groups of     between the channels and backplane bus  Yes; Optocoupler  Isolation  Isolation tested with  500 V DC  connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Potential separation	
between the channels, in groups of     between the channels and backplane bus      Yes; Optocoupler  Isolation  Isolation tested with     500 V DC  connection method  required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Potential separation digital inputs	
between the channels and backplane bus      Yes; Optocoupler  Isolation  Isolation tested with      500 V DC  connection method  required front connector      Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	<ul> <li>between the channels</li> </ul>	No
Isolation Isolation tested with 500 V DC  connection method  required front connector Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	<ul> <li>between the channels, in groups of</li> </ul>	16
Isolation tested with 500 V DC  connection method  required front connector Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	between the channels and backplane bus	Yes; Optocoupler
required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Isolation	
required front connector  Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0  Dimensions	Isolation tested with	500 V DC
Dimensions	connection method	
	required front connector	Cable: 6ES7392-4Bxx0-0AA0 terminal blocks: 6ES7392-1xN00-0AA0
Width 40 mm	Dimensions	
	Width	40 mm
Height 125 mm	Height	125 mm
Depth 112 mm	Depth	112 mm
Weights	Weights	
Weight, approx. 230 g	Weight, approx.	230 g

last modified: 3/12/2024 🖸