SIEMENS

Data sheet

6ES7322-1HH01-0AA0



SIMATIC S7-300, Digital output SM 322, Isolated 16 DO, relay contacts, 1x 20-pole

Figure similar

rigulesiiiila	
Supply voltage	
Load voltage L+	
 Rated value (DC) 	120 V
Load voltage L1	
Rated value (AC)	230 V
Input current	
from supply voltage L+, max.	250 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	4.5 W
Digital outputs	
Number of digital outputs	16; Relays
Short-circuit protection	No
Controlling a digital input	Yes
Size of motor starters according to NEMA, max.	Size 5 according to NEMA
Switching capacity of the outputs	
● on lamp load, max.	50 W; 230 V AC
Output current	
● for signal "1" rated value	2 A
for signal "1" minimum load current	10 mA
Parallel switching of two outputs	
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
 With inductive load (to IEC 60947-5-1, DC13/AC15), max. 	0.5 Hz
on lamp load, max.	1 Hz
mechanical, max.	10 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 60 °C, max.	8 A
vertical installation	
— up to 40 °C, max.	8 A
Relay outputs	
Rated supply voltage of relay coil L+ (DC)	24 V
Contact connection (internal)	No
 Number of operating cycles, max. 	100 000; 50 000 (24 V DC, at 2 A); 700 000 (120 V AC, at 2 A); 100 000 (230 V AC, at 2 A)

Switching capacity of contacts - with inductive load, max. 2 A; 2 A (230 V AC), 2 A (24 V DC) - with resistive load, max. 2 A; 2 A (230 V AC), 2 A (24 V DC) - Thermal continuous current, max. 2 A Gable length • shielded, max. 1000 m • unshielded, max. 600 m Interrupts/diagnostics/status information Alarms No Diagnostics function No Alarms • Diagnostic alarm No Diagnostic alarm No Diagnostics function No Alarms • Diagnostic alarm No Diagnostics function No Alarms • Diagnostic alarm No Diagnostics uncludied No • Short-circuit No • Short-circuit No • Fuse blown No • missing load voltage No Diagnostics indication LED • Rated load voltage PVIR (green) No • Fuse OK FSG (green) No • Status indicator digital output (green) Yes Potential separation Potential separation digital outputs • between the channels in groups of 8 • between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 1500 V AC connection method required front connector 20-piin Dimensions Width 40 mm Height 125 mm Depth 120 mm			
with resistive load, max. 2 A; 2 A (230 V AC), 2 A (24 V DC) Thermal continuous current, max. 2 A Cable length • shielded, max. 1 000 m • unshielded, max. 600 m Interrupts/diagnostics/status information Alarms • Diagnostics function No Alarms • Diagnostic alarm No Diagnoses • Wire-break No • Short-circuit No • missing load voltage No Diagnostics indication LED • Ratel doad voltage PWR (green) No • Status indicator digital output (green) Yes Potential separation digital output (green) Potential separation digital outputs • between the channels in groups of 8 • between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 1 500 V AC connection method required front connector 20-pin Diagnosions Width 40 mm Height 125 mm Dopth 125 mm I 000 m 1 000 m	Switching capacity of contacts		
Cable length • shielded, max. • unshielded, max. • unshielded, max. • unshielded, max. • unshielded, max. Interrupts/diagnostics/status information Alarms Alarms • Diagnostics function Alarms • Diagnostic alarm No Diagnoses • Wire-break • Short-circuit • No • Fuse blown • missing load voltage Puse DK FSG (green) • Status indicator digital output (green) Potential separation Potential separation digital outputs • between the channels and backplane bus Isolation Isolation Isolation Isolation Isolation Isolation Isolation Intervity (and in the property of the prop	— with inductive load, max.	2 A; 2 A (230 V AC), 2 A (24 V DC)	
Cable length • shielded, max. • unshielded, max. • unshielded, max. 600 m	— with resistive load, max.	2 A; 2 A (230 V AC), 2 A (24 V DC)	
shielded, max.	 Thermal continuous current, max. 	2 A	
unshielded, max. 600 m Interrupts/diagnostics/status information Alarms No Diagnostics function No Alarms Diagnostic alarm No Diagnoses Wire-break No Short-circuit No missing load voltage No imide load voltage No Puse blown No imissing load voltage No Status indication LED Rated load voltage PWR (green) No Status indicator digital output (green) Yes Potential separation Potential separation Potenten the channels Yes between the channels Yes between the channels Ne Separation Solation tested with 1500 V AC connection method required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	Cable length		
Interrupts/diagnostics/status information Alarms No Diagnostics function No Alarms Oliagnoses Oliagnoses Wire-break No Short-circuit Fuse blown No Mo Diagnostic indication LED Alarms No Diagnostic indication LED Alarms No Diagnostics indication LED Alarms No Puses Down No Status indicator digital output (green) Status indicator digital output (green) Potential separation Potential separation digital outputs Oliagnostics in groups of Oliagnostics in dication LED **Rated load voltage PWR (green) No **Status indicator digital output (green) Potential separation Potential separation digital outputs Oliagnostics in groups of Oliagnostics in dication LED **Status indicator digital output (green) **Potential separation **Potential separation **Potential separation digital outputs Oliagnostics in groups of Oliagno	• shielded, max.	1 000 m	
Alarms No Diagnostics function No Alarms • Diagnostic alarm No Diagnoses • Wire-break No • Short-circuit No • Fuse blown No • missing load voltage No Pated load voltage PWR (green) No • Fuse OK FSG (green) No • Status indicator digital output (green) Yes Potential separation digital outputs • between the channels Yes • between the channels in groups of 8 • between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 1500 V AC connection method required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	• unshielded, max.	600 m	
Diagnostics function No Alarms Diagnoses Wire-break No Short-circuit No Fuse blown Mo Missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Yes Potential separation Potential separation digital outputs between the channels between the channels and backplane bus Set ween the channels and backplane bus Isolation Isolation tested with 1 500 V AC Connection method required front connector Dimensions Width Height Depth 120 mm	Interrupts/diagnostics/status information		
Alarms Diagnoses Wire-break Short-circuit No Fuse blown Mo missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Status indicator digital output (green) Status indicator digital output (green) Yes Potential separation Potential separation digital outputs Status enhances Setween the channels Setween the channels yes Setween the channels and backplane bus Setween the channel	Alarms	No	
Diagnoses Wire-break Wire-break Short-circuit Fuse blown missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus Tes; Optocoupler Isolation Isolation tested with 1 500 V AC Connection method required front connector Dimensions Width Height Depth 120 mm	Diagnostics function	No	
Diagnoses Wire-break Wire-break No Short-circuit No Fuse blown No missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus 1 500 V AC Connection method required front connector Dimensions Width 40 mm Height Depth 120 mm	Alarms		
Wire-break Short-circuit No Short-circuit No Fuse blown No missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) No Fuse OK FSG (green) No Status indicator digital output (green) Yes Potential separation Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus Isolation Isolation Isolation method required front connector Dimensions Width 40 mm Height Depth Depth 120 mm	Diagnostic alarm	No	
Short-circuit Fuse blown Fuse blown Mo missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation digital outputs Setween the channels Setween the channels in groups of Setween the channels and backplane bus Isolation Isolation tested with Toon VAC connection method required front connector Dimensions Width W	Diagnoses		
Fuse blown In missing load voltage No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation digital outputs between the channels between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with required front connector Dimensions Width 40 mm Height Depth Depth No No Yes No No Yes Potential separation No No Yes Potential separation Yes Yes Solation Solation Isolation tested with 1 500 V AC Tonnection method required front connector Dimensions Width 40 mm Height Depth 120 mm	Wire-break	No	
No Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus Isolation Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height 125 mm Depth Depth No	Short-circuit	No	
Diagnostics indication LED Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus Potential separation digital outputs between the channels between the channels, in groups of between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height 125 mm Depth 120 mm	Fuse blown	No	
Rated load voltage PWR (green) Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation digital outputs • between the channels • between the channels, in groups of • between the channels and backplane bus Isolation Isolation Isolation method required front connector Dimensions Width Height Depth No No No No No No No No No N	 missing load voltage 	No	
Fuse OK FSG (green) Status indicator digital output (green) Potential separation Potential separation digital outputs • between the channels • between the channels, in groups of • between the channels and backplane bus Isolation Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height Depth 120 mm	Diagnostics indication LED		
Status indicator digital output (green) Potential separation Potential separation digital outputs • between the channels • between the channels, in groups of • between the channels and backplane bus Isolation Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height Depth 125 mm Depth	 Rated load voltage PWR (green) 	No	
Potential separation Potential separation digital outputs • between the channels • between the channels, in groups of • between the channels and backplane bus Solution	 Fuse OK FSG (green) 	No	
Potential separation digital outputs • between the channels • between the channels, in groups of • between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height 125 mm Depth 120 mm	 Status indicator digital output (green) 	Yes	
 ◆ between the channels ◆ between the channels, in groups of ◆ between the channels and backplane bus Isolation Isolation tested with 1 500 V AC connection method required front connector 20-pin Dimensions Width Height 125 mm Depth 120 mm 	Potential separation		
 ◆ between the channels, in groups of ◆ between the channels and backplane bus Isolation Isolation tested with 1 500 V AC Connection method required front connector 20-pin Dimensions Width Height Depth 125 mm Depth 	Potential separation digital outputs		
● between the channels and backplane bus Isolation Isolation tested with 1 500 V AC connection method required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	 between the channels 	Yes	
Isolation Isolation tested with 1 500 V AC connection method required front connector Dimensions Width 40 mm Height 125 mm Depth 120 mm	 between the channels, in groups of 	8	
Isolation tested with 1 500 V AC connection method required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	 between the channels and backplane bus 	Yes; Optocoupler	
connection method required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	Isolation		
required front connector 20-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm	Isolation tested with	1 500 V AC	
Dimensions Width 40 mm Height 125 mm Depth 120 mm	connection method		
Width 40 mm Height 125 mm Depth 120 mm	required front connector	20-pin	
Height 125 mm Depth 120 mm	Dimensions		
Depth 120 mm	Width	40 mm	
Depth 120 mm	Height	125 mm	
Weights	Depth	120 mm	
	Weights		
Weight, approx. 250 g	Weight, approx.	250 g	

last modified:

4/26/2024