6ES7131-6CF00-0AU0

Data sheet



SIMATIC ET 200SP, digital input module, DI $8x\ 24\ V$ AC.. $48\ V$ UC Basic, packing quantity: 1 unit, suitable for BU type U0, color code CC20, module diagnostics

General information	
Product type designation	DI 8x24VAC/48VUC BA
HW functional status	From FS02
Firmware version	V0.0
 FW update possible 	No
usable BaseUnits	BU type U0
Product function	
 Isochronous mode 	No
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V15
 STEP 7 configurable/integrated from version 	V5.6
 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
 PROFINET from GSD version/GSD revision 	GSDML V2.3
Operating mode	
• DI	Yes
Counter	No
 Oversampling 	No
• MSI	No
Supply voltage	
Rated value (DC)	48 V
permissible range, lower limit (DC)	40.8 V
permissible range, upper limit (DC)	57.6 V
Rated value (AC)	48 V; 24 V/48 V; 50 Hz/60 Hz
permissible range, lower limit (AC)	40.8 V
permissible range, upper limit (AC)	52.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	70 mA; without sensor supply
Encoder supply	
Number of outputs	8
Short-circuit protection	Yes; Per module, 5x 20 mm fuse, 2 A/250 V, quick-response, replaceable
Output current	
• up to 60 °C, max.	1 A
24 V encoder supply	
• 24 V	No
Power loss	
Power loss, typ.	1.5 W

Address area	
Address space per module	
Address space per module, max.	1 byte
Hardware configuration	
Automatic encoding	
Mechanical coding element	Yes
 Type of mechanical coding element 	type C
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type U0
• 2-wire connection	BU type U0
3-wire connection	BU type U0 + Potential distributor module
• 4-wire connection	BU type U0 + Potential distributor module
Digital inputs	
Number of digital inputs	8
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input characteristic curve in accordance with IEC 61131, type 2	No
Input characteristic curve in accordance with IEC 61131, type 3	No
Pulse extension	No
Input voltage	
• for signal "0"	AC/DC < 10 V
• for signal "1"	AC > 14 V, DC > 34 V
Input current	
● for signal "1", typ.	3.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	15 ms
— at "1" to "0", max.	20 ms
Cable length	1000
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Diagnoses	
Diagnostic information readable	Yes
Monitoring the supply voltage	Yes
 Monitoring of encoder power supply 	Yes
Group error	Yes
Diagnostics indication LED	
Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
Channel status display	Yes; green LED
• for channel diagnostics	No V. LBIAGLER
• for module diagnostics	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
between the channels	No
 between the channels and backplane bus 	Yes
between the channels and the power supply of the electronics	No
Isolation	
Isolation tested with	1 200 V DC between supply voltage and backplane bus

Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	-30 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
Installation altitude above sea level, max.	2 000 m; On request: Installation altitudes greater than 2 000 m
	2 000 m; On request: Installation altitudes greater than 2 000 m
Installation altitude above sea level, max.	2 000 m; On request: Installation altitudes greater than 2 000 m 20 mm
• Installation altitude above sea level, max. Dimensions	
 Installation altitude above sea level, max. Dimensions Width 	20 mm
 Installation altitude above sea level, max. Dimensions Width Height 	20 mm 73 mm
 Installation altitude above sea level, max. Dimensions Width Height Depth 	20 mm 73 mm