SIEMENS

Data sheet

6ES7131-6BF61-0AA0



SIMATIC ET 200SP, Digital input module, DI 8x 24V DC SRC BA, type 1 (IEC 61131), source Input (NPN, M-reading) Packing unit: 1 piece, fits to BU-type A0, Colour Code CC02, input delay time 0,05..20ms, module diagnostics for: supply voltage

General information	
Product type designation	DI 8x24 VDC SRC BA
HW functional status	From FS02
Firmware version	V0.0
 FW update possible 	No
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
Product function	
• I&M data	Yes; I&M0 to I&M3
Isochronous mode	No
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V14
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
 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)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Encoder supply	
Short-circuit protection	No
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	
Inputs	1 byte
Hardware configuration	
Automatic encoding	Yes
 Type of mechanical coding element 	type B
Selection of BaseUnit for connection variants	
1-wire connection	BU type A0
• 2-wire connection	BU type A0

- A vire Connection Bull gear A ministration desination destination module Bull gear A ministration destination module Bull gear A ministration destination module Bull gear A ministration destination module Digital inputs Advance of optical inputs Sourcing Input characteristic curve in accordance with IEC 61131, Yes Sourcing Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance with IEC 61131, Yes Input characteristic curve in accordance Input characteristic curve in	3-wire connection	BU type A0 with AUX terminals or potential distributor module
Digital inputs 8 Digital inputs 9 Number of digital inputs, parameterizable Yes Sourcessink input Sourcessink input Sourcessink input characterizable Yes Sourcessink input characterizable Yes Sourcessink input characterizable Yes Input characterizable Yes Input characterizable Yes Input characterizable Yes Input characterizable Sourcessing Input characterizable Gan A Input characterizable Yes - parameterizable Yes - at '10' to '1', min. 0.05 ms - at '1' to '0', max. 20 ms Cable length 1.000 m - at '1' to '0', max. 20 ms Cable length 1.5 mA Iterarbetidaponal characterizable Yes - permissible quidescent current (2-wire sensor) 1.5 mA Iterarbetidaponalst information Yes Diagnostic information readable Yes Diagnostic information readable Yes Dia		
Number of digital inputs. 8 Digital inputs, parameterizable Yes Sourcalank input Sourcalank input Input characteristic curve in accordance with IEC 61131, type 1 Yes Input characteristic curve in accordance with IEC 61131, type 1 Yes Input characteristic curve in accordance with IEC 61131, type 1 Yes Input calculate of input voltage Failed value (DC) 24 V Input calculate of input voltage Failed value (DC) 24 V Input delay, for rated value of input voltage Failed value of input voltage Failed value of input voltage Input delay, for rated value of input voltage Ves; 0.05 / 0.1 / 0.4 / 0.8 / 1.8 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 50 us, depending on line length) - at '1' to '0', min. 0.06 ms 20 ms Cable length - at '1' to '0', max. 20 ms Cannectable encoders - 2 viris sensor Yes - or signal encoders - 2 viris sensor Yes - Diagnostic alarm Yes 1.5 mA Diagnostic fairent value (disploy voltage (PVR-LED) Yes No - Diagnostic side fams Yes; green PWR LED Yes; green		
Digital inputs yes SourceSink input SourceSink input SourceSink input Yes Input softage Yes • Rold value (DC) 24 V • for signal '0' 30 V to -5 V (reference potential is L+) • for signal '1' -11 V to -30 V (reference potential is L+) • for signal '1', typ. 6 mA • for signal '1', typ. 7 model solution of input solutions - a tr'0' to '1', min, 0.05 for s - a tr'0' to '1', max. 20 ms - a tr'1' to '0', max. 20 ms Concectable empth • • Code somph • • Dold possit of soms 20 ms • Code somsh • • Parmissible quisscent current (2-wire sensor), max. 100 m • Dagnostic solarus Yes • Diagnostic solarus Yes • Diagnostic solarus Yes • Monitoring of encoder power supply No • M		8
Survice Sourcing Input characteristic scurve in accordance with IEC 61131, type 1. Yes Input voltage • • Rated value (DC) 24 V • for signal 1°7 00 V to -5 V (reference potential is L+) • for signal 1°7 -11 V to -30 V (reference potential is L+) • for signal 1°7 -11 V to -30 V (reference potential is L+) • for signal 1°7, typ. 6 mA Input deay (for rated value of Input voltage) for signal 1°7, typ. • for signal 1°7, typ. 6 mA • not deay (for rated value of Input voltage) for signal 1°7, typ. • of vignal 1°7, typ. 6 mA • not of 0 1°7, min. 0.05 ms - = at 1°1 to 0°7, min. 0.05 ms • unshible demoder. - • Veris ensor Yes - wire sensor Yes - wire sensor Yes • Diagnostic sinterial is Lip information Yes Diagnostic sinterial formation readable Yes • Diagnostic sinterial is splay voltage Yes • Diagnostic sinterial is basely voltage (PWR-LED) Yes; green PWR LED		
Input characteristic curve in accordance with IEC 01131, ypp 01 Yes Input voltage 24 V • Relact voltage 24 V • for signal '0" 30 V to -5 V (reference potential is L+) • for signal '1" -11 V to -30 V (reference potential is L+) • for signal '1", typ. 6 mA • for signal '1", typ. 7 mA • a "1" to '1", max. 20 ms • a "1" to '0", max. 20 ms • cancetable encoders Yes • shielded, max. 1000 m • a "1" to '0", max. 200 m • a "1" to '0", max. 200 m • Banded mode Yes • Shielded, max. 1000 m • a "1" to '0", max. 200 ms • Cable length 1.5 mA • a "1" to '0", max. </td <td></td> <td></td>		
type1 inpact voltage inPact voltage in Failed volue (ICC) 24 V in for signal '1' -11 V to -30 V (reference potential is L+) in for signal '1' -11 V to -30 V (reference potential is L+) in for standard inputs 6 mA Input deay (for rated value of input voltage) 6 mA in for standard inputs - - parameterizable V es: 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 50 us, depending on line length) - at '10 to '1', max. 20 ms Cable length - • unshelded, max. 1.000 m - at '11 to '0', max. 20 ms Cable length - • unshelded, max. 1.000 m - parmissible quiescent current (2 wire sensor), max. 1.5 mA • Dagnostic sfunction Yes • Dagnostic information Yes • Dagnostic alarm Yes • Diagnostic information readable Yes • Monitoring of the supply voltage Yes • Monitoring of the supply voltage Yes • Monindring of the supply voltage (P		-
• Reter value (PC) 24 V • for signal '1' 30 V to 5 V reference potential is L+) • for signal '1', typ. 6 mA Input delay (for rated value of input voltage) 6 mA • for signal '1', typ. 6 mA Input delay (for rated value of input voltage) 6 mA • for signal '1', typ. 6 mA • for signal '1', typ. 0.5 mS parameter/zable 0' 30 to 500 µs, depending on line length) at '0' to '1', max. 20 ms at '1' to '0', max. 20 ms permissible quiescent current (2-wire sensor), max. 1000 m - Dagrostic formation readable Yes - Dagrostic formation readable Yes - Diagnostic status information Yes - Dagrostic formation readable Yes - Diagnostic information readable Yes - Diagnostic calarm Yes - Diagnostic information readable Yes - Monitoring of the supply voltage (PWR+LED) Yes; green LED <t< td=""><td></td><td></td></t<>		
 for signal '0' for signal '1' for signal '1' for signal '1', yp. for signal '1', '1', '1', '1', '1', '1', '1', '1'	Input voltage	
 - for signal ''1' - for signal ''1, typ. 6 mA Input current - for signal ''1, typ. 6 mA Input datesy (for rated value of input voltage) for standard inputs - parameterizable 'Yes': 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 1.2 8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) - at 'D' to ''1', min. 0.05 ms - at 'D' to ''1', max. 20 ms - at 'T' to ''0', max. 200 m Cabae length - shielded, max. 200 m - parmissible quiescent current (2-wire sensor). - permissible quiescent current (2-wire sensor). - permissible quiescent current (2-wire sensor). - Diagnostic information Ves - Diagnostic information readable Yes Diagnostic information readable Yes - Monitoring of encoder power supply No Short-Crout No<	Rated value (DC)	24 V
Input deizy (for rated value of input voltage) 6 mA • for standard inputs - parameterizable 7 (2) (0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) - at "0" to "1", min. 0.05 ms - at "0" to "1", max. 20 ms - at "0" to "1", max. 20 ms 20 ms - at "1" to "0", max. 20 ms Cable length - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable length - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable length - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable dength - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable dength - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable dength - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable dength - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Calcular max 1.000 m - at max 20 ms - at max Calcular max	• for signal "0"	30 V to -5 V (reference potential is L+)
• for signal "1", bp. 6 mA Input delay (for rated value of input voltage) For standard inputs - parameterizable Yes: 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) - at "0" to "1", min. 0.05 ms - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable length - • at "1" to "0", max. 200 m conscient 200 ms Cable length - • unsheledd, max. 200 m Encoder - Connectable encoders - • 2-wire sensor Yes - permissible quiescent current (2-wire sensor), max. 1.5 mA • Diagnostic sfunction Yes Oblagnostic sfunction Yes Oblagnostic sfunction readable Yes • Diagnostic information readable Yes • Diagnostic information readable Yes • Diagnostic information readable Yes • Monitoring of encoder power supply No • Wire-break No • Short-creat<	• for signal "1"	-11 V to -30 V (reference potential is L+)
Input delay (for rated value of input voltage) for standard inputs - parameterizable art "0" to "1", min. 0.05 ms art "1" to "0", max. 20 ms at "1" to "0", max. 20 ms cate art "1" to "1", ma	Input current	
for standard inputs Yes: 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) - at "0" to "1", min. 0.05 ms - at "0" to "1", max. 20 ms - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms - at "1" to "0", max. 20 ms Cable length	● for signal "1", typ.	6 mA
	Input delay (for rated value of input voltage)	
of 30 to 500 µs, depending on line length) at "0" to "1", max.0.05 ms at "1" to "0", min.0.05 ms at "1" to "0", max.20 ms at "1" to "0", max.20 msCable length at "1" to "0", max.200 msCable length at "1" to "0", max.200 msCable length	for standard inputs	
	— parameterizable	
	— at "0" to "1", min.	0.05 ms
at*1** to *0*, max. 20 ms Cable length 1000 m • shielded, max. 200 m Encoder 200 m Connectable encoders 9 wire sensor • 2-wire sensor Yes		20 ms
Cable length • shielded, max, unshielded, max, Encoder Connectable encoders • 2-wire sensor Yes	— at "1" to "0", min.	0.05 ms
• shielded, max. 1 000 m • unshielded, max. 200 m Encoder Connectable encoders • 2-wire sensor Yes - permissible quiescent current (2-wire sensor), max. 15 mA Interrupts/diagnostics/status information Diagnostic sfunction Vers Alarms • Diagnostic information readable Yes • Monitoring the supply voltage Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostic information tED Yes; green PWR LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Or channel diagnostics No • Or channel diagnostics Yes; green LED • Or channel diagnostics No • between the channels and backplane bus Yes • between the channels and backplane bus Yes • between the channels and the power supply of the electronics Yes Isolation tested with 707 V DC (type test) Standards, approvals, certificates No Suitable for safety functions No	— at "1" to "0", max.	20 ms
• unshielded, max. 200 m Encoder	Cable length	
Encoder Connectable encoders • 2-wire sensor - permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Diagnostic sfunction Alarms • Diagnostic structurent (2-wire sensor), max. Interrupts/diagnostics/status information Ves Alarms • Diagnostic normation readable Yes • Diagnostic information readable Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostics indication LED Yes; green PWR LED • for channel diagnostics No • for channel diagnostics Yes; green /VR LED • for channel diagnostics No • between the channels No • between the channels and backplane bus Yes • between the channels and the power supply of the electronics Yes • between the channels and the power supply of the electronics No <td< td=""><td> shielded, max. </td><td></td></td<>	 shielded, max. 	
Connectable encoders Yes permissible quiescent current (2-wire sensor), max. 1.5 mA Interrupts/diagnostics/status information Diagnostics function Diagnostic function Yes Alarms • • Diagnostic alarm Yes Diagnostic information readable Yes • Diagnostic information readable Yes • Monitoring the supply voltage Yes parameterizable Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostics indication LED Yes; green PWR LED • Channel status display Yes; green LED • for channel diagnostics No • for module diagnostics No • for when the channels No • between the channels and backplane bus Yes • between the channels and backplane bus No	• unshielded, max.	200 m
• 2-wire sensor Yes — permissible quiescent current (2-wire sensor), 1.5 mA Interrupts/diagnostics/status information Yes Diagnostic sfunction Yes Alarms Yes • Diagnostic alarm Yes • Diagnostic information readable Yes • Anitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostics indication LED Yes; green PWR LED • Kontioring of the supply voltage (PWR-LED) Yes; green PWR LED • Channel status display Yes; green LED • for module diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation Yes Potential separation channels No • between the channels and backplane bus Yes • between the channels and backplane bus Yes • between the channels and backplane bus Yes • between the channels	Encoder	
permissible quiescent current (2-wire sensor), max. 1.5 mA Interrupts/diagnostics/status information Yes Diagnostic sfunction Yes Alarms Ves Diagnostic information readable Yes Diagnostic information readable Yes Obignostic information readable Yes - parameterizable Yes - wontoring of encoder power supply No • Wonitoring of the supply voltage (PWR-LED) Yes; green PWR LED • Short-circuit No Diagnostics indication LED Yes; green PWR LED • Channel status display Yes; green PWR LED • for channel diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation No • between the channels No • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No statable for safety functions No	Connectable encoders	
max. Interrupts/diagnostics/status information Diagnostics function Yes Alarms	• 2-wire sensor	Yes
Interrupts/diagnostics/status information Diagnostics function Yes Alarms		1.5 mA
Diagnostics function Yes Alarms • • Diagnostic alarm Yes Diagnoses • • Oilagnostic information readable Yes • Monitoring the supply voltage Yes - parameterizable Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostics indication LED Yes; green PWR LED • Channel status display Yes; green LED • for channel diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No Isolation Yes Isolation tested with 707 V DC (type test) Statadeds, approvals, certificates No Suitable for safety functions No Ambient conditions No Ambient conditions -30 °C; < 0 °C as of FS02		
Alarms Diagnostic alarm Yes Diagnoses • • Diagnostic information readable Yes • Monitoring the supply voltage Yes - parameterizable Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No • Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED • Channel status display Yes; green LED • for channel diagnostics No • for module diagnostics No • for module diagnostics No • between the channels No • between the channels and backplane bus Yes • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No Isolation 1solation Isolation tested with 707 V DC (type test) Standards, approvals, certificates No Suitable for safety functions No Ambient temperature during operation - A0°C, < 0°C as of FS02		
 Diagnostic alarm Yes Diagnostic information readable Yes Monitoring the supply voltage Yes Monitoring of encoder power supply No Monitoring of encoder power supply No Short-circuit No Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED Channel status display Yes; green PWR LED Channel status display Yes; green LED Another channel diagnostics No for channel diagnostics Yes; green/red DIAG LED for module diagnostics Yes; green/red DIAG LED for module diagnostics Yes between the channels between the channels and backplane bus between the channels and backplane bus between the channels and backplane bus Yes between the channels and the power supply of the electronics Isolation Isolation tested with		Yes
Diagnoses Diagnostic information readable Yes Monitoring the supply voltage Yes parameterizable Yes Monitoring of encoder power supply No Wire-break Short-circuit No Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED Channel status display Yes; green PUR LED Channel status display Yes; green PUR LED Yes; green LED No for channel diagnostics Yes; green PUR LED Yes; green LED No for channel diagnostics Yes; green/red DIAG LED Potential separation between the channels between the channels between the channels and backplane bus Yes between the channels and backplane bus Yes between the channels and the power supply of the electronics Isolation Isolation Suitable for safety functions Ambient conditions Ambient conditions Ambient conditions Ambient temperature during operation horizontal installation, min. -30 °C; < 0 °C as of FS02		N/
• Diagnostic information readable Yes • Monitoring the supply voltage Yes • parameterizable Yes • Monitoring of encoder power supply No • Wire-break No • Short-circuit No Diagnostics indication LED • Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED • Channel status display Yes; green PWR LED • for channel diagnostics No • for module diagnostics Yes; green LED • for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels No • between the channels No • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No Isolation No Standards, approvals, certificates Suitable for safety functions Suitable for safety functions No Ambient temperature during operation -30 °C; < 0 °C as of FS02		Yes
• Monitoring the supply voltageYes parameterizableYes• Monitoring of encoder power supplyNo• Monitoring of encoder power supplyNo• Wire-breakNo• Short-circuitNoDiagnostics indication LEDYes; green PWR LED• Channel status displayYes; green PWR LED• Channel diagnosticsNo• for channel diagnosticsNo• for channel diagnosticsYes; green/red DIAG LEDPotential separationYes; green/red DIAG LED• between the channelsNo• between the channels and backplane busYes• between the channels and the power supply of the electronicsNoIsolationNoSuitable for safety functionsNoSuitable for safety functionsNoAmbient temperature during operation-30 °C; < 0 °C as of FS02	0	Vee
parameterizableYes• Monitoring of encoder power supplyNo• Wire-breakNo• Short-circuitNoDiagnostics indication LEDYes; green PWR LED• Monitoring of the supply voltage (PWR-LED)Yes; green PWR LED• Channel status displayYes; green LED• for channel diagnosticsNo• for channel diagnosticsYes; green/red DIAG LEDPotential separationYes; green/red DIAG LEDPotential separation channelsNo• between the channels and backplane busYes• between the channels and backplane busYes• between the channels and the power supply of the electronicsNoIsolation707 V DC (type test)Standards, approvals, certificatesNoSuitable for safety functionsNoAmbient temperature during operation-30 °C; < 0 °C as of FS02	-	
 Monitoring of encoder power supply No Wire-break Short-circuit No Short-circuit No Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED Channel status display Yes; green LED No for channel diagnostics Yes; green/red DIAG LED Potential separation between the channels between the channels and backplane bus between the channels and backplane bus between the channels and the power supply of the electronics Isolation Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions No Ambient temperature during operation horizontal installation, min. -30 °C; < 0 °C as of FS02 		
• Wire-break No • Short-circuit No Diagnostics indication LED		
• Short-circuit No Diagnostics indication LED • • Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED • Channel status display Yes; green LED • for channel diagnostics No • 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 Yor V DC (type test) Standards, approvals, certificates Suitable for safety functions Suitable for safety functions No Ambient temperature during operation -30 °C; < 0 °C as of FS02		
Diagnostics indication LED Image: space spac		
 Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED Channel status display Yes; green LED for channel diagnostics No for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels Ves; green/red DIAG LED • between the channels No • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No Isolation Tor V DC (type test) Standards, approvals, certificates No Suitable for safety functions No Ambient conditions -30 °C; < 0 °C as of FS02		
• for channel diagnostics No • 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 backplane bus Yes • between the channels and the power supply of the electronics No Isolation 707 V DC (type test) Standards, approvals, certificates No Suitable for safety functions No Ambient conditions -30 °C; < 0 °C as of FS02		•
• 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 No Isolation tested with 707 V DC (type test) Standards, approvals, certificates No Suitable for safety functions No Ambient conditions -30 °C; < 0 °C as of FS02		-
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 Standards, approvals, certificates Suitable for safety functions Suitable for safety functions No Ambient conditions -30 °C; < 0 °C as of FS02	_	
Potential separation channels No • between the channels No • between the channels and backplane bus Yes • between the channels and the power supply of the electronics No Isolation No Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions Suitable for safety functions No Ambient conditions -30 °C; < 0 °C as of FS02	-	
• between the channelsNo• between the channels and backplane busYes• between the channels and the power supply of the electronicsNoIsolationNoIsolation tested with707 V DC (type test)Standards, approvals, certificatesSuitable for safety functionsSuitable for safety functionsNoAmbient conditionsAmbient temperature during operation • horizontal installation, min30 °C; < 0 °C as of FS02		
• between the channels and backplane busYes• between the channels and the power supply of the electronicsNoIsolationIsolation tested withIsolation tested with707 V DC (type test)Standards, approvals, certificatesSuitable for safety functionsSuitable for safety functionsNoAmbient conditionsAmbient temperature during operation • horizontal installation, min30 °C; < 0 °C as of FS02		No
• between the channels and the power supply of the electronicsNoIsolationIsolation tested with707 V DC (type test)Standards, approvals, certificatesNoSuitable for safety functionsNoAmbient conditionsNoAmbient temperature during operation • horizontal installation, min30 °C; < 0 °C as of FS02		
electronics Isolation Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions Suitable for safety functions No Ambient conditions Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		
Isolation Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions No Ambient conditions Ambient temperature during operation horizontal installation, min. -30 °C; < 0 °C as of FS02 		NO
Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions No Ambient conditions Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		
Standards, approvals, certificates Suitable for safety functions No Ambient conditions Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		
Suitable for safety functions No Ambient conditions Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		
Ambient conditions Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		No
Ambient temperature during operation • horizontal installation, min. -30 °C; < 0 °C as of FS02		
• horizontal installation, min30 °C; < 0 °C as of FS02		
	· · · · · · · · · · · · · · · · · · ·	
norizontal installation, max.		
	 horizontal installation, max. 	60 °C

 vertical installation, min. 	-30 °C; < 0 °C as of FS02
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	28 g
last modified:	2/1/2021 🖸