SIEMENS

Data sheet

6ES7132-6BD20-0BA0

	SIMATIC ET 200SP, digital output module, DQ 4x 24VDC/2A Standard, suitable for BU type A0, Color code CC02, Module diagnostics
General information	
Product type designation	DQ 4x24 V DC/2 A ST
HW functional status	From FS08
Firmware version	V1.1
• FW update possible	Yes
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	V11 SP2 / V13
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
 PCS 7 configurable/integrated from version 	V8.1 SP1
PROFIBUS from GSD version/GSD revision	GSD Revision 5
PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DQ	Yes
 DQ with energy-saving function 	No
• PWM	No
Oversampling	No
• MSO	No
Supply voltage	
Rated value (DC)	24 ∨
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	60 mA; without load
output voltage / header	oo ma, winou iouu
Rated value (DC)	24 ∨
Power loss	24 V
	4.10/
Power loss, typ. Address area	1 W
Address space per module	
Address space per module, max.	1 byte; + 1 byte for QI information
Hardware configuration	
Automatic encoding	
 Mechanical coding element 	Yes
Type of mechanical coding element	Туре А
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type A0
2-wire connection	BU type A0
3-wire connection	BU type A0 with AUX terminals or potential distributor module
4-wire connection	BU type A0 + Potential distributor module
Digital outputs	
Type of digital output	Source output (PNP, current-sourcing)
Number of digital outputs	4
Current-sinking	No
Current-sourcing	Yes

Stand crash productions Yes • Neagenome threaded, by, 22 8 0 5 2 A Limbation of inductive shaddown voltage to Typ, L + (50 V) Controlling a digital input Yes • which residue of the output Yes • which residue of the output Yes • which residue of the output Yes • or agend "IT rated value 2 A • or rated value 0 Jus • or rated value 100 Jus • or rated value 100 Jus • or rated value 100 Jus • or rated value 2 A • or rated value 2 A • or rated value 2 A • or rated value 3 A • or rated value		
• Programme threshod, typ.2.2.0.52.ALinketion of inductive shadown websge toTyp. Le (-50 V)Switching capacity of the dualust2.A• with relative load, max.10.WLander testing enge-• over limit3.400 D• over limit3.400 D• over limit3.400 D• over limit3.000 D• over limit <td>Digital outputs, parameterizable</td> <td>Yes</td>	Digital outputs, parameterizable	Yes
Initialized of inductive shadown votinge to Type 1+ (-50 V) Controlling a digital input Yes Switching casabally of the output 2 A • on himp load, max. 10 W Load resistance range 12 O • ower init 3 400 O • ower init 3 400 O Output carrent 0 A • or ing init 'T mets value 0 A • or ing init 'T mets value 0 A • or ing init 'T mets value 0 A • or ing init 'T mets value 0 Jin A Output darway 0 Jin A Output the setting fragmet 'T' mets value 0 Jin A Parame soutcarrent of the outputs 0 Jin A • of to 'T', nax. 0 Jin A • of to 'T', nax. 10 Jin Z • of to 'T', nax. 2 Jin Z • of to 'T', nax. 2 Jin Z • of to 'T', nax.	Short-circuit protection	Yes
Controling a fight input Yes Severching appedie of the sourgues 2 A • with restative load, max. 10 W Load resistance strape 12 D • uppe in that 3 400 D Outpatacament 2 A • or signal 'T rest value 2 A • or signal 'T rest value 0 I mA Outpatacament 0 J mA • Off that 'T rest value 0 J mA Outpatacament 0 J mA • Off that 'T rest value 0 J mA Outpatacament 0 J mA • Off that 'T rest value 0 J mA Outpatacament 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Off that 'T rest value 0 J mA • Internot file restration 0 J MA • or rest restration 0 J MA <td> Response threshold, typ. </td> <td>2.8 to 5.2 A</td>	 Response threshold, typ. 	2.8 to 5.2 A
Swaching canacity of the outputs2 A• with residence trange10 WLaad residence range12 D• lower find12 D• or signal 11* rister outputs400 DOutput carrent2 A• or signal 11* rister outputs0.1 mAOutput carrent0.1 mAOutput carrent0.1 mAOutput carrent0.1 mAOutput carrent0.0 signal 11* rister outputs• 0* or signal 11* rister outputs0.1 mAOutput carrent0.0 signal 11* rister outputs• 0* or signal 11* rister outputs0.0 signal 11* rister outputs• 0* or signal 11* rister outputs0.0 signal 11* rister outputs• 0* or signal 11* rister outputs0.0 signal 11* rister outputs• 0* or signal 11* rister outputs0.0 signal 11* rister outputs• 0* or signal 11* rister outputsNo• 0* or signal 11* rister outputsNo• 0* or reductant corrent of a loadYesSwaching research2 A• output signalNo• output signal100 hr• output signal2 A• output signal3 A• output signal3 A <td>Limitation of inductive shutdown voltage to</td> <td>Typ. L+ (-50 V)</td>	Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
• • • Harry beside load, max,2 A• • harry for the status of range12 D• • how finith12 D• • how finith3400 D• • for signal "1" relate value2 A• • for signal "1" relate value2 A• • for signal "1" relate value0.1 mA• Other diagnal "1" relate value50 µs• • for lan", 10050 µs• • for land", 100100 µs• • for landman control of a loadYes• Saveting frequency100 µs• • with relative load, max,10 µs• • with relative load, max,10 µs• • for landman, max,10 µs• • up la 0 °C, max,8 A• • up la 0 °C, max,8 A• • up la 0 °C, max,6 A• • up la 0 °C, max,100 m• • up la 0 °C, max,100 m• • up la 0 °C, max,100 m• • up la 0 °C, max,100 m <tr< td=""><td>Controlling a digital input</td><td>Yes</td></tr<>	Controlling a digital input	Yes
• on large load, max.10 WLoad residuate inque12 0• over linit12 0 0• over linit3400 0• over linit2 A• or signal "1" rated value2 A• or signal "1" rated value0.1 mAOutput carrent, max.0.1 mAOutput datay with residue load90 ya• '0" to '1", to to, to, p.100 ya• '1" to 'to, to, p.100 ya• '1" to 'to, rank.100 ya• Or redundant control of a loadYes• 'N' to to't, max.100 ha• or redundant control of a loadYes• 'N' to to't, max.100 ha• 'N' to to't, max.100 ha• or redundant control of a loadYes• 'N' to to'th residue load, max.2 Ha• 'N' to to'the load, max.2 Ha• 'N' to to'the load, max.2 A• 'N' to to'the load, max.2 A• Ourrent per module, max.8 A• Ourrent per module, max.6 A• Ourrent per module, max.6 A• up to 50 'C, max	Switching capacity of the outputs	
Load residency ange• lower limit3 400 0• or signal "1 relativalue2 A• or signal "1 relativalue0.1 mAObdat delay with residue load50 µs• '0 to '1', 'nax.50 µs• '0 to '1', 'nax.100 µs• '1' to '1', 'nax.2 H• or rupatingNo• or rupating free load, max.2 HL• or indination control of loadYesSamethan excline load, max.2 HL• on lang load, max.2 HL• our and the cubdust (per module)10 Hz• Current per channel, max.2 A• Current per channel, max.8 A• Up to 40 °C, 'nax.8 A• up to 40 °C, 'nax.6 A• up to 40 °C, 'nax.8 A• up to 40 °C, 'nax.6 A• up to 40 °C, 'nax.7 A• up to 40 °C, 'nax.7 A• Substitus values connectable7 A• up to 40 °C, 'nax.7 A </td <td>• with resistive load, max.</td> <td>2 A</td>	• with resistive load, max.	2 A
• lower limit 2 Ω • upper limit 3 400 Ω Output current 2 Λ • for signal *1* risted value 2 Λ • of raignal *1* risted value 0.1 mA Output cartert, max. 0.1 mA Output daday with resistate load 50 μs • *1" to "t, "to pt," 50 μs • *1" to "t, "to pt," 50 μs • *1" to "t, "to pt," 100 μs • *1" to "t, max. 0 A • thin inductive load, max. 100 μs • up to 40 °C, max. 6 A • Current per channel, max. 6 A • Current per channel, max. 6 A • up to 40 °C, max. 8 A • up to 40 °C, max. 8 A • up to 40 °C, max. </td <td> on lamp load, max. </td> <td>10 W</td>	 on lamp load, max. 	10 W
9400 QOutput summent• for signal 1" rated value2 A• for signal 1" rated value2 A• for signal 1" rated value0.1 mA• Output diagy with resistive load90 us• for to 1", typ.50 us• for to 1", typ.100 us• for truptsing100 us• for upstingNo• for repating settive load, max.100 hz• with inductive load, max.100 hz• with inductive load, max.2 Hz• with inductive load, max.2 Hz• Current per module, max.8 A• Current per module, max.8 A• Current per module (ger module)• Current per module.8 A• up to 50 °C, max.8 A• up to 50 °C, max.9 A• up to 50	Load resistance range	
9400 QOutput summent• for signal 1" rated value2 A• for signal 1" rated value2 A• for signal 1" rated value0.1 mA• Output diagy with resistive load90 us• for to 1", typ.50 us• for to 1", typ.100 us• for truptsing100 us• for upstingNo• for repating settive load, max.100 hz• with inductive load, max.100 hz• with inductive load, max.2 Hz• with inductive load, max.2 Hz• Current per module, max.8 A• Current per module, max.8 A• Current per module (ger module)• Current per module.8 A• up to 50 °C, max.8 A• up to 50 °C, max.9 A• up to 50	lower limit	12 Ω
Output current 2 A • for signal "1 raded value" 2 A • of raignal "1 raded value met. 0.1 mA Output delay with resistive load 50 µs • 1 "10 '0", 'ny, pp. 50 µs • 1 "10 '0", 'ny, pp. 100 µs • 1 "10 '0", max. 100 µs • 1 "10 '0", max. 100 µs • or redundant control of a load Yes • or redundant control of a load Yes • or redundant control of a load Yes • or the outputs 100 Hz • or with resistive load, max. 100 Hz • Ourrent gre modules - • or with resistive load, max. 2 A • Ourrent gre modules (pre module) - • Ourrent gre modules (pre module) - • or bo 50 °C, max. 8 A • up to 30 °C, max. 6 A		
• for signal "1" relat vulue2 A • for signal "0" residual current, max.0.1 m A• O'to "1", "sp.50 µs• O'to "1", "sp.50 µs• O'to "1", "sp.50 µs• O'to "1", "sp.100 µs• T'to to "1", max.100 µs• Faralet switchmoof vtwo outputs•• o'to rupatingNo• o'to rupating for uprating for upratin		
• for signal "0" residual current, max.0.1 mAOutput Seave with residual current, max.50 µs• "0" for "1", np.50 µs• "1" for "0, np.100 µs• "1" for "0, np.100 µs• for redundant control of a loadYes• for redundant control of a loadYes• with residue load, max.100 hz• with redundant control of a loadYes• with redundant control of the control	•	2 4
Output deay with reasible load 50 µs • "0" to "1, typ. 50 µs • "0" to "1, max. 50 µs • "1" to "0; typ. 100 µs • Tri to "0; max. 100 µs • for relating No • for relating fequency Ves • with relative load, max. 100 Hz • with inductive load, max. 2 Hz • on lamp load, max. 10 Hz • Current per relative load, max. 2 A • Current per rodule, max. 8 A • Current per module, max. 8 A • Current per module, max. 8 A • out pis 50 °C, max. 8 A • up b 50 °C, max. 9 A • up b 50 °C, max. 9 A • up b 50 °C, max. 9 A • up b 50 °C, max. 100 m • unshideled, max. 100 m • unshideled, max.	-	
• '0' to '1'; typ.50 µs• '0' to '1'; mx.50 µs• '1' to '0'; typ.100 µs• for upratingNo• for redundant control of a loadYes• for redundant control of a loadYes• with resistive load, max.100 Hz• with resistive load, max.100 Hz• with inductive load, max.10 Hz• with inductive load, max.2 Hz• on lamp load, max.10 Hz• our lamp load, max.10 Hz• our lamp load, max.2 Hz• our lamp load, max.2 A• Current per channel, max.8 A• Current per channel, max.8 A• our lamp load 'nc, max.8 A• up lo 40 °C, max.8 A• up lo 50 °C, max.9 A• up lo 50 °C, max.9 A• up lo 50 °C, max.9 A• up lo 60 °C, max.9 A• up lo 160 °C, max		0.1111A
• °° to °1', max,60 μs• °1' to °0', max,100 μsParalet switching of two outputs.• for regulating of the adaptaYesSwitching frequency.• with inductive load, max,100 Hz• with inductive load, max,2 Hz• on lamp load, max,10 Hz• Current per channel, max,2 A• Current per module, max,2 A• Current per module, max,8 A• Current per module, max,6 A• Current per module, max,6 A• up to 50 °C, max,7 B• Substitue values connectableYesSubstitue values connectableYes• Substitue values connectable <td< td=""><td></td><td>50</td></td<>		50
•••**********************************		
Parallel switching of two outputs For gridting No • for gridting finaçuency Yes • with resistive load, max. 100 Hz • with inductive load, max. 2 Hz • on lamp load, max. 100 Hz • und in resistive load, max. 2 Hz • on lamp load, max. 2 Hz • on lamp load, max. 2 A • Current per module, max. 8 A • - up to 60° C, max. 8 A - up to 60° C, max. 9 A - up to 60° C, max. 9 A - up to 60° C, max. 9 A - up to 60° C, max. 1000 m - up to 60° C, max. 9 A - Solotich max 1000 m - up to 60° C, max. 1000 m - Sol		
Parallel switching of two cutputs No • for regrating No • for fundant control of a load Yes Switching frequency 100 Hz • with inductive load, max. 2 Hz • on lamp load, max. 100 Hz • Current per channel, max. 2 A • Current per channel, max. 8 A • Current per channel, max. 8 A • Total current of the outputs (per module) 6 A - up to 60° C, max. 8 A - up to 60° C, max. 9 A - up to 60° C, max. 9 A - up to 60° C, max. 6 A - up to 60° C, max. 6 A - up to 60° C, max. 9 A - up to 60° C, max. 1000° m • Unothori		
• for upratingNo• for redundant control of a loadYes• with redistive load, max.100 Hz• with inductive load, max.2 Hz• on lamp load, max.10 Hz• on lamp load, max.10 Hz• or utern load, max.2 A• Current per channel, max.8 A• Current per module, max.8 A• Current per module, max.8 A• Current per module, max.8 A• on lamp load, Cr, max.8 A• on lamp load, Cr, max.8 A• on load 'C', max.8 A- up to 40 °C, max.6 A- up to 60 °C, max.6 A- up to 70 °C, max.6 A- up to 70 °C, max.6 A- up to 80 °C, max.7 No- up to 80 °C, max.6 A- up to 80 °C, max.8 A- 0 Deol °C.7 No	• "1" to "0", max.	100 µs
• for redundant control of a loadYesSwitching frequency100 Hz• with inductive load, max.100 Hz• on lamp load, max.2 Hz• on lamp load, max.2 A• Current per channel, max.2 A• Current per channel, max.3 A• Current per module, max.8 A• Data Current of the outputs (regrambule) up to 40 °C, max.8 A up to 50 °C, max.6 A up to 50 °C, max.7 A up to 50 °C, max.7 A up to 50 °C, max.8 A up to 50 °C, max.8 A up to 50 °C, max.9 A <trr> up to 50 °C, max.<td>Parallel switching of two outputs</td><td></td></trr>	Parallel switching of two outputs	
Switching frequency • with resistive load, max. 100 Hz • on lamp load, max. 10 Hz • on lamp load, max. 10 Hz Total current of the outputs 2 A • Current per channel, max. 8 A • Current per module, max. 8 A • Current of the outputs (ger module) 50 °C, max. - up to 40 °C, max. 8 A - up to 60 °C, max. 8 A Diagonstics/status information 9 C Interrupts//diagonstics/status information 9 C Diagnostics function Yes Diagnostics function Yes Diagnostics function Yes Diagnostics function Yes Diagnostic fud	• for uprating	No
• with resistive load, max.100 Hz• with inductive load, max.2 Hz• on lamp load, max.10 HzTotal current of the outputs2 A• Current per module, max.8 A• Current per module, max.8 A• or lamp to 40 °C, max.8 A- up to 50 °C, max.9 A- op to and to and<	 for redundant control of a load 	Yes
• with inductive load, max.2 Hz• on lamp load, max.10 HzTotal current of the outputs2 A• Current per module, max.8 A• Current per module, max.8 ATotal current of the outputs (per module)•- up to 40 °C, max.8 A- up to 50 °C, max.4 A- up to 50 °C, max.6 A- up to 50 °C, max.7 AA7 A- Up to 50 °C, max.7 A- Up to 50 °C, max.9 A- Diagnostics function7 A- Up to 50 °C, max.9 A- Diagnostic functionYesDiagnostic functionYes- Nontioring the supply voltageYes- Nontioring the supply voltage (PWR-LED)Yes: green PWR LED- Nontioring of the supply voltage (PWR-LED)Yes: green LED- Obtannel status displayYes: gr	Switching frequency	
• on lamp load, max.10 Hz• Current per nodule, max.2 A• Current per module, max.8 A8 A• Total current of the outputs (per module)• up to 60 °C, max.8 A- up to 60 °C, max.4 A- up to 60 °C, max.600 m- up to 60 °C, max.600 m- up to 60 °C, max.900 m-	with resistive load, max.	100 Hz
• on lamp load, max.10 HzV• Current per nodule, max.2 A• Current per nodule, max.8 A• up to 60 °C, max.8 A- up to 60 °C, max.6 A- up to 60 °C, max.6 A- up to 60 °C, max.8 A- up to 60 °C, max.6 A- up to 60 °C, max.4 A- up to 60 °C, max.6 A- up to 60 °C, max.600 mInterrupts/diagnostics/status information5000 mInterrupts/diagnostics/status information7000 mSubstitut values connectableYesNointoring the supply voltageYesNointoring the supply voltageYesNointoring the supply voltage (PWR-LED)Yes; green EDNontoring of the supply voltage (PWR-LED)Yes; green LEDNontoring of the supply voltage (PWR-LED)Yes; green LEDNo for module diagnosticsNoPotential separation channelsNoPotential separation channelsNo	 with inductive load, max. 	2 Hz
Total current of the outputs 2 A • Current per module, max. 8 A Total current of the outputs (per module) 8 A Total current of the outputs (per module) 8	• on lamp load, max.	10 Hz
• Current per module, max. 2 A • Current of the outputs (per module) 8 A Total current of the outputs (per module) 1000000000000000000000000000000000000		
• Current per module, max. 8 A Total current of the outputs (per module) horizontal installation - up to 40 °C, max. 8 A - up to 50 °C, max. 6 A - up to 50 °C, max. 6 A - up to 50 °C, max. 8 A - up to 50 °C, max. 9 A - up to 50 °C, max.	· · · · · · · · · · · · · · · · · · ·	2 A
Total current of the outputs (per module) horizontal installation		
horizontal installation 8 A		07
up to 40 °C, max.8 A up to 50 °C, max.6 A up to 50 °C, max.4 Avertical installation8 A up to 30 °C, max.8 A up to 50 °C, max.6 A up to 50 °C, max.4 A up to 50 °C, max.4 A up to 50 °C, max.4 A up to 60 °C, max.4 A up to 60 °C, max.4 A up to 60 °C, max.600 mInterception600 mInterception7 esSubstitute values connectableYesAlarms7 esObignostic alarmYes• Diagnostic alarmYes• Diagnostic alarmYes• Short-circuitYes; Module-wise• Short-circuitYes; Module-wise• Short-circuitYes; Module-wise• Cannel status displayYes; green PWR LED• Channel diagnosticsNo• for channel diagnosticsNo• between the channelsNo		
		0.4
vertical installation up to 30 °C, max. 8 A up to 40 °C, max. 6 A up to 50 °C, max. 4 A Cable length 4 A Cable length 500 m instructed, max. 600 m instructed, max. 600 m interrupts/diagnostics/status information Yes Diagnostics function Yes Substitute values connectable Yes Alarms Yes Diagnostic alarm Yes Nonitoring the supply voltage Yes Write-break Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics function LED Yes; green PWR LED • Channel status display Yes; green LED • Channel status display Yes; green VR LED • for chanal diagnostics No • for channel diagnostics Yes; green VR LED • for channel diagnostics Yes; green LED • for channel diagnostics Yes; green tecl DIAG LED • between the channels No		
up to 30 °C, max.8 A up to 40 °C, max.6 A up to 50 °C, max.4 A up to 60 °C, max.4 ACable length4 up to 60 °C, max.1000 m• shielded, max.600 mInterrupts/diagnostics/status information1000 mDiagnostic functionYesSubstitute values connectableYesAlarms	• •	4 A
up to 40 °C, max.6 A up to 50 °C, max.4 A up to 60 °C, max.4 ACable length4 ACable length1000 m unshielded, max.600 m unshielded, max.600 mInterrupts/diagnostics/status information1000 mDiagnostics functionYesSubstitute values connectableYesAlarms		
up to 50 °C, max.4 A up to 60 °C, max.4 ACable length1000 m• unshielded, max.600 m• unshielded, max.600 mInterrupts/diagnostics/status informationYesDiagnostics functionYesSubstitute values connectableYesAlarms7• Diagnostic alarmYesNonitoring the supply voltageYes• Monitoring the supply voltageYes; Module-wise• Short-circuitYes; Module-wise• Group errorYes; Module-wise• Channel status displayYes; green PWR LED• Channel status displayYes; green PWR LED• for module diagnosticsNo• for module diagnosticsYes; green ILED• for module diagnosticsYes; green ILED• between the channelsNo• between the channelsNo		8 A
up to 60 °C, max.4 ACable length- shielded, max.1 000 m• unshielded, max.600 mInterrupts/diagnostics/status informationDiagnostics functionYesDiagnostics functionYesAlarms Diagnostic alarmYes• Diagnostic alarmYes• Diagnostic alarmYes• Monitoring the supply voltageYes• Monitoring the supply voltageYes; Module-wise• Short-circuitYes; Module-wise• Short-circuitYes; green PWR LED• Monitoring of the supply voltage (PWR-LED)Yes; green PWR LED• Channel status displayYes; green LED• for channel diagnosticsNo• for module diagnosticsYes; green ILEDPotential separation channelsNo• between the channelsNo		6 A
Cable length • shielded, max. 1 000 m • unshielded, max. 600 m Interrupts/diagnostics/status information Interrupts/diagnostics/status information Diagnostics function Yes Substitute values connectable Yes Alarms Ves • Diagnostic alarm Yes Diagnoses Yes • Monitoring the supply voltage Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics indication LED Yes; green PWR LED • Channel status display Yes; green PWR LED • for channel diagnostics Yes; green/red DIAG LED Potential separation channels Yes; green/red DIAG LED	— up to 50 °C, max.	4 A
• shielded, max.1 000 m• unshielded, max.600 mInterrupts/diagnostics/status informationDiagnostics functionYesSubstitute values connectableYesAlarms• Diagnostic alarmYes• Diagnostic alarmYes• Monitoring the supply voltageYes• Monitoring the supply voltageYes; Module-wise• Short-circuitYes; Module-wise• Short-circuitYes; Module-wise• Group errorYesDiagnostics indication LEDYes; green PWR LED• Channel status displayYes; green LED• for channel diagnosticsNo• for module diagnosticsYes; green/red DIAG LEDPotential separationYes; green/red DIAG LEDPotential separation channelsNo• between the channelsNo	— up to 60 °C, max.	4 A
• unshielded, max. 600 m Interrupts/diagnostics/status information Yes Diagnostics function Yes Substitute values connectable Yes Alarms Yes • Diagnostic alarm Yes Diagnoses Yes • Monitoring the supply voltage Yes; Module-wise • Wire-break Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics indication LED Yes; green PWR LED • Channel status display Yes; green LED • for channel diagnostics Yes; green LED • for module diagnostics Yes; green LED • for module diagnostics Yes; green HED • between the channels No	Cable length	
Interrupts/diagnostics/status information Diagnostics function Yes Substitute values connectable Yes Alarms Diagnostic alarm Yes Diagnoses Monitoring the supply voltage Yes; Module-wise Short-circuit Yes; Module-wise 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 Yes; green/red DIAG LED Potential separation Potential separation channels between the channels No 	 shielded, max. 	1 000 m
Diagnostics function Yes Substitute values connectable Yes Alarms Diagnostic alarm Yes Diagnoses Yes • Monitoring the supply voltage Yes • Wire-break Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics indication LED Yes; green PWR LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; green LED • for channel diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation No	• unshielded, max.	600 m
Diagnostics function Yes Substitute values connectable Yes Alarms Diagnostic alarm Yes Diagnoses Yes • Monitoring the supply voltage Yes • Wire-break Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics indication LED Yes; green PWR LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; green LED • for channel diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation No	Interrupts/diagnostics/status information	
Substitute values connectable Yes Alarms Yes Diagnostic alarm Yes Monitoring the supply voltage Yes; Module-wise Short-circuit Yes; Module-wise Group error Yes Diagnostics indication LED Channel status display Yes; green PWR LED Channel status display Yes; green PWR LED For channel diagnostics No Yes; green/red DIAG LED Potential separation channels between the channels No 		Yes
Alarms Yes Diagnoses Yes Monitoring the supply voltage Yes, Module-wise Wire-break Yes; Module-wise Short-circuit Yes; Module-wise Group error Yes Diagnostics indication LED Yes; green PWR LED Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED Channel status display Yes; green PWR LED of or channel diagnostics No of or module diagnostics Yes; green PWR LED Potential separation No Potential separation channels No		
• Diagnostic alarmYesDiagnoses• Monitoring the supply voltageYes• Monitoring the supply voltageYes; Module-wise• Wire-breakYes; Module-wise• Short-circuitYes; Module-wise• Group errorYesDiagnostics indication LED• Monitoring of the supply voltage (PWR-LED)Yes; green PWR LED• Channel status displayYes; green LED• for channel diagnosticsNo• for module diagnosticsYes; green/red DIAG LEDPotential separationYes; green/red DIAG LED• between the channelsNo		
Diagnoses Yes • Monitoring the supply voltage Yes; Module-wise • Wire-break Yes; Module-wise • Short-circuit Yes; Module-wise • Group error Yes Diagnostics indication LED Yes; green PWR 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		Yes
• Monitoring the supply voltageYes• Wire-breakYes; Module-wise• Short-circuitYes; Module-wise• Group errorYesDiagnostics 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 module diagnosticsYes; green/red DIAG LEDPotential separation channelsNo	· · · · · · · · · · · · · · · · · · ·	
• Wire-breakYes; Module-wise• Short-circuitYes; Module-wise• Group errorYesDiagnostics 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 module diagnosticsYes; green/red DIAG LEDPotential separationPotential separation channels• between the channelsNo	-	Vec
• Short-circuitYes; Module-wise• Group errorYesDiagnostics 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 module diagnosticsYes; green/red DIAG LEDPotential separationPotential separation channels• between the channelsNo		
• 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 • for module diagnostics Yes; green/red DIAG LED Potential separation Yes; green/red DIAG LED Potential separation channels No • between the channels 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		
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		Yes
• 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		
• for channel diagnostics No • for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels • between the channels No		
for module diagnostics Yes; green/red DIAG LED Potential separation Potential separation channels between the channels No	 Channel status display 	Yes; green LED
Potential separation Potential separation channels • between the channels No	 for channel diagnostics 	No
Potential separation channels • between the channels No	 for module diagnostics 	Yes; green/red DIAG LED
• between the channels No	Potential separation	
• between the channels No	Potential separation channels	
		No
	 between the channels and backplane bus 	

• between the channels and the power supply of the
electronics

No

electronics	
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety functions	No
Suitable for safety-related tripping of standard modules	Yes; see FAQ Entry ID: 39198632
Highest safety class achievable in safety mode	
 Performance level according to ISO 13849-1 	PL d
SIL acc. to IEC 61508	SIL 2
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	-30 °C; < 0 °C as of FS08
 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C; < 0 °C as of FS08
 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.	30 g
last modified	9/27/2021

last modified:

9/27/2021 🖸