SIEMENS

Data sheet

6ES7522-1BL01-0AB0



SIMATIC S7-1500, digital output module DQ 32x24V DC/0.5A HF; 32 channels in groups of 8; 4 A per group; single-channel diagnostics; substitute value, switching cycle counter for connected actuators. the module supports the safety-oriented shutdown of load groups up to SILCL2 acc. to EN 62061:2005 + A2:2015, and Category 3 / PL d according to EN ISO 13849-1:2015. front connector (screw terminals or push-in) to be ordered separately

General information		
Product type designation	DQ 32x24VDC/0.5A HF	
HW functional status	From FS02	
Firmware version	V1.1.0	
Product function		
● I&M data	Yes; I&M0 to I&M3	
 Isochronous mode 	Yes	
Prioritized startup	Yes	
Engineering with		
 STEP 7 TIA Portal configurable/integrated from version 	V13 SP1 / -	
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -	
 PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1	
 PROFINET from GSD version/GSD revision 	V2.3 / -	
Operating mode		
• DQ	Yes	
 DQ with energy-saving function 	No	
• PWM	No	
 Cam control (switching at comparison values) 	No	
Oversampling	No	
• MSO	Yes	
 Integrated operating cycle counter 	Yes	
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; through internal protection with 7 A per group	
Input current		
Current consumption, max.	60 mA	
output voltage / header		
Rated value (DC)	24 V	
Power		
Power available from the backplane bus	1.1 W	
Power loss		
Power loss, typ.	3.5 W	
Digital outputs		
Type of digital output	Transistor	
Number of digital outputs	32	
Current-sourcing	Yes	

Toyon double participation Yes Short creat protection Yes Initiation of nucleore shutdown voltage to L + (-53 V) Controlling a digital input Yes Switching acades/ of the aduata 5 W Index of marks beam and the aduata 5 W Index of the aduata 5 M Index of the aduata 5 A Index of the aduata <th>Digital outputs, parameterizable</th> <th>Yes</th>	Digital outputs, parameterizable	Yes
• Response threshold, typ. 1 A Linitation of Inductive shudown voltage to L+ (-63 V) Controlling a digital input Yes Switching capacity of the outputs 0.5 A • out may bad, max. 5 W Load resistance range 0.5 A • over finith 42 D • over finith 42 D • over finith 12 KD Obtative voltage range 0.5 A • or signal "1", min. L+ (-0.8 V) Obtative voltage range, max. 0.5 A • or signal "1" permissible range, max. 0.5 A • or signal "1" permissible range, max. 0.5 A • or signal "1" permissible range, max. 0.5 A • or signal "1" rande value 0.0 ya • "1" to "0", max. 500 ya Paratil switching of two outputs 500 ya • or or uprating No • or or uprating fequency Vers • with reside load, max. 0.5 Hz: According to EC 60947-5-1, DC-13 • with reside load, max. 0.5 Hz: According to EC 60947-5-1, DC-13 • of trigo: Infs Vers (-1000, max. • Our or per channel, max. 0.5 Hz: According to EC 60947-5-1, DC-13 • with reside load, max. 0.5 Hz: According to EC 60947-5-1, DC-13 • Our or per channel, max. 1.00 Hz<		
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Controlling a digital input. Yes Switching capacity of the outputs • with resistive load, max. 0.5 A • on larmp Load, max. 5 W Load resistance range • lower limit. 49 0 • upper limit. 12 kD Couptor voltage • for signal "1", min. L + (+0.8 V) Couptor disay with resistive load • for signal "1" rated value • for signal messive load • for opating • for roduration control of a load Ves Switching frequency • with induve lead, max. • on larmp load, max. • Current per group, max. • Substative load, max. • Dilapostics function • subsided, max. • Dispostics function • subsided, max. • Dispostics function • Substative load, max. • Dispostics function • Dispostics function • Substative load, function • Dispostics function • Dispostics function • Dispostics function • Dispostics function • Substative load scinage (PDP, min. • Dispostics function • Dispostics function • Dispostics function • Dispostics function • Course to the satue sistely workspe • Web First K • Orignostics function • Dispostics function • Course to the satue sistely workspe • Frence it separation channels • Course to the satue sistely workspe • Frence it separation channels • Course to the satue sistely workspe • Frence it		
Switching capacity of the outputs 0.5 A • with resistre load, max. 5 W Load resistance range 0.0000 • lower limit 48 0 • output institute load, max. 5 W • output institute load, max. 0.5 A • output institute load, max. 0.5 A • for signal "1" min. 0.1 (-0.8 V) Output institute load, max. 0.5 A • for signal "1" max. 0.5 A • for signal "1" max. 0.5 A • for signal "1" max. 0.5 M • Output disty with resistre load 0.5 M • Output disty with resistre load 0.5 mA • Output disty with resistre load, max. 100 µs • for ingening No • for reguraling No • for uppating No • for reguraling No • for uppating No • for reguraling No <t< td=""><td></td><td></td></t<>		
• with resistive load, max. 0.5 Å • on lamp bad, max. 5 W Load resistance range 48 Ω • opper limit 12 kΩ Output voltage - • for signal ''1', min. L (- (0.8 V) Output disky with resistive load 0.5 Å • for signal ''1' rated value 0.5 Å • for signal with resistive load Yes • for opating No • for opating frequency - • with resistive load, max. 0.5 Hz; According to IEC 60947.5-1, DC-13 • on lamp load, max. 0.5 A; see additional description in the manual • Current per rodue, max. 0.5 A; see additional description in the manual • Current per rodue, max. 4.6 ksee additional description in the manual • Current per rodue, max. 6.00 m • current per modue, max. 1000 m </td <td></td> <td>Tes</td>		Tes
• olamp bad, max. 5 W Load resistance range • • lower limit 48 D • opper limit 12 kQ • for signal "1", min. Lef (-0.8 V) • Output votige • • for signal "1", readual current, max. 0.5 A • for signal "1", readual current, max. 0.5 RA • O'to fo't, max. 0.5 RA • O'to reguling • • O'to fo't, max. 0.00 µs • O'to fo't, max. 0.00 µs • O'to reguling No • O'to reguling No • for reguling No • oth residue load, max. 0.0 Hz • with inductive load, max. 0.0 Hz • oth residue load, max. 0.0 Hz • Outre other channel, max. 100 Hz • Current per radoue, max. 10 A see additional description in the manual • Current per radoue, max. 100 M • Current per radoue, max. 100 M • Current per radoue, max. 100 N • Current per radoue, max. 10 A see additional description in the manual		0.5.4
Load resistance range 40 • lower limit 42 kQ Output voltage - • for signal "1", min. L + (-0.8 V) Output voltage 0.5 A • for signal "1" rated value 0.5 A • for signal "1" rated value 0.5 A • for signal "1" reminisable range, max. 0.5 A • for signal "1" reminisable range, max. 0.5 A • for signal "1" rated value 0.5 A • for rigic links Yes • for rigic links Yes • for rigic links Yes • out inductive load, max. 100 Hz • with inductive load, max. 10 Hz • Urier top roop, max. 4.7 see additional description in the manual • Current per module, max. 100 h • Current per module, max. 50 pe • for rigic links Yes	-	
• lower limit 48.0 • oupper limit 12 kΩ • for signal "1", min. L + (0.8 V) • Output durates 0.5 A • for signal "1" permissible range, max. 0.5 A • for signal "1" reade value 0.5 A • for signal "1" permissible range, max. 0.5 mA Output durate value 0.5 A • for signal "1" reade value 0.5 A • for signal "1" reade value 0.5 A • for signal "1" reade value 0.5 mA Output durating of two outputs • • for logic links Yes • for logic links Yes • for redurdant control of a load Yes • with inductive load, max. 0.5 Hz; According to IEC 60947-5-1, DC-13 • our pre channel, max. 0.5 A; see additional description in the manual • Current per channel, max. 0.5 A; see additional description in the manual • Current per durate, max. 100 Hz • Totat current of the outputs • • Current per module, max. 100 m • Current per module, max. 60 m • Subiching diverstore interrr		5 W
• upper limit 12 kQ Output voltage - • for signal 1*1, min. L + (0.8 V) Output durrent 0.5 A • for signal 1*1 reted value 0.5 M • for signal 1*1 reted value 0.5 M • for signal 1*1 reted value 0.5 M • for logic Inhis Ves • for logic Inhis No • for redurdant control of a load Ves • for redurdant control of a load Ves • for redurdant control of a load Ves • our net piped, max. 0.5 A; see additional description in the manual • Current per modue, max. 0.5 A; see additional description in the manual • Current per modue, max. 100 for • shielded, max. 500 m Execution and activation time (TCO), min. 70 µs		40.0
Output Notinge + (+ (-0.8 V) • for signal *1* related value 0.5 A • for signal *1* permissible range, max. 0.5 A • for signal *1* permissible range, max. 0.5 mA Output current. • (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)		
• for signal ***, min. L + (-0.8 V) Output current 0.5 A • for signal *** permissible range, max. 0.5 A • Or signal *** permissible range, max. 0.5 A • Or signal *** 0.5 A • Or signal *** 0.5 A • Or signal *** 0.5 mA Output delay with resistive load • • Or 10 *** 500 µs Parallel switching of two outputs • • for rogic Inks Yes • for rogic Inks Yes • for rogic Inks Yes • off rodundant control of a load Yes • with inductive load, max. 0.5 hz; According to IEC 60947-5-1, DC-13 • on lamp load, max. 0.5 hz; see additional description in the manual • Current per donene, max. 0.5 A; see additional description in the manual • Current per module, max. 100 m • on lamp load, max. 100 m • on lamp lo		12 KΩ
Output current 0.5 A • for signal '1' permissible range, max. 0.5 A • for signal '0' residual current, max. 0.5 mA Output delay with resistive load 00 µs • '1' to '0', max. 500 µs Parallel switching of two outputs 500 µs • for logic links Yes • for redundant control of a load Yes • for urganing No • of redundant control of a load Yes • with resistive load, max. 0.5 kt; According to IEC 60947-5-1, DC-13 • with inductive load, max. 0.5 kt; see additional description in the manual • Current per group, max. 0.5 A ; see additional description in the manual • Current per group, max. 4 A; see additional description in the manual • Current per group, max. 100 m • unshielded, max. 600 m • unshielded, max. 600 m • subscitus indor 70 µs Execution and activation time (TCO), min. 250 µs • Interrupts//diagnostics/status information Yes Diagnostics function Yes Substitut evalues connectable Yes<		
for signal *1* rated value of 5 A for signal *1* permissible range, max. 0.5 A Of signal *1* permissible range, max. 0.5 A Of a for signal *1* permissible range, max. 0.5 A Otignut delay with resistive load for log in the supply with resistive load for log in the supply voltage for log in the supply voltage for log in the outputs for upraining for uprainini		L+ (-0.8 V)
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 for signal *0" residual current, max. 0.5 mA Otiput delay with resistive load *1" to *0", max. 500 µs Parallel switching of two outputs for logic links. for uprating No for regrating with resistive load, max. 00 Hz with inductive load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 on lamp load, max. 0.5 Hz; According to EC 60947-5-1, DC-13 0.5 Hz; According to EC 60947-5-1, DC-13 0.6 Nax. Current per module, max. Aciae additional description in the manual Current per module, max. Both resolution with extent to market to the additional description in the manual Education and additional description in the manual Education additional description in the manual Education additional description in the manual Education additional description in the manual Solotication the (TCO), min. 250 µs Education the	-	
Output delay with resistive load 100 µs • ''t' o'', ''', max. 100 µs • ''t' o'', ''', max. 500 µs Parallel switching of two outputs		
• "0" to "1", max. 100 µs • "0" to "0", max. 500 µs Parallel switching of two outputs 500 µs • for logic links Yes • for logic links Yes • with resistive load, max. 100 Hz • with resistive load, max. 0.5 Hz; According to IEC 60947-5-1, DC-13 • with inductive load, max. 0.5 Hz; According to IEC 60947-5-1, DC-13 • on lamp load, max. 10 Hz • Current per channel, max. 0.5 A; see additional description in the manual • Current per module, max. 10 A; see additional description in the manual • Current per module, max. 100 m • Current per module, max. 600 m • Current per module, max. 600 m • Sublided, max. 000 m • unshielded, max. 600 m • unshielded, max. 600 m • subsidied, max. 1000 m • Unsche for (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostics function Yes • Diagnostic alarm Yes • Maintenance interrupt Yes • Diagnostic alarm Yes • Monitoring the supply voltage Yes; red LED • RVIN LED Yes; red LED • RIVIN LED Yes; r		0.5 mA
• "1" to "0", max. 500 μs Parallel switching of two outputs • • for logic links Yes • for redundant control of a load Yes Switching frequency • • with resistive load, max. 100 Hz • with inductive load, max. 0.5 Hz: According to IEC 60947-5-1, DC-13 • on lamp load, max. 0.5 A: see additional description in the manual • Current per channel, max. 0.5 A: see additional description in the manual • Current per channel, max. 0.5 A: see additional description in the manual • Current per moutle, max. 100 m • Current per moutle, max. 100 m • current per moutle, max. 600 m • subielded, max. 600 m • subielded, max. 600 m • subielded, max. 600 m • subsidied, max. 600 m • Substitute values connectable Yes • Bus cycle time (TDP), min. 70 μs • Diagnostics function Yes • Diagnostics function Yes • Maintenance interrupt Yes • Diagnostic function Yes • Monitoring the supply voltage Yes • Monitoring the supply voltage Yes; red LED • Wirk-break Yes; red LED • FRROR LED		
Parallel switching of two outputs Yes • for logic links Yes • for regundant control of a load Yes Switching frequency • • with resistive load, max. 100 Hz • with inductive load, max. 0.5 Hz; According to IEC 60947-5-1, DC-13 • on lamp load, max. 100 Hz • Current for the outputs 0.5 A; see additional description in the manual • Current per channel, max. 0.5 A; see additional description in the manual • Current per module, max. 1000 m • Current per module, max. 1000 m • Current per module, max. 1000 m • Shielded, max. 600 m • unshielded, max. 600 m • unshielded, max. 250 µs Interrupts/diagnostics/status information 250 µs Diagnostic alarm Yes • Diagnostic alarm Yes • Monitoring the supply voltage Yes • Wire-break Yes • Substitute values connectable Yes • Wire-break Yes • Diagnostic alarm Yes • Monitoring the supply voltage (PWR-LED) Yes; green LED • ERROR LED Yes; red LED • Monitoring the supply voltage (PWR-LED) Yes; red LED • Contannel diagnostics </td <td></td> <td></td>		
 For logic links Yes for uprating No For redundant control of a load Yes Switching frequency with inductive load, max. 00 Hz with inductive load, max. 05 Hz, According to IEC 60947-5-1, DC-13 on lamp load, max. 10 Hz Total current of the outputs Current per channel, max. 0.5 A; see additional description in the manual Current per group, max. 4 A; see additional description in the manual Current per module, max. 1000 m unshielded, max. 000 m Bochronous mode Execution and activation time (TCO), min. 260 μs Interrupts/diagnostics/status information Diagnostic function Yes Substitute values connectable Yes Maintenance interrupt Yes Diagnostic alarm Yes Short-orcuit Yes Substitute values connectable Yes Monitoring the supply voltage Yes Short-orcuit Yes Diagnostic alarm Yes Short-orcuit Yes Short-orcuit Yes Short-orcuit Yes Obignostic alarm Yes Short-orcuit Yes Short-orcuit Yes Corcue perfor Yes Short-orcuit Yes Short-orcuit Yes, red LED Yes; red LED		500 µs
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for redundant control of a load Switching frequency with inductive load, max. 100 Hz with inductive load, max. 101 Hz Total current of the outputs Current per channel, max. 0.5 A; see additional description in the manual Current per group, max. Current per module, max. Cable length Current per module, max. Cable length Current per module, max. Color m current per module, max. Cable length Current per module, max. Cable length Current per module, max.	-	
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• with resistive load, max. 100 Hz • with inductive load, max. 0.5 Hz; According to IEC 60947-5-1, DC-13 • Total current of the outputs 10 Hz • Current per channel, max. 0.5 A; see additional description in the manual • Current per channel, max. 16 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual • Current per module, max. 1000 m • sinelded, max. 1000 m • unshielded, max. 600 m • sus cycle time (TDP), min. 250 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostics function Yes Alarms • • Diagnostic alarm Yes • Maintenance interrupt Yes • Monitoring the supply voltage Yes • Monitoring the supply voltage Yes • Ron-circuit Yes • Stor-circuit Yes • Ron-circuit Yes • Ron-circuit Yes; green LED • Ron-c	 for redundant control of a load 	Yes
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• on lamp load, max. 10 Hz Total current of the outputs 0.5 A; see additional description in the manual • Current per group, max. 4 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual • Current per module, max. 1000 m • unshielded, max. 600 m Isochronous mode Execution and activation time (TCO), min. Execution and activation time (TCO), min. 70 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostic struction Yes Alarms • • Diagnostic atarm Yes • Maintenance interrupt Yes Diagnoses Yes • Wire-break Yes • Nonitoring the supply voltage Yes; green LED • RUN LED Yes; red LED • RUN LED Yes; red LED • Mainter LED Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Orannel status display Yes; red LED	 with resistive load, max. 	100 Hz
Total current of the outputs • Current per channel, max. 0.5 A; see additional description in the manual • Current per group, max. 4 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual Cable length 16 A; see additional description in the manual • bitelded, max. 1000 m • unshielded, max. 600 m Isochronous mode 250 μs Execution and activation time (TCO), min. 250 μs Interrupts/diagnostics/status information 1000 m Diagnostics function Yes Substitute values connectable Yes Alarms Yes • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses Yes • Wrie-break Yes • Short-circuit Yes • RUN LED Yes; green LED • ERROR LED Yes; green LED • Maintoning of the supply voltage (PWR-LED) Yes; green LED • Maint LED Yes; green LED • RUN LED Yes; green LED • Channel status display Yes; green LED	 with inductive load, max. 	0.5 Hz; According to IEC 60947-5-1, DC-13
• Current per channel, max. 0.5 A; see additional description in the manual • Current per group, max. 4 A; see additional description in the manual • Current per module, max. 16 A; see additional description in the manual Cable length 1000 m • shielded, max. 600 m • unshielded, max. 600 m • shielded, max. 600 m Isochronous mode Execution and activation time (TCO), min. Zodu et me (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostic function Yes Substitute values connectable Yes Alarms • • Diagnostic alarm Yes • Maintenance interrupt Yes • Maintenance interrupt Yes • Maintenance interrupt Yes • Bagnostic indication LED Yes; green LED • RUN LED Yes; red LED • ERROR LED Yes; green LED • Mainting of the supply voltage (PWR-LED) Yes; green LED • KAIN LED Yes; green LED • FAROR LED Yes; green LED • Kontoning of the supply voltage (PWR-LED) Yes;	 on lamp load, max. 	10 Hz
 Current per group, max. 4 A; see additional description in the manual Current per module, max. 16 A; see additional description in the manual Cable length shielded, max. 1000 m unshielded, max. 600 m Isochronous mode Execution and activation time (TCO), min. 70 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Diagnostic s/status information Yes Alarms O Diagnostic alarm Yes Monitoring the supply voltage Yes Short-circuit Group error Yes Diagnostic indication LED Yes; green LED KRNN LED Yes; red LED Monitoring of the supply voltage (PWR-LED) Yes; green LED Channel status display Yes; green LED Channel status display Yes; green LED Channel status display Yes; green LED Yes; red LED Yes; red LED Potential separation channels 	Total current of the outputs	
• Current per module, max. 16 A; see additional description in the manual Cable length 1000 m • unshielded, max. 600 m Isochronous mode 70 μs Execution and activation time (TCO), min. 70 μs Bus cycle time (TDP), min. 250 μs Interrupts/diagnostics/status information 70 μs Diagnostic sinction Yes Substitute values connectable Yes Alarms • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses Yes • Monitoring the supply voltage Yes • Wire-break Yes • Short-circuit Yes • Group error Yes Diagnostics indication LED Yes; green LED • RUN LED Yes; red LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • for channel diagnostics Yes; red LED	 Current per channel, max. 	0.5 A; see additional description in the manual
Cable length 1000 m • shielded, max. 600 m Isochronous mode 1000 m Execution and activation time (TCO), min. 70 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information 1000 m Diagnostics function Yes Substitute values connectable Yes Alarms 0 Diagnostic alarm • Diagnostic alarm Yes • Maintenance interrupt Yes • Monitoring the supply voltage Yes • Wire-break Yes • Short-circuit Yes • Group error Yes Diagnostic indicaton LED Yes; green LED • ERROR LED Yes; red LED • Maintenang of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; red LED • for module diagnostics Yes; red LED • for module diagnostics <td< td=""><td> Current per group, max. </td><td>4 A; see additional description in the manual</td></td<>	 Current per group, max. 	4 A; see additional description in the manual
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• unshielded, max. 600 m Isochronous mode Execution and activation time (TCO), min. 70 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Diagnostics function Yes Substitute values connectable Yes Alarms • • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses • • Wire-break Yes • Short-circuit Yes • Group error Yes Diagnostic indication LED Yes; green LED • RUN LED Yes; Yellow LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; green LED • for rohannel diagnostics Yes; red LED • for module diagnostics Yes; red LED <t< td=""><td>Cable length</td><td></td></t<>	Cable length	
Isochronous mode Execution and activation time (TCO), min. 70 µs Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Diagnostics function Yes Substitute values connectable Yes Alarms • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses • Monitoring the supply voltage Yes • Short-circuit Yes • Group error Yes Diagnostics indication LED Yes; green LED • RUN LED Yes; red LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; green LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; re	 shielded, max. 	1 000 m
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Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostics function Yes Substitute values connectable Yes Alarms Yes • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses Yes • Monitoring the supply voltage Yes • Short-circuit Yes • Short-circuit Yes • Group error Yes; green LED • RUN LED Yes; red LED • ERROR LED Yes; green LED • Monitoring the supply voltage (PWR-LED) Yes; green LED • for channel status display Yes; green LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED	Isochronous mode	
Bus cycle time (TDP), min. 250 µs Interrupts/diagnostics/status information Yes Diagnostics function Yes Substitute values connectable Yes Alarms Yes • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses Yes • Monitoring the supply voltage Yes • Short-circuit Yes • Short-circuit Yes • Group error Yes; green LED • RUN LED Yes; red LED • ERROR LED Yes; green LED • Monitoring the supply voltage (PWR-LED) Yes; green LED • for channel status display Yes; green LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED	Execution and activation time (TCO), min.	70 μs
Interrupts/diagnostics/status information Diagnostics function Yes Substitute values connectable Yes Alarms Diagnostic alarm Yes Maintenance interrupt Yes Monitoring the supply voltage Vire-break Short-circuit Group error Yes Diagnostics indication LED RUN LED Yes; green LED Yes; red LED Yes; Yellow LED Monitoring the supply voltage (PWR-LED) Yes; green LED Channel status display Yes; red LED Yes; red LED	Bus cycle time (TDP), min.	250 µs
Diagnostics function Yes Substitute values connectable Yes Alarms Yes Alarns Yes • Diagnostic alarm Yes • Maintenance interrupt Yes Diagnoses Yes • Monitoring the supply voltage Yes • Monitoring the supply voltage Yes • Monitoring the supply voltage Yes • Short-circuit Yes • Group error Yes Diagnostics indication LED Yes; green LED • RUN LED Yes; red LED • Barnol LED Yes; red LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Monitoring of the supply voltage (PWR-LED) Yes; green LED • Channel status display Yes; green LED • for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED		
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• Maintenance interrupt Yes Diagnoses		Yes
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• for channel diagnostics Yes; red LED • for module diagnostics Yes; red LED Potential separation Potential separation channels		-
for module diagnostics Yes; red LED Potential separation Potential separation channels		-
Potential separation Potential separation channels	-	
Potential separation channels	-	Yes; red LED
between the channels No		
	 between the channels 	No

e between the channels, in groups of	0	
between the channels, in groups of	8	
between the channels and backplane bus	Yes	
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; From FS02	
Highest safety class achievable for safety-related tripping of standard modules		
 Performance level according to ISO 13849-1 	PL d	
 Category according to ISO 13849-1 	Cat. 3	
 SILCL according to IEC 62061 	SILCL 2	
Ambient conditions		
Ambient temperature during operation		
 horizontal installation, min. 	-30 °C; From FS03	
 horizontal installation, max. 	60 °C	
 vertical installation, min. 	-30 °C; From FS03	
vertical installation, max.	40 °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	35 mm	
Height	147 mm	
Depth	129 mm	
Weights		
Weight, approx.	280 g	
last modified:	4/19/2021 🖸	