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 SIL2 according to EN IEC 62061:2021 and Category 3 / PL d according to EN ISO 13849-1:2015. front connector (screw terminals or push-in) to be ordered separately

Figure similar

Product type designation DQ 32x24VDC/0.5A HF HW functional status From FSQ2 Firmware version V1.1.0 Product function V1.1.0 Product function V1.1.0 Product function Ves; I&M0 to I&M3 • Isochronous mode Yes Prioritized startup Yes • STEP 7 TA Portal configurable/integrated from version V13 SP1 / - • STEP 7 Ta Portal configurable/integrated from version V13 SP1 / - • PROFIBUS from GSD version/GSD revision V2.3 / - Operating mode Ves • DQ Yes • DQ No • Carr control (switching at comparison values) No • Oversampling No • MSO Yes Papply voltage Yes Pated value (DC) 24 V		
HW functional status From FS02 Firmware version V1.10 Product function ************************************	General information	
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 V13 SP1/- • STEP 7 TIA Portal configurable/integrated from version V13 SP1/- • PROFIBUS from CSD version/GSD revision V1.0 / V5.1 • PROFIBUT from CSD version/GSD revision V2.3 / - Operating mode * • DQ Yes • DQ with energy-saving function No • Oversampling No • Oversampling No • Oversampling No • MSO Yes • Integrated operating cycle counter Yes Supply voltage * Reted value (DC) 24 V permissible range, lower limit (DC) 19.2 V permissible range, lower 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 <		
Product function Ves • KM data Yes; I&M0 to I&M3 • Isochronous mode Yes • Prioritized startup Yes • STEP 7 TIA Portal configurable/integrated from version V13 SP1 / - • STEP 7 orifigurable/integrated from version V5.5 SP3 / - • PROFIBUS from GSD version/GSD revision V1.0 / V5.1 • PROFIBUS from GSD version/GSD revision V2.3 / - Operating mode - • DQ Yes • DQ with energy-saving function No • VWM No • Output integrated operating cycle counter Yes Supply voltage Yes Pressenpling No • MSO Yes • Integrated operating cycle counter Yes Supply voltage - Rated value (DC) 19.2 V permissible range, lower limit (DC) 19.2 V permissible range, upper limit (DC) 24.8 V Reverse polarity protection Yes; through internal protection with 7 A per group Ipput current - Current consumption, max. 60 m		
• i8M data Yes; 18M0 to 18M3 • isochronous mode Yes • Prioritized startup Yes Engineering with		V1.1.0
• Isochronous modeYes• Prioritized startupYesEngineering with• STEP 7 TA Portal configurable/integrated from versionV13 SP1 / -• STEP 7 configurable/integrated from versionV5.5 SP3 / -• PROFIBUS from GSD version/GSD revisionV1.0 / V5.1• PROFINET from GSD version/GSD revisionV2.3 / -Operating mode• DQYes• DQ with energy-saving functionNo• OR off (switching at comparison values)No• OrwersamplingNo• NROFYes• Integrated operating cycle counterYesSupply voltageYesRated value (DC)24 Vpermissible range, uoper limit (DC)28.8 VReverse polarity protectionYes; through internal protection with 7 A per groupInductorentCurrent consumption, max.60 mAOutput voltage / headerPower loss, typ.3.5 WPower logs (upput)TransistorNumber of digital outputs32Current-sourcingYes		
• Prioritized startup Yes Engineering with V13 SP1 / - • STEP 7 TIA Portal 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 • DQ with energy-saving function No • Carm control (switching at comparison values) No • MSO Yes • Integrated operating cycle counter Yes Persible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 19.2 V permissible range, lower 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 - Power loss, typ. 3.5 W Power loss, typ. 3.5 W Direction Yes Power loss, typ. 3.5 W Direction Yes	● I&M data	Yes; I&M0 to I&M3
Engineering with V13 SP1 / - • STEP 7 Th Portal configurable/integrated from version V13 SP1 / - • PROFIBUS from GSD version/GSD revision V1.0 / V5.1 • PROFINET from GSD version/GSD revision V2.3 / - Operating mode V2.3 / - • DQ Yes • DQ Yes • DQ Ves • DQ Yes • DQ Ves • OQ Ves • OP Ves • No Ves • Integrated operating cycle counter Yes Supply voltage ZeV permissible range, upper 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 Cu	 Isochronous mode 	Yes
• 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 V2.3 / - • DQ Yes • DQ with energy-saving function No • PW/M No • Cam control (switching at comparison values) No • MSO Yes • Integrated operating cycle counter Yes • Integrated operating cycle counter Yes • permissible range, lower limit (DC) 24 V permissible range, uper limit (DC) 28 V Reverse polarity protection Yes; through internal protection with 7 A per group Input current Current consumption, max. Cutput voltage / header 1.1 W Power loss, typ. 3.5 W Power loss, typ. 3.5 W Origital output Transistor Number of digital outputs 32 Current-sourcing Yes	Prioritized startup	Yes
• 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 Ves • DQ Yes • DQ with energy-saving function No • PWM No • Carn control (switching at comparison values) No • Oversampling No • MSO Yes • Integrated operating cycle counter Yes Supply voltage Rated value (DC) permissible range, lower limit (DC) 24 V permissible range, upper limit (DC) 28.8 V Rated value (DC) 24 V Perverse polarity protection Yes; through internal protection with 7 A per group Input current Current consumption, max. Current consumption, max. 60 mA output voltage / heador 24 V Power available from the backplane bus 1.1 W Power loss, typ. 3.5 W Digital output Transistor Number of digital outputs 32 Current.ourcing Yes	Engineering with	
• PROFIBUS from GSD version/GSD revision V1.0 / V5.1 • PROFINET from GSD version/GSD revision V2.3 / - Operating mode Version/GSD revision • DQ Yes • DQ with energy-saving function No • PWM No • Can control (switching at comparison values) No • Oversampling No • MSO Yes • Integrated operating cycle counter Yes Supply voltage Rated value (DC) Permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes; through internal protection with 7 A per group Input current Current consumption, max. Courrent consumption, max. 60 mA output voltage / header Power loss Power loss 1.1 W Power loss 1.1 W Power loss 1.5 W Digital output Transistor Number of digital outputs 32 Current-sourcing Yees	 STEP 7 TIA Portal configurable/integrated from version 	V13 SP1 / -
• 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 • Integrated operating cycle counter Yes • Integrated operating cycle counter Yes Supply voltage - Rated value (DC) 24 V permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes; through internal protection with 7 A per group Input current 60 mA output voltage / header - Power available from the backplane bus 1.1 W Power loss, typ. 3.5 W Dower loss, typ. 3.5 W Dever of digital output Transistor Number of digital outputs 32 Current-sourcing Yes	 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
Operating mode Yes • 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	 PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1
• DQ Yes • DQ with energy-saving function No • PWM No • Carn control (switching at comparison values) No • Oversampling No • Oversampting No • MSO Yes • Integrated operating cycle counter Yes Supply voltage Z4 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. Current consumption, max. 60 mA output voltage / header Z4 V Power available from the backplane bus 1.1 W Power loss 3.5 W Power loss Jointal outputs Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes	 PROFINET from GSD version/GSD revision 	V2.3 / -
• DQ with energy-saving functionNo• PWMNo• Cam control (switching at comparison values)No• OversamplingNo• OversamplingNo• Integrated operating cycle counterYesSupply voltageYesRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYes; through internal protection with 7 A per groupInput currentCurrent consumption, max.output voltage / header60 mAPower available from the backplane bus1.1 WPower loss1.1 WPower loss, typ.3.5 WDigital outputTransistorNumber of digital outputs32Current-sourcingYes	Operating mode	
• PWM No • Cam control (switching at comparison values) No • Oversampling No • MSO Yes • Integrated operating cycle counter Yes Supply voltage Yes 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. Current consumption, max. 60 mA output voltage / header 24 V Power available from the backplane bus 1.1 W Power loss, typ. 3.5 W Digital outputs Transistor Type of digital outputs 32 Current-sourcing Yes	• DQ	Yes
• Cam control (switching at comparison values)No• OversamplingNo• MSOYes• Integrated operating cycle counterYesSupply voltage24 VRated value (DC)24 Vpermissible range, lower limit (DC)28.8 VReverse polarity protectionYes; through internal protection with 7 A per groupInput currentCurrent consumption, max.60 mA0utput voltage / headerRated value (DC)24 VPower available from the backplane bus1.1 WPower loss3.5 WDigital outputTransistorNumber of digital outputs32Current-sourcingYes	 DQ with energy-saving function 	No
OversamplingNo• MSOYes• Integrated operating cycle counterYesSupply voltageYesRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYes; through internal protection with 7 A per groupInput currentCurrent consumption, max.Current consumption, max.60 mAoutput voltage / header24 VPower available from the backplane bus1.1 WPower lossPower lossType of digital outputTransistorNumber of digital outputs32Current-sourcingYes	• PWM	No
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permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes; through internal protection with 7 A per group Input current 60 mA Output voltage / header 60 mA Rated value (DC) 24 V Power 1.1 W Power loss 1.1 W Power loss, typ. 3.5 W Digital outputs Transistor Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes	Rated value (DC)	24 V
Reverse polarity protection Yes; through internal protection with 7 A per group Input current 60 mA Current consumption, max. 60 mA output voltage / header 24 V Rated value (DC) 24 V Power 1.1 W Power available from the backplane bus 1.1 W Power loss 90 Wer loss, typ. Solution outputs 3.5 W Digital outputs Transistor Number of digital outputs 32 Current-sourcing Yes	permissible range, lower limit (DC)	19.2 V
Input current 60 mA Output voltage / header 60 mA Rated value (DC) 24 V Power 24 V Power available from the backplane bus 1.1 W Power loss 1.1 W Power loss, typ. 3.5 W Digital outputs Transistor Number of digital outputs 32 Current-sourcing Yes	permissible range, upper limit (DC)	28.8 V
Current consumption, max. 60 mA output voltage / header 60 mA Rated value (DC) 24 V Power 24 V Power available from the backplane bus 1.1 W Power loss 1.1 W Power loss 3.5 W Digital outputs Transistor Number of digital outputs 32 Current-sourcing Yes	Reverse polarity protection	Yes; through internal protection with 7 A per group
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Rated value (DC) 24 V Power Power available from the backplane bus 1.1 W Power loss 1.1 W Power loss, typ. 3.5 W Digital outputs Transistor Number of digital outputs 32 Current-sourcing Yes	Current consumption, max.	60 mA
Power Power available from the backplane bus 1.1 W Power loss 3.5 W Power loss, typ. 3.5 W Digital outputs Transistor Type of digital outputs 32 Current-sourcing Yes	output voltage / header	
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Power loss, typ. 3.5 W Digital outputs Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes	Power available from the backplane bus	1.1 W
Power loss, typ. 3.5 W Digital outputs Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes		
Digital outputs Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes		3.5 W
Type of digital output Transistor Number of digital outputs 32 Current-sourcing Yes		
Number of digital outputs 32 Current-sourcing Yes		Transistor
Current-sourcing Yes		
	Digital outputs, parameterizable	Yes

Short-circuit protection	Yes; Clocked electronically
Response threshold, typ.	1 A
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
 with resistive load, max. 	0.5 A
 on lamp load, max. 	5 W
Load resistance range	
lower limit	48 Ω
• upper limit	12 kΩ
Output voltage	
● for signal "1", min.	L+ (-0.8 V)
Output current	
 for signal "1" rated value 	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	
• "0" to "1", max.	100 µs
• "1" to "0", max.	500 µs
Parallel switching of two outputs	
for logic links	Yes
• for uprating	No
 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. 	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.	16 A; see additional description in the manual
	16 A; see additional description in the manual
Current per module, max.	16 A; see additional description in the manual 1 000 m
Current per module, max. Cable length	
Current per module, max. Cable length shielded, max.	1 000 m
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode	1 000 m
 Current per module, max. Cable length shielded, max. unshielded, max. 	1 000 m 600 m
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min.	1 000 m 600 m 70 μs
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min.	1 000 m 600 m 70 μs
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information	1 000 m 600 m 70 μs 250 μs
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function	1 000 m 600 m 70 μs 250 μs Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable	1 000 m 600 m 70 μs 250 μs Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms	1 000 m 600 m 70 μs 250 μs Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm	1 000 m 600 m 70 μs 250 μs Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. sunshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt 	1 000 m 600 m 70 μs 250 μs Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses	1 000 m 600 m 70 μs 250 μs Yes Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage	1 000 m 600 m 70 μs 250 μs 70 μs 250 μs 70 μs 250 μs 70 μs
Current per module, max. Cable length shielded, max. unshielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit 	1 000 m 600 m 70 μs 250 μs 70 μs 250 μs 70 μs 250 μs 70 μs
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Wire-break Short-circuit Group error 	1 000 m 600 m 70 μs 250 μs 70 μs 250 μs 70 μs 250 μs 70 μs
Current per module, max. Cable length shielded, max. unshielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit 	1 000 m 600 m 70 μs 250 μs 78 Yes Yes Yes Yes Yes Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED 	1 000 m 600 m 70 μs 250 μs Yes Yes Yes Yes Yes Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED Statistication LED RUN LED	1 000 m 600 m 70 μs 250 μs 78 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Current per module, max. Cable length shielded, max. unshielded, max. Isochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED 	1 000 m 600 m 70 μs 250 μs 72 yes 7es 7es 7es 7es 7es 7es 7es 7es 7es 7
 Current per module, max. Cable length shielded, max. unshielded, max. Instruct and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) 	1 000 m 600 m 70 μs 250 μs 72 μs 78 s 78 s 79 s 79 s 79 s 79 s 79 s 79 s 79 s 79
 Current per module, max. Cable length shielded, max. unshielded, max. Instead of the supply voltage (PWR-LED) Konitoring of the supply voltage (PWR-LED) Channel status display 	1 000 m 600 m 70 μs 250 μs 250 μs Yes Yes Yes Yes Yes Yes Yes Ye
 Current per module, max. Cable length shielded, max. unshielded, max. Instruct and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics 	1 000 m 600 m 70 μs 250 μs 78 Yes Yes Yes Yes Yes Yes Yes Yes
 Current per module, max. Cable length shielded, max. unshielded, max. Inschronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics 	1 000 m 600 m 70 μs 250 μs 70 μs 250 μs Yes Yes Yes Yes Yes Yes Yes Ye
 Current per module, max. Cable length shielded, max. unshielded, max. sochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics 	1 000 m 600 m 70 μs 250 μs 78 Yes Yes Yes Yes Yes Yes Yes Yes
 Current per module, max. Cable length shielded, max. unshielded, max. sochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics Potential separation channels 	1 000 m 600 m 70 μs 250 μs Yes Yes Yes Yes Yes Yes Yes Ye
 Current per module, max. Cable length shielded, max. unshielded, max. sochronous mode Execution and activation time (TCO), min. Bus cycle time (TDP), min. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics 	1 000 m 600 m 70 μs 250 μs 78 Yes Yes Yes Yes Yes Yes Yes Yes

 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 standa	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		
• SIL acc. to IEC 62061	SIL 2		
 remark on safety-oriented shutdown 	https://support.industry.siemens.com/cs/de/en/view/39198632		
product functions / security / header			
signed firmware update	No		
data integrity	No		
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:	3/12/2024 🖸		