Data sheet



SIRIUS safety relay Safety-oriented Speed monitoring 24 V DC, 45 mm overall width Screw terminal EC instantaneous: 2 NO EC delayed: 0 SC: 2 electrical NAMUR version Auto-start/manual start Basic device Maximum achievable PL according to EN 13849-1: e Maximum achievable SIL according to IEC 61508: 3

product brand name	SIRIUS
product designation	Speed monitor
design of the product	standstill and speed monitoring
General technical data	
protection class IP of the enclosure	IP20
touch protection against electrical shock	finger-safe
insulation voltage rated value	300 V
ambient temperature	
 during storage 	-20 +70 °C
during operation	0 60 °C
air pressure according to SN 31205	90 106 kPa
relative humidity during operation	10 95 %
installation altitude at height above sea level maximum	2 000 m
vibration resistance according to IEC 60068-2-6	10 55 Hz: 0.35 mm
shock resistance	8g / 10 ms
surge voltage resistance rated value	4 000 V
EMC emitted interference	EN 60947-5-1
installation environment regarding EMC	This product is suitable for Class A environments only. In household environments, this device can cause unwanted radio interference. The user is required to implement appropriate measures in this case.
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	КТ
reference code according to EN 61346-2	F
number of sensor inputs	
• 2-channel	3
1-channel or 2-channel	0
design of the cascading	none
type of the safety-related wiring of the inputs	single-channel or two-channel
product feature cross-circuit-proof	Yes
Safety Integrity Level (SIL)	
 according to IEC 61508 	3
 according to IEC 62061 	3
for delayed release circuit according to IEC 61508	SIL3
SIL Claim Limit (subsystem) according to EN 62061	3
performance level (PL)	
according to ISO 13849-1	е
for delayed release circuit according to ISO 13849-1	е
category according to EN ISO 13849-1	4
hardware fault tolerance according to IEC 61508	1
safety device type according to IEC 61508-2	Type B
PFHD with high demand rate according to IEC 62061	3.4E-9 1/h

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Switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 24 V — at 230 V • of the NC contacts of the relay outputs at AC-15 — at 24 V — at 230 V • of the NC contacts of the relay outputs at AC-15 — at 24 V — at 230 V 3 A — at 115 V — at 230 V 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA
switching capacity current of semiconductor outputs — for signaling function at DC-13 at 24 V of the NO contacts of the relay outputs at DC-13 — at 24 V of the NO contacts of the relay outputs at AC-15 — at 24 V at 230 V of the NC contacts of the relay outputs at AC-15 — at 24 V at 24 V at 230 V of the NC contacts of the relay outputs at AC-15 — at 24 V at 24 V at 24 V at 24 V at 25 C at 24 V at 25 C at 24 V at 25 C at 25 C at 26 C at 27 C at 27 C at 28 C	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs
of semiconductor outputs — for signaling function at DC-13 at 24 V of the NO contacts of the relay outputs at DC-13 — at 24 V of the NO contacts of the relay outputs at AC-15 — at 24 V at 230 V of the NC contacts of the relay outputs at AC-15 — at 24 V at 24 V of the NC contacts of the relay outputs at AC-15 — at 24 V at 24 V at 230 V of the NC contacts of the relay outputs at AC-15 — at 24 V	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs
 for signaling function at DC-13 at 24 V of the NO contacts of the relay outputs at DC-13 at 24 V of the NO contacts of the relay outputs at AC-15 at 24 V at 230 V of the NC contacts of the relay outputs at AC-15 at 24 V at 24 V 3 A of the NC contacts of the relay outputs at AC-15 at 24 V at 230 V at 24 V at 24 V at 24 V at 25 V	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs
of the NO contacts of the relay outputs at DC-13 — at 24 V	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs
- at 24 V • of the NO contacts of the relay outputs at AC-15 - at 24 V - at 230 V • of the NC contacts of the relay outputs at AC-15 - at 24 V - at 115 V - at 230 V 2 A 2 A 3 A 3 A 3 A 4 A 3 A 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs
of the NO contacts of the relay outputs at AC-15 — at 24 V	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
- at 24 V - at 230 V ■ of the NC contacts of the relay outputs at AC-15 - at 24 V - at 115 V - at 230 V 3 A 3 A 3 A 3 A 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
— at 230 V ■ of the NC contacts of the relay outputs at AC-15 — at 24 V — at 115 V — at 230 V 3 A 3 A 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
of the NC contacts of the relay outputs at AC-15 — at 24 V	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
at 24 V 3 A 3 A 3 A 4 A 230 V 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
at 24 V 3 A 3 A 3 A 4 A 230 V 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 24 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
— at 230 V 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 24 V — at 230 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 μs 75 μs 1 Hz 2 kHz
— at 230 V 2 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 230 V • of the NC contacts of the relay outputs at AC-15	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 µs 75 µs 1 Hz 2 kHz 0.02 A 2 A 3 A 3 A
	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 230 V • of the NC contacts of the relay outputs at AC-15 — at 24 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 µs 75 µs 1 Hz 2 kHz 0.02 A 2 A 3 A 3 A 3 A
thermal current of the switching element with contacts 5 A	type of failure response of the encoder Proximity switch measuring precision switching hysteresis NAMUR sensors type of voltage of the supply voltage of NAMUR sensors supply voltage of NAMUR sensors switching threshold for input current at input of NAMUR sensors • with signal <0> • for signal <1> switching threshold for input current at input of NAMUR sensors • for cable break maximum • on short circuit minimum pulse duration of NAMUR sensors minimum interpulse period of NAMUR sensors minimum adjustment range of signal frequency of NAMUR sensors Outputs switching capacity current • of semiconductor outputs — for signaling function at DC-13 at 24 V • of the NO contacts of the relay outputs at DC-13 — at 24 V • of the NO contacts of the relay outputs at AC-15 — at 230 V • of the NC contacts of the relay outputs at AC-15 — at 24 V — at 230 V • of the NC contacts of the relay outputs at AC-15 — at 24 V — at 215 V	+-2 % 6.25 % DC 8.2 V; provided by the device 1.6 mA 1.8 mA 0.15 mA 6 mA 75 µs 75 µs 1 Hz 2 kHz 0.02 A 2 A 3 A 3 A 3 A 3 A

maximum electrical endruance (operating cycles) typical electrical endruance design of the control supply voltage control supply voltage 1 at DC * rated value * rated value * rated value * at DC * rated value * rated va	<u> </u>	
mechanical service life (operating cycles) typical design of the fase in fix of short-circuit protection of the NO control of the relay outputs required Control circuit Control yes of violage of the control supply voltage operating range factor control supply voltage at 24 V operating range factor control supply voltage rated value of magnet coil • of DC installation mounting dimensions. mounting position fastening method sorew and seap-on mounting width 45 mm installation mounting dimensions. mounting position fastening method sorew and seap-on mounting width 45 mm installation mounting dimensions. mounting position fastening method sorew terminal type of electrical connection • solid • finely stranded - with core and processing type of electrical connection yes of connectable conductor cross-sections for AWG cables • solid • finely stranded - with core and processing type of connectable conductor cross-sections for AWG cables • solid • stranded - with core and processing yes of connectable conductor cross-sections for AWG cables • solid • stranded • strand	maximum	400,000
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contacts of the relay outputs required Control circuit (Centrol type of voltage of the control supply voltage Control supply voltage at at DC - rated value - at DC - rated value - at DC		
type of voltage of the control supply voltage control supply voltage 1 at DC		gL/gG: 4 A
control supply voltage 1 at DC * rated value perating range factor control supply voltage rated value of magnet coil * at DC * rated value perating range factor control supply voltage rated value of magnet coil * at DC * rated value * at DC * rated value	Control circuit/ Control	
e rated value operating range factor control supply voltage rated value of magnet coil e at DC 0.9 1.1 Installation mounting/ dimensions mounting position fastening method width 45 mm leight 105.9 mm dopth 124.3 mm Connections/ Terminals type of electrical connection • solid • finely stranded — with core end processing — with core end processing • solid • sind • siranded • stranded • stranded Product function product function • light barrier monitoring • standstill monitoring • retrective door monitoring • retrective door monitoring • retrective door monitoring • retrective door monitoring • retreative door monitoring • retrective flat interval monitoring • retrective flat interval monitoring • retrective flat flat monitoring • retrective flat flat monitoring • retrective flat flat flat flat flat flat flat flat	type of voltage of the control supply voltage	DC
operating range factor control supply voltage rated value of magnet coil at DC	control supply voltage 1 at DC	
magnet coll at DC nstallation/ mounting/ dimensions mounting position fastening method width 45 mm height depth 105.9 mm depth 124.3 mm Connections Terminals type of electrical connection • solid • finely standed — with core end processing type of connectable conductor cross-sections • solid • finely standed — with core end processing type of connectable conductor cross-sections or AWG cables • solid • stranded Pyee of connectable conductor cross-sections for AWG cables • solid • stranded • with core end processing type of connectable conductor cross-sections for AWG cables • solid • stranded • stranded Product function • light barrier monitoring • standstill monitoring • standstill monitoring • standstill monitoring • automatic start • magnetically operated switch monitoring NC-NO • rotation speed monitoring • laser scanner monitoring • laser scanner monitoring • monitored start-up • light array monitoring • magnetically operated switch monitoring NC-NC • EMERGENCY OFF function • sustability for use • monitoring of non-floating sensors • monitoring of non-floating se	rated value	24 V
mounting position any fastening method screw and snap-on mounting method width 45 mm height 105.9 mm depth 124.3 mm 105.9 mm depth 105.9 m		
mounting position any fastening method screw and snap-on mounting width 45 mm height 105.9 mm depth 124.3 mm Connections/ Terminals Typo of electrical connection screw terminal type of connectable conductor cross-sections • solid • finely stranded — with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1,5 mm²) Typo of connectable conductor cross-sections for AWG cables • solid • stranded — with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1,5 mm²) Typo of connectable conductor cross-sections for AWG cables • solid • stranded • 2x (20 14) Product function Product function • light barrier monitoring • standstill monitoring • yes • standed yes • stranded yes • yes • yes • monitoring of stranded yes • yes • stranded yes • yes • yes • stranded yes •		0.9 1.1
fastening method width 45 mm height 105.9 mm depth 124.3 mm Connections/ Terminals Type of electrical connection type of connectable conductor cross-sections • solid 0.5 4 mm² • finely stranded — with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) Type of connectable conductor cross-sections for AWG cables • solid 2x (20 14) • stranded — with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) Type of connectable conductor cross-sections for AWG cables • solid 2x (20 14) • stranded Product Function product function • light barrier monitoring No No standstill monitoring Yes 1 automatic start Yes 1 automa	Installation/ mounting/ dimensions	
width height 105.9 mm depth 124.3 mm Connections/ Terminals type of electrical connection type of connectable conductor cross-sections	mounting position	any
height depth 124.3 mm Connections/Terminals	fastening method	screw and snap-on mounting
depth	width	45 mm
type of electrical connection type of connectable conductor cross-sections	height	105.9 mm
type of electrical connectable conductor cross-sections	depth	124.3 mm
type of connectable conductor cross-sections	Connections/ Terminals	
• solid • finely stranded — with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) type of connectable conductor cross-sections for AWG cables • solid • stranded • strandede	type of electrical connection	screw terminal
finely stranded	type of connectable conductor cross-sections	
type of connectable conductor cross-sections for AWG cables solid stranded stranded product Function product function Standstill monitoring Yes	• solid	0.5 4 mm²
type of connectable conductor cross-sections for AWG cables • solid • stranded • stranded • stranded • stranded Product Function Solid	 finely stranded 	
estinated 2x (20 14) Product Function product function light barrier monitoring Yes	 — with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
• stranded 2x (20 14) Product Function Product function • light barrier monitoring Yes • protective door monitoring Yes • automatic start Yes • magnetically operated switch monitoring NC-NO No • rotation speed monitoring No-NO No • rotation speed monitoring No-NO No • rotation speed monitoring No-NO No • monitored start-up Yes • light array monitoring NO-NO No • magnetically operated switch monitoring NC-NO No • EMERGENCY OFF function Yes • pressure-sensitive mat monitoring NO-NO No suitability for interaction press control No suitability for use • monitoring of floating sensors Yes • monitoring of floating sensors No • safety switch Yes • position switch monitoring No • valve monitoring No • valve monitoring No • valve monitoring No • safety-related circuits Yes Certificates/ approvals certificates of suitability • TÜV (German technical inspectorate) certificate EN ISO 13849, EN 62061, IEC 61508		
Product Function product function ilight barrier monitoring standstill monitoring standstill monitoring protective door monitoring automatic start magnetically operated switch monitoring NC-NO rotation speed monitoring laser scanner monitoring laser scanner monitoring laser scanner monitoring monitored start-up light array monitoring magnetically operated switch monitoring NC-NC magnetically operated switch monitoring monitoring of floating sensors monitoring of floating sensors monitoring of floating sensors monitoring of floating sensors monitoring of non-floating non-floating monitoring mo	• solid	2x (20 14)
product function light barrier monitoring	• stranded	2x (20 14)
 light barrier monitoring standstill monitoring yes protective door monitoring Yes automatic start magnetically operated switch monitoring NC-NO no rotation speed monitoring laser scanner monitoring monitored start-up light array monitoring monitored start-up light array monitoring monitored start-up EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control suitability for interaction press control suitability for use monitoring of floating sensors e monitoring of non-floating sensors safety switch position switch monitoring e EMERGENCY-OFF circuit monitoring valve m	Product Function	
standstill monitoring protective door monitoring automatic start magnetically operated switch monitoring NC-NO rotation speed monitoring laser scanner monitoring monitored start-up light array monitoring magnetically operated switch monitoring NC-NO light array monitoring magnetically operated switch monitoring NC-NC light array monitoring magnetically operated switch monitoring NC-NC EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control No suitability for use monitoring of floating sensors monitoring of non-floating sensors monitoring of non-floating sensors safety switch position switch monitoring Pes EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring valve monitoring tatclie sensor monitoring no safety-related circuits Certificate of suitability FÜV (German technical inspectorate) certificate Fül ISO 13849, EN 62061, IEC 61508	product function	
protective door monitoring automatic start au	 light barrier monitoring 	No
automatic start magnetically operated switch monitoring NC-NO rotation speed monitoring laser scanner monitoring laser scanner monitoring light array monitoring monitored start-up light array monitoring magnetically operated switch monitoring NC-NC light array monitoring magnetically operated switch monitoring NC-NC EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control No suitability for use monitoring of floating sensors monitoring of non-floating sensors monitoring of non-floating sensors safety switch position switch monitoring Yes EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring no safety-related circuits Certificates/ approvals certificate of suitability EN ISO 13849, EN 62061, IEC 61508 TÜV (German technical inspectorate) certificate Figure 1 No No No EN ISO 13849, EN 62061, IEC 61508 Yes	 standstill monitoring 	Yes
 magnetically operated switch monitoring NC-NO rotation speed monitoring laser scanner monitoring monitored start-up light array monitoring magnetically operated switch monitoring NC-NC EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control suitability for use monitoring of floating sensors monitoring of non-floating sensors safety switch position switch monitoring EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring valve monitoring monagnetically operated switch monitoring magnetically operated switch monitoring safety-related circuits certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes 	 protective door monitoring 	Yes
Italian speed monitoring Italian spe	automatic start	Yes
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 monitored start-up light array monitoring magnetically operated switch monitoring NC-NC EMERGENCY OFF function pressure-sensitive mat monitoring no suitability for interaction press control monitoring of floating sensors monitoring of non-floating sensors monitoring of non-floating sensors safety switch position switch monitoring EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring tactile sensor monitoring magnetically operated switch monitoring magnetically operated switch monitoring safety-related circuits certificates/approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes 	 rotation speed monitoring 	Yes
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magnetically operated switch monitoring NC-NC EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control No suitability for use monitoring of floating sensors monitoring of non-floating sensors monitoring of non-floating sensors safety switch position switch monitoring Yes EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring tactile sensor monitoring no magnetically operated switch monitoring No safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes	 monitored start-up 	Yes
EMERGENCY OFF function pressure-sensitive mat monitoring No suitability for interaction press control No suitability for use emonitoring of floating sensors monitoring of non-floating sensors esafety switch position switch monitoring EMERGENCY-OFF circuit monitoring valve monitoring valve monitoring etactile sensor monitoring magnetically operated switch monitoring safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes	 light array monitoring 	No
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suitability for interaction press control suitability for use • monitoring of floating sensors • monitoring of non-floating sensors • safety switch • position switch monitoring • EMERGENCY-OFF circuit monitoring • valve monitoring • tactile sensor monitoring • magnetically operated switch monitoring • safety-related circuits Certificates/ approvals certificate of suitability • TÜV (German technical inspectorate) certificate No No No EN ISO 13849, EN 62061, IEC 61508 Yes	 EMERGENCY OFF function 	Yes
suitability for use • monitoring of floating sensors • monitoring of non-floating sensors • safety switch • position switch monitoring • EMERGENCY-OFF circuit monitoring • valve monitoring • tactile sensor monitoring • magnetically operated switch monitoring • safety-related circuits Certificates/ approvals certificate of suitability • TÜV (German technical inspectorate) certificate Yes Yes Yes Yes No No No EN ISO 13849, EN 62061, IEC 61508 Yes	 pressure-sensitive mat monitoring 	No
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 position switch monitoring EMERGENCY-OFF circuit monitoring valve monitoring tactile sensor monitoring magnetically operated switch monitoring safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate EN ISO 13849, EN 62061, IEC 61508 Yes	 monitoring of non-floating sensors 	No
EMERGENCY-OFF circuit monitoring valve monitoring tactile sensor monitoring magnetically operated switch monitoring safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate No No No EN ISO 13849, EN 62061, IEC 61508 Yes	safety switch	Yes
 valve monitoring tactile sensor monitoring magnetically operated switch monitoring safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate EN ISO 13849, EN 62061, IEC 61508 Yes	 position switch monitoring 	Yes
 tactile sensor monitoring magnetically operated switch monitoring safety-related circuits Yes Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes 	 EMERGENCY-OFF circuit monitoring 	No
 magnetically operated switch monitoring safety-related circuits Certificates/ approvals certificate of suitability TÜV (German technical inspectorate) certificate Yes 	 valve monitoring 	No
 ◆ safety-related circuits	• tactile sensor monitoring	No
Certificates/ approvals certificate of suitability • TÜV (German technical inspectorate) certificate EN ISO 13849, EN 62061, IEC 61508 Yes	 magnetically operated switch monitoring 	No
certificate of suitability EN ISO 13849, EN 62061, IEC 61508 ◆ TÜV (German technical inspectorate) certificate Yes	safety-related circuits	Yes
certificate of suitability EN ISO 13849, EN 62061, IEC 61508 ◆ TÜV (German technical inspectorate) certificate Yes	Certificates/ approvals	
• TÜV (German technical inspectorate) certificate Yes	certificate of suitability	EN ISO 13849, EN 62061, IEC 61508
	-	
BG BIA approval No		No
General Product Approval		













Functional Saftey

Test Certificates

other

Railway

Environment



Special Test Certific-

Confirmation

Confirmation

Environmental Con**firmations**

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3TK2810-1BA41-0AA0

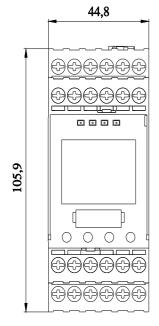
Cax online generator

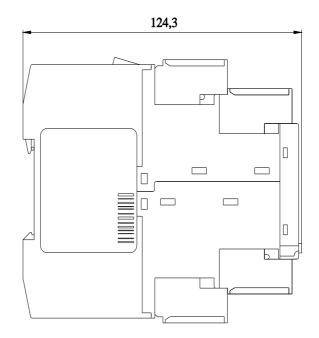
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TK2810-1BA41-0AA0

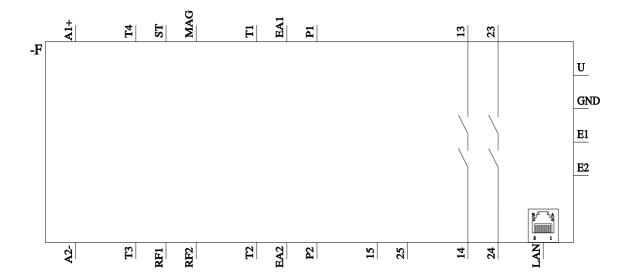
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3TK2810-1BA41-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TK2810-1BA41-0AA0&lang=en







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