SIEMENS

Data sheet 3RV2021-0FA10



Circuit breaker size S0 for motor protection, Class 10 A-release 0.35...0.5 A Short-circuit release 6.5 A Screw terminal Standard switching capacity



product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	SO
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	5.5 W
 at AC in hot operating state per pole 	1.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
of the main contacts typical	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	0.35 0.5 A
operating voltage	
• rated value	20 690 V
 at AC-3 rated value maximum 	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz

	0.54
operational current rated value	0.5 A
operational current	
 at AC-3 at 400 V rated value 	0.5 A
at AC-3e at 400 V rated value	0.5 A
operating power	
• at AC-3	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.1 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.2 kW
• at AC-3e	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.1 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.2 kW
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
·	No
ground fault detection phase failure detection	
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
at AC at 240 V rated value	100 kA
 at AC at 400 V rated value 	100 kA
 at AC at 500 V rated value 	100 kA
at AC at 690 V rated value	100 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	100 kA
• at 400 V rated value	100 kA
• at 500 V rated value	100 kA
at 690 V rated value	100 kA
response value current of instantaneous short-circuit trip unit	6.5 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	0.5 A
at 600 V rated value	0.5 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit	
protection of the main circuit	
• at 690 V	gL/gG 4 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	0
with side-by-side mounting at the side	0 mm
· · · · · · · · · · · · · · · · · · ·	O THILL
• for grounded parts at 400 V	20
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm

downwards	 for live parts at 400 V 	
	— downwards	30 mm
for grounded parts at 500 V downwards	— upwards	30 mm
downwards	— at the side	9 mm
downwards	 for grounded parts at 500 V 	
at the side • for live parts at 500 V downwards upwards at the side • for grounded parts at 800 V downwards upwards upwards upwards downwards upwards downwards upwards downwards the side side forwards the side forwards the side forwards the side		30 mm
	— upwards	30 mm
	— at the side	9 mm
	• for live parts at 500 V	
- at the side • for grounded parts at 690 V - downwards - upwards - backwards - at the side - forwards - for live parts at 690 V - downwards - for live parts at 690 V - downwards - for live parts at 690 V - downwards - for live parts at 690 V - downwards - backwards - upwards - backwards - upwards - backwards - onm - browards - onm - forwards - onm - forwards - onm - forwards - for man contacts Type of electrical connection - for main current circuit screw-type terminals - solid or stranded - for firm for detectrical connectors for main current circuit - for main contacts - solid or stranded - firm firm for main contacts - solid or stranded - firm firm for main contacts - for firm firm firm firm firm firm firm fir		30 mm
• for grounded parts at 880 V — downwards — pywards — backwards — on the side — forwards • for live parts at 890 V — downwards • for live parts at 890 V — downwards • for live parts at 890 V — downwards — upwards — backwards — upwards — backwards — onwards — backwards — onwards — on mm — at the side — so mm — at the side — forwards — on mm — on the side — forwards — on mm Connections/ Terminals Type of electrical connection • for main current circuit Top and bottom circuit Type of connectable conductor cross-sections • for main contacts — sold or stranded — finely standed with core end processing • for MVS cables for main contacts — sold or stranded — for main contacts • for main contacts with screw-type terminals design of the screwdriver shaft size of the screwdriver shaft size of the screwdriver shaft besign of the thread of the connection screw • for main contacts — safety-related switching on • s	— upwards	30 mm
- downwards - upwards - backwards - at the side - for live parts at 800 V - downwards - backwards - upwards - for live parts at 800 V - downwards - backwards - upwards - backwards - upwards - backwards - on m - at the side - backwards - on m - on the side - backwards - for main current circuit Top and bottom ConnectIons Terminals Type of detertical connection - for main current circuit - rangement of detertical connectors for main current circuit - solid or stranded - finely stranded with core and processing - for AWG cables for main contacts - solid or stranded - finely stranded with core and processing - for AWG cables for main contacts - for main contacts with scree-type terminals - for main contacts with scree-type terminals - for main contacts with scree-type terminals - solid or stranded - finely stranded with scree-type terminals - for main contacts with scree-type terminals - for product function suitable for safety function - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - with flight demand rate according to SN 31920 - word flight demand rate according to SN 31920 - solid-product street with screen and screen and screen and scree	— at the side	9 mm
- upwards	• for grounded parts at 690 V	
- backwards - at the side - drowards - for live parts at 690 V - downwards - backwards - upwards - backwards - upwards - backwards - on mm - at the side - backwards - on mm - on the side - forwards - on mm	— downwards	50 mm
- at the side - forwards 0 mm - forwards 50 mm - downwards 50 mm - upwards 0 mm - backwards 0 mm - at the side 30 mm - at the side 30 mm - orwards 0 mm - at the side 30 mm - forwards 0 mm - orwards 0 mm - forwards 0 mm - forwards 0 mm - forwards 0 mm - for main current circuit 50 mm - for main current circuit 70 mm - for main conductor cross-sections 6 mm - for main conductor cross-sections 6 mm - for main conductor cross-sections 7 mm - for main conductor cross-sections 8 mm - for main conductor cross-sections 9 mm - for main conductor cross-sections 10 mm - for proof test interval or service life according to EC 10 a mm - for proof test interval or service life according to EC 10 a mm - for proof test interval or service life according to EC 10 a mm - for proof test interval or service life acco	— upwards	50 mm
• for live parts at 680 V - downwards - upwards - backwards - at the side - backwards - forwards - forwards - the side - forwards - formain current circuit - for main current circuit - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts - for main contacts with screw-type terminals - for main contacts with screw-type terminals - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts - for main contacts with screw-type terminals - for main contacts with screw-type terminals - for have contacts - for main contacts with screw-type terminals - for have contacts - for main contacts with screw-type terminals - for finely stranded with core end processing - for finely stranded with some stranded - for the screwdriver tip - design of the screwdriver tip - design of the thread of the connection screw - for main contacts - for main contacts - MA - Strander Strander - for main contacts - safety-related switching on	— backwards	0 mm
of rive parts at 680 V odwnwards ourwards one obsclwards one other	— at the side	30 mm
- downwards 50 mm 50 mm 50 mm 60 mm	— forwards	0 mm
- upwards	• for live parts at 690 V	
- backwards - at the side - forwards Connections/ Terminals type of electrical connection • for main current circuit trype of connectable conductor cross-sections • for main contacts - solid or stranded - finely stranded with core end processing • for AWC cables for main contacts 1 for main contacts • for main contacts - solid or stranded • for main contacts - for fawC cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 4x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 4x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 4x (— downwards	50 mm
- at the side — forwards 0 mm O mm Connections/Terminals type of electrical connection • for main current circuit screw-type terminals arrangement of electrical connectors for main current circuit Top and bottom circuit Top and	— upwards	50 mm
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • for awin contacts • for awin contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of screwdriver tip elosign of the thread of the connection screw • for main contacts * for main contacts * M4 * Safety rolated data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF Yes service life maximum test wear-related service life necessary • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 * With low demand rate according to SN 31920 * With low demand rate according to SN 31920 * With low demand rate according to SN 31920 * With low demand rate according to SN 31920 * With low demand rate according to SN 31920 * With low demand rate according to SN 31920 * Ow * For SM 31849 * device type according to ISO 13849-2 necessary * IEC 61508 * safety device type according to IEC 61508-2 * Type A * Ty value * for proof test interval or service life according to IEC * 10 a	— backwards	0 mm
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • for main contacts 10	— at the side	30 mm
type of electrical connection • for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing — so rawly cables for main contacts • for main contacts — solid or stranded — finely stranded with core end processing — so rawly cables for main contacts • for main contacts • for main contacts • for main contacts • for main contacts with screw-type terminals design of screwdriver shaft — Diameter 5 to 6 mm size of the screwdriver tip — Pozidriv size 2 design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF — yes service life maximum — 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 swith ligh demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	— forwards	0 mm
• for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing — for AWG cables for main contacts • for AWG cables for main contacts • for AWG cables for main contacts • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for main contacts with screw-type terminals design of screwdriver shaft bliameter 5 to 6 mm size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function suitability for use • safety-related switching OFF Yes service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 # with high demand rate according to SN 31920 # with high demand rate according to SN 31920 # So Wall with high demand rate according to SN 31920 # So Wall with ligh demand rate according to SN 31920 ## So FIT 3 overdimensioning according to ISO 13849-1 * overdimensioning according to ISO 13849-2 necessary IEC 61508 ## Safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	Connections/ Terminals	
arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) • for AWG cables for main contacts 2x (16 12), 2x (14 8) tightening forque • for main contacts with screw-type terminals design of screwdriver shaft Diameter 5 to 6 mm size of the screwdriver tip Pozidriv size 2 design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF Yes service life maximum 10 a test wear-related switche life necessary yes proportion of dangerous failures • with low demand rate according to SN 31920 with high demand rate according to SN 31920 with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary Fes IEC 61508 safety device type according to IEC 61508-2 Ti value • for proof test interval or service life according to IEC 10 a	type of electrical connection	
type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screw-driver shaft Diameter 5 to 6 mm size of the screw-driver tip Pozidriv size 2 design of the thread of the connection screw • for main contacts M4 Safety rolated data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 soverdimensioning according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Ti value • for proof test interval or service life according to IEC 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²), 2x (2.5 10 mm²), 2x (15 10 mm²), 2x (15 10 mm²), 2x (15 10 mm²	for main current circuit	screw-type terminals
type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) • for AWG cables for main contacts 2x (16 12), 2x (14 8) tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function safety-related switching OFF yes service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 SO 13849 device type according to ISO 13849-1 overdimensioning according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a		Top and bottom
• for main contacts — solid or stranded — finely stranded with core end processing — to AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (16 12), 2x (14 8) tightening torque • for main contacts with screw-type terminals design of screwdriver shaft Diameter 5 to 6 mm size of the screwdriver tip Pozidriv size 2 design of the thread of the connection screw • for main contacts **M4* **Safety related data* product function suitable for safety function **safety-related switching on • safety-related switching of Yes suitability for use • safety-related switching OFF **service life maximum* 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 for profit est interval or service life according to IEC Type A T1 value • for proof test interval or service life according to IEC		
solid or stranded		
- finely stranded with core end processing • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function safety-related switching on • safety-related switching on • safety-related switching OFF service life maximum 10 a test wear-related service life necessary yes proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 SO 000 failure rate [FIT] with low demand rate according to SN 31920 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a		0x/4 0 5 mm²\ 0x/0 5 40 mm²\
tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function • safety-related switching on • safety-related switching OFF service life maximum 10 a test war-related service life necessary • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to IEC 61508-2 T1 value • for main contacts 2 2.5 N·m Diameter 5 to 6 mm 2 2.5 N·m Diameter 5 to 6 mm 10 a	— Solid of Stranded	2X (1 2.5 mm²), 2X (2.5 10 mm²)
tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function • safety-related switching on • safety-related switching OFF service life maximum 10 a test wear-related service life necessary yes • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate (FIT) at the sum of t	finally atranded with some and processing	2) (4
• for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF yes service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 50 % B10 value with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate of the formula of the screen o		
design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts	
size of the screwdriver tip design of the thread of the connection screw of or main contacts M4 Safety related data product function suitable for safety function suitability for use osafety-related switching on safety-related switching OFF yes service life maximum 10 a test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value of or proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque	2x (16 12), 2x (14 8)
design of the thread of the connection screw • for main contacts M4 Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals	2x (16 12), 2x (14 8) 2 2.5 N·m
• for main contacts Safety related data product function suitable for safety function Suitability for use • safety-related switching on • safety-related switching OFF Service life maximum 10 a test wear-related service life necessary Proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC Type A	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm
product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 suitability for use • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC To yes Yes	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm
product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF Service life maximum 10 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 Solution of the street of the same of the street of the same of the street of the same of the same of the same of the same of the safety of	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2
suitability for use • safety-related switching on • safety-related switching OFF Service life maximum 10 a test wear-related service life necessary Proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC No No No No No No No No No N	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2
safety-related switching on safety-related switching OFF Yes service life maximum 10 a test wear-related service life necessary Yes proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4
safety-related switching OFF service life maximum 10 a test wear-related service life necessary Yes proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4
service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes
test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes
 with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value for proof test interval or service life according to IEC 10 a 	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF service life maximum	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a
with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a
B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes
31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 %
device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw for main contacts Safety related data product function suitable for safety function suitability for use safety-related switching on safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 %
overdimensioning according to ISO 13849-2 necessary IEC 61508 safety device type according to IEC 61508-2 Type A T1 value • for proof test interval or service life according to IEC 10 a	for AWG cables for main contacts tightening torque of main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw of main contacts Safety related data product function suitable for safety function suitability for use osafety-related switching on osafety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures owith low demand rate according to SN 31920 owith high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000
IEC 61508 safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	• for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000
safety device type according to IEC 61508-2 T1 value • for proof test interval or service life according to IEC 10 a	• for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
T1 value • for proof test interval or service life according to IEC 10 a	• for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
• for proof test interval or service life according to IEC 10 a	• for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000 50 FIT
	• for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary IEC 61508	2x (16 12), 2x (14 8) 2 2.5 N·m Diameter 5 to 6 mm Pozidriv size 2 M4 Yes No Yes 10 a Yes 40 % 50 % 5 000 50 FIT

IP20
finger-safe, for vertical contact from the front
Handle

General Product Approval





Confirmation





<u>KC</u>

General Product Approval

For use in hazardous locations

Test Certificates

Marine / Shipping







Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report



Marine / Shipping











Miscellaneous

other

Railway

Environment

Confirmation



Special Test Certificate

Confirmation



Siemens **EcoTech**



Environment

Environmental Confirmations

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=3RV2021-0FA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-0FA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0FA10

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

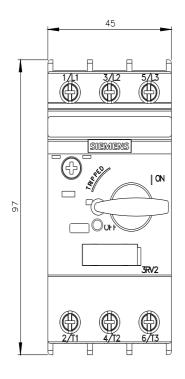
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-0FA10&lang=en

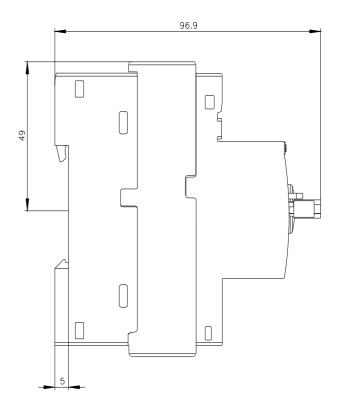
Characteristic: Tripping characteristics, I2t, Let-through current

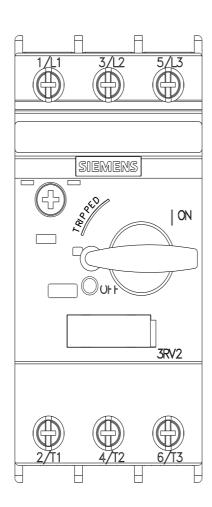
https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0FA10/char

Further characteristics (e.g. electrical endurance, switching frequency)

3RV2021-0FA10&objecttype=14&gridview=view1









last modified: 4/12/2024 🖸