3RA2120-1JA24-0AK6

Data sheet



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S0, 7. . .10A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, TYPE OF ASSIGNMENT 2,IQ = 150KA (ALSO FULFILLS TYPE OF ASSIGNMENT 1) 1NO+1NC (CONTACTOR)

product brand name	SIRIUS
product designation	non-fused load feeders 3RA2
design of the product	direct starter
manufacturer's article number	
 of the supplied contactor 	3RT2024-1AK60
 of the supplied circuit-breakers 	3RV2021-1JA10
 of the supplied link module 	3RA2921-1AA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance acc. to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	10 000 000
type of assignment	2
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
ambient temperature	
during operation	-20 +60 °C
during storage	-50 +80 °C
 during transport 	-50 +80 °C
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	7 10 A
operating voltage	
rated value	690 V
at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current at AC-3 at 400 V rated value	8.5 A
operating power at AC-3	
at 400 V rated valueat 500 V rated value	4 000 W

Control supply voltage at AC • at 60 Hz rated value sparent holding power of magnet coil at AC sty-A Protective and monitoring functions trip class design of the overload release response value current of instantaneous short-circuit trip tint LUCSA ratings full-load current (FLA) for 3-phase AC motor • at 80 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • of 5-phase AC motor — at 101/120 V rated value • of 3-phase AC motor — at 200/230 V rated value • at 400 AV rated value • at 400 AV rated value • at 500 V rated value • at 400 AV rated value — at 400/480 V rated value — at 575/600 V rated value — at 575/600 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value — at 575/600 V rated value • at 600	at 690 V rated value	7 500 W
control supply voltage at AC at 50 Hz rated value at 0014z rated value paparent holding power of magnet coil at AC protective and monitoring functions trip class clessing of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings full-load current (FLA) for 3-phase AC motor at 40 V rated value at 500 V rated value at 200 v rated value at 40480 V rated value at 4050 V rated value at 500 V rated value at 4050 V rated value at 4050 V rated value at 500 V rated value at 4050 V rated value at 500 V rated	Control circuit/ Control	
a till 50 Hz rated value a till 60 Hz rated value apparent holding power of magnet coll at AC apparent holding power of magnet coll at AC brotective and monitoring functions trip class CLASS 10 themal (bimetallic) themal		
apparent holding power of magnet coil at AC Protective and monitoring functions trip class design of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 7.92 A at 800 V rated value 9.19 A yielded mechanical performance [hp] of or single-phase AC motor —at 101/120 V rated value 9.19 A yielded mechanical performance [hp] of or single-phase AC motor —at 200/230 V rated value 9.15 hp at 220/230 V rated value 9.15 hp at 220/230 V rated value 9.15 hp at 220/230 V rated value 9.15 hp at 600 v rated value 9.15 hp short-circuit protection product function short circuit protection design of the short-circuit turrent (hg) 9.16 the short-circuit turrent (hg) 9.17 the product function short circuit current (hg) 9.18 the short-circuit turrent (hg) 9.18 the short-circuit turrent (hg) 9.19 the short-circuit turrent (hg) 9.19 the short-circuit turrent (hg) 9.19 the short-circuit turrent (hg) 9.10 the short-circuit turrent (hg) 9		110 V
trip class trip class design of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings Tull-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 480 V rated value • at 480 V rated value — at 230 V rated value — at 230 V rated value — at 202030 V rated value — at 202030 V rated value — at 202030 V rated value — at 2000280 V rated value — at 460480 V rated value — at 460480 V rated value — at 576000 V rated value — at 400480 V cac to IEC 60947-4-1 rated value • at 400 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to	at 60 Hz rated value	120 V
trip class trip class design of the overload release response value current of instantaneous short-circuit trip unit ULCSA ratings Tull-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 480 V rated value • at 480 V rated value — at 230 V rated value — at 230 V rated value — at 202030 V rated value — at 202030 V rated value — at 202030 V rated value — at 2000280 V rated value — at 460480 V rated value — at 460480 V rated value — at 576000 V rated value — at 400480 V cac to IEC 60947-4-1 rated value • at 400 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 500 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to IEC 60947-4-1 rated value • at 600 V acc, to	apparent holding power of magnet coil at AC	8.5 V·A
trip class design of the overload release response value current of instantaneous short-circuit trip unit DUGSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value • at 600 V rated value • at 600 V rated value • for single-phase AC motor — at 100/20 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • at 200/208 V rated value • at 200/208 V rated value • at 300 V rated value • at 300 V rated value • at 300 V rated value • at 375/600 V rated value — at 460/400 V rated value — at 660/400 V rated value — at 675/600 V rated value — at 680 V acc. to IEC 60047-4-1 rated value • at 680 V acc. to IEC 60047-4-1 rated value • at 680 V acc. to IEC 60047-4-1 rated value • at 69		
design of the overload release response value current of instantaneous short-circuit trip will DUCSA ratings (full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 480 V rated value — at 230 V rated value — at 230 V rated value — at 220 V rated value — at 2202230 V rated value — at 2202230 V rated value — at 2202230 V rated value — at 2702280 V rated value — at 2702280 V rated value — at 2702280 V rated value — at 37,860 V rated value — at 57,860 V rated value — at 61,860 V rated value — at 7,5 hp Short-circuit protection product function short circuit protection design of the short-circuit current (Iq) • at 690 V acc. to 1EC 60947-4-1 rated value • at 400 V acc. to 1EC 60947-4-1 rated value • at 4500 V acc. to 1EC 60947-4-1 rated value • at 400 V acc. to 1EC 60947-4-1 rated value • at 500 V acc. to 1EC 60947-4-1 rated value • at 600 V acc. to 1EC 60947-4-1 rated value • at 600 V acc. to 1EC 60947-4-1 rated value • at 600 V a		CLASS 10
ULICSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	design of the overload release	thermal (bimetallic)
full-load current (FLA) for 3-phase AC motor at 480 V rated value 7.92 A at 600 V rated value 9.19 A yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value — at 220 V rated value — at 220 V rated value — at 220/230 V rated value — at 575/500 V rated value — at 680 V rated value — at 680 V acc. to IEC 60947-4-1 rated value at 680 V acc. to IEC 60947-4-1 rated value at 400 V acc. to IEC 60947-4-1 rated value at 400 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value 153 000 A at 500 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V acc. to IEC 60947-4-1 rated value at 600 V ac	response value current of instantaneous short-circuit trip	
* at 480 V rated value	UL/CSA ratings	
* at 480 V rated value	full-load current (FLA) for 3-phase AC motor	
violded mechanical performance [hp] • for single-phase AC motor		7.92 A
• for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value	at 600 V rated value	9.19 A
at 1101/20 V rated value	yielded mechanical performance [hp]	
■ at 230 V rated value ■ for 3-phase AC motor ■ at 200/208 V rated value ■ at 220/230 V rated value ■ at 220/230 V rated value ■ at 460/480 V rated value ■ at 575/600 V rated value To be short-circuit protection product function short circuit protection design of the short-circuit trip ■ at 690 V acc. to IEC 60947-4-1 rated value ■ at 400 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ at 500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-1 rated value ■ 5500 V acc. to IEC 60947-4-	 for single-phase AC motor 	
of or 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value	 — at 110/120 V rated value 	0.5 hp
- at 200/208 V rated value 3 hp 4 1200/203 V rated value 3 hp 5 1	— at 230 V rated value	1.5 hp
- at 220/230 V rated value 5 hp - at 460/480 V rated value 5 hp 7.5 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit current (tq) • at 690 V acc. to IEC 60947-4.1 rated value 42 000 A • at 400 V acc. to IEC 60947-4.1 rated value 42 000 A installation/mounting/dimensions mounting position vertical fastening method 5 screw and snap-on mounting onto 35 mm standard mounting rail height 193.1 mm width 45 mm depth 97.1 mm required spacing • for grounded parts - for grounded parts - for wards 0 mm - at the side 9 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 9 mm - downwards 10 mm - at the side 9 mm - downwards 10 mm - the side 9 mm - downwards 10 mm - pupwards 30 mm - at the side 9 mm - downwards 10 mm - for proventing for main current circuit type of electrical connection for main current circuit type of connectable conductor cross-sections - for main contacts stranded 1 10 mm², 2x (2.5 6 mm²) - at AWG cables for main contacts finely stranded with core end processing	• for 3-phase AC motor	
- at 220/230 V rated value 5 hp - at 460/480 V rated value 5 hp 7.5 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit current (tq) • at 690 V acc. to IEC 60947-4.1 rated value 42 000 A • at 400 V acc. to IEC 60947-4.1 rated value 42 000 A installation/mounting/dimensions mounting position vertical fastening method 5 screw and snap-on mounting onto 35 mm standard mounting rail height 193.1 mm width 45 mm depth 97.1 mm required spacing • for grounded parts - for grounded parts - for wards 0 mm - at the side 9 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 9 mm - downwards 10 mm - at the side 9 mm - downwards 10 mm - the side 9 mm - downwards 10 mm - pupwards 30 mm - at the side 9 mm - downwards 10 mm - for proventing for main current circuit type of electrical connection for main current circuit type of connectable conductor cross-sections - for main contacts stranded 1 10 mm², 2x (2.5 6 mm²) - at AWG cables for main contacts finely stranded with core end processing	— at 200/208 V rated value	2 hp
Short-circuit protection product function short circuit protection design of the short-circuit trip at 8500 V acc. to IEC 60947-4-1 rated value at 400 V acc. to IEC 60947-4-1 rated value at 5300 V acc. to IEC 60947-4-1 rated value at 5300 V acc. to IEC 60947-4-1 rated value at 5300 V acc. to IEC 60947-4-1 rated value at 5300 V acc. to IEC 60947-4-1 rated value be at 500 V acc. to IEC 60947-4-1 rated value at 5300 V acc. to IEC 60947-4-1 rated value vertical fastening method fastening method fastening method sorew and snap-on mounting onto 35 mm standard mounting rail height width depth 97.1 mm required spacing of or grounded parts - forwards - backwards - upwards - at the side - downwards of or live parts - forwards - backwards - upwards - downwards of or live parts - downwards - upwards - at the side - downwards - upwards - at me side - downwards - upwards - at me side - downwards - upwards - at me side - downwards - upwards - upwar	— at 220/230 V rated value	3 hp
Short-circuit protection Product function short circuit protection design of the short-circuit turp magnetic	— at 460/480 V rated value	5 hp
product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 690 V acc. to IEC 60947-4-1 rated value • at 400 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 600 V acc. to IEC 60947-4-1 rated value • a	— at 575/600 V rated value	7.5 hp
design of the short-circuit trip conditional short-circuit current (Iq) • at 690 V acc. to IEC 60947-4-1 rated value 153 000 A • at 400 V acc. to IEC 60947-4-1 rated value 42 000 A • at 500 V acc. to IEC 60947-4-1 rated value 42 000 A Installation/ mounting/ dimensions vertical fastening method screw and snap-on mounting onto 35 mm standard mounting rail height 193.1 mm width 45 mm depth 7.1 mm required spacing • for grounded parts 10 mm - backwards 0 mm - downwards 30 mm - at the side 9 mm - downwards 10 mm • for live parts - forwards 10 mm • for main contacts 10 mm • downwards	Short-circuit protection	
conditional short-circuit current (lq) • at 690 V acc. to IEC 60947-4-1 rated value • at 400 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value • at 500 V acc. to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method • screw and snap-on mounting onto 35 mm standard mounting rail • height • standard mounting rail • feight • for mounting spacing • for grounded parts — forwards — backwards — on mm — at the side — downwards • for live parts — forwards • for live parts — forwards — backwards — upwards • for live parts — forwards — to mm • for live parts — forwards — upwards — at the side — downwards — upwards — at the side — downwards — upwards — at the side — downwards — to mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing 1 6 mm²	product function short circuit protection	Yes
at 690 V acc. to IEC 60947-4-1 rated value at 400 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value 42 000 A Installation/ mounting/ dimensions mounting position fastening method height 193.1 mm width 45 mm depth 97.1 mm required spacing for grounded parts forwards upwards at the side downwards for live parts forwards for live parts forwards upwards of orlive parts forwards forwards forwards of mile parts forwards of mile parts forwards upwards of orlive parts forwards of mm solutions forwards of mm solutions forwards of mm backwards of mm at the side backwards of mm of orwards of orlive parts forwards of ormains forwards of mm solutions formains type of electrical connection for main current circuit type of connectable conductor cross-sections of main contacts stranded at AWG cables for main contacts finely stranded with core end processing at 53000 A 42 000 A 153 000 A 42 000 A 153 000 A 42 000 A 153 000 A 42 000 A 100 A 1	design of the short-circuit trip	magnetic
at 400 V acc. to IEC 60947-4-1 rated value at 500 V acc. to IEC 60947-4-1 rated value to at 500 V acc. to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method screw and snap-on mounting onto 35 mm standard mounting rail height 193.1 mm width 45 mm depth 71.1 mm required spacing for grounded parts - forwards - backwards - upwards - at the side - downwards - for live parts - forwards - backwards - backwards - backwards - of mm - downwards - at the side - downwards - backwards - downwards - at the side - at Maccalon connection for main current circuit type of connectable conductor cross-sections for main contacts stranded - at AWG cables for main contacts finely stranded with core end processing 1 10 mm², 2x (2.5 6 mm²) - 1 6 mm² 1 6 mm²	conditional short-circuit current (Iq)	
at 500 V acc. to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method fastening method height vertical 193.1 mm vidth 45 mm depth required spacing for grounded parts - forwards - upwards - at the side - downwards for filve parts - forwards - backwards o mm 10 mm for live parts - forwards - upwards - at the side - downwards - upwards - at the side - forwards - to mm 10 mm for live parts - to main contacts - to main contacts stranded o at AWG cables for main contacts finely stranded with core end processing vertical	 at 690 V acc. to IEC 60947-4-1 rated value 	4 000 A
mounting position fastening method height width depth 97.1 mm required spacing • for grounded parts — forwards — upwards — at the side — downwards — backwards — browards — torwards — of oriverats — forwards — 10 mm • for live parts • for grounded parts • for grounded parts — the side — downwards — at the side — downwards — to mm • for live parts • forwards — backwards — backwards — backwards — backwards — the side — th	 at 400 V acc. to IEC 60947-4-1 rated value 	153 000 A
mounting position fastening method height width depth 193.1 mm width 45 mm fequired spacing of grounded parts - forwards - upwards - at the side - downwards - forwards - forwards - to mm - t	 at 500 V acc. to IEC 60947-4-1 rated value 	42 000 A
fastening method height width depth for grounded parts - forwards - packwards - at the side - downwards - forwards - torwards - forwards - torwards - at the side - downwards - upwards - torwards - torwards - torwards - torwards - tormards - tormards - to mm - at the side - downwards - to mm - to mm - backwards - upwards - to mm - t	Installation/ mounting/ dimensions	
height 193.1 mm	mounting position	vertical
width 45 mm depth 97.1 mm required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards — for live parts — forwards — upwards — upwards — o mm • for live parts — forwards — upwards — upwards — backwards — upwards — upwards — upwards — upwards — upwards — upwards — o mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing 45 mm 10 mm 9 mm 10 mm 9 mm Connections/ Terminals 10 mm 10 mm 10 mm 20 mm	fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
depth 97.1 mm required spacing • for grounded parts — forwards 10 mm — backwards 0 mm — upwards 30 mm — at the side 9 mm — downwards 10 mm • for live parts 0 mm — backwards 0 mm — upwards 30 mm — downwards 10 mm — at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit screw-type terminals type of connectable conductor cross-sections 1 10 mm², 2x (2.5 6 mm²) • at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main contacts finely stranded with core end processing 1 6 mm²	height	193.1 mm
required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — o mm • for live parts — forwards — upwards — backwards — upwards — upwards — upwards — upwards — upwards — at the side 9 mm 10 mm — backwards — upwards — upwards — upwards — o mm — at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing 1 6 mm² 1 6 mm²	width	45 mm
• for grounded parts — forwards — backwards — upwards — at the side — downwards — for live parts — forwards — backwards — 10 mm • for live parts — forwards — upwards — 0 mm — upwards — backwards — upwards — upwards — upwards — at the side — upwards — at the side — odwnwards — at the side — odwnwards — at the side — of electrical connection for main current circuit type of electrical connection for main current circuit screw-type terminals type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing 1 6 mm² 1 6 mm²	depth	97.1 mm
- forwards - backwards 0 mm - upwards 30 mm - at the side 9 mm - downwards 10 mm • for live parts - forwards 10 mm • for law parts - forwards 0 mm - backwards 0 mm - backwards 10 mm - backwards 10 mm - backwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit screw-type terminals type of connectable conductor cross-sections • for main contacts stranded 1 10 mm², 2x (2.5 6 mm²) • at AWG cables for main contacts finely stranded with core end processing 1 6 mm²	required spacing	
— backwards — upwards — at the side — odwnwards — for live parts — forwards — backwards — backwards — upwards — upwards — downwards — downwards — at the side — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections	 for grounded parts 	
- upwards - at the side - downwards - for live parts - forwards - backwards - upwards - downwards - downwards - upwards - downwards - downwards - at the side - at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections - for main contacts stranded - at AWG cables for main contacts finely stranded with core end processing 30 mm - 0 mm	— forwards	10 mm
- at the side 9 mm - downwards 10 mm • for live parts - forwards 10 mm - backwards 0 mm - upwards 30 mm - downwards 10 mm - at the side 9 mm Connections/ Terminals type of connectable conductor cross-sections • for main contacts stranded 1 10 mm², 2x (2.5 6 mm²) • at AWG cables for main contacts finely stranded with core end processing 9 mm 10 mm 9 mm 10 mm 20 mm 10 mm 20 m	— backwards	0 mm
- downwards • for live parts - forwards - backwards - upwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing 10 mm 9 mm 20 mm 10 mm 9 mm 10 mm 1	— upwards	30 mm
 for live parts — forwards — backwards — upwards — upwards — downwards — at the side — at the side — y mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts finely stranded with core end processing	— at the side	9 mm
— forwards — backwards — upwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections ● for main contacts stranded ● at AWG cables for main contacts finely stranded with core end processing 10 mm 9 mm Screw-type terminals **Connectable conductor cross-sections 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm²	— downwards	10 mm
 — backwards — upwards — downwards — at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing 0 mm Screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm² 1 6 mm² 1 6 mm²	for live parts	
 — upwards — downwards — at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit type of connectable conductor cross-sections for main contacts stranded at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main contacts finely stranded with core end processing 30 mm 10 mm 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm² 1 6 mm²	— forwards	10 mm
 — downwards — at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit screw-type terminals type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts 1 10 mm², 2x (2.5 6 mm²) • at AWG cables for main contacts 1 6 mm² 1 6 mm²	— backwards	
— at the side 9 mm Connections/ Terminals type of electrical connection for main current circuit screw-type terminals type of connectable conductor cross-sections ● for main contacts stranded 1 10 mm², 2x (2.5 6 mm²) ● at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main contacts finely stranded with core end processing	•	30 mm
type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm²		
type of electrical connection for main current circuit type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing screw-type terminals 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm²		9 mm
type of connectable conductor cross-sections • for main contacts stranded • at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm²	Connections/ Terminals	
 for main contacts stranded at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing 1 10 mm², 2x (2.5 6 mm²) 2x (16 12), 2x (14 8) 1 6 mm² 		screw-type terminals
• at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main contacts finely stranded with core end processing	type of connectable conductor cross-sections	
connectable conductor cross-section for main contacts finely stranded with core end processing 1 6 mm²	 for main contacts stranded 	
finely stranded with core end processing		
Safety related data		1 6 mm²
	Safety related data	

B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures with high demand rate acc. to SN 31920	73 %
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front

Certificates/ approvals

General Product Approval

For use in hazardous locations

Declaration of Conformity











UK Declaration of Conformity

Test Certificates

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









Marine / Shipping

other Railway







Confirmation

Vibration and Shock

Further information

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=3RA2120-1JA24-0AK6

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2120-1JA24-0AK6}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JA24-0AK6

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

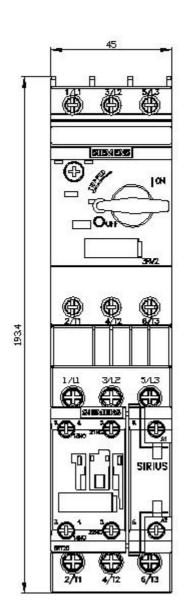
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1JA24-0AK6&lang=en

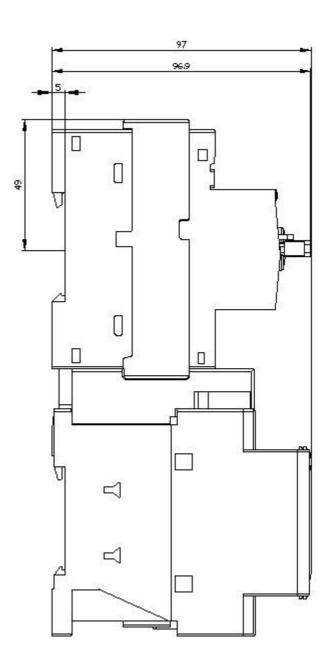
Characteristic: Tripping characteristics, I2t, Let-through current

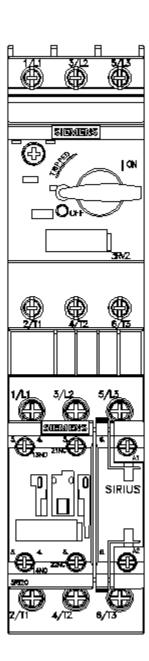
https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1JA24-0AK6/char

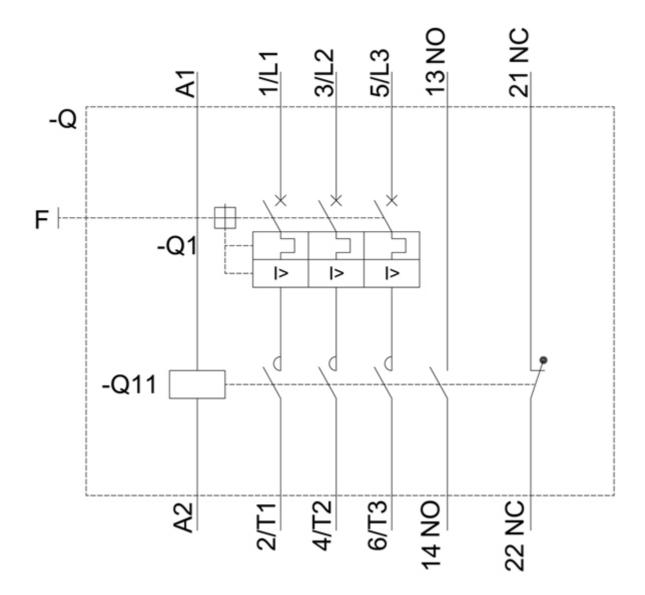
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1JA24-0AK6&objecttype=14&gridview=view1









last modified: 12/15/2020 🖸