SIEMENS

Data sheet 3RV2121-4CA10





Circuit breaker size S0 for motor protection, CLASS 10 with overload relay function A-release 16...22 A N-release 286 A screw terminal Standard switching capacity



product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection with overload relay function
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 	10.5 W
 at AC in hot operating state per pole 	3.5 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	16 22 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

operational current rated value		
### AR-C3 at 400 V rated value		22 A
## AAC-9s at A400 V rated value ## at AC-10	•	
Section Sect		
**A AC-3	at AC-3e at 400 V rated value	22 A
	operating power	
at 400 V rated value	• at AC-3	
alt 500 V rated value at 690 V rated value 15 5 kW at 690 V rated value 55 kW at 200 V rated value 55 kW at 200 V rated value 11 kW at 500 V rated value 11 kW at 500 V rated value 18 kW	— at 230 V rated value	5.5 kW
at 200 V rated value	— at 400 V rated value	11 kW
- al 230 V rated value	— at 500 V rated value	11 kW
	— at 690 V rated value	18.5 kW
alt 400 V rated value	• at AC-3e	
	— at 230 V rated value	5.5 kW
— at 890 V rated value 18.5 kW operating frequency	— at 400 V rated value	11 kW
operating frequency	— at 500 V rated value	11 kW
at AC-3 maximum at AC-3 maximum at AC-3 maximum bit 15 l/h Auxillary circuit design of the auxillary switch number of NC contacts for auxillary contacts number of NC contacts for auxillary contacts number of NC contacts for auxillary contacts onumber of CC contacts for auxillary contacts earlief active of CC contacts active of auxillary contacts at AC-15 earlief active of auxillary contacts at AC-15 earlief active of auxillary contacts at AC-15 earlief active of auxillary contacts at DC-13 earlief active of active of auxillary contacts at DC-13 earlief active of a	— at 690 V rated value	18.5 kW
* at AC-3e maximum Auxiliarry circuit design of the auxiliary switch number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts operational current of auxiliary contacts * at 24 V * at 230 V operational current of auxiliary contacts at AC-15 * at 24 V * at 230 V operational current of auxiliary contacts at DC-13 * at 24 V * at 230 V operational current of auxiliary contacts at DC-13 * at 24 V * at 26 V Protective and monitoring functions product function * ground fault detection * product function * phase failure detection * yes trip class CLASS 10 design of the overload release maximum short-circuit current breaking capacity (icu) * at AC at 240 V rated value * at AC at 400 V rated value * at AC at 500 V rated value * at AC at 400 V rated value * at 600 V r	operating frequency	
Auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts 0 number of NC contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts 15 at 24 V 15.A at 29 V 15.A at 29 V 15.A or at 29 V 15.A or at 29 V 16 or at 29 V 17 or at 29 V 17 or at 29 V 18 or at 24 V 19 or at 29 V 10 or at 20 V 1	• at AC-3 maximum	15 1/h
design of the auxiliary switch number of NC contacts for auxiliary contacts 0 number of NC contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 • at 24 V • at 230 V 1.5 A operational current of auxiliary contacts at DC-13 • at 24 V • at 230 V 1.5 A operational current of auxiliary contacts at DC-13 • at 24 V 1.4 Protective and monitoring functions product function • ground fault detection • ground fault detection • product function • ground fault detection • yes trip class CLASS 10 design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 24 V or Yarded value • at AC at 400 V rated value • at AC at 400 V rated value • at AC at 560 V rated value • at AC at 400 V rated value • at AC at 400 V rated value • at AC at 400 V rated value • at 300 V rated value • at 480 V rated value • at 220 V ated value • at 230 V rated value • at 330 V rated value • at 330 V rated value • at 500 V rated value • at 500 V rated value • at 600 V rated	• at AC-3e maximum	15 1/h
number of NC contacts for auxiliary contacts 0	Auxiliary circuit	
number of NO contacts for auxiliary contacts 0 number of CO contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-15 • at 24 V • at 230 V 1.5 A operational current of auxiliary contacts at DC-13 • at 24 V • at 24 V 1 A Protective and monitoring functions • product function • ground fault detection No • phase failure detection Yes • trip class CLASS 10 design of the overload release thermal maximum short-circuit current breaking capacity (icu) • at AC at 40 V rated value 100 kA • at AC at 500 V rated value 55 kA • at AC at 500 V rated value 4 kA • at AC at 500 V rated value 10 kA • at 240 V rated value 25 kA • at 500 V rated value 5 kA • at 650 V rated value 2 kA • at 600 V rated value 2 kA • 22 A • at 600 V rated value 2 kA • 22 A • at 600 V rated value 22 A • 22 A • at 600 V rated value 22 A • 22 A	design of the auxiliary switch	laterally
number of CO contacts for auxiliary contacts at AC-15	number of NC contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15 at 24 V at 230 V operational current of auxiliary contacts at DC-13 at 24 V 1A Protective and monitoring functions product function ground fault 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 at AC at 400 V rated value at AC at 500 V rated value at AC at 500 V rated value be at 40 V rated value at 400 V rated value 7.5 hp at 200/208 V rated value at 200/208 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor at 200/209 V rated value for 3-phase AC motor at 200/200 V rated valu	number of NO contacts for auxiliary contacts	0
at 24 V at 230 V 1.5 A at 230 V 1.5 A 1.6 A 1.7 A 1.8	number of CO contacts for auxiliary contacts	0
• at 230 V operational current of auxiliary contacts at DC-13 • at 24 V Protective and monitoring functions product function • ground fault detection • ground fault detection • phase failure detection Yes trip class CLASS 10 design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 250 V rated value • at AC at 350 V rated value • at AC at 460 V rated value • at AC at 460 V rated value • at 4AC at 460 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value • at 480 V rated value • at 500 V rated value • at 600 V rated	operational current of auxiliary contacts at AC-15	
operational current of auxiliary contacts at DC-13 • at 24 V Protective and monitoring functions product function • ground fault detection No • phase failure detection Yes design of the overload release thermal maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value 10 kA • at AC at 400 V rated value 55 kA • at AC at 400 V rated value 4 kA • at AC at 590 V rated value 100 kA • at 40 V rated value 25 kA • at 240 V rated value 25 kA • at 400 V rated value 25 kA • at 400 V rated value 25 kA • at 500 V rated value 25 kA • at 500 V rated value 25 kA • at 500 V rated value 25 kA • at 400 V rated value 25 kA • at 400 V rated value 25 kA • at 600 V rated value 35 kA • at 600 V rated value 37 kBP • for single-phase AC motor 38 kBP • at 200 V rated value 37 kBP • for 3-phase AC motor 38 kBP • at 200 V rated value 37 kBP • for 3-phase AC motor 39 kBP • at 200 V rated value 30 kBP • for 3-phase AC motor 39 kBP • at 200 V rated value 30 kBP • for 3-phase AC motor 30 kBP • at 200 V rated value 4 kBP • at 200 V rated value 50 kBP • for 3-phase AC motor 50 kBP • at 400 V rated value 50 kBP • for 3-phase AC motor 50 kBP • at 400 V rated value 50 kBP • for 3-phase AC motor 50 kBP • for 5-phase AC motor 50 kBP • for 5-phase AC motor 50 kBP • for 5-	• at 24 V	1.5 A
• at 24 V	• at 230 V	1.5 A
Protective and monitoring functions product function	operational current of auxiliary contacts at DC-13	
product function • ground fault detection • phase failure detection Yes trip class CLASS 10 design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC of to V rated value • at AC of to V rated value • at AC of the overload release for a late of the overload release 10 kA • at AC of the overload release 10 kA • at AC of the overload release 10 kA • at AC of the overload value • at AC overload value • at the overload value • at 20 V rated value • at 200 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 200 V rated value • for 4-phase AC motor • at 200 V rated value • for 4-phase AC motor • at 200 V rated value • for 4-phase AC motor • at 200 V rated value • for 4-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 4800 V rated value • for 5-phase AC motor • at 5-phase AC	• at 24 V	1 A
• ground fault detection • phase failure detection • phase failure detection • phase failure detection trip class CLASS 10 design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value • 25 kA • at 890 V rated value • 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 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 • for 3-phase AC motor • at 200/208 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 • for 3-phase AC motor • at 200/208 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 • for 3-phase AC motor • at 200/208 V rated value • for 3-phase AC motor • for	Protective and monitoring functions	
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value at 40 V rated value at 400 V rated value at 400 V rated value at 55 kA at 400 V rated value be at 400 V rated value at 500 V rated value at 500 V rated value at 600 V rated value at 200 V rated value for 3-phase AC motor at 200 V rated value at 200 V rated value for 3-phase AC motor at 200 V rated value at 200 V rated value for 3-phase AC motor at 200 V rated value at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase AC motor at 200 V rated value for 3-phase	product function	
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 55 kA • at AC at 500 V rated value 4 kA • at AC at 690 V rated value 4 kA operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value 100 kA • at 400 V rated value 25 kA • at 500 V rated value 25 kA • at 500 V rated value 25 kA • at 500 V rated value 26 kA • at 400 V rated value 27 kA • at 400 V rated value 28 kA • at 600 V rated value 28 kA • at 600 V rated value 28 kA • at 600 V rated value 22 kA response value current of instantaneous short-circuit trip unit 286 kA UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 22 kA • at 600 V rated value 22 kA yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1.5 hp — at 230 V rated value 3 hp • for 3-phase AC motor — at 200/230 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	ground fault detection	No
design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • 2 kA response value current of instantaneous short-circuit trip unit UL/CSA 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 • at 600 V rated value • at 360 V rated value • 22 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • 1.5 hp — at 230 V rated value • 7.5 hp — at 220/230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — 15 hp — at 460/480 V rated value — 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	-	Yes
maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 440 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 40 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • 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 • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 460/480 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	trip class	CLASS 10
maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 440 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 40 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • 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 • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 460/480 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	design of the overload release	thermal
at AC at 240 V rated value at AC at 400 V rated value at AC at 400 V rated value at AC at 400 V rated value but AC at 690 V rated value at AC at 690 V rated value brating brot-circuit current breaking capacity (Ics) at AC at 240 V rated value at 240 V rated value at 400 V rated value at 400 V rated value but AC at 690 V rated value but AC at 690 V rated value but AC at 690 V rated value but AC bu		
at AC at 500 V rated value at AC at 690 V rated value 4 kA operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value 5 kA at 500 V rated value 5 kA at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 22 A at 600 V rated value 22 A in 600 V rated value 22 A in 600 V rated value 32 A in 600 V rated value 3 hp in 6r single-phase AC motor — at 110/120 V rated value 3 hp in 6r 3-phase AC motor — at 230 V rated value 3 hp in 6r 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		100 kA
at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 56 kA at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 22 A at 690 V rated value 22 A yielded mechanical performance [hp] af for single-phase AC motor — at 110/120 V rated value 1.5 hp — at 230 V rated value af 607 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	at AC at 400 V rated value	55 kA
operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA 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 110/120 V rated value — at 230 V rated value 1.5 hp — at 230 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 460/480 V rated value 7.5 hp — at 460/480 V rated value — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	at AC at 500 V rated value	10 kA
operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA 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 110/120 V rated value — at 230 V rated value 1.5 hp — at 230 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 460/480 V rated value 7.5 hp — at 460/480 V rated value — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection	at AC at 690 V rated value	4 kA
at 240 V rated value at 400 V rated value 5 kA at 500 V rated value 25 kA at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 22 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 1.5 hp - at 230 V rated value 5 hp - at 220/230 V rated value 7.5 hp - at 220/230 V rated value 7.5 hp - at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		
 at 400 V rated value at 500 V rated value 5 kA at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 22 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor at 200/208 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 for 3-phase AC motor for 4-phase AC motor for 5-phase AC motor for 5-pha		100 kA
at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 22 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 1.5 hp - at 230 V rated value 3 hp for 3-phase AC motor - at 200/208 V rated value 7.5 hp - at 200/208 V rated value 7.5 hp - at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		
• at 690 V rated value response value current of instantaneous short-circuit trip unit 286 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • for single-phase AC motor		
response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1.5 hp — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1.5 hp — at 230 V rated value 3 hp • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 22 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 1.5 hp — at 230 V rated value 3 hp • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		
 at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 1.5 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 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection 		
● at 600 V rated value yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 3 hp ● for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		22 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value — at 200/208 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value Contact rating of auxiliary contacts according to UL To the contact rating of auxiliary contacts according to UL Contact rating of auxiliary contacts according to UL		
for single-phase AC motor — at 110/120 V rated value		
— at 110/120 V rated value 1.5 hp — at 230 V rated value 3 hp ● for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection		
— at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL Short-circuit protection		1.5 hp
● for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection		
- at 200/208 V rated value 7.5 hp - at 220/230 V rated value 7.5 hp - at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection		0.15
- at 220/230 V rated value 7.5 hp - at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection	·	7.5 hn
— at 460/480 V rated value 15 hp contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection		
contact rating of auxiliary contacts according to UL C600 / R300 Short-circuit protection		
Short-circuit protection		
		0000 / N300
product function snort circuit protection Yes		Voc
	product function snort circuit protection	Yes

design of the short circuit trip	magnetic
design of the short-circuit trip design of the fuse link	magnetic
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 6 A, quick: 10 A
design of the fuse link for IT network for short-circuit protection of the main circuit	iuse giligo. o A, quick. To A
• at 400 V	gL/gG 63 A
● at 500 V	gL/gG 50 A
• at 690 V	gL/gG 50 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	65 mm
depth	97 mm
required spacing	
 with side-by-side mounting at the side 	0 mm
 for grounded parts at 400 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
● for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side — forwards	30 mm 0 mm
	O HIIII
Connections/ Terminals type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— finely stranded with core end processing	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)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	
	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
finely stranded with core end processingfor AWG cables for auxiliary contacts	

 for main contacts with screw-type terminals 	2 2.5 N·m
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m
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
 of the auxiliary and control contacts 	M3
Safety related data	
product function suitable for safety function	Yes
suitability for use	
 safety-related switching on 	No
 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 	40 %
 with high demand rate according to SN 31920 	50 %
B10 value with high demand rate according to SN 31920	5 000
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
T1 value	
 for proof test interval or service life according to IEC 61508 	10 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Display	
display version for switching status	Handle
Approvals Certificates	
General Product Approval	

General Product Approval







Confirmation



<u>KC</u>

General Product Approval

Test Certificates

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other







Miscellaneous

Confirmation



Railway

Environment





Further information

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=3RV2121-4CA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2121-4CA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2121-4CA10

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

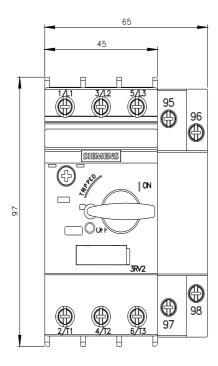
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2121-4CA10&lang=en

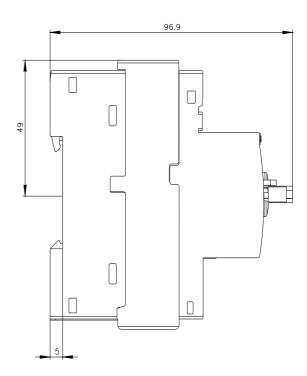
Characteristic: Tripping characteristics, I²t, Let-through current

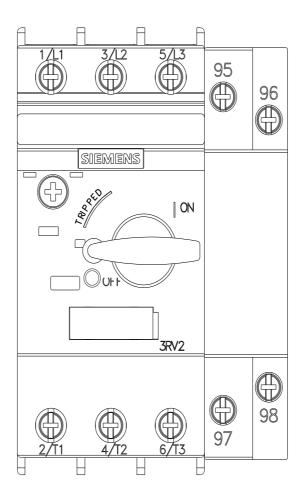
https://support.industry.siemens.com/cs/ww/en/ps/3RV2121-4CA10/char

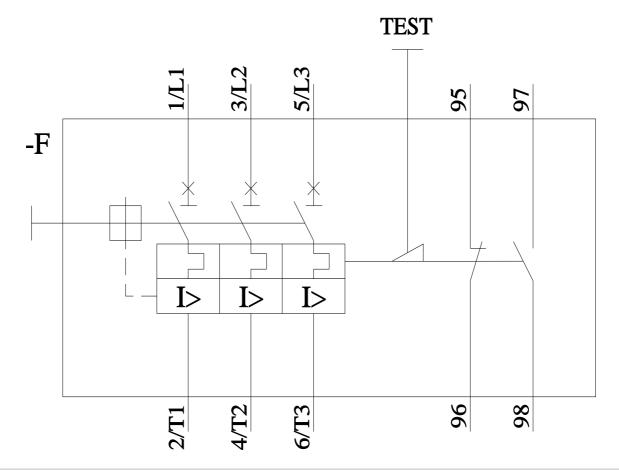
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2121-4CA10&objecttype=14&gridview=view1









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