SIEMENS

Data sheet 3RV2021-1GA10

Circuit breaker size S0 for motor protection, CLASS 10 A-release 4.5...6.3 A N-release 82 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	S0
Size of contactor can be combined company-specific	S00, S0
Product extension	
Auxiliary switch	Yes
Power loss [W] total typical	6 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
in networks with grounded star point between	400 V
main and auxiliary circuit	

Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Certificate of suitability ATEX	Yes
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	Q
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
Temperature compensation	-20 +60 °C
Relative humidity during operation	10 95 %
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	4.5 6.3 A
dependent overload release	
Operating voltage	000.17
• rated value	690 V
at AC-3 rated value maximum	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	6.3 A
Operating current	
• at AC-3	6.3 A
— at 400 V rated value	0.0 A
Operating power	
• at AC-3	1.500 W
• at AC-3 — at 230 V rated value	1 500 W
at AC-3— at 230 V rated value— at 400 V rated value	2 200 W
 at AC-3 at 230 V rated value at 400 V rated value at 500 V rated value 	2 200 W 3 000 W
at AC-3— at 230 V rated value— at 400 V rated value	2 200 W

Number of NC contacts for auxiliary contacts Number of NO contacts for auxiliary contacts • for auxiliary contacts 0 Protective and monitoring functions Product function • Ground fault detection • Phase failure detection • Phase failure detection • Phase failure detection Trip class CLASS 10 Design of the overload release thermal Operational short-circuit current breaking capacity (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at 630 V rated value • at 630 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 500 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 AC at 500 V rated value • at AC at 500 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 5 current paths in series at DC at 450 V rated value • with 6 current paths in series at DC at 450 V rated value	• at AC-3 maximum	15 1/h
Number of NC contacts for auxiliary contacts Number of CC contacts • for auxiliary contacts 0 Protective and monitoring functions Product function • Cround fault detection • Phase failure detection Trip class CLASS 10 Design of the overload release Operational short-circuit current breaking capacity (los) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • with 3 current path at DC at 150 V rated value • with 3 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current path in series at DC at 450 V rated value • with 3 current path in series at DC at 450 V rated value • with 3 current path in series at DC at 450 V rated value • with 3 current path in series at DC at 50 V rated value • with 3 current path in series at DC at 50 V rated value • of instantaneous short-circuit trip unit • of instantaneous short-circuit trip unit • of or instantaneous short-circuit trip unit • of or single-phase AC motor - at 4100/120 V rated value • ot 70 single-phase AC motor - at 110/120 V rated value • for three-phase AC motor	Auxiliary circuit	
Number of CO contacts • for auxiliary contacts • for ouxiliary contacts • for ouxiliary contacts Product function • Ground fault detection • Phase failure detection • Phase failure detection Pess CLASS 10 Design of the overload release Operational short-drouit current breaking capacity ((ca) at AC • at 240 V rated value • at 400 V rated value • at 560 V rated value • at 680 V rated value • at 680 V rated value • at AC at 400 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 AC at 500 V rated value • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 50 V rated value • of instantaneous short-circuit trip unit 82 A **UUCSA ratings** Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 700 V rated value • at 700 V rated value • at 700 V rated value • of three-phase AC motor • at 710 V rated value • for three-phase AC motor		0
Protective and monitoring functions Product function Ground fault detection Ground fault detection Phase failure detection Pease CLASS 10 Design of the overload release CLASS 10 Design of the overload release Operational short-circuit current breaking capacity ((cs) at AC at 240 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 500 V rated value bat AC at 690 V rated value at AC at 690 V rated value at AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 690 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contract paths in series at DC at 450 V rated value contr	Number of NO contacts for auxiliary contacts	0
Product function • Ground fault detection • Phase failure detection Possign of the overload release Oberational short-circuit current breaking capacity (los) at AC • at 240 V rated value • at 400 V rated value • at 690 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-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 • for three-phase AC motor — at 230 V rated value • for three-phase AC motor	Number of CO contacts	
Product function • Ground fault detection • Phase failure detection Prip class CLASS 10 Design of the overload release Operational short-circuit current breaking capacity ((cs) at AC • at 240 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor — at 230 V rated value • for three-phase AC motor	• for auxiliary contacts	0
Ground fault detection Phase failure detection Class CLASS 10 Design of the overload release Operational short-circuit current breaking capacity ((cs) at AC at 240 V rated value 100 kA at 500 V rated value 100 kA at 500 V rated value 4 kA Maximum short-circuit current breaking capacity ((tu)) at AC at 240 V rated value 4 kA Maximum short-circuit current breaking capacity ((tu)) at AC at 240 V rated value 100 kA at AC at 240 V rated value 100 kA at AC at 400 V rated value 100 kA at AC at 400 V rated value 100 kA be at AC at 400 V rated value 100 kA at AC at 500 V rated value 100 kA be at AC at 500 V rated value 100 kA at AC at 690 V rated value 100 kA be at AC at 50	Protective and monitoring functions	
Phase failure detection Trip class CLASS 10 Design of the overload release thermal Operational short-circuit current breaking capacity ((cs) at AC at 240 V rated value at 400 V rated value at 690 V rated value at AC at 490 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 490 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value buth 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 3 current paths in series at DC at 450 V rated value avith 480 V rated value at 480 V rated value at 480 V rated value at 60.3 A Vielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value at 230 V rated value of three-phase AC motor - at 230 V rated value of three-phase AC motor	Product function	
Trip class Class 10 Design of the overload release Cherational short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 500 V rated value be at AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value be at AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value be at AC at 500 V rated value at AC at 500 V rated value be at AC at 500 V rated value at AC at 500 V rated value be at AC at 500 V rated value at AC at 500 V rated value be at AC at 500 V rated value control of instantaneous short-circuit trip unit be at 500 V rated value at 480 V rated value be at 480 V rated value at 480 V rated value at 480 V rated value be at 480 V rated value be at 480 V rated value at 480 V rated value at 480 V rated value be at 480 V rated value at 480 V rated value be for three-phase AC motor at 110/120 V rated value be for three-phase AC motor at 230 V rated value be for three-phase AC motor	 Ground fault detection 	No
Design of the overload release Operational short-circuit current breaking capacity (ics) at AC at 240 V rated value at 500 V rated value at 500 V rated value at 600 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 240 V rated value bat AC at 240 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 240 V rated value bat AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value bat AC at 500 V rated value at AC at 500 V rated value at AC at 500 V rated value bat AC at 500 V rated value at AC at 500 V rated value bat AC at 500 V rated value b	Phase failure detection	Yes
Operational short-circuit current breaking capacity (Ics) at AC • at 240 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 • at AC at 240 V rated value • at AC at 240 V rated value • 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 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at C at 690 V rated value • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • of instantaneous short-circuit trip unit • 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for single-phase AC motor — at 230 V rated value • for three-phase AC motor	Trip class	CLASS 10
(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 • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • with 2 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • with 3 current paths in series at DC at 450 V rated value • of instantaneous short-circuit trip unit • of at 480 V rated value • at 600 V rated value • at 300 V rated value • 6.3 A Yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor	Design of the overload release	thermal
at 400 V rated value at 500 V rated value 100 kA at 690 V rated value 4 kA Maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value 100 kA at AC at 240 V rated value 100 kA at AC at 240 V rated value 100 kA at AC at 500 V rated value 6 kA Breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value 6.3 A Yielded mechanical performance [hp] for single-phase AC motor at 230 V rated value 0.25 hp at 230 V rated value 6 for three-phase AC motor		
at 500 V rated value at 690 V rated value 4 kA Maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value 100 kA at AC at 240 V rated value 100 kA at AC at 500 V rated value 100 kA at AC at 500 V rated value 6 kA Breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value at 6 of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value 6.3 A Vielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value - at 230 V rated value of three-phase AC motor - at 230 V rated value of three-phase AC motor	• at 240 V rated value	100 kA
at 690 V rated value At 690 V rated value at AC at 240 V rated value at AC at 240 V rated value at AC at 300 V rated value at AC at 300 V rated value at AC at 690 V rated value at AC at 690 V rated value breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 4 current paths in Series at DC at 300 V rated value with 5 current paths in Series at DC at 300 V rated value with 5 current paths in Series at DC at 300 V rated value with 5 current paths in Serie	• at 400 V rated value	100 kA
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 breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value confined the following short-circuit trip unit at 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value confined short confined performance [hp] for single-phase AC motor at 110/120 V rated value confined short confined performance [hp] for three-phase AC motor at 230 V rated value confined short confined performance [hp] for three-phase AC motor	• at 500 V rated value	100 kA
at AC at 240 V rated value at AC at 400 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value of instantaneous short-circuit trip unit at 480 V rated value at 480 V rated value at 6.3 A at 600 V rated value at 600 V rated value brown at 6.3 A Tielded mechanical performance [hp] brown at 230 V rated value at 230 V rated value brown at 240 V rated value brown	• at 690 V rated value	4 kA
at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value Response value current of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-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 of three-phase AC motor for three-phase AC motor	Maximum short-circuit current breaking capacity (Icu)	
at AC at 500 V rated value at AC at 690 V rated value Breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor — at 110/120 V rated value — at 230 V rated value o.5 hp for three-phase AC motor	• at AC at 240 V rated value	100 kA
at AC at 690 V rated value Breaking capacity short-circuit current (Icn) at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value with 3 current paths in series at DC at 450 V rated value Response value current of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 6.3 A for single-phase AC motor at 110/120 V rated value for single-phase AC motor at 230 V rated value for three-phase AC motor for three-phase AC motor at 230 V rated value for three-phase AC motor for three-phase AC motor	• at AC at 400 V rated value	100 kA
Breaking capacity short-circuit current (Icn) • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value Response value current • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 6.3 A • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor • for three-phase AC motor	• at AC at 500 V rated value	100 kA
at 1 current path at DC at 150 V rated value with 2 current paths in series at DC at 300 V rated value with 3 current paths in series at DC at 450 V rated value Response value current of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value at 6.3 A at 600 V rated value for single-phase AC motor of or single-phase AC motor - at 110/120 V rated value - at 230 V rated value of for three-phase AC motor for three-phase AC motor of three-phase AC motor of three-phase AC motor of three-phase AC motor of three-phase AC motor	• at AC at 690 V rated value	6 kA
• with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value Response value current • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor — at 230 V rated value • for three-phase AC motor • for three-phase AC motor	Breaking capacity short-circuit current (Icn)	
rated value • with 3 current paths in series at DC at 450 V rated value Response value current • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • at 230 V rated value • for three-phase AC motor • at 230 V rated value • for three-phase AC motor	• at 1 current path at DC at 150 V rated value	10 kA
rated value Response value current • of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor — at 230 V rated value • for three-phase AC motor	-	10 kA
of instantaneous short-circuit trip unit 82 A UL/CSA ratings Full-load current (FLA) for three-phase AC motor o at 480 V rated value o at 600 V rated value for single-phase AC motor — at 110/120 V rated value o .25 hp — at 230 V rated value for three-phase AC motor of three-phase AC motor of three-phase AC motor	•	10 kA
UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for three-phase AC motor • for three-phase AC motor	Response value current	
Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value 6.3 A Yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor	• of instantaneous short-circuit trip unit	82 A
 at 480 V rated value at 600 V rated value 6.3 A Yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value — at 230 V rated value for three-phase AC motor 	UL/CSA ratings	
 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 for three-phase AC motor 	Full-load current (FLA) for three-phase AC motor	
Yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value — at 230 V rated value ● for three-phase AC motor	● at 480 V rated value	
 for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor 	• at 600 V rated value	6.3 A
 — at 110/120 V rated value — at 230 V rated value ● for three-phase AC motor 	Yielded mechanical performance [hp]	
— at 230 V rated value 0.5 hp • for three-phase AC motor	• for single-phase AC motor	
• for three-phase AC motor	— at 110/120 V rated value	0.25 hp
	— at 230 V rated value	0.5 hp
— at 200/208 V rated value 1 hp	• for three-phase AC motor	
	— at 200/208 V rated value	1 hp

— at 220/230 V rated value	1.5 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 hp

Short-circuit protection	
Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic

Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	97 mm
Width	45 mm
Depth	97 mm
Required spacing	
with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	30 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	30 mm

Connections/Terminals	
Product function	
 removable terminal for auxiliary and control circuit 	No
Type of electrical connection	
• for main current circuit	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	

• for main contacts	
 single or multi-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
 at AWG conductors for main contacts 	2x (16 12), 2x (14 8)
Tightening torque	
 for main contacts with screw-type terminals 	2 2.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Size of the screwdriver tip	Pozidriv 2
Design of the thread of the connection screw	
• for main contacts	M4

Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	50 %
 with high demand rate acc. to SN 31920 	50 %
Failure rate [FIT]	
 with low demand rate acc. to SN 31920 	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version	
• for switching status	Handle

Certificates/approvals

General Product Approval

For use in hazardous locations







KC



/ Shipping



For use in haz-	Declaration of	Test Certificates	Marine /
ardous loca-	Conformity		
tions			





Special Test Certificate

Type Test Certificates/Test Report





other

Marine / Shipping













Confirmation

other Railway



Miscellaneous

Vibration and Shock

Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2021-1GA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-1GA10

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

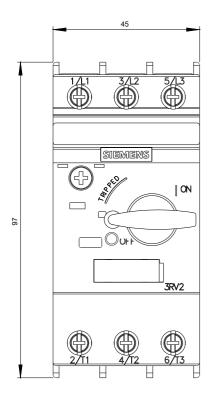
https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1GA10

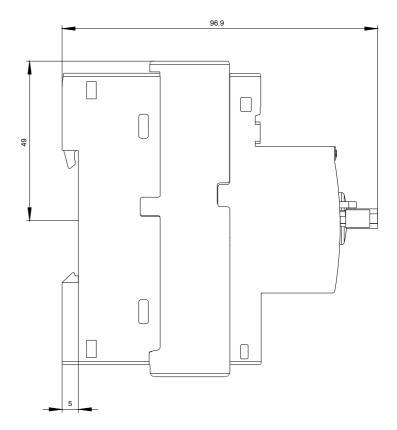
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-1GA10&lang=en

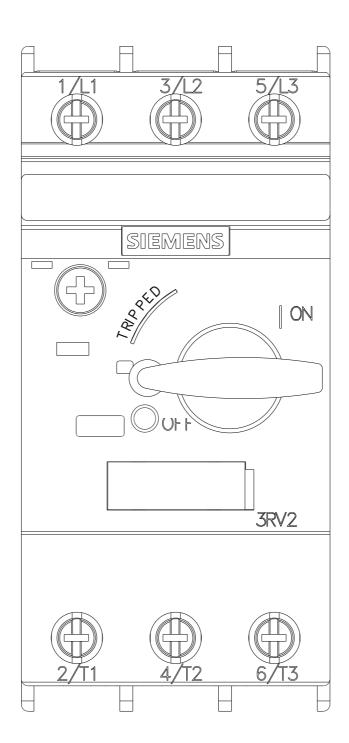
Characteristic: Tripping characteristics, I2t, Let-through current

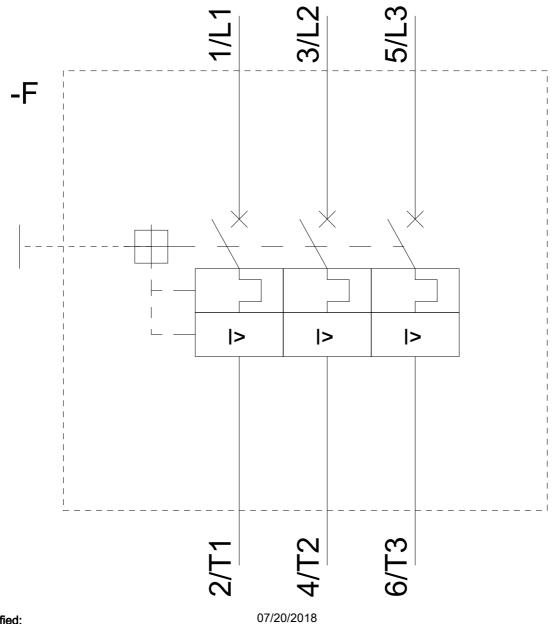
https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1GA10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-1GA10&objecttype=14&gridview=view1









last modified: