## SIEMENS

## Data sheet

## 3RV2021-1KA10



Circuit breaker size S0 for motor protection, CLASS 10 A-release 9...12.5 A N-release 163 A screw terminal Standard switching capacity

2/11 4/12 6/13	
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] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	9.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.1 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)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
electrical endurance (operating cycles) typical	100 000
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-50 +80 °C
<ul> <li>during transport</li> </ul>	-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	9 12.5 A
operating voltage	
<ul> <li>rated value</li> </ul>	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	12.5 A

operating prover         12.5 A           • # AC-3e at 400 V rated value         12.5 A           • # AC-3e at 400 V rated value         12.5 A           • # AC-3e at 400 V rated value         12.5 A           • # AC-3e at 400 V rated value         5.5 KW           - # 1320 V rated value         5.5 KW           - # 1500 V rated value         7.5 KW           opporting frequency         #           - # 1600 V rated value         7.5 KW           opporting frequency         #           - # 1600 V rated value         7.5 KW           opporting frequency         #           - # 160 A rated value         7.5 KW           opporting frequency         #           - # 160 A rated value         0.           - # 100 V rated value         0.           - # 100 V rated value         0.           - # 100 V rated value         10.0 KA		
• # AC-3e at 400 vinde value12.5 A• # AC-3e-• = # 420 vinde value5.5 WV• = # 420 vinde value7.5 KW• = # 620 vinde value7.5 KW• = # 620 vinde value5.5 WV• = # 620 vinde value7.5 KW• = # 620 vinde value8.6 K• = # 620 vinde value7.5 KW• = # 620 vinde value9.6 K•	operational current	12 5 4
operating powerset AC-3• af 230 V rade Value3 kW- af 230 V rade Value5.5 kW- af 530 V rade Value7.5 kW- af 230 V rade Value7.5 kWoperating frequency10.1 h- af 230 V rade Value0- af 230 V rade Value100 kA- af 230 V rade Value100 kA- af 240 V rade Value125 A- af 240 V rade V		
• at AC-3 at 400 V relat value3 kW at 600 V relat value7.5 kW at 630 V relat value7.5 kW at 630 V relat value3 kW at 630 V relat value5.5 kW at 630 V relat value5.5 kW at 630 V relat value7.5 kW at 630 V relat value0 at 630 V relat value0		12.5 A
- af 400 V reliet value     5.5 kW       - af 890 V reliet value     7.5 kW       - af 220 V reliet value     7.5 kW       - af 420 V reliet value     3.6 kW       - af 420 V reliet value     7.5 kW       - af 400 V reliet value     7.5 kW       - af 400 V reliet value     7.5 kW       - af 600 V reliet value     0       - pront faut detection     Yes       - eind faut detection     Yes       - eind Call V reliet value     100 kA       - eind Call V reliet value     100 kA       - eind Call V reliet value     6 kA       - operating short-circuit current breaking capacity (tex)     100 kA       - eind 200 V reliet value     6 kA       - eind 200 V reliet value     6 kA       - operating short-circuit current breaking capacity (tex)     16 kA       - eind 200 V reliet value		3 kW/
− at 500 V rated value     7.5 kW       − at 230 V rated value     7.5 kW       − at 230 V rated value     3.6 kW       − at 400 V rated value     5.5 kW       − at 500 V rated value     7.5 kW       − at 600 V rated value     0       − at 600 V rated value     00 kA       − at 600 V rated value     100 kA       − at 600 V rated value     100 kA       − at 600 V rated value     100 kA <t< td=""><td></td><td></td></t<>		
- af 80 V rated value     7.5 kW       - af 420 V rated value     3 kW       - at 400 V rated value     5.5 kW       - at 600 V rated value     7.5 kW       - af 600 V rated value     7.5 kW       - at 600 V rated value     0       - at 600 K contacts for auxiliary contacts     0       - number of NC contacts for auxiliary contacts     0       - at 600 K rated value     0       - of contacts for auxiliary contacts     0       - at 600 K rated value     CLASS 10       - design of the overload rolease     thermal       - maximum short-ficuit current breaking capacity (Cu)     100 kA       - at 600 V rated value     100 kA       - at 6100 V rated value     <		
• at AC:3° • at AC:3° • at 400 Y rated value3 KW • at 600 Y rated value• at 600 Y rated value7.5 KW• at 600 Y rated value7.5 KW• at 600 Y rated value7.5 KW• at AC:3° maximum15 hh• at AC:3° maximum15 hh• at AC:3° maximum0• at AC:3° to contacts for auxiliary contacts0• at AC:3° to contact for auxiliary contacts0• at AC:3° to auxiliary contacts100 kA• at AC:3° to auxiliary contacts100 kA• at AC:3° too Y rated value<		
	— at 230 V rated value	3 kW
	— at 400 V rated value	5.5 kW
operating frequency • at AC-3 maximum15 1h• at AC-3 maximum15 1h• at AC-3 maximum15 1h• at AC-3 maximum15 1hAuximary circuit0number of NO contacts for auxiliary contacts0Protective and monitoring functions0Protective and monitoring functions0• ground fault detectionYes• product functionYes• product durated eleasethermalmaximum short-circuit current breaking capacity (tcu)100 kA• at AC at 240 V rated value100 kA• at AC at 500 V rated value2 kA• at AC at 500 V rated value100 kA• at AC at 500 V rated value2 kA• at AC at 600 V rated value100 kA• at 600 V rated value100 kA• at 600 V rated value100 kA• at 600 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value2 kA• at 600 V rated value2 hp• for single-phase AC motor15 hp- at 200200 V rated value3 hp- at 200200 V rated value3 hp- at 200200 V rated value3 hp- at 75/600 V rated value3 hp	— at 500 V rated value	7.5 kW
• at AC-3 maximum     15 hh       • at AC-3e maximum     15 hh       Auxiliary circuit     0       number of NC contacts for auxiliary contacts     0       number of CO contacts for auxiliary contacts     0       product function     0       • ground fault detection     No       • phase failure detection     Yes       trip class     CLASS 10       design of the overload rolease     thermal       maximum short-circuit current breaking capacity (tcu)     • at AC at 240 V rated value       • at AC at 240 V rated value     100 kA       • at AC at 900 V rated value     6 kA       • operating short-circuit current breaking capacity (tcu)     • at AC at 900 V rated value       • at AC at 900 V rated value     100 kA       • at AC at 900 V rated value     100 kA       • at AC at 900 V rated value     100 kA       • at AC at 900 V rated value     100 kA       • at 420 V rated value     100 kA       • at 420 V rated value     100 kA       • at 620 V rated value     100 kA       • at 620 V rated value     100 kA       • at 620 V rated value     12.5 A       • at 620 V rated value     12.5 A       • at 620 V rated value     12.5 A       • at 620 V rated value     2 hp       • of single-phase AC motor     12	— at 690 V rated value	7.5 kW
• at AC-3e maximum15 l/hAuxiliary circuit·Auxiliary circuit·Auxiliary circuit0number of NO contacts for auxiliary contacts0Protectivo and monitoring functions·Protectivo and monitoring functions·· at AC at 240 V rated value·· at AC at 240 V rated value·· at AC at 650 V rated value·· at AC at 650 V rated value·· at AC at 650 V rated value·· at AC at 240 V rated value·· at 400 V rated value·· at 400 V rated value·· at 400 V rated value· <td>operating frequency</td> <td></td>	operating frequency	
Auxiliary circuit       0         number of NC contacts for auxiliary contacts       0         number of CO contacts for auxiliary contacts       0         Protective and monitoring functions       0         product function       •         • ground fault detection       Yes         • plase failure detection       Yes         trip class       CLASS 10         design of the overload release       thermal         maximum short-circuit current breaking capacity (lcu)       • at AC at 500 V rated value         • at AC at 500 V rated value       100 kA         • at AC at 500 V rated value       6 kA         • oprarting short-circuit current breaking capacity (lcs)       • at 4C at 600 V rated value         • at 420 V rated value       100 kA         • at 420 V rated value       12 kA         • at 620 V rated value       12 kA         • at 620 V rated value       2 kA         • at 620 V rated value       12 kA <tr< td=""><td><ul> <li>at AC-3 maximum</li> </ul></td><td>15 1/h</td></tr<>	<ul> <li>at AC-3 maximum</li> </ul>	15 1/h
number of NC contacts for auxiliary contacts         0           number of NC contacts for auxiliary contacts         0           protective and monitoring functions         0           product function         0           ergound fault detection         Yes           trip class         CLASS 10           design of the overload release         thermal           maximum short-circuit current breaking capacity (lcu)         at AC at 240 V rated value           at AC at 240 V rated value         100 kA           at AC at 500 V rated value         2 k/A           at AC at 500 V rated value         4 kA           at AC at 680 V rated value         100 kA           at AC at 690 V rated value         100 kA           at AC at 690 V rated value         100 kA           at AC at 690 V rated value         100 kA           at AC at 690 V rated value         100 kA           at 60 V rated value         100 kA           at 60 V rated value         100 kA           at 60 V rated value         100 kA           at 40 V rated value         100 kA           at 60 V rated value	<ul> <li>at AC-3e maximum</li> </ul>	15 1/h
number of NO contacts for auxiliary contacts         0           Protective and monitoring functions         0           Protective and monitoring functions         No           • ground fault detection         No           • ground fault detection         Yes           • ground fault detection         Yes           • ground fault detection         Yes           • ark Cat 240 V rated value         100 kA           • at AC at 400 V rated value         2 kA           • at AC at 500 V rated value         6 kA           opparting short-circuit current breaking capacity (Ics)         at AC at 500 V rated value           • at AC at 500 V rated value         6 kA           opparting short-circuit current breaking capacity (Ics)         at AC at 500 V rated value           • at 400 V rated value         100 kA           • at 600 V rated value         100 kA           • at 400 V rated value         100 kA           • at 400 V rated value         100 kA           • at 600 V rated value         10 kA           • at 600 V rated value         10 kA<	Auxiliary circuit	
number of N0 contacts for auxiliary contacts         0           Protective and monitoring functions         0           Protective and monitoring functions         No           • ground fault detection         No           • ground fault detection         Yes           • ground fault detection         Yes           • ground fault detection         Yes           • ark Cat 240 V rated value         100 kA           • at AC at 400 V rated value         24 kA           • at AC at 500 V rated value         6 kA           opparting short-circuit current breaking capacity (Ics)         at AC at 500 V rated value           • at AC at 500 V rated value         6 kA           opparting short-circuit current breaking capacity (Ics)         at AC at 500 V rated value           • at 400 V rated value         100 kA           • at 600 V rated value         100 kA           • at 600 V rated value         100 kA           • at 600 V rated value         100 kA           • at 400 V rated value         100 kA           • at 600 V rated value         100 kA           • at 600 V rated value         10 k	number of NC contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts         0           Protective and monitoring functions         •           product function         No           • ground fault detection         No           • phase failure detection         Ves           trip class         CLASS 10           design of the overload release         thermal           maximum short-circuit current breaking capacity (lcu)         •           • at AC at 240 V rated value         100 kA           • at AC at 500 V rated value         2 kA           • at AC at 500 V rated value         6 kA           • operating short-circuit current breaking capacity (lcs)         •           • at 240 V rated value         100 kA           • at 400 V rated value         12.5 A           • at 600 V rated value         12.5 A           • at 600 V rated value         0.5 hp           - at 200202 V rated value	-	0
product function     No       • graund fault detection     No       • phase failure detection     Yes       CLASS 10     thermal       design of the overload release     CLASS 10       maximum short-circuit current breaking capacity (icu)     itemal       • at AC at 200 V rated value     100 kA       • at AC at 400 V rated value     42 kA       • at AC at 500 V rated value     6 kA       opparating short-circuit current breaking capacity (ics)     100 kA       • at 200 V rated value     100 kA       • at 200 V rated value     100 kA       • at 200 V rated value     100 kA       • at 300 V rated value     42 kA       • at 400 V rated value     100 kA       • at 400 V rated value     100 kA       • at 400 V rated value     42 kA       • at 600 V rated value     42 kA       • at 600 V rated value     100 kA       • at 600 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 400 V rated value     12.5 A       • at 400 V rated value     12.5 A       • at 400 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 600 V rated value     13 hp       • at 200 V rated value     3 hp       • at 200/200 V rated value     3 hp   <	-	0
• ground fault detectionNo• phase failure detectionYes• phase failure detectionYes• trip classCLASS 10design of the overload releasethermalmaximum short-circuit current breaking capacity (Leu)100 kA• at AC at 400 V rated value100 kA• at AC at 500 V rated value100 kA• at AC at 500 V rated value6 kAor at AC at 500 V rated value100 kA• at AC at 600 V rated value100 kA• at AC at 600 V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 300 V rated value100 kA• at 400 V rated value100 kA• at 400 V rated value100 kA• at 600 V rated value4 kA• at 600 V rated value4 kA• at 600 V rated value12.5 A• at 800 V rated value12.5 A• at 800 V rated value2 kA• at 800 V rated value2 kA• at 800 V rated value12.5 A• at 800 V rated value12.5 A• at 800 V rated value2 hp• for single-phase AC motor at 200/208 V rated value3 hp- at 5/5600 V rated value3 hp- at 5/5600 V rated value1	Protective and monitoring functions	
• phase failure detectionYestrip classCLASS 10design of the overload releasethermalmaximum short-circuit current breaking capacity (lcu)100 kA• at AC at 240 V rated value100 kA• at AC at 500 V rated value42 kA• at AC at 500 V rated value6 kA• operating short-circuit current breaking capacity (lcs)at AC at 600 V rated value100 kA• at 240 V rated value100 kA• at 300 V rated value42 kA• at 300 V rated value42 kA• at 600 V rated value42 kA• at 600 V rated value163 A• at 630 V rated value12.5 A• at 480 V rated value12.5 A• at 480 V rated value12.5 A• at 480 V rated value2 kp• at 300 V rated value2 kp• at 300 V rated value2 kp• at 630 V rated value3 hp- at 230 V rated value3 hp- at 200208 V rated value3 hp- at 200208 V rated value3 hp- at 200208 V rated value3 hp- at 40040 V rated value3 hp- at 40040 V rated value3 hp- at 40040 V rated value3 hp- at 200208 V rated value3 hp- at 40040 V rated value3 hp- at 40040 V rated value10 hpShort-circuit protectionmagnetic <td>product function</td> <td></td>	product function	
trip class trip class trip class trip class trip class class 10 termal trip class class 10 termal termal class 10 termal termal termal termal class 10 termal terma	<ul> <li>ground fault detection</li> </ul>	No
design of the overload release     thermal       maximum short-circuit current breaking capacity (Icu)     i at AC at 240 V rated value     100 kA       • at AC at 500 V rated value     42 kA       • at AC at 690 V rated value     6 kA       operating short-circuit current breaking capacity (Ics) at AC     100 kA       • at 240 V rated value     100 kA       • at 680 V rated value     100 kA       • at 690 V rated value     4 kA       response value current of instantaneous short-circuit trip     163 A       unit     125 A       • at 690 V rated value     12.5 A       • at 690 V rated value     12.5 A       • at 690 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 600 V rated value     2.5 A       • at 230 V rated value     10.5 hp       - at 230 V rated value     14.6       • at 600 V rated value     15.6       • at 600 V rated value     14.6       • at 600 V rated value     15.6       • at 600 V rated value     16.7       • at 230 V rated value     16.7   <	<ul> <li>phase failure detection</li> </ul>	Yes
maximum short-circuit current breaking capacity (Icu)i• at AC at 240 V rated value100 kA• at AC at 400 V rated value100 kA• at AC at 500 V rated value6 kA• at AC at 600 V rated value6 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 240 V rated value100 kA• at 400 V rated value100 kA• at 400 V rated value100 kA• at 400 V rated value100 kA• at 690 V rated value4 kA• at 690 V rated value4 kA• at 890 V rated value12.5 A• at 400 V rated value12.5 A• at 400 V rated value12.5 A• at 400 V rated value12.5 A• at 200 V rated value12.5 A• at 200 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value12.5 A• at 200 V rated value12.5 A• at 600 V rated value10.5 hp- at 110/120 V rated value3 hp- at 200/230 V rated value3 hp- at 200/230 V rated value3 hp- at 60/480 V rated value3 hp- at 60/480 V rated value10 hpShort-circuit protectionYesmounting positionanyfastening method60715height97 mmwidth45 mm	trip class	CLASS 10
• at AC at 240 V rated value     100 kA       • at AC at 400 V rated value     100 kA       • at AC at 500 V rated value     6 kA       operating short-circuit current breaking capacity (ics) at AC     6 kA       • at 240 V rated value     100 kA       • at 400 V rated value     100 kA       • at 200 V rated value     100 kA       • at 200 V rated value     100 kA       • at 600 V rated value     100 kA       • at 600 V rated value     100 kA       • at 600 V rated value     42 kA       • at 600 V rated value     42 kA       • at 600 V rated value     163 A       unit     163 A       unit     12.5 A       • at 400 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 200 V rated value     12.5 A       • at 200 V rated value     12.5 A       • at 600 V rated value     12.5 A       • at 10/120 V rated value     0.5 hp       - at 110/120 V rated value     0.5 hp       - at 200/208 V rated value     3 hp       - at 200/208 V rated value     3 hp       - at 60/480 V rated value     8 hp       - at 60/480 V rated value     8 hp       - at 67/5800 V rated value     8 hp       - at 67/5800	design of the overload release	thermal
• at AC at 400 V rated value100 kA• at AC at 500 V rated value42 kA• at AC at 690 V rated value6 kAoperating short-circuit current breaking capacity (Ics) at AC7• at 240 V rated value100 kA• at 400 V rated value100 kA• at 400 V rated value100 kA• at 600 V rated value42 kA• at 600 V rated value42 kA• at 600 V rated value42 kA• at 600 V rated value163 A• at 600 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value2.5 A• at 600 V rated value2.5 A• at 600 V rated value10.5 hp- at 110/120 V rated value2 hp• for single-phase AC motor at 120/200 V rated value2 hp• for 3-phase AC motor at 200 V rated value3 hp- at 200 V rated value3 hp- at 200 V rated value3 hp- at 200/200 V rated value3 hp- at 50/600 V rated value3 hp- at 50/600 V rated value3 hp- at 60/480 V rated value3 hp- at 57/600 V rated value3 hp- at 57/600 V rated value3 hp- at 60/480 V rated value3 hp- at 60/480 V rated value3 hp- at 60/480 V rated value3 hp	maximum short-circuit current breaking capacity (lcu)	
• at AC at 500 V rated value42 kA• at AC at 680 V rated value6 kA• at AC6 kA• at 240 V rated value100 kA• at 400 V rated value100 kA• at 400 V rated value42 kA• at 600 V rated value42 kA• at 600 V rated value4 kAresponse value current of instantaneous short-circuit trip163 Aunit125 A• at 480 V rated value12.5 A• at 480 V rated value13.5 hp- at 200/28 V rated value3 hp- at 200/28 V rated value3 hp- at 50/680 V rated value3 hp- at 450/680 V rated value8 hp- at 55/680 V rated value10 hp <trr>Installation/ mounting/ dimensio</trr>	<ul> <li>at AC at 240 V rated value</li> </ul>	100 kA
• at AC at 690 V rated value       6 kA         operating short-circuit current breaking capacity (Ics) at AC       100 kA         • at 240 V rated value       100 kA         • at 400 V rated value       100 kA         • at 600 V rated value       100 kA         • at 600 V rated value       42 kA         • at 600 V rated value       4 kA         response value current of instantaneous short-circuit trip unit       163 A         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor         • at 400 V rated value       12.5 A         • at 600 V rated value       2.5 hp         - at 210 V rated value       0.5 hp         - at 200 V rated value       3 hp         - at 200208 V rated value       3 hp         - at 200208 V rated value       8 hp         - at 200208 V rated value       10 hp         Short-circuit protection       Yes         respin of the short-circuit trip       magnetic         Installation/ mounting/ dimensions       any         screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715         fasteni		
operating short-circuit current breaking capacity (Ics) at AC100 kA• at 240 V rated value100 kA• at 400 V rated value100 kA• at 600 V rated value42 kA• at 600 V rated value4 kAresponse value current of instantaneous short-circuit trip unt163 AUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value12.5 A• at 600 V rated value0.5 hp- at 110/120 V rated value0.5 hp- at 230 V rated value3 hp- at 200/208 V rated value10 hpShort-circuit protectionYes mounting position fastenting of the short-circuit tripmounting position fastening methodany screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 607/15height mounting width• At 5 mm45 mm		
at AC• at 240 V rated value100 kA• at 400 V rated value100 kA• at 500 V rated value42 kA• at 690 V rated value4 kAresponse value current of instantaneous short-circuit trip163 AUL/CSA ratingsUL/CSA ratingsUL/CSA ratingsUL/CSA ratings12.5 Aat 480 V rated value12.5 Aat 480 V rated value12.5 Aat 480 V rated value0.5 hpat 10/120 V rated value0.5 hpat 230 V rated value0.5 hpat 200/208 V rated value3 hp- at 575/600 V rated value-		6 kA
• at 400 V rated value100 kA• at 500 V rated value42 kA• at 690 V rated value4 kAresponse value current of instantaneous short-circuit trip163 AULCSA ratingsTull-load current (FLA) for 3-phase AC motor• at 480 V rated value12.5 A• at 480 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value12.5 A• at 110/120 V rated value0.5 hp- at 110/120 V rated value2 hp• for 3-phase AC motor at 200/208 V rated value3 hp- at 220/208 V rated value3 hp- at 220/208 V rated value3 hp- at 460/480 V rated value8 hp- at 575/600 V rated value10 hpShort-circuit protectionYesmounting position fastentions hort circuit tripmagneticmounting position fastening methodanyscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height97 mmwidth45 mm	at AC	
• at 500 V rated value42 kA• at 690 V rated value4 kAresponse value current of instantaneous short-circuit trip163 AUL/CSA ratings163 Afull-load current (FLA) for 3-phase AC motor12.5 A• at 480 V rated value12.5 A• at 600 V rated value12.5 A• at 600 V rated value0.5 hp- at 110/120 V rated value0.5 hp- at 110/120 V rated value2 hp• for 3-phase AC motor at 200/208 V rated value3 hp- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value10 hpShort-circuit protectionYesproduct function short circuit protectionYesmounting positionanyfastening methodanywidth45 mm		
• at 690 V rated value       4 kA         response value current of instantaneous short-circuit trip unit       163 A         UL/CSA ratings       163 A         full-load current (FLA) for 3-phase AC motor <ul> <li>• at 480 V rated value</li> <li>12.5 A</li> <li>• at 600 V rated value</li> <li>12.5 A</li> </ul> • at 600 V rated value       12.5 A         • at 600 V rated value       12.5 A         • at 600 V rated value       12.5 A         • at 10/120 V rated value       12.5 A         - at 110/120 V rated value       0.5 hp         - at 110/120 V rated value       2 hp         • for 3-phase AC motor       -         - at 200/208 V rated value       3 hp         - at 200/208 V rated value       3 hp         - at 200/208 V rated value       3 hp         - at 60/480 V rated value       8 hp         - at 60/480 V rated value       8 hp         - at 575/600 V rated value       8 hp         - at 575/600 V rated value       10 hp         Short-circuit protection       Yes         mounting position       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715         height       97 mm         width		
response value current of instantaneous short-circuit trip unit       163 A         UL/CSA ratings		
unit       unit         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>12.5 A</li> <li>at 600 V rated value</li> <li>12.5 A</li> </ul> <li>e for single-phase AC motor         <ul> <li>at 110/120 V rated value</li> <li>0.5 hp</li> <li>at 230 V rated value</li> <li>2 hp</li> </ul> </li> <li>for 3-phase AC motor         <ul> <li>at 200/208 V rated value</li> <li>3 hp</li> <li>at 200/208 V rated value</li> <li>9 hp</li> <li>at 480/480 V rated value</li> <li>9 hp</li> <li>at 575/600 V rated value</li> <li>10 hp</li> </ul> </li> <li>Short-circuit protection</li> <li>Yes</li> <li>design of the short-circuit trip</li> <li>magnetic</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position         <ul> <li>any</li> <li>screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715</li> <li>height</li> <li>97 mm</li> <li>width</li> </ul> </li>		
full-load current (FLA) for 3-phase AC motor       12.5 A         • at 480 V rated value       12.5 A         • at 600 V rated value       12.5 A         • at 600 V rated value       12.5 A         yielded mechanical performance [hp]       12.5 A         • for single-phase AC motor       0.5 hp         - at 230 V rated value       2 hp         • for 3-phase AC motor       3 hp         - at 220/230 V rated value       3 hp         - at 220/230 V rated value       3 hp         - at 460/480 V rated value       8 hp         - at 575/600 V rated value       10 hp         Short-circuit protection       Yes         modult function short circuit protection       Yes         design of the short-circuit trip       magnetic         Installation/ mounting/ dimensions       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715         height       97 mm         width       45 mm	unit	163 A
• at 480 V rated value12.5 Å• at 600 V rated value12.5 Åyielded mechanical performance [hp]12.5 Å• for single-phase AC motor0.5 hp- at 110/120 V rated value0.5 hp- at 230 V rated value2 hp• for 3-phase AC motor3 hp- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value8 hp- at 575/600 V rated value10 hpShort-circuit protectionproduct function short circuit protectiondesign of the short-circuit tripmagneticInstallation/ mounting/ dimensionsanyscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height97 mmwidth45 mm	UL/CSA ratings	
• at 600 V rated value12.5 Ayielded mechanical performance [hp]Image: Constraint of the single-phase AC motor- at 110/120 V rated value0.5 hp- at 230 V rated value2 hp• for 3-phase AC motorImage: Constraint of the single value- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value8 hp- at 460/480 V rated value10 hpShort-circuit protectionProduct function short circuit protectionYesmounting positionanyfastening methodAnyfastening method97 mmwidth45 mm		
yielded mechanical performance [hp].• for single-phase AC motor0.5 hp- at 110/120 V rated value2 hp• for 3-phase AC motor2 hp• for 3-phase AC motor3 hp- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value8 hp- at 460/480 V rated value8 hp- at 460/480 V rated value10 hpShort-circuit protectionYesmounting rotection Yesmounting positionfastening methodanyscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN6071597 mmwidth45 mm		
<ul> <li>for single-phase AC motor         <ul> <li>at 110/120 V rated value</li> <li>by</li> <li>at 230 V rated value</li> <li>by</li> </ul> </li> <li>for 3-phase AC motor         <ul> <li>at 200/208 V rated value</li> <li>bp</li> <li>at 220/230 V rated value</li> <li>bp</li> <li>at 220/230 V rated value</li> <li>bp</li> <li>at 460/480 V rated value</li> <li>bp</li> <li>at 575/600 V rated value</li> <li>bp</li> </ul> </li> <li>Short-circuit protection</li> <li>yes</li> <li>design of the short-circuit protection</li> <li>yes</li> <li>mounting position</li> <li>any</li> <li>screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715</li> <li>height</li> <li>97 mm</li> <li>width</li> </ul>		12.5 A
- at 110/120 V rated value0.5 hp- at 230 V rated value2 hp• for 3-phase AC motor3 hp- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value8 hp- at 575/600 V rated value10 hpShort-circuit protectionproduct function short circuit protectionYesmounting positionanyfastening methodScrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height width97 mmwidth45 mm		
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— at 575/600 V rated value10 hpShort-circuit protectionYes magneticproduct function short circuit protection design of the short-circuit tripYes magneticInstallation/ mounting/ dimensionsany screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height width97 mm 45 mm		
Short-circuit protection         product function short circuit protection       Yes         design of the short-circuit trip       magnetic         Installation/ mounting/ dimensions       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715         height       97 mm         width       45 mm		
product function short circuit protection design of the short-circuit trip       Yes magnetic         Installation/ mounting/ dimensions       any         mounting position fastening method       any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715         height width       97 mm         width       45 mm		
design of the short-circuit trip     magnetic       Installation/ mounting/ dimensions     any       fastening method     any       fastening method     screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715       height     97 mm       width     45 mm		Yes
Installation/ mounting/ dimensions         mounting position       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail according to DIN EN         height       97 mm         width       45 mm		
mounting positionanyfastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height97 mmwidth45 mm	-	
fastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715height97 mm 45 mm		any
height         97 mm           width         45 mm		
width 45 mm		
	height	97 mm
depth 97 mm	width	45 mm
	depth	97 mm

new find an editor	
required spacing	
• with side-by-side mounting at the side	0 mm
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— at the side — forwards	0 mm
<ul> <li>for live parts at 690 V</li> </ul>	0 mm
	F0 mm
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
<ul> <li>— solid or stranded</li> </ul>	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (16 12), 2x (14 8)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 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	
<ul> <li>for main contacts</li> </ul>	M4
Safety related data	
B10 value	
with high demand rate according to SN 31920	5 000
proportion of dangerous failures	
with low demand rate according to SN 31920	50 %
with high demand rate according to SN 31920	50 %
failure rate [FIT]	
	50 FIT
with low demand rate according to SN 31920     T1 value for proof text interval or convice life according to	
T1 value for proof test interval or service life according to IEC 61508	10 у
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 version for switching status	Handle
Certificates/ approvals	
General Product Approval	

	<u>Confirmation</u>			<u>KC</u>	EHC
For use in hazardou	us locations	Declaration of Con	formity	Test Certificates	
KEx ATEX	IECEx	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate
Marine / Shipping					
ABS	BUREAU VERITAS		Lloyd's Register uts	PRS	RINA
Marine / Shipping	other		Railway		
KARS	<u>Confirmation</u>		<u>Confirmation</u>	Vibration and Shock	
https://www.siemens. Industry Mall (Online	e ordering system) iemens.com/mall/en/er	ogs, Brochures,) n/Catalog/product?mlfb:	= <u>3RV2021-1KA10</u>		

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-1KA10

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

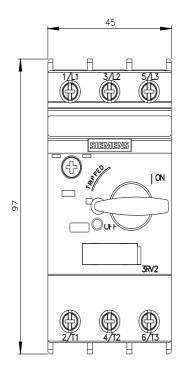
https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1KA10

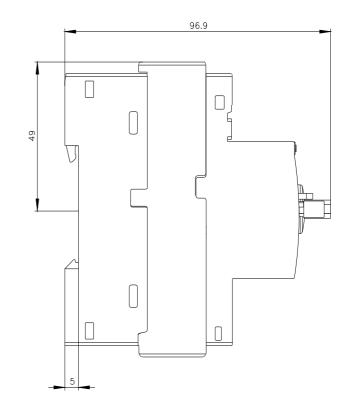
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2021-1KA10&lang=en

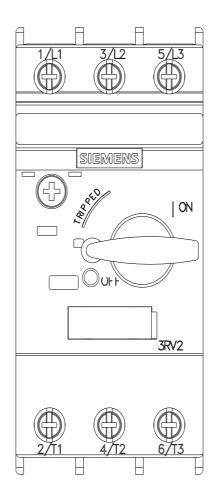
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1KA10/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-1KA10&objecttype=14&gridview=view1

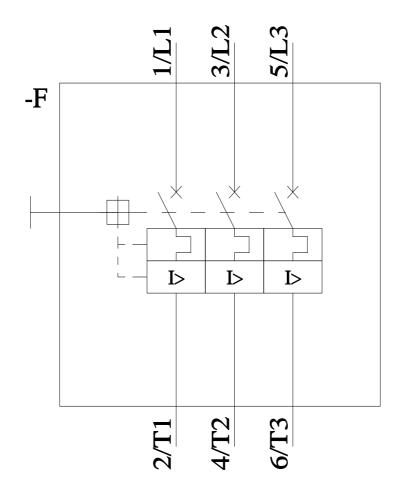






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