## **SIEMENS**

Data sheet 3RV2021-4FA15



Circuit breaker size S0 for motor protection, CLASS 10 A-release 34...40 A N-release 480 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

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>	16.25 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	5.4 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 (switching cycles)		
<ul> <li>of the main contacts typical</li> </ul>	100 000	
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000	
electrical endurance (switching 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 +40 °C	
<ul> <li>during storage</li> </ul>	-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	34 40 A	
operating voltage		
rated value	20 690 V	
at AC-3 rated value maximum	690 V	
operating frequency rated value	50 60 Hz	

operational current rated value		10.0
### ### ### ### #### #### ############	operational current rated value	40 A
Operating power	•	
- at AC-3		40 A
at 400 V rated value	• at AC-3	
	— at 230 V rated value	11 kW
— at 680 V rated value   39 kW	— at 400 V rated value	18.5 kW
operating frequency	— at 500 V rated value	22 kW
auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts operational current of auxiliary contacts at AC-15 at 120 V at 125 V bit 125 V contacts at AC-13 at 24 V at 20 Contacts for auxiliary contacts at DC-13 at 24 V at 100 V contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 V conto CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts at DC-13 at 24 CO Contacts for auxiliary contacts according to UL CSA ratings full-oad current (FLA) for 3-phase AC motor at 24 CO Contact value at 25 CO Contact value	— at 690 V rated value	39 kW
Auxiliary circuit  design of the auxillary switch number of NC contacts for auxillary contacts number of NC contacts for auxillary contacts number of CO contacts for auxillary contacts operational current of auxillary contacts at AC-15  • at 24 V • at 120 V • at 125 V • at 230 V  operational current of auxillary contacts at DC-13 • at 24 V • at 120 V • at 25 V • at 250 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V • at 60 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 24 V  operational current of auxillary contacts at DC-13 • at 25 V  operational current of auxillary contacts at DC-13 • at 25 V  operational current of auxillary contacts at DC-13 • at 25 V  operational current of auxillary contacts at DC-13 • at 25 V  operational current of auxillary contacts at DC-13 • at 25 V  operational current o	operating frequency	
design of the auxiliary switch number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts 1 number of CO contacts for auxiliary contacts 0 porational current of auxiliary contacts at AC-15 ent 24 V ent 120	at AC-3 maximum	15 1/h
number of NC contacts for auxiliary contacts   1	Auxiliary circuit	
number of NO contacts for auxillary contacts   1	design of the auxiliary switch	transverse
number of CO contacts for auxiliary contacts operational current of auxiliary contacts at AC-15	number of NC contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	number of NO contacts for auxiliary contacts	1
	number of CO contacts for auxiliary contacts	0
• at 120 V • at 125 V • at 125 V • at 125 V • at 230 V  operational current of auxiliary contacts at DC-13 • at 24 V • at 60 V • at 60 V  Protective and monitoring functions  Product function • ground fault detection • product function short circuit function • product funct	operational current of auxiliary contacts at AC-15	
	• at 24 V	2 A
operational current of auxiliary contacts at DC-13	• at 120 V	0.5 A
operational current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  Protective and monitoring functions  product function  • ground fault detection  • ground fault detection  • phase failure detection  Yes  CLASS 10  thermal  breaking capacity maximum short-circuit current (Icu)  • at AC at 240 V rated value  • at AC at 500 V rated value  • at AO v rated value  • at 400 V rated value  • at 400 V rated value  • at 500 V rated value  • at 400 V rated value  • at 400 V rated value  • at 500 V rated value  • at 600 V rated value  •	• at 125 V	0.5 A
operational current of auxiliary contacts at DC-13  • at 24 V  • at 60 V  Protective and monitoring functions  product function  • ground fault detection  • ground fault detection  • phase failure detection  Yes  CLASS 10  thermal  breaking capacity maximum short-circuit current (Icu)  • at AC at 240 V rated value  • at AC at 500 V rated value  • at AO v rated value  • at 400 V rated value  • at 400 V rated value  • at 500 V rated value  • at 400 V rated value  • at 400 V rated value  • at 500 V rated value  • at 600 V rated value  •		
at 24 V at 60 V Drotective and monitoring functions  product function ground fault detection hyphase fallure detection yes CLASS 10 telegrange for the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 240 V rated value braking capacity operating short-circuit current (Icu) at AC at 500 V rated value broking capacity operating short-circuit current (Icu) at AC at 500 V rated value broking capacity operating short-circuit current (Icu) at AC at 600 V rated value broking capacity operating short-circuit current (Icu) broking capacity operating short-circuit current (Icu) at AC at 240 V rated value broking capacity operating short-circuit current (Icu) at 400 V rated value broking capacity operating short-circuit turrent (Icu) at 400 V rated value broking capacity operating short-circuit turrent (Icu) at 400 V rated value broking capacity operating short-circuit trip unit broking capacity operation  at 400 V rated value broking capacity operation  at 4400 V rated value broking capacity operation  400 A broking capacity opera		
e at 60 V  Protective and monitoring functions  product function e ground fault detection Phase failure detection Yes Ctrip class CLASS 10 design of the overload release Understand State Act 40 V rated value e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 500 V rated value e at AC at 500 V rated value e at 400 V rated value for act 400 V rated value e at 500 V rated value e at 400 V rated value e at 400 V rated value e at 600 V rated value e at 600 V rated value e at 600 V rated value e at 480 V rated value e at 400 V rated value e at 480 V		1 A
Protective and monitoring functions  product function		
product function  • ground fault detection • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • phase failure detection  • cLASS 10  • design of the overload release  • thermal  • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 4500 V rated value • at AC at 550 V rated value • at AC at 550 V rated value • at 400 V rated value • at 690 V rated value • at 480 V rated value • at 230 V rated value • 10 hp • at 220/230 V rated value • 10 hp • at 220/230 V rated value • 10 hp • at 220/230 V rated value • 10 hp • at 4600 V rated value • 10 hp • at 4600 V rated value • 10 hp • at 200/230 V rated value • 10 hp • at 4600 V rated value • 10 hp • at 4600 V rated value • 10 hp • at 4600 V rated value • 10 hp • at 200/230 V rated value • 10 hp • at 4600		
ground fault detection phase failure detection  rip class  CLASS 10  design of the overload release thermal  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value breaking capacity operating short-circuit current (Ics) at AC at 500 V rated value at AC at 500 V rated value breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value 10 kA at 500 V rated value 10 kA at 500 V rated value 3 kA breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value 10 kA st 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 40 A at 600 V rated value 40 A yielded mechanical performance [hp] for single-phase AC motor — at 230 V rated value 7.5 hp  for 3-phase AC motor — at 220/208 V rated value 10 hp — at 220/208 V rated value 10 hp — at 220/208 V rated value 10 hp — at 460/480 V rated value 10 hp — at 460/480 V rated value 90 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection Yes design of the short-circuit trip magnetic		
rip class CLASS 10 design of the overload release thermal  breaking capacity maximum short-circuit current (Icu)  at AC at 240 V rated value 100 kA at AC at 500 V rated value 6 kA at AC at 690 V rated value 3 kA  breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value 100 kA  at AC at 690 V rated value 3 kA  breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value 100 kA  at 400 V rated value 100 kA  at 690 V rated value 2 kA  at 690 V rated value 2 kA  at 690 V rated value 3 kA  at 690 V rated value 2 kA  at 690 V rated value 480 A  at 690 V rated value 400 A  at 600 V rated value 40 A  at 600 V rated value 40 A  at 600 V rated value 40 A  yielded mechanical performance [hp]  at 70 r single-phase AC motor  - at 230 V rated value 7.5 hp  at 220/230 V rated value 7.5 hp  at 220/230 V rated value 9.0 hp  - at 220/230 V rated value 9.0 hp  - at 220/230 V rated value 10 hp  - at 220/230 V rated value 30 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection Yes  design of the short-circuit trip magnetic	•	No
trip class  design of the overload release  breaking capacity maximum short-circuit current (Icu)  • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 5500 V rated value • at AC at 690 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 400 V rated value  • at 690 V rated value  • at 100/120 V rated value  • at 220/230 V rated value  • for 3-phase AC motor  • at 480 V rated value  • for 3-phase AC motor  • at 220/230 V rated value  • for 3-phase AC motor  • at 220/230 V rated value  • for 3-phase AC motor  • at 460/480 V rated value  • for 3-phase AC motor  • at 240/270 V rated value  • for 3-phase AC motor  • at 240/270 V rated value  • for 3-phase AC motor  • at 250/270 V rated value  • for 3-phase AC motor  • at 250/270 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • at 600/480 V rated value  • for 3-phase AC motor  • for 3	-	
design of the overload release  breaking capacity maximum short-circuit current (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 400 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 890 V rated value • at 890 V rated value • at 800 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 100 KA • at 600 V rated value • at 700 V rated value • at 800 V rated value • at 600 V rated value • at 600 V rated value • at 700 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 230 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 • 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 3-phase AC motor • for 3-phase AC motor • for 3-phas	·	
breaking capacity maximum short-circuit current (Icu)  at AC at 240 V rated value 20 kA at AC at 400 V rated value 6 kA at AC at 500 V rated value 6 kA at AC at 690 V rated value 7 tak at AC at 690 V rated value 8 tak breaking capacity operating short-circuit current (Ics) at AC at 400 V rated value 100 kA at 400 V rated value 100 kA at 400 V rated value 100 kA at 400 V rated value 2 kA at 690 V rated value 2 kA response value current of instantaneous short-circuit trip unit 480 A  ILL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 40 A at 800 V rated value 40 A yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value 7.5 hp for 3-phase AC motor — at 230 V rated value 10 hp — at 220/230 V rated value 10 hp — at 220/230 V rated value 30 hp  contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit trip trotection design of the short-circuit trip magnetic		
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 AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value at 400 V rated value 100 kA at 400 V rated value at 400 V rated value 2 kA 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 40 A  yielded mechanical performance [hp]  of or single-phase AC motor — at 110/120 V rated value for 3-phase AC motor — at 230 V rated value 7.5 hp  of 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value — at 260/480 V rated value — at 4460/480 V rated value — at 4600/480 V rated value  product function short circuit protection  product function short circuit protection  general 700 kA  40 A  40 A  40 A  50		tiletillai
at AC at 400 V rated value at AC at 500 V rated value at AC at 500 V rated value breaking capacity operating short-circuit current (Ics) at AC at 400 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value breakings 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 200 V rated value at		100 kA
at AC at 500 V rated value at AC at 690 V rated value  breaking capacity operating short-circuit current (Ics) at AC  at 240 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  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 200 V rated value briefly a 40 A  yielded mechanical performance [hp]  of or 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 480 A for 40 A for 4		
at AC at 690 V rated value  breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value  at 400 V rated value  at 500 V rated value  at 690 V rated value  cesponse 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  for single-phase AC motor  at 110/120 V rated value  for single-phase AC motor  at 110/120 V rated value  for 3-phase AC motor  at 220 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  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit trip  magnetic		
breaking capacity operating short-circuit current (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  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 • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 220/230 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 — at 220/330 V rated value — at 260/480 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  100 kA  100 kA		
at AC  at 240 V rated value 10 kA  at 400 V rated value 110 kA  at 500 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 40 A  at 600 V rated value 40 A  yielded mechanical performance [hp]  for single-phase AC motor  at 110/120 V rated value 5 for 3-phase AC motor  at 230 V rated value 7.5 hp  for 3-phase AC motor  at 200/208 V rated value 10 hp  at 220/230 V rated value 3 hp  at 220/230 V rated value 3 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit trip magnetic		3 MA
<ul> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>3 kA</li> <li>at 690 V rated value</li> <li>2 kA</li> <li>response value current of instantaneous short-circuit trip unit</li> <li>480 A</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>40 A</li> <li>at 600 V rated value</li> <li>for single-phase AC motor <ul> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>10 hp</li> <li>at 200/208 V rated value</li> <li>10 hp</li> <li>at 460/480 V rated value</li> <li>30 hp</li> </ul> </li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>product function short circuit protection</li> <li>design of the short-circuit trip</li> </ul></li></ul>		
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>2 kA</li> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>30 hp</li> </ul> </li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>product function short circuit protection</li> <li>design of the short-circuit trip</li> </ul>	at 240 V rated value	100 kA
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>2 kA</li> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>30 hp</li> </ul> </li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>product function short circuit protection</li> <li>design of the short-circuit trip</li> </ul>		
at 690 V rated value     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     for single-phase AC motor         - at 110/120 V rated value         - at 230 V rated value         - at 230 V rated value         - at 220/230 V rated value         - at 460/480 V rated value          - at 460/480 V rated value		
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		
unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value		
tull-load current (FLA) for 3-phase AC motor	·	100 / 1
full-load current (FLA) for 3-phase AC motor		
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 at 230 V rated value at 200/208 V rated value at 220/230 V rated value at 220/230 V rated value at 460/480 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  40 A  40	-	
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 — 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  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  40 A  40		40 A
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 3 hp — at 230 V rated value 5 for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  magnetic		
<ul> <li>for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value — at 200 / rated value — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  y hp  3 hp  7.5 hp  10 hp  10 hp  230 hp  C300 / R300  C300 / R300  Yes  magnetic</li> </ul>		
- at 110/120 V rated value		
- at 230 V rated value  • for 3-phase AC motor  - at 200/208 V rated value 10 hp  - at 220/230 V rated value 10 hp  - at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  7.5 hp  7.5 hp  7.5 hp		3 hn
● for 3-phase AC motor  — at 200/208 V rated value 10 hp  — at 220/230 V rated value 10 hp  — at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL C300 / R300  Short-circuit protection Yes  design of the short-circuit trip magnetic		
- at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL C300 / R300  Short-circuit protection Yes design of the short-circuit trip magnetic		1.0 lip
- at 220/230 V rated value 10 hp - at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL C300 / R300  Short-circuit protection Yes design of the short-circuit trip magnetic	•	10 hp
— at 460/480 V rated value 30 hp  contact rating of auxiliary contacts according to UL C300 / R300  Short-circuit protection Yes  design of the short-circuit trip magnetic		·
contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  C300 / R300  Yes  magnetic		·
Short-circuit protection  product function short circuit protection  design of the short-circuit trip  magnetic		·
product function short circuit protection  design of the short-circuit trip  Yes  magnetic		G300 / K300
design of the short-circuit trip magnetic		
design of the fuse link		magnetic
	design of the fuse link	

for short-circuit protection of the auxiliary switch required	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gG 63 A
• at 500 V	gG 63 A
• at 690 V	gG 63 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	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	
<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
● for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— downwards	70 mm
— upwards	70 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	70 mm
— upwards	70 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
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	
<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
at AWG cables for main contacts	2x (16 12), 2x (14 8)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m

<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	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	
<ul> <li>for main contacts</li> </ul>	M4
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
Safety related data	
B10 value	
<ul> <li>with high demand rate according to SN 31920</li> </ul>	5 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %
failure rate [FIT]	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 FIT
T1 value for proof test interval or service life according to IEC 61508	10 y
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**





Confirmation



<u>KC</u>



For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 









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

Type Test Certificates/Test Report

## Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Vibration and Shock

Confirmation

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2021-4FA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4FA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4FA15

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4FA15/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-4FA15&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-4FA15&objecttype=14&gridview=view1</a>

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