## **SIEMENS**

Data sheet 3RV2031-4BB15



Circuit breaker size S2 for motor protection class 20 A-release 14...20 A N-release 260 A screw terminal Standard switching capacity with transverse auxiliary switch 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	S2
size of contactor can be combined company-specific	S2
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	14.5 W
at AC in hot operating state per pole	4.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
between main and auxiliary circuit	400 V
shock resistance according to IEC 60068-2-27	25g / 11 ms Sinus
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	50 000
of auxiliary contacts typical	50 000
electrical endurance (switching cycles) typical	50 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/15/2014
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
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 current response value current of the current-dependent overload release	14 20 A
operating voltage	
rated value	690 V
rated value	20 690 V

Operations   Current   20 A	at AC-3 rated value maximum	690 V
Operational current rate value   20 A		50 60 Hz
a   AC   3   400 \table   valed value   20 \table   A   AC   3   400 \table   valed value   7.5 kW   - at 230 \table   valed value   7.5 kW   - at 500 \table   valed value   11 kW   - at 600 \table   value   15 kW   - at 600 \table   value   value   15 kW   - at 600 \table   value   value   15 kW   - at 600 \table   value   va		20 A
e at AC-3 at 400 V rated value operating prover e at AC-3		
	•	20 A
alt 500 V rated value	— at 230 V rated value	5.5 kW
alt 500 V rated value		
Departing frequency   at AC-3 maximum   15 1/h		
Operating frequency		
* at AC-3 maximum  Auxiliary circuit  design of the auxiliary switch number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 operational current of auxiliary contacts 1 operational current of auxiliary contacts at AC-15  * at 24 V * at 230 V operational current of auxiliary contacts at DC-13  * at 24 V * at 60 V * out 110 V * out 110 V * out 110 V * out 125 V * out 125 V * out 125 V * out 126 V * out 126 V * out 127 V *		
Auxiliary circuit  design of the auxillary switch number of NC contacts for auxillary contacts 1 number of NC contacts for auxillary contacts 1 operational current of auxillary contacts at AC-15 • at 24 V • at 230 V 0.5 A operational current of auxillary contacts at DC-13 • at 24 V • at 250 V 0.5 A  • at 100 V • at 100 V • at 110 V • at 125 V 0.0 A  Protective and monitoring functions  product function • ground faut detection • phase failure detection • phase failure detection • rip class  design of the overload release  breaking capacity operating short-circuit current (lcs) at AC • at 240 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at AC at 240 V rated value • at AC at 4400 V rated value • at AC at 4500 V rated value • at AC at 6500 V rated value • at AC at 4500 V rated value • at AC at 4500 V rated value • at AC at 6500 V rated		15 1/h
design of the auxiliary switch		
number of NC contacts for auxillary contacts   1		transverse
number of NO contacts for auxiliary contacts   1		
at 24 V		
* at 24 V		
• at 230 V   Operational current of auxiliary contacts at DC-13	•	2 A
operational current of auxiliary contacts at DC-13		
	•	1A
• at 220 V  Protective and monitoring functions  product function  • ground fault detection • phase failure detection • proses CLASS 20  design of the overload release thermal  breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 800 V rated value • at 800 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 600 V rated value • at 200 V rated value • for single-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 400 V rated value • for 3-phase AC motor — at 400 V rat		
Protective and monitoring functions product function  • ground fault detection • phase failure detection • phase failure detection • phase failure detection • phase failure detection • product function • phase failure detection • product function • phase failure detection • product function • product function • phase failure detection  Yes  CLASS 20  design of the overload release 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 • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 590 V rated value • at AC at 690 V rated value • at AC at 690 V rated value  12 kA • at AC at 690 V rated value • at AC at 690 V rated value  12 kA  response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 100 V rated value • at 200 X  yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 220/220 V rated value • for 3-phase AC motor — at 220/220 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value  20 hp contact rating of auxiliary contacts according to UL		
product function  • ground fault detection  • phase failure detection  • phase failure detection  • phase failure detection  trip class  CLASS 20  design of the overload release  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  • 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 ABV V rated value  • at ABV V rated value  • at 180 V rated value  • at 180 V rated value  • at 190 V rated value  • at 190 V rated value  • at 200 V rated value  • at 20 V rated value  • at 200 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 575/600 V rated value  — at 575/600 V rated value		
• ground fault detection • phase failure detection Yes  CLASS 20  design of the overload release  breaking capacity operating short-circuit current (Ics) at AC  • at 240 V rated value • at 240 V rated value • at 690 V rated value • at 690 V rated value • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 480 V rated value • at AC at 500 V rated value • at AC at 480 V rated value • at AC at 500 V rated value  • at AC at 500 V rated value  • at AC at 2500 V rated value • at AC at 2500 V rated value • at AC at 2500 V rated value • at AC at 2500 V rated value • at AC at 2500 V rated value • at 30 V rated value • at 200 V rated value • at 200 V rated value • at 200 V rated value • for 3-phase AC motor  — at 200/208 V rated value • at 200/208 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 60/480 V rated value — at 575/600 V rated value — at 60/480 V rated v		
trip class	•	No
design of the overload release 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 breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 240 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value breaking capacity maximum short-circuit trip at AC at 500 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value breaking capacity maximum short-circuit trip at AC at 690 V rated value break	-	
design of the overload release  breaking capacity operating short-circuit current (lcs) at AC  at 240 V rated value at 400 V rated value at 500 V rated value at 600 V rated value at AC 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 breaking capacity maximum short-circuit current (lcu) at AC at 240 V rated value at AC at 240 V rated value at AC at 500 V rated value breaking capacity release at AC at 400 V rated value at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC at 500 V rated value breaking capacity release at AC actions capacity release at AC actions breaking capacity release at AC actions		
breaking capacity operating short-circuit current (Ics) at AC  • at 240 V rated value 100 kA • at 400 V rated value 30 kA • at 500 V rated value 6 kA • at 690 V rated value 3 kA  breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value 100 kA • at AC at 240 V rated value 65 kA • at AC at 500 V rated value 12 kA • at AC at 690 V rated value 5 kA  response value current of instantaneous short-circuit trip unit 260 A  unit 10L/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value 20 A • at 600 V rated value 20 A  yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp • for 3-phase AC motor — at 230 V rated value 3 hp • for 3-phase AC motor — at 220/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300	·	
at AC  at 240 V rated value at 400 V rated value at 500 V rated value at 600 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 240 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value at AC at 400 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value breaking capacity maximum short-circuit trip capacity ca		ulenna
<ul> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 6 kA</li> <li>at 690 V rated value</li> <li>3 kA</li> <li>breaking capacity maximum short-circuit current (Icu)</li> <li>at AC at 240 V rated value</li> <li>at AC at 400 V rated value</li> <li>at AC at 500 V rated value</li> <li>at AC at 690 V rated value</li> <li>at AC at 690 V rated value</li> <li>5 kA</li> <li>response value current of instantaneous short-circuit trip unit</li> <li>bult/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <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 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>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/200 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/200 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/200 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/200 V rated value</li> <li>for 3-phase AC motor</li> <li>guither action of the AC mot</li></ul>		
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 240 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 400 V rated value at AC at 500 V rated value breaking value at AC at 500 V rated value breaking value at AC at 500 V rated value breaking 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 breaking value at 600 V rated value breaking value at 110/120 V rated value at 20 A  yielded mechanical performance [hp]  for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value at 200/208 V rated value breaking value at 200/208 V rated value breaking value at 575/600 V rated value	at 240 V rated value	100 kA
• at 690 V rated value  breaking capacity maximum short-circuit current (Icu)  • at AC at 240 V rated value  • at AC at 2400 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  response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  • at 600 V rated value  • at 600 V rated value  • for single-phase AC motor  — at 110/120 V rated value  • for 3-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  7.5 hp  — at 270/230 V rated value  — at 2575/600 V rated value  20 hp  contact rating of auxiliary contacts according to UL  C300 / R300	at 400 V rated value	30 kA
breaking capacity maximum short-circuit current (Icu)  • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC 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 20 A  yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value • at 200/208 V rated value 7.5 hp — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL  C300 / R300	at 500 V rated value	6 kA
<ul> <li>at AC at 240 V rated value</li> <li>at AC at 400 V rated value</li> <li>at AC at 500 V rated value</li> <li>at AC at 500 V rated value</li> <li>at AC at 690 V rated value</li> <li>5 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</li> <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>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>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>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/5600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 250/600 V rated value</li> <li>for 3-phase AC motor</li> <li>gt ph</li> <li>gt ph</li> <li>gt p</li> <l< td=""><td>at 690 V rated value</td><td>3 kA</td></l<></ul>	at 690 V rated value	3 kA
at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value  tesponse value current of instantaneous short-circuit trip unit  at 480 V rated value  tat 480 V rated value at 600 V rated value  at 600 V rated value  to for single-phase AC motor  at 110/120 V rated value  for 3-phase AC motor  at 230 V rated value  for 3-phase AC motor  at 230 V rated value  for 3-phase AC motor  at 220/230 V rated value  7.5 hp  at 220/230 V rated value  at 460/480 V rated value  at 460/480 V rated value  at 575/600 V rated value  contact rating of auxiliary contacts according to UL  at AC at 500 V rated value  12 kA  26 A  260 A  27 A  28 A  29 A  20 A  20 A  3 hp  4 Find The Ac Total Value  7.5 hp	breaking capacity maximum short-circuit current (Icu)	
<ul> <li>at AC at 500 V rated value</li> <li>at AC at 690 V rated value</li> <li>5 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>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for single-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>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 25 hp</li> <li>at 260 A</li> </ul> </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 25 hp</li> <li>at 460/480 V rated value</li> <li>for 3-phase AC motor</li> <li>at 3 hp</li> <li>for 3-phase AC motor</li> <li>at 25 hp</li> <li>at 2575/600 V rated value</li> <li>php</li> <li>at 5 hp</li> <li>at 5 hp</li> <li>at 5 hp</li> <li>at 5 hp</li> <li>at 575/600 V rated value</li> <li>php</li> <li>contact rating of auxiliary contacts according to UL</li> <li>C300 / R300</li> </ul>		100 kA
at AC 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  for single-phase AC motor  at 110/120 V rated value  for 3-phase AC motor  at 230 V rated value  for 3-phase AC motor  at 200/208 V rated value  at 200/208 V rated value  at 200/208 V rated value  at 200/408 V rated value  at 200/408 V rated value  7.5 hp  at 2460/480 V rated value  at 6575/600 V rated value  20 A  20 A  21.5 hp  3 hp  4 for 3-phase AC motor  at 200/208 V rated value  7.5 hp  at 2575/600 V rated value  20 hp  contact rating of auxiliary contacts according to UL  20 N	<ul> <li>at AC at 400 V rated value</li> </ul>	65 kA
response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  • at 600 V rated value  20 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  1.5 hp — at 230 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  7.5 hp — at 220/230 V rated value  — at 460/480 V rated value  15 hp — at 575/600 V rated value  20 A	<ul> <li>at AC at 500 V rated value</li> </ul>	12 kA
unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value 20 A  • at 600 V rated value 20 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 1.5 hp — at 230 V rated value 3 hp  • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 15 hp — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300	<ul> <li>at AC at 690 V rated value</li> </ul>	5 kA
## Contact ratings    Tull-load current (FLA) for 3-phase AC motor   • at 480 V rated value	response value current of instantaneous short-circuit trip	260 A
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value 20 A  • at 600 V rated value 20 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 3 hp  • for 3-phase AC motor  — at 200/208 V rated value 7.5 hp  — at 220/230 V rated value 7.5 hp  — at 460/480 V rated value 7.5 hp  — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL  C300 / R300		
<ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor  — at 110/120 V rated value</li> <li>— at 230 V rated value</li> <li>5 hp</li> <li>for 3-phase AC motor</li> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> <li>Contact rating of auxiliary contacts according to UL</li> </ul>		
● at 600 V rated value  yielded mechanical performance [hp]  ● for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value 3 hp  ● for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL  C300 / R300		
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value 3 hp  • for 3-phase AC motor — at 200/208 V rated value 7.5 hp — at 220/230 V rated value 7.5 hp — at 460/480 V rated value 15 hp — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL  C300 / R300		
<ul> <li>for single-phase AC motor  — at 110/120 V rated value  — at 230 V rated value  3 hp  for 3-phase AC motor  — at 200/208 V rated value  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  contact rating of auxiliary contacts according to UL</li> <li>1.5 hp  7.5 hp  7.5 hp  15 hp  20 hp</li> </ul>		20 A
<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 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> <li>Contact rating of auxiliary contacts according to UL</li> </ul> 1.5 hp  7.5 hp  15 hp  20 hp  Contact rating of auxiliary contacts according to UL		
<ul> <li>— at 230 V rated value</li> <li>● for 3-phase AC motor</li> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> <li>Contact rating of auxiliary contacts according to UL</li> <li>3 hp</li> <li>7.5 hp</li> <li>15 hp</li> <li>20 hp</li> <li>C300 / R300</li> </ul>		
● for 3-phase AC motor  — at 200/208 V rated value 7.5 hp  — at 220/230 V rated value 7.5 hp  — at 460/480 V rated value 15 hp  — at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300		
- at 200/208 V rated value 7.5 hp - at 220/230 V rated value 7.5 hp - at 460/480 V rated value 15 hp - at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300		3 hp
— at 220/230 V rated value       7.5 hp         — at 460/480 V rated value       15 hp         — at 575/600 V rated value       20 hp         contact rating of auxiliary contacts according to UL       C300 / R300	·	
- at 460/480 V rated value 15 hp - at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300		
— at 575/600 V rated value 20 hp  contact rating of auxiliary contacts according to UL C300 / R300		
contact rating of auxiliary contacts according to UL C300 / R300		
Short-circuit protection		C300 / R300
	Short-circuit protection	

product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	
for short-circuit protection of the auxiliary switch required	fuse 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 240 V	none required
● at 400 V	100
● at 500 V	80
● at 690 V	63
nstallation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
height	140 mm
width	55 mm
depth	149 mm
required spacing	
• for grounded parts at 400 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 400 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
for grounded parts at 500 V	10 11111
— downwards	50 mm
— upwards	50 mm
— upwards — at the side	10 mm
	10 111111
• for live parts at 500 V	E0 mana
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 16 mm²), 1x (1 25 mm²)
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (18 3), 1x (18 2)
type of connectable conductor cross-sections	
type of confidentable conductor cross-sections	
• for auxiliary contacts	
	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for auxiliary contacts	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	3 4.5 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>	M6
<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
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>



**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

UK Declaration of Conformity



Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping





LRS







Confirmation

other

other

Railway



Confirmation

Vibration and Shock

## **Further information**

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2031-4BB15

Cax online generator

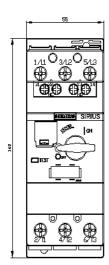
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2031-4BB15

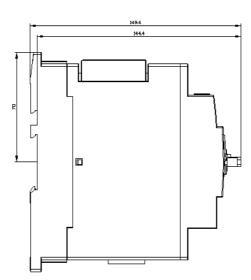
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4BB15">https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4BB15</a>

Characteristic: Tripping characteristics, I²t, Let-through current

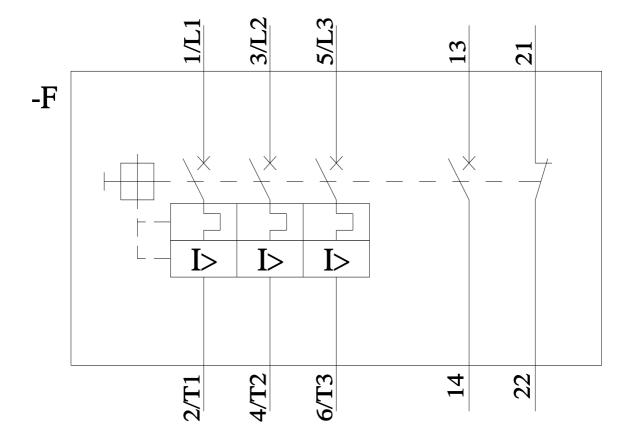
https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4BB15/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4BB15&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4BB15&objecttype=14&gridview=view1</a>









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