## **SIEMENS**

Data sheet 3RV2031-4VB15



Circuit breaker size S2 for motor protection class 20 A-release 35...45 A N-release 650 A screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

product designation design of the product product type designation 3RV2  General technical data size of the circuit-breaker Size of contactor can be combined company-specific size of contactor can be combined company-specific product extension auxiliary switch ves power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value synck resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2  Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage of utring depretation of utring transport relative humidity during operation 10 95 %  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage of at AC-3 arted value maximum operational current rated value operational current of value 45 A	product brand name	SIRIUS	
Second Identified Id	product designation	Circuit breaker	
size of the circuit-breaker  size of contactor can be combined company-specific product extension auxiliary switch  power loss [W] for rated value of the current  • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  e) of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical of auxiliary contacts typical source code according to IEC 81348-2  Substance Prohibitance (Date)  Amblent conditions installation altitude at height above sea level maximum ambient temperature of during torage of during transport relative humidity during operation  adjustable current response value current of the current dependent overload release operating voltage  orated value  of at AC 3 rated value maximum operation at AC according to IEC 81346 A  size of the current dependent overload release operating frequency rated value operational current rated value	design of the product	For motor protection	
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch prower loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical so 000 electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during operation • during transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3e rated value maximum • at AC-3 rated value maximum • at AC-3 rated value maximum • operational current rated value	product type designation	3RV2	
size of contactor can be combined company-specific product extension auxiliary switch  power loss [M] for rated value of the current  • at AC in hot operating state 24.5 W • at AC in hot operating state per pole 8.2 W  insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value 6 kV shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus  mechanical service life (switching cycles) • of the main contacts typical 50 000 • of auxiliary contacts typical 50 000 • of auxiliary contacts 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 • during operation -20 +60 °C • during storage -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  operating voltage • rated value • at AC-3 rated value maximum 690 V • at AC-3 rated value of AC-3 rated va	General technical data		
product extension auxiliary switch  power loss [W] for rated value of the current  at AC in hot operating state at AC in hot operating state per pole surge voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value surge voltage resistance rated value  shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical selectrical endurance (switching cycles) typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during operation during storage during transport relative humidity during operation 10 95 %  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value maximum enter tated value at AC-3 rated value maximum enter tated value operational current rated value	size of the circuit-breaker	S2	
power loss [W] for rated value of the current  at AC in hot operating state  at AC in hot operating state  at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical feetcrical endurance (switching cycles) typical gleetcrical endurance (switching cycles) typical gleetcrical endurance (switching cycles) typical for ference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport during storage during transport stone during transport stone relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage arted value maximum apperation current rated value operational current rated value operational current rated value operational current rated value operational current of the current rated value operational current rated value operational current	size of contactor can be combined company-specific	S2	
at AC in hot operating state 24.5 W at AC in hot operating state per pole 8.2 W insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus  mechanical service life (switching cycles) of the main 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 ambient temperature during operation -20 +60 °C during storage -50 +80 °C eduring 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 operating voltage a rated value 20 690 V at AC-3e rated value maximum 690 V operating frequency rated value operations current rated value operational current openation operation operational current rated value operational current openation operation operat	product extension auxiliary switch	Yes	
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 690 V shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus mechanical service life (switching cycles) of the main contacts typical 50 000 electrical endurance (switching cycles) typical 50 000 electrical endurance (switching cycles) 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 ambient temperature during operation -20 +60 °C -20 +80 °C -20 +80 °C relative humidity during operation 10 95 %  Main circuit 10 adjustable current response value current of the current-dependent overload release operating voltage rated value aximum 690 V at AC-3e rated value maximum 690 V operating frequency rated value operation accurrent rated value operational current rated value operation current rated value operational current rated value operation rated value operational current operation operational current rated value operational current rated value operational current operation operation operation operation operation operation operation operation operation operat	power loss [W] for rated value of the current		
insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  per of the main contacts typical  of auxiliary contacts typical  electrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  reference code according to IEC 81346-2  Questical endurance (switching cycles) typical  substance Prohibitance (Date)  10/15/2014  Ambient conditions  installation attitude at height above sea level maximum  e during operation  -20 +60 °C  -50 +80 °C  -50	<ul> <li>at AC in hot operating state</li> </ul>	24.5 W	
value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 shock resistance according to IEC 60068-2-27 shock resistance according to IEC 60068-2-27 e of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Prohibitance (Date) Interference code according to IEC 81346-2 Q Q Q Substance Pro	at AC in hot operating state per pole	8.2 W	
shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature of during operation of during storage of during transport relative humidity during operation  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage of rated value at AC-3 rated value maximum operating frequency rated value operational current of the switching cycles on 000  50 000  20 000	· · · · · · · · · · · · · · · · · · ·	690 V	
mechanical service life (switching cycles)  • of the main contacts typical  • of auxiliary contacts typical  electrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current rated value	surge voltage resistance rated value	6 kV	
of the main contacts typical     of auxiliary contacts typical     of auxiliary contacts typical     electrical endurance (switching cycles) typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum     ambient temperature     ouring operation     ouring storage     oduring transport     relative humidity during operation  Main circuit  number of poles for main current circuit     adjustable current response value current of the current-dependent overload release  operating voltage     rated value     at AC-3 rated value maximum     operational current rated value  operational current  50 000  operational current	shock resistance according to IEC 60068-2-27	25g / 11 ms Sinus	
of auxiliary contacts typical     electrical endurance (switching cycles) typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature      ouring operation     during storage     during transport  relative humidity during operation  Adin circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage      rated value     at AC-3 rated value maximum     eat AC-3 rated value maximum  operational current rated value  operational current  50 000  avaicance  10/15/2014  Ambient conditions  10/15/2014  Ambient conditions  2 000 m  ambient temperature  2 000 m  ambient emperature  3 000 m  ambient emperature  4 00 m  ambient emperature  2 000 m  ambient emperature  3 000 m  ambient emperature  4 00 m  ambient emperature  2 000	mechanical service life (switching cycles)		
electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • 690 V operating frequency rated value operational current rated value operational current rated value operational current rated value  45 A operational current  50 000  10/15/2014  Ambiert conditions  -20 +60 °C -20 +60 °C -20 +80 °C -	<ul> <li>of the main contacts typical</li> </ul>	50 000	
reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  690 V  operating frequency rated value  operational current	of auxiliary contacts typical	50 000	
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  operational current rated value  45 A  operational current  10/15/2014  2 0 60 °C  -20 +60 °C  -50 +80 °C	electrical endurance (switching cycles) typical	50 000	
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operational current rated value  operational current rated value  operational current rated value  45 A  operational current  20 +60 °C  -20 +60 °C  -50 +80 °C  -	reference code according to IEC 81346-2	Q	
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport • during transport  relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  operational current rated value  operational current  20 00 m  -20 +60 °C  -50 +80 °C  -50 +	Substance Prohibitance (Date)	10/15/2014	
ambient temperature  • during operation • during storage • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  operational current rated value  45 A  operational current	Ambient conditions		
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>50 +80 °C</li> <li>during transport</li> <li>50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>50 60 Hz</li> <li>operational current rated value</li> <li>45 A</li> </ul>	installation altitude at height above sea level maximum	2 000 m	
<ul> <li>during storage</li> <li>during transport</li> <li>-50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>eat AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>45 A</li> </ul>	ambient temperature		
<ul> <li>during transport</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>	<ul><li>during operation</li></ul>	-20 +60 °C	
relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  45 A  operational current	<ul><li>during storage</li></ul>	-50 +80 °C	
Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • rated value maximum  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  45 A  operational current	during transport	-50 +80 °C	
number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  operational current  3  35 45 A  20 690 V  690 V  690 V  45 A	relative humidity during operation	10 95 %	
adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  operational current  35 45 A  20 690 V  690 V  690 V  45 A	Main circuit		
current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  operational current	number of poles for main current circuit	3	
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>	•	35 45 A	
<ul> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>	operating voltage		
<ul> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>	rated value	20 690 V	
operating frequency rated value 50 60 Hz operational current rated value 45 A operational current	<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V	
operational current rated value 45 A operational current	<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V	
operational current	operating frequency rated value	50 60 Hz	
	operational current rated value	45 A	
• at AC-3 at 400 V rated value 45 A	operational current		
	at AC-3 at 400 V rated value	45 A	

at AC-3e at 400 V rated value	45 A
operating power	
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	22 kW
	30 kW
— at 500 V rated value	
— at 690 V rated value	37 kW
• at AC-3e	44 100
— at 230 V rated value	11 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	37 kW
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	0.15 A
• at 110 V	0 A
• at 125 V	0 A
• at 220 V	0 A
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 20
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 400 V rated value	65 kA
at AC at 500 V rated value	10 kA
at AC at 690 V rated value	4 kA
breaking capacity operating short-circuit current (Ics)	7 10 1
at AC	
at 240 V rated value	100 kA
at 400 V rated value	30 kA
• at 500 V rated value	5 kA
<ul><li>at 500 V rated value</li><li>at 690 V rated value</li></ul>	
• at 690 V rated value	2 kA
at 690 V rated value  response value current of instantaneous short-circuit trip	2 kA
at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings	2 kA
at 690 V rated value response value current of instantaneous short-circuit trip unit	2 kA
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	2 kA 650 A
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	2 kA 650 A 45 A
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 yielded mechanical performance [hp]	2 kA 650 A 45 A
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	2 kA 650 A 45 A 45 A
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  yielded mechanical performance [hp]     for single-phase AC motor	2 kA 650 A 45 A 45 A
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  yielded mechanical performance [hp]     for single-phase AC motor     at 110/120 V rated value     at 230 V rated value	2 kA 650 A 45 A 45 A
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  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	2 kA 650 A 45 A 45 A 3 hp 10 hp
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  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	2 kA 650 A 45 A 45 A 3 hp 10 hp
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  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 220/230 V rated value  at 220/230 V rated value	2 kA 650 A 45 A 45 A 3 hp 10 hp 15 hp
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  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	2 kA 650 A 45 A 45 A 3 hp 10 hp

contact rating of auxiliary contacts according to UL	C300 / R300
Short-circuit protection	0000 / 10000
	Voc
product function short circuit protection	Yes
design of the short-circuit trip  design of the fuse link	magnetic
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	TOO 11)
• at 240 V	none required
• at 400 V	125
• at 500 V	100
• at 690 V	80
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	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	50
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for grounded parts at 500 V	F0 mm
— downwards	50 mm
— upwards — at the side	50 mm
<ul><li>— at the side</li><li>• for live parts at 500 V</li></ul>	10 mm
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
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 16 mm²), 1x (1 25 mm²)
at AWG cables for main contacts	2x (18 3), 1x (18 2)
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>	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
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	

Certificates/ approvals

## **General Product Approval**





Confirmation



<u>KC</u>



**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping





LRS







Confirmation

other

other

Railway



Vibration and Shock

Confirmation

## 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=3RV2031-4VB15

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2031-4VB15}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4VB15

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2031-4VB15&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2031-4VB15&lang=en</a>

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2031-4VB15/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4VB15&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2031-4VB15&objecttype=14&gridview=view1</a>

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