## **SIEMENS**

Data sheet 3RV2032-4KA15



Circuit breaker size S2 for motor protection, CLASS 10 A-release 62...73 A N-release 949 A screw terminal increased 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	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>	29.5 W		
at AC in hot operating state per pole	9.8 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		
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V		
shock resistance acc. to IEC 60068-2-27	25g / 11 ms Sinus		
mechanical service life (switching cycles)			
<ul> <li>of the main contacts typical</li> </ul>	20 000		
of auxiliary contacts typical	20 000		
electrical endurance (switching cycles) typical	20 000		
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 acc. to IEC 81346-2	Q		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature during operation	-20 +60 °C		
ambient temperature during storage	-50 +80 °C		
<ul> <li>ambient temperature during transport</li> </ul>	-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	62 73 A		

current-dependent overload release	
<ul> <li>operating voltage rated value</li> </ul>	690 V
<ul> <li>operating voltage at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	73 A
operational current at AC-3 at 400 V rated value	73 A
operating power at AC-3	
at 230 V rated value	22 000 W
at 400 V rated value	37 000 W
at 500 V rated value	45 000 W
at 690 V rated value	55 000 W
operating frequency at AC-3 maximum	15 1/h
Auxiliary circuit	10 1/11
	transverse
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	0.4
• 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	
<ul> <li>ground fault detection</li> </ul>	No
<ul> <li>phase failure detection</li> </ul>	Yes
trip class	CLASS 10
design of the overload release	thermal
design of the overload release breaking capacity operating short-circuit current (Ics)	thermal
design of the overload release breaking capacity operating short-circuit current (Ics) at AC	thermal
breaking capacity operating short-circuit current (Ics)	thermal  100 kA
breaking capacity operating short-circuit current (lcs) at AC	
breaking capacity operating short-circuit current (Ics) at AC  • at 240 V rated value	100 kA
breaking capacity operating short-circuit current (Ics) at AC  • at 240 V rated value  • at 400 V rated value	100 kA 50 kA
breaking capacity operating short-circuit current (Ics) at AC  at 240 V rated value  at 400 V rated value  at 500 V rated value	100 kA 50 kA 8 kA
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	100 kA 50 kA 8 kA
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)	100 kA 50 kA 8 kA 4 kA
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	100 kA 50 kA 8 kA 4 kA
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 400 V rated value	100 kA 50 kA 8 kA 4 kA 100 kA
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 400 V rated value  at AC at 500 V rated value	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA
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 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 10 kA 6 kA
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 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 10 kA 6 kA
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 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 at AC at 690 V rated value tesponse value current of instantaneous short-circuit trip unit  UL/CSA ratings	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 10 kA 6 kA
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 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  response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 100 kA 10 kA 6 kA 949 A
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 400 V rated value at AC at 500 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	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 100 kA 949 A
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 400 V rated value at AC at 500 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	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 100 kA 949 A
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 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  tesponse value current of instantaneous short-circuit tripunit  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]	100 kA 50 kA 8 kA 4 kA 100 kA 100 kA 100 kA 949 A
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 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 tesponse 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 3-phase AC motor	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 6 kA 949 A
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 400 V rated value • at AC at 500 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  yielded mechanical performance [hp] • for 3-phase AC motor — at 200/208 V rated value	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 10 kA 6 kA 949 A
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 400 V rated value • at AC at 500 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  yielded mechanical performance [hp] • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 949 A  65 A 62 A  20 hp 25 hp 50 hp
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 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 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 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 at 575/600 V rated value	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 6 kA 949 A  65 A 62 A  20 hp 25 hp 50 hp 60 hp
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 400 V rated value • at AC at 500 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  yielded mechanical performance [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	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 949 A  65 A 62 A  20 hp 25 hp 50 hp
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 400 V rated value • at AC at 500 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  yielded mechanical performance [hp] • for 3-phase AC motor — at 200/208 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 Short-circuit protection	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 6 kA 949 A  65 A 62 A  20 hp 25 hp 50 hp 60 hp C300 / R300
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 400 V rated value • at AC at 500 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  yielded mechanical performance [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	100 kA 50 kA 8 kA 4 kA  100 kA 100 kA 100 kA 6 kA 949 A  65 A 62 A  20 hp 25 hp 50 hp 60 hp

design of the fuse link					
for short-circuit protection of the auxiliary switch	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk <				
required	400 Å)				
design of the fuse link for IT network for short-circuit protection of the main circuit					
• at 240 V	none required				
● at 400 V	160				
● at 500 V	125				
● at 690 V	100				
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					
<ul> <li>for grounded parts at 400 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— at the side	10 mm				
<ul> <li>for live parts at 400 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— at the side	10 mm				
<ul> <li>for grounded parts at 500 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— at the side	10 mm				
• for live parts at 500 V					
— downwards	50 mm				
— upwards	50 mm				
— at the side	10 mm				
<ul> <li>for grounded parts at 690 V</li> </ul>					
— downwards	50 mm				
— upwards	50 mm				
— backwards	0 mm				
— at the side	10 mm				
— forwards	0 mm				
• for live parts at 690 V	O TIMIT				
— downwards	50 mm				
— downwards — upwards	50 mm				
— upwards — backwards	0 mm				
— backwards — at the side	10 mm				
— at the side — forwards	0 mm				
Connections/ Terminals	V IIIII				
product function removable terminal for auxiliary and	No				
control circuit					
type of electrical connection					
for main current circuit	screw-type terminals				
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals				
arrangement of electrical connectors for main current	Top and bottom				
circuit					
type of connectable conductor cross-sections					
• for main contacts					
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1)				
<ul> <li>at AWG cables for main contacts</li> </ul>					

<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 for main contacts with screw-type terminals	3 4.5 N·m			
<ul> <li>tightening torque 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 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				
with high demand rate acc. to SN 31920	5 000			
proportion of dangerous failures				
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %			
with high demand rate acc. to SN 31920	50 %			
failure rate [FIT]				
with low demand rate acc. to SN 31920	50 FIT			
T1 value for proof test interval or service life acc. to IEC 61508	10 y			
protection class IP on the front acc. to IEC 60529	IP20			
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front			
display version for switching status	Handle			
Certificates/ approvals				

**(I)** 

**General Product Approval** 





<u>KC</u>





For use in

hazardous locations

For use in hazardous locations	Declaration of Conformity		Test Certificates		
<b>€</b> x <b>&gt;</b>	<u>Miscellaneous</u>	CE	Type Test Certificates/Test Report	Special Test Certificate	Type Test Certificates/Test Report

Test Certificates Marine / Shipping

Type Test
Certificates/Test
Report

Type Test
Certificates/Test
Report



EG-Konf.







Marine / Shipping other Railway











Confirmation

## Railway

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=3RV2032-4KA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2032-4KA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4KA15

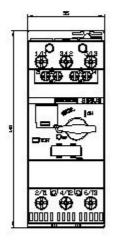
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

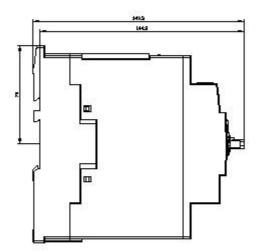
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=

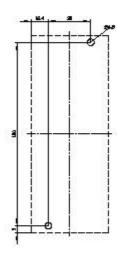
Characteristic: Tripping characteristics, I2t, Let-through current

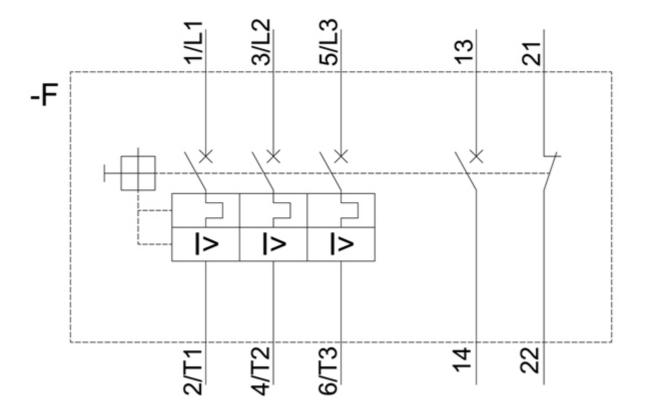
https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4KA15/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2032-4KA15&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2032-4KA15&objecttype=14&gridview=view1</a>









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