## **SIEMENS**

Data sheet 3RV2032-4WA15



Circuit breaker size S2 for motor protection, CLASS 10 A-release 42...52 A N-release 741 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>	24.5 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	8.2 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 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
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)	10/15/2014
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
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	42 52 A
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V

operating frequency rated value	50 60 Hz
operational current rated value	52 A
operational current	
at AC-3 at 400 V rated value	52 A
• at AC-3e at 400 V rated value	52 A
operating power	
• at AC-3	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	45 kW
• at AC-3e	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	45 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	
<ul> <li>ground fault detection</li> </ul>	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity maximum short-circuit current (Icu)	
<ul> <li>at AC at 240 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	10 kA
at AC at 690 V rated value	6 kA
breaking capacity operating short-circuit current (lcs)	
at AC	100 kA
at 240 V rated value     at 400 V rated value	100 kA
at 400 V rated value     at 500 V rated value	50 kA 5 kA
<ul><li>at 500 V rated value</li><li>at 690 V rated value</li></ul>	5 KA 4 kA
response value current of instantaneous short-circuit trip unit	741 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	52 A
at 600 V rated value     at 600 V rated value	52 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	5 hp
— at 230 V rated value	10 np
<ul><li>— at 230 V rated value</li><li>• for 3-phase AC motor</li></ul>	10 hp

<ul> <li>— at 200/208 V rated value</li> </ul>	15 hp
<ul> <li>at 220/230 V rated value</li> </ul>	20 hp
<ul> <li>at 460/480 V rated value</li> </ul>	40 hp
— at 575/600 V rated value	50 hp
contact rating of auxiliary contacts according to UL	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	160
● at 500 V	125
• at 690 V	100
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	
<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
<ul> <li>for live parts at 500 V</li> </ul>	
— 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	TV IIIII
type of electrical connection	ecrow type terminals
for main current circuit     for auxiliany and control 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	
<ul> <li>for main contacts</li> </ul>	
— 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)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
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)
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	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	
B10 value  • with high demand rate according to SN 31920	5 000
	5 000
with high demand rate according to SN 31920	5 000 50 %
with high demand rate according to SN 31920  proportion of dangerous failures	
<ul> <li>with high demand rate according to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate according to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate according to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> </ul>	50 %
with high demand rate according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920  failure rate [FIT]	50 % 50 %
with high demand rate according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920  failure rate [FIT]     with low demand rate according to SN 31920  T1 value for proof test interval or service life according to	50 % 50 % 50 FIT
with high demand rate according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920  failure rate [FIT]     with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC	50 % 50 % 50 FIT 10 y
with high demand rate according to SN 31920  proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920  failure rate [FIT]     with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529	50 % 50 % 50 FIT 10 y

## **General Product Approval**



Confirmation





<u>KC</u>



For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 









Special Test Certificate Type Test Certificates/Test Report

## Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Vibration and Shock

Confirmation

## Further informatio

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=3RV2032-4WA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2032-4WA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA15

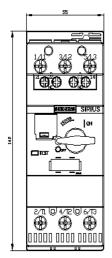
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

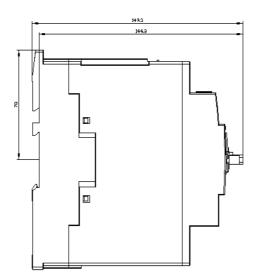
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2032-4WA15&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA15/char">https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA15/char</a>

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2032-4WA15&objecttype=14&gridview=view1







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