### Data sheet



Circuit breaker size S00 for motor protection, CLASS 10 A-release 7...10 A N release 130 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC Reusable packaging Pack = 43 units

Figure similar

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	S00
Size of contactor can be combined company-specific	S00, S0
Product extension	
Auxiliary switch	Yes
Power loss [W] total typical	7 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	

Protection class IP	
on the front	IP20
of the terminal	IP20
Shock resistance	11 20
• acc. to IEC 60068-2-27	25g / 11 ms
	239 / 11 IIIS
Mechanical service life (switching cycles)	400,000
of the main contacts typical	100 000
of auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Certificate of suitability ATEX	Yes
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
Temperature compensation	-20 +60 °C
Relative humidity during operation	10 95 %
B.AInIn-nits	
Main circuit  Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	7 10 A
dependent overload release	7 107X
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	10 A
Operating current	
• at AC-3	
— at 400 V rated value	10 A
Operating power	
• at AC-3	
— at 230 V rated value	2 200 W
— at 400 V rated value	4 000 W
— at 500 V rated value	5 500 W
— at 690 V rated value	7 500 W
at 500 v lated value	

• at AC-3 maximum	15 1/h
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Auxiliary circuit	
Design of the auxiliary switch	transverse
Number of NC contacts for auxiliary contacts	1
Number of NO contacts for auxiliary contacts	1
Number of CO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	0
Operating current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	1 A
● at 60 V	0.15 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
Operational short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	100 kA
• at 500 V rated value	42 kA
• at 690 V rated value	4 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	42 kA
● at AC at 690 V rated value	6 kA
Breaking capacity short-circuit current (Icn)	
• at 1 current path at DC at 150 V rated value	10 kA
<ul> <li>with 2 current paths in series at DC at 300 V</li> </ul>	10 kA
rated value	
<ul> <li>with 3 current paths in series at DC at 450 V</li> </ul>	10 kA
rated value	
Response value current	
<ul> <li>of instantaneous short-circuit trip unit</li> </ul>	130 A

# UL/CSA ratings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	10 A
• at 600 V rated value	10 A
Yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	1.5 hp
<ul> <li>for three-phase AC motor</li> </ul>	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 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	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
Design of the fuse link for IT network for short-circuit protection of the main circuit	
● at 400 V	gL/gG 50 A
● at 500 V	gL/gG 40 A
● at 690 V	gL/gG 40 A

Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	97 mm
Width	45 mm
Depth	97 mm
Required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm

— at the side	30 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	30 mm

Connections/Terminals  Product function	
removable terminal for auxiliary and control	No
circuit	
Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
• for main contacts	
<ul><li>— single or multi-stranded</li></ul>	2x (0,75 2,5 mm²), 2x 4 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 conductors for main contacts</li> </ul>	2x (18 14), 2x 12
Connectable conductor cross-section for auxiliary contacts finely stranded	
• with core end processing	0.5 2.5 mm²
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— single or multi-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 conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
Tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
• for auxiliary contacts with screw-type terminals	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	
• for main contacts	M3
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	5 000
Proportion of dangerous failures	

<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version	
• for switching status	Handle

# General Product Approval

For use in hazardous locations











For use in haz-	Declaration of	Test Certificates	Marine / Shipping
ardous loca-	Conformity		
tions			



**IECE**x



Type Test Certificates/Test Report

Special Test Certificate

KC





other

## Marine / Shipping



LRS









Confirmation

### other Railway



Miscellaneous

Vibration and Shock

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-1JA15-Z X95

### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1JA15-Z X95

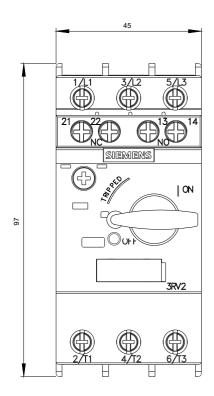
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA15-Z X95

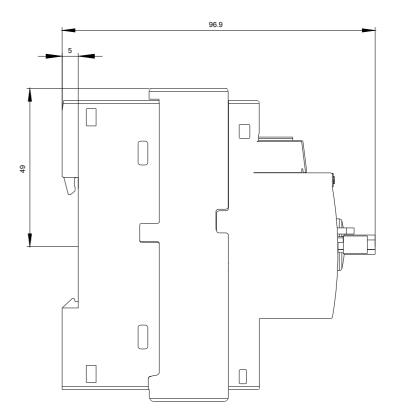
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1JA15-Z X95&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1JA15-Z X95&lang=en</a>

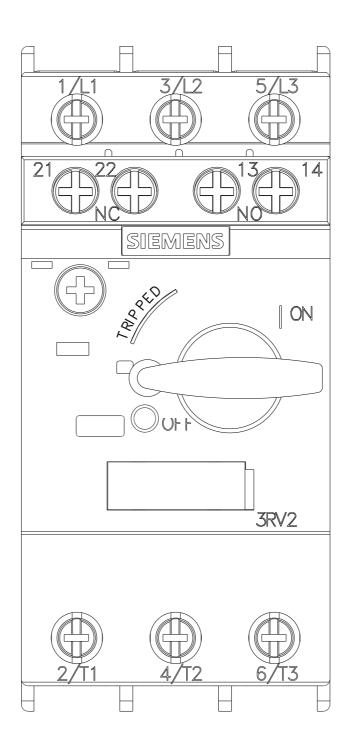
Characteristic: Tripping characteristics, I2t, Let-through current

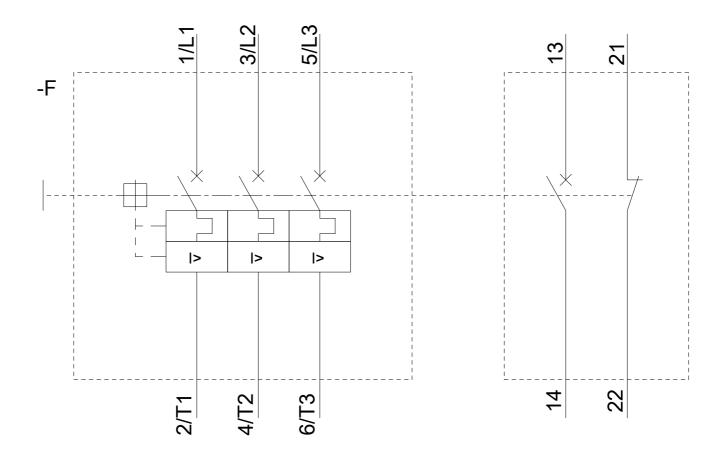
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA15-Z X95/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1JA15-Z X95&objecttype=14&gridview=view1









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