



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.7...1 A N-release 13 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	3RV1

General technical data

size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	5.5 W
• at AC in hot operating state per pole	1.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
mechanical service life (operating cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitive (Date)	01/01/2013

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
• 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	0.7 ... 1 A
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	1 A
operational current	
• at AC-3 at 400 V rated value	1 A
• at AC-3e at 400 V rated value	1 A
operating power	
• at AC-3	

<ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value 	0.1 kW 0.25 kW 0.4 kW 0.6 kW 0.1 kW 0.25 kW 0.4 kW 0.6 kW
operating frequency <ul style="list-style-type: none"> ● at AC-3 maximum ● at AC-3e maximum 	15 1/h 15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	1
number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> ● at 24 V ● at 110 V ● at 120 V ● at 125 V ● at 230 V 	2 A 2 A 2 A 2 A 0.5 A
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> ● at 24 V ● at 60 V 	1 A 0.15 A
Protective and monitoring functions	
product function	
<ul style="list-style-type: none"> ● ground fault detection ● phase failure detection 	No Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> ● 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 	100 kA 100 kA 100 kA 100 kA
operating short-circuit current breaking capacity (Ics) at AC	
<ul style="list-style-type: none"> ● at 240 V rated value ● at 400 V rated value ● at 500 V rated value ● at 690 V rated value 	100 kA 100 kA 100 kA 100 kA
response value current of instantaneous short-circuit trip unit	13 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	1 A 1 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> ● for 3-phase AC motor <ul style="list-style-type: none"> — at 575/600 V rated value 	0.5 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 style="list-style-type: none"> ● for short-circuit protection of the auxiliary switch required 	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)
design of the fuse link for IT network for short-circuit protection of the main circuit	
<ul style="list-style-type: none"> ● at 240 V 	none required

- at 400 V
- at 500 V
- at 690 V

gL/gG 10 A
gL/gG 10 A
gL/gG 10 A

Installation/ mounting/ dimensions

mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	90 mm
width	45 mm
depth	75 mm
required spacing	
<ul style="list-style-type: none"> • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side 	<p>20 mm 20 mm 9 mm</p>
<ul style="list-style-type: none"> • for live parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side 	<p>20 mm 20 mm 9 mm</p>
<ul style="list-style-type: none"> • for grounded parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side 	<p>20 mm 20 mm 9 mm</p>
<ul style="list-style-type: none"> • for live parts at 500 V <ul style="list-style-type: none"> — downwards — upwards — at the side 	<p>20 mm 20 mm 9 mm</p>
<ul style="list-style-type: none"> • for grounded parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards 	<p>20 mm 20 mm 0 mm 9 mm 0 mm</p>
<ul style="list-style-type: none"> • for live parts at 690 V <ul style="list-style-type: none"> — downwards — upwards — backwards — at the side — forwards 	<p>20 mm 20 mm 0 mm 9 mm 0 mm</p>

Connections/ Terminals

type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit 	<p>screw-type terminals screw-type terminals</p>
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing 	<p>2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (1 ... 4 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p>
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded 	<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p>
tightening torque	
<ul style="list-style-type: none"> • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 	<p>0.8 ... 1.2 N·m 0.8 ... 1.2 N·m</p>
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
<ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts 	<p>M3 M3</p>

Safety related data

B10 value	
<ul style="list-style-type: none"> • with high demand rate according to SN 31920 	5 000
proportion of dangerous failures	
<ul style="list-style-type: none"> • with low demand rate according to SN 31920 	50 %

- with high demand rate according to SN 31920
- failure rate [FIT]**
- with low demand rate according to SN 31920
- protection class IP on the front according to IEC 60529**
- touch protection on the front according to IEC 60529**
- display version for switching status

50 %

50 FIT
IP20

finger-safe, for vertical contact from the front
Rocker switch

Certificates/ approvals

General Product Approval

For use in hazardous locations

[Confirmation](#)



CCC



UL



ATEX



IECEX

Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Marine / Shipping

other



LRS



PRS



RINA



RMRS



DNV GL

[Miscellaneous](#)

other

Railway

[Confirmation](#)



VDE

[Special Test Certificate](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RV1011-0JA15>

Cax online generator

<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0JA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0JA15>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0JA15&lang=en

Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0JA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0JA15&objecttype=14&gridview=view1>



