



Circuit breaker size S00 for motor protection, CLASS 10 A-release 5.5...8 A
N-release 104 A 1 NO+1 NC transverse Screw terminal Standard switching capacity

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	9.25 W
• at AC in hot operating state per pole	3.1 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (switching cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibition (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	5.5 ... 8 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	8 A
operational current	
• at AC-3 at 400 V rated value	8 A
• at AC-3e at 400 V rated value	8 A

operating power	
<ul style="list-style-type: none"> 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 	1.5 kW 3 kW 4 kW 5.5 kW 1.5 kW 3 kW 4 kW 5.5 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
breaking capacity maximum short-circuit current (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 50 kA 3 kA 2 kA
breaking capacity operating short-circuit current (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 13 kA 3 kA 2 kA
response value current of instantaneous short-circuit trip unit	104 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 	8 A 8 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> for single-phase AC motor <ul style="list-style-type: none"> at 110/120 V rated value at 230 V rated value for 3-phase AC motor <ul style="list-style-type: none"> at 200/208 V rated value at 220/230 V rated value 	0.33 hp 1 hp 2 hp 2 hp

— at 460/480 V rated value	5 hp
— at 575/600 V rated value	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 I _k < 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 Vat 400 Vat 500 Vat 690 V	gL/gG 80 A gL/gG 63 A gL/gG 40 A gL/gG 40 A
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	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">downwardsupwardsat the sidefor live parts at 400 V<ul style="list-style-type: none">downwardsupwardsat the sidefor grounded parts at 500 V<ul style="list-style-type: none">downwardsupwardsat the sidefor live parts at 500 V<ul style="list-style-type: none">downwardsupwardsat the sidefor grounded parts at 690 V<ul style="list-style-type: none">downwardsupwardsbackwardsat the sideforwardsfor live parts at 690 V<ul style="list-style-type: none">downwardsupwardsbackwardsat the sideforwards	20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 0 mm 9 mm 0 mm 20 mm 20 mm 0 mm 9 mm 0 mm
Connections/ Terminals	
type of electrical connection <ul style="list-style-type: none">for main current circuitfor auxiliary and control circuit	screw-type terminals screw-type terminals
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 strandedfinely stranded with core end processing	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)

type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts	M3 M3

Safety related data	
B10 value • with high demand rate according to SN 31920	5 000
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920	50 % 50 %
failure rate [FIT] • with low demand rate according to SN 31920	50 FIT
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	Rocker switch

Certificates/ approvals

General Product Approval	For use in hazard-ous locations
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[Confirmation](#)



For use in hazard-ous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping



other	Railway
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[Miscellaneous](#)

[Confirmation](#)



[Special Test Certificate](#)

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=3RV1011-1HA15>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1HA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1HA15>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1HA15&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1HA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1HA15&objecttype=14&gridview=view1>

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