



Special type Circuit breaker size S0 for motor protection, CLASS 10 A-release 18...25 A N-release 325 A Screw terminal Standard switching capacity Ambient temperature -50 °C 500 switching cycles

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	S0
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	10.5 W
• at AC in hot operating state per pole	3.5 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
mechanical service life (operating cycles)	
• of the main contacts typical	500
• of auxiliary contacts typical	500
electrical endurance (operating cycles) typical	500
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1 Lead titanium zirconium oxide - 12626-81-2
Net Weight	320 g
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-50 ... +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	18 ... 25 A
type of voltage for main current circuit	AC
operating voltage	

<ul style="list-style-type: none"> • rated value 	20 ... 690 V
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	25 A
operational current	
<ul style="list-style-type: none"> • at AC-3 at 400 V rated value 	25 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 	5.5 kW 11 kW 15 kW 22 kW
operating frequency	
<ul style="list-style-type: none"> • at AC-3 maximum 	15 1/h
Auxiliary circuit	
type of voltage for auxiliary and control circuit	AC/DC
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
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 (I_{cu})	
<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 	50 kA 50 kA 10 kA 4 kA
operating short-circuit current breaking capacity (I_{cs}) 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 	25 kA 25 kA 5 kA 2 kA
response value current of instantaneous short-circuit trip unit	325 A
UL/CSA ratings	
Category Control Number (CCN)	E156943 (NKJH, NKJH7)
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
<ul style="list-style-type: none"> • at 400 V • at 500 V • at 690 V 	gG 63 A gG 50 A gG 50 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	97 mm
width	45 mm
depth	97 mm
required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting at the side • for grounded parts at 400 V <ul style="list-style-type: none"> — downwards — upwards — at the side • for live parts at 400 V 	0 mm 30 mm 30 mm 9 mm

— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
• for main current circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
tightening torque	
• for main contacts with screw-type terminals	2 ... 2.5 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	
• for main contacts	M4
IEC 61508	
T1 value	
• for proof test interval or service life according to IEC 61508	10 a
Electrical Safety	
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	
display version for switching status	Handle
Approvals Certificates	
Environmental Product Declaration	
• global warming potential [CO ₂ eq] / during manufacturing	2.68 kg
• global warming potential [CO ₂ eq] / during sales	0.143 kg
• global warming potential [CO ₂ eq] / during operation	72.7 kg
• global warming potential [CO ₂ eq] / after end of life	-0.445 kg
• global warming potential [CO ₂ eq] / total	75.078 kg
Environment	General Product Approval



Environmental Con-
firmations



General Product Approval



Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Maritime application



other

[Miscellaneous](#)



[Confirmation](#)



Railway

[Special Test Certificate](#)

[Confirmation](#)

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RV2021-4DA10-0BA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4DA10-0BA0>

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

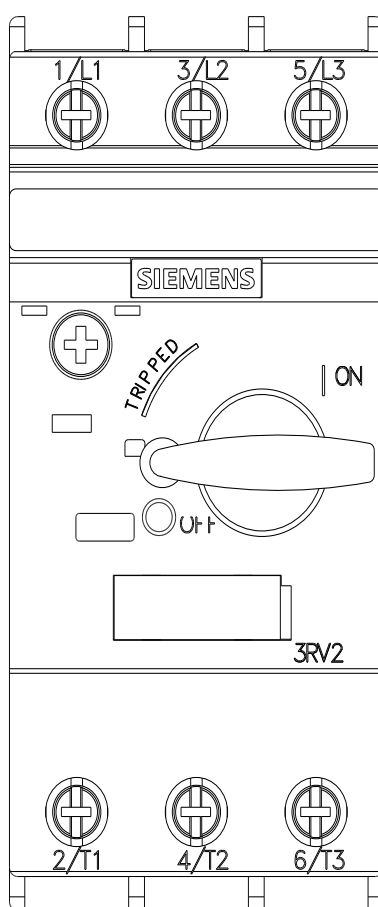
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-4DA10-0BA0&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4DA10-0BA0>

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>





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