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Data sheet

3RV2021-0JA10



Circuit breaker size S0 for motor protection, CLASS 10 A-release 0.7...1 A N-release 13 A screw terminal Standard switching capacity

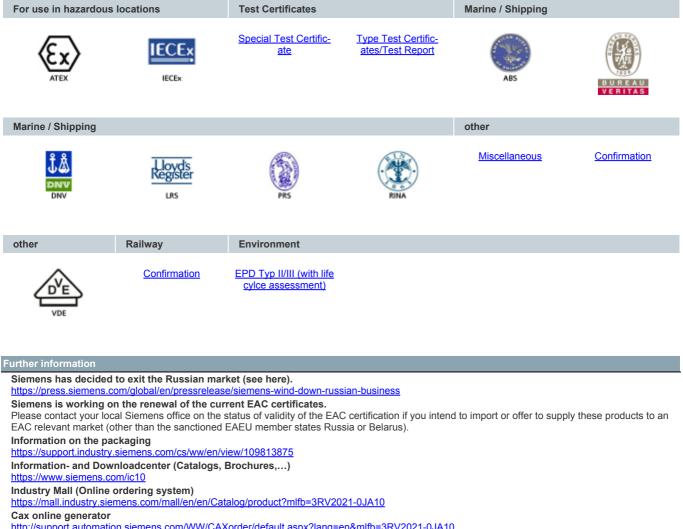
4/11 4/12 6/13	
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S0
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	7.25 W
 at AC in hot operating state per pole 	2.4 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 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (operating cycles) typical	100 000
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)	10/01/2009
SVHC substance name	Blei - 7439-92-1
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	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.3 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
• at AC-3e	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.3 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
	0.0 KVV
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
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	
 ground fault detection 	No
 phase failure detection 	Yes
trip class	CLASS 10
design of the overload release	thermal
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	100 kA
at AC at 690 V rated value	100 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	100 kA
at 240 V rated value at 400 V rated value	100 kA
at 500 V rated value	100 kA
at 690 V rated value	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	
 at 480 V rated value 	1 A
● at 600 V rated value	1 A
yielded mechanical performance [hp]	
 for 3-phase AC motor 	
— at 575/600 V rated value	0.5 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
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	
• with side-by-side mounting at the side	0 mm
 for grounded parts at 400 V 	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm

CE UK Confirmation	
General Product Approval	
oprovals Certificates	
display version for switching status	Handle
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
protection class IP on the front according to IEC 60529	IP20
Electrical Safety	
T1 value for proof test interval or service life according to EC 61508	10 a
EC 61508	
B10 value with high demand rate according to SN 31920	5 000
31920	
ailure rate [FIT] with low demand rate according to SN	50 FIT
 with high demand rate according to SN 31920 	50 %
with low demand rate according to SN 31920	50 %
proportion of dangerous failures	
fety related data	
 for main contacts 	M4
design of the thread of the connection screw	
size of the screwdriver tip	Pozidriv size 2
design of screwdriver shaft	Diameter 5 to 6 mm
for main contacts with screw-type terminals	2 2.5 N·m
tightening torque	
for AWG cables for main contacts	2x (16 12), 2x (14 8)
— finely stranded with core end processing	2x (1 2.5 mm ²), 2x (2.5 6 mm ²), 1x 10 mm ²
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
for main contacts	
type of connectable conductor cross-sections	
arrangement of electrical connectors for main current circuit	Top and bottom
for main current circuit	screw-type terminals
ype of electrical connection	
onnections/ Terminals	
— forwards	0 mm
— at the side	30 mm
— backwards	0 mm
— upwards	50 mm
— downwards	50 mm
• for live parts at 690 V	50 mm
— forwards	0 mm
— at the side	
— backwards — at the side	0 mm 30 mm
— upwards	50 mm
— downwards	50 mm
• for grounded parts at 690 V	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
• for live parts at 500 V	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
 for grounded parts at 500 V 	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
 for live parts at 400 V 	

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http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-0JA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0JA10

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

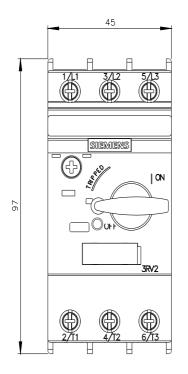
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-0JA10&lang=en

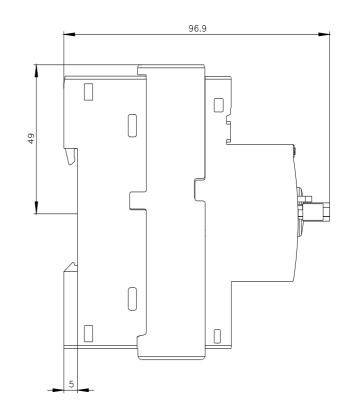
Characteristic: Tripping characteristics, I2t, Let-through current

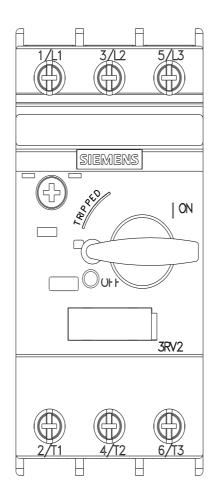
https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0JA10/char

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

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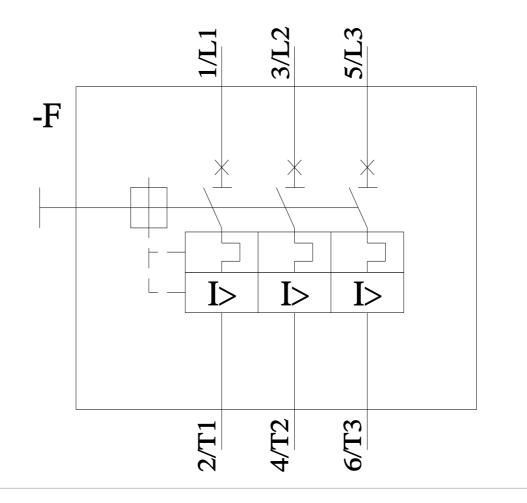






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