SIEMENS

Data sheet

3RV2021-1AA10



Circuit breaker size S0 for motor protection, CLASS 10 A-release 1.1...1.6 A N-release 21 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
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	1.1 1.6 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	1.6 A
operational current	

 at AC-3 at 400 V rated value 	1.6 A				
• at AC-3e at 400 V rated value	1.6 A				
operating power					
• at AC-3					
— at 230 V rated value	0.3 kW				
— at 400 V rated value	0.6 kW				
— at 500 V rated value	0.8 kW				
— at 690 V rated value	1.1 kW				
• at AC-3e					
— at 230 V rated value	0.3 kW				
— at 400 V rated value	0.6 kW				
— at 500 V rated value	0.8 kW				
— at 690 V rated value	1.1 kW				
operating frequency					
• at AC-3 maximum	15 1/h				
• at AC-3e maximum	15 1/h				
Auxiliary circuit	15 1/11				
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 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	21 A				
UL/CSA ratings					
full-load current (FLA) for 3-phase AC motor					
at 480 V rated value	1.6 A				
• at 600 V rated value	1.6 A				
vielded mechanical performance [hp]	1.0 A				
for single-phase AC motor at 220 V retect value	0.1 hp				
— at 230 V rated value	0.1 hp				
• for 3-phase AC motor					
- at 460/480 V rated value	1 hp				
— at 575/600 V rated value	0.8 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 for grounded parts at 400 V 	0 mm				
 or grounded parts at 400 V — downwards 	30 mm				

 for live parts at 400 V downwards upwards at the side n for grounded parts at 500 V downwards upwards upwards upwards at the side n at the side backwards at the side <	nm) nm) nm mm) nm) nm) nm) nm) nm
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tightening torque 2 • for main contacts with screw-type terminals 2 design of screwdriver shaft Dia	: (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
• for main contacts with screw-type terminals 2 design of screwdriver shaft Dia	: (16 12), 2x (14 8)
design of screwdriver shaft Dia	
-	2.5 N·m
size of the screwdriver tip Po	ameter 5 to 6 mm
	ozidriv size 2
design of the thread of the connection screw	
• for main contacts M4	4
afety related data	
B10 value	
	000
proportion of dangerous failures	
	0/
3	%
• with high demand rate according to SN 31920 50	70
failure rate [FIT]	
5) FIT
T1 value for proof test interval or service life according to IEC 10 61508	
protection class IP on the front according to IEC 60529	20
touch protection on the front according to IEC 60529 fing	ger-safe, for vertical contact from the front
display version for switching status Ha	andle
ertificates/ approvals	

	<u>Confirmation</u>	U	KC	EHC	IECEx
For use in hazard- ous locations	Declaration of Conformity	y	Test Certificates		Marine / Shipping
ATEX A	CE EG-Konf.	UK CA	Special Test Certific- ate	Type Test Certific- ates/Test Report	ABS
Marine / Shipping					other
BUREAU VERITAS		Lloyd's Register uis	PRS	RINA	<u>Confirmation</u>
other	Railway				
	Vibration and Shock	<u>Confirmation</u>			

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=3RV2021-1AA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-1AA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-1AA10

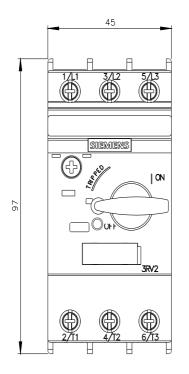
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-1AA10&lang=en

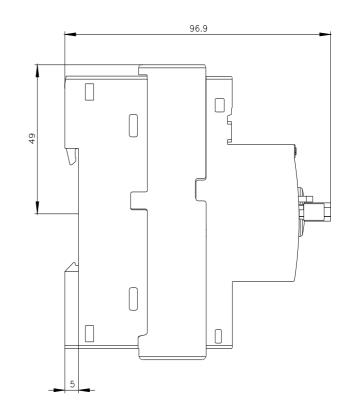
Characteristic: Tripping characteristics, I²t, Let-through current

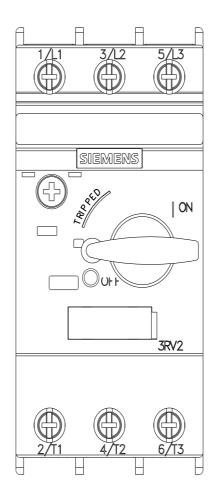
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Further characteristics (e.g. electrical endurance, switching frequency)

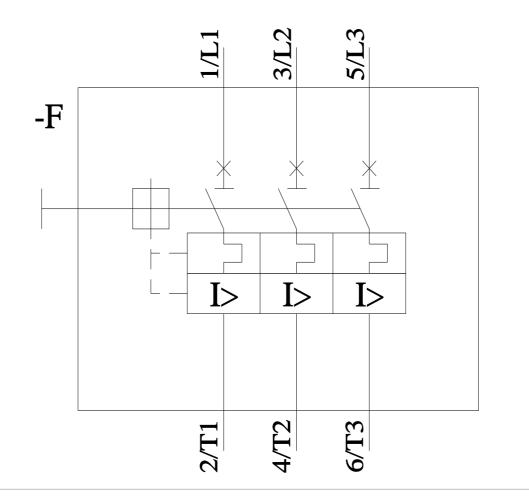
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-1AA10&objecttype=14&gridview=view1







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