



Circuit breaker size S0 for motor protection, CLASS 10 A-release 20...25 A N-release 325 A Spring-type terminal switching capacity 30 kA at 600 V according to UL/CSA

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	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
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	18 ... 25 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	25 A
operational current	
• at AC-3 at 400 V rated value	25 A
• at AC-3e at 400 V rated value	25 A

operating power		
• at AC-3		
— at 690 V rated value	22 kW	
• at AC-3e		
— at 690 V rated value	22 kW	
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 690 V rated value	4 kA	
operating short-circuit current breaking capacity (Ics) at AC		
• at 690 V rated value	2 kA	
response value current of instantaneous short-circuit trip unit	325 A	
UL/CSA ratings		
full-load current (FLA) for 3-phase AC motor		
• at 480 V rated value	25 A	
• at 600 V rated value	25 A	
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 110/120 V rated value	2 hp	
— at 230 V rated value	3 hp	
• for 3-phase AC motor		
— at 200/208 V rated value	5 hp	
— at 220/230 V rated value	7.5 hp	
— at 460/480 V rated value	15 hp	
— at 575/600 V rated value	20 hp	
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		
• at 400 V	gG 63 A	
• at 500 V	gG 50 A	
• at 690 V	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	119 mm	
width	45 mm	
depth	97 mm	
required spacing		
• with side-by-side mounting at the side	0 mm	
• for grounded parts at 690 V		
— downwards	50 mm	
— upwards	50 mm	
— at the side	30 mm	
• for live parts at 690 V		
— downwards	50 mm	
— upwards	50 mm	
— at the side	30 mm	
Connections/ Terminals		

type of electrical connection	spring-loaded terminals
• for main current circuit	
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 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 6 mm ²)
— finely stranded without core end processing	2x (1 ... 6 mm ²)
• for AWG cables for main contacts	2x (18 ... 8)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm

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	50 %
• with high demand rate according to SN 31920	50 %
failure rate [FIT]	
• with low demand rate according to SN 31920	50 FIT
T1 value for proof test interval or service life according to IEC 61508	10 a
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	Handle

Certificates/ approvals

General Product Approval	Declaration of Conformity
	Confirmation
	
	
	

Test Certificates	Marine / Shipping
Special Test Certificate	Type Test Certificates/Test Report
	
	
	

Marine / Shipping	other	Railway
	Confirmation	Confirmation
		Vibration and Shock

Further information

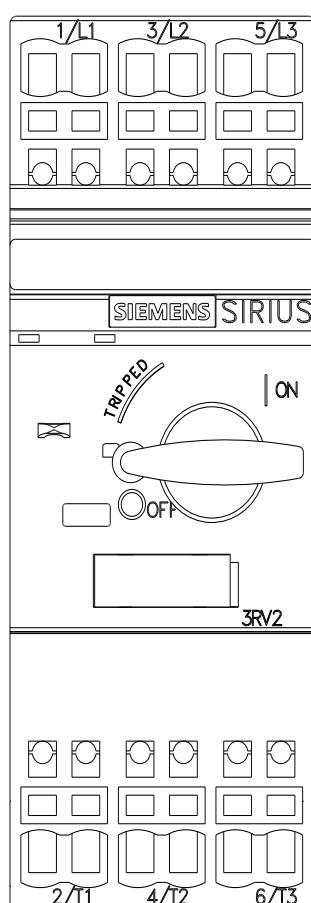
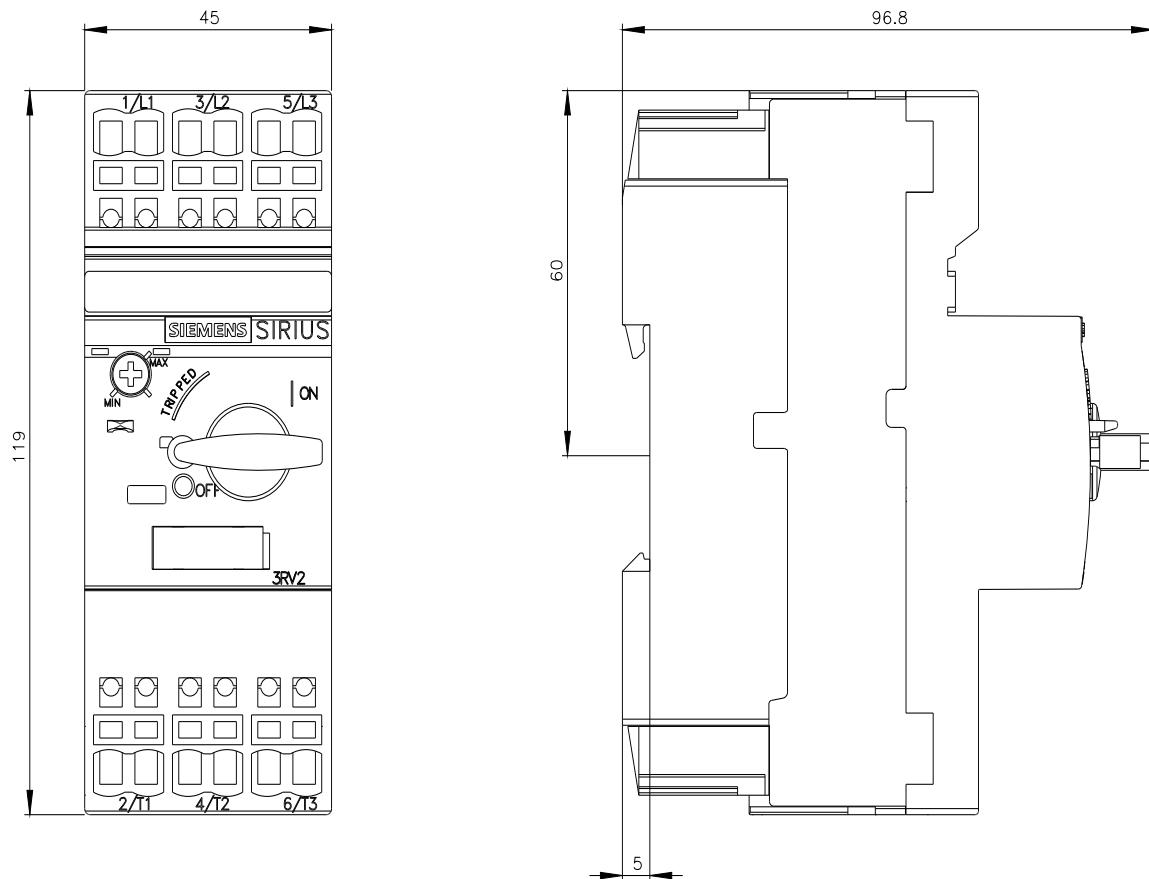
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification 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=3RV2023-4DA20
Cax online generator http://support.automation.siemens.com/WW/CAxorder/default.aspx?lang=en&mlfb=3RV2023-4DA20
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2023-4DA20
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2023-4DA20&lang=en

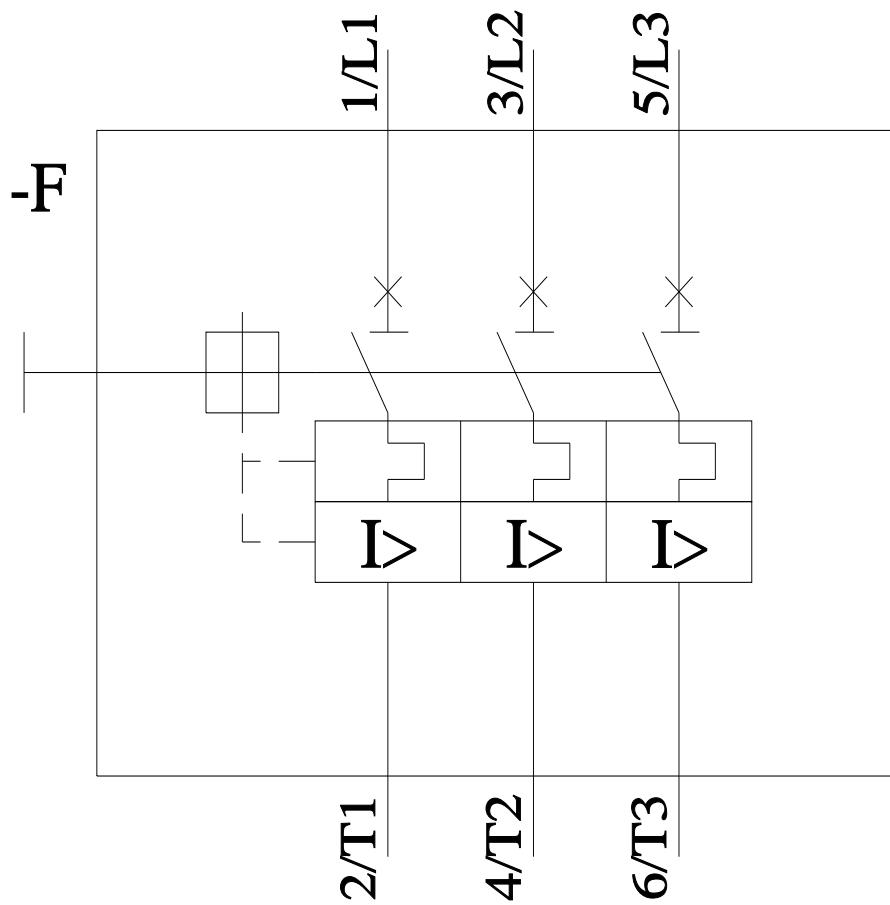
Characteristic: Tripping characteristics, I^t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2023-4DA20/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2023-4DA20&objecttype=14&gridview=view1>





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