SIEMENS

Data sheet

3RV2041-4RA10-0DA0



Circuit breaker size S3 For plant protection Without phase failure protection Arelease 65...84 A Short-circuit release 1170 A Screw terminal Standard switching capacity

an an an	
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	for system protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	\$3
size of contactor can be combined company-specific	\$3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	39 W
 at AC in hot operating state per pole 	11.3 W
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance rated value	8 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms Sinus
mechanical service life (operating cycles)	
 of the main contacts typical 	25 000
 of auxiliary contacts typical 	25 000
electrical endurance (operating cycles) typical	25 000
reference code according to IEC 81346-2	Q
SVHC substance name	Lead - 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	65 84 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	84 A

operational current	
• at AC-3 at 400 V rated value	84 A
• at AC-3e at 400 V rated value	84 A
operating power	
• at AC-3	
— at 230 V rated value	22 kW
— at 400 V rated value	45 kW
— at 500 V rated value	55 kW
— at 690 V rated value	75 kW
• at AC-3e	
— at 230 V rated value	22 kW
— at 400 V rated value	45 kW
— at 500 V rated value	55 kW
— at 690 V rated value	75 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	No
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	65 kA
• at AC at 500 V rated value	8 kA
• at AC at 690 V rated value	5 kA
operating short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	30 kA
• at 500 V rated value	4 kA
• at 690 V rated value	3 kA
response value current of instantaneous short-circuit trip unit	1 170 A
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	165 mm
width	70 mm
depth	176 mm
required spacing	
with side-by-side mounting at the side	0 mm
 for grounded parts at 400 V 	
downwards	70 mm
— upwards	70 mm
— at the side	10 mm
• for live parts at 400 V	70
— downwards	70 mm
— upwards	70 mm
— at the side	10 mm
 for grounded parts at 500 V 	
— downwards	110 mm
— upwards	110 mm

— at the side	10 mm	
 for live parts at 500 V 		
— downwards	110 mm	
— upwards	110 mm	
— at the side	10 mm	
 for grounded parts at 690 V 		
— downwards	150 mm	
— upwards	150 mm	
— at the side	30 mm	
• for live parts at 690 V		
— downwards	150 mm	
— upwards	150 mm	
— at the side	30 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	2x (2.5 16 mm²)	
— solid or stranded	2x (2,5 50 mm²), 1x (10 70 mm²)	
 — finely stranded with core end processing 	2x (2.5 35 mm ²), 1x (2.5 50 mm ²)	
— finely stranded without core end processing	2x (10 35 mm ²), 1x (10 50 mm ²)	
tightening torque		
for main contacts for ring cable lug	4.5 6 N·m	
	19 mm	
outer diameter of the usable ring cable lug maximum	19 11111	
tightening torque		
for main contacts with screw-type terminals	4.5 6 N·m	
design of the thread of the connection screw		
for main contacts	M8	
Safety related data		
product function suitable for safety function	Yes	
suitability for use		
 safety-related switching on 	No	
 safety-related switching OFF 	Yes	
service life maximum	10 a	
test wear-related service life necessary	Yes	
proportion of dangerous failures		
with low demand rate according to SN 31920	40 %	
with high demand rate according to SN 31920	50 %	
B10 value with high demand rate according to SN 31920	5 000	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT	
ISO 13849		
device type according to ISO 13849-1	3	
overdimensioning according to ISO 13849-2 necessary	Yes	
IEC 61508		
	Turce A	
safety device type according to IEC 61508-2	Туре А	
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	
	Handle	
Approvals Certificates General Product Approval		Test Certificates

CE EG-Konf.	<u>Confirmation</u>	UK CA	<u>KC</u>	EAC	Type Test Certific- ates/Test Report		
Test Certificates	Marine / Shipping						
Special Test Certific- ate	ABS	BUREAU VERITAS		Lloyds Register urs	PRS		
Marine / Shipping	other			Railway	Environment		
RINA	<u>Miscellaneous</u>	<u>Confirmation</u>		<u>Confirmation</u>	EPD		
Environment							
Siemens EcoTech	Environmental Con- firmations						
Further information							
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=3B\/2041-4BA10-0DA0							

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2041-4RA10-0DA0

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2041-4RA10-0DA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4RA10-0DA0

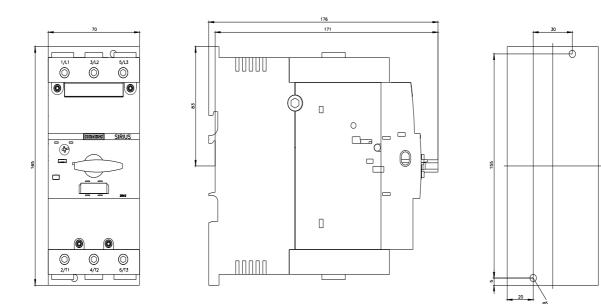
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

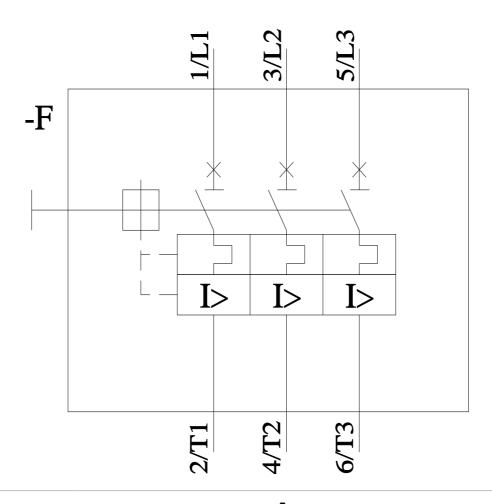
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2041-4RA10-0DA0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4RA10-0DA0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4RA10-0DA0&objecttype=14&gridview=view1





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