SIEMENS

Data sheet

3RV2041-4HA10-0DA0



Circuit breaker size S3 For plant protection Without phase failure protection Arelease 36...50 A Short-circuit release 650 A Screw terminal Standard switching capacity

Se Se Jan	
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	S3
size of contactor can be combined company-specific	S3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	27 W
 at AC in hot operating state per pole 	9 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	36 50 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	50 A

operational current			
• at AC-3 at 400 V rated value	50 A		
• at AC-3e at 400 V rated value	50 A		
operating power			
• at AC-3			
— at 230 V rated value	11 kW		
— at 400 V rated value	22 kW		
— at 500 V rated value	30 kW		
— at 690 V rated value	45 kW		
• at AC-3e			
— at 230 V rated value	11 kW		
— at 400 V rated value	22 kW		
— at 500 V rated value	30 kW		
— at 690 V rated value	45 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		
	0		
number of NO contacts for auxiliary contacts			
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 (lcu)			
• 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	12 kA		
• at AC at 690 V rated value	6 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	6 kA		
• at 690 V rated value	3 kA		
response value current of instantaneous short-circuit trip unit	650 A		
Short-circuit protection			
product function short circuit protection	Yes		
design of the short-circuit trip	magnetic		
Installation/ mounting/ dimensions			
	2014		
mounting position	any		
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		
bai abé			
height	165 mm		
width	70 mm		
width depth			
width depth required spacing	70 mm 176 mm		
width depth required spacing • with side-by-side mounting at the side	70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V	70 mm 176 mm 0 mm		
width depth required spacing • with side-by-side mounting at the side	70 mm 176 mm 0 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V	70 mm 176 mm 0 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards	70 mm 176 mm 0 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards	70 mm 176 mm 0 mm 70 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side	70 mm 176 mm 0 mm 70 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V	70 mm 176 mm 0 mm 70 mm 70 mm 10 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards	70 mm 176 mm 0 mm 70 mm 70 mm 10 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — at the side • for live parts at 400 V — upwards — upwards — upwards	70 mm 176 mm 0 mm 70 mm 70 mm 10 mm 70 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — at the side • for live parts at 400 V — downwards — upwards — at the side	70 mm 176 mm 0 mm 70 mm 70 mm 10 mm 70 mm 70 mm		
width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — at the side • for live parts at 400 V — downwards — upwards — upwards — at the side • for grounded parts at 500 V	70 mm 176 mm 0 mm 70 mm 70 mm 10 mm 70 mm 70 mm 10 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			

C C EG-Konf.	UK CA	<u>Confirmation</u>	<u>KC</u>	EHC	Type Test Certific- ates/Test Report
Test Certificates	Marine / Shipping				
<u>Special Test Certific-</u> <u>ate</u>	ABS	BUREAU VERITAS		Lloyds Register urs	PRS
Marine / Shipping	other			Environment	
RINA	<u>Miscellaneous</u>	<u>Confirmation</u>		EPD	Siemens EcoTech
Environment					
Environmental Con- firmations					
Further information Information on the page					

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=3RV2041-4HA10-0DA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2041-4HA10-0DA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4HA10-0DA0

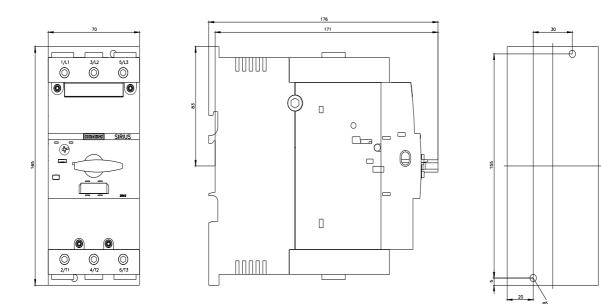
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

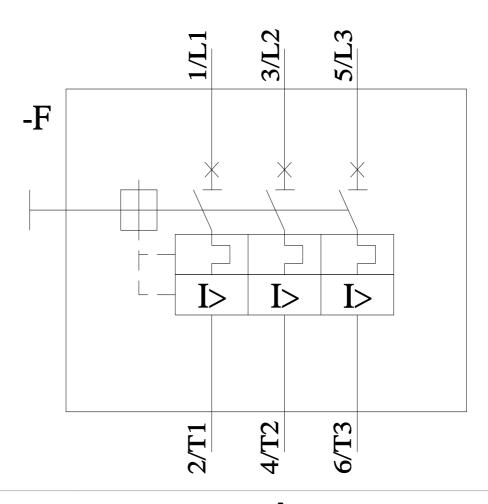
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2041-4HA10-0DA0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4HA10-0DA0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4HA10-0DA0&objecttype=14&gridview=view1





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