SIEMENS

Data sheet



Circuit breaker size S3 for system protection without phase failure protection A-release 28...40 A N-release 520 A screw terminal Standard switching capacity

Figure similar

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 	23 W
at AC in hot operating state per pole	7.7 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
Substance Prohibitance (Date)	03/01/2017
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	28 40 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	40 A
operational current	
• at AC-3 at 400 V rated value	40 A

	40.4
at AC-3e at 400 V rated value	40 A
operating power	
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	37 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	12 kA
at AC at 690 V rated value	5 kA
operating short-circuit current breaking capacity (Ics) at AC	
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	520 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
Installation/ mounting/ dimensions	magnotio
mounting position	anv
fastening method	any 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	110 11111
with side-by-side mounting at the side	0 mm
 with side-by-side mounting at the side for grounded parts at 400 V 	O THILL
for grounded parts at 400 v downwards	70 mm
	70 mm
— upwards	70 mm 10 mm
— at the side	10 111111
• for live parts at 400 V	70 mm
— 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	33	
— downwards	150 mm	
— upwards	150 mm	
— at the side	30 mm	
Connections/ Terminals	30 Hilli	
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 solid or stranded	2x (2,5 50 mm²), 1x (10 70 mm²)	
finely stranded with core end processing	2x (2.5 35 mm²), 1x (2.5 50 mm²)	
finely stranded with core end processing	2x (10 35 mm²), 1x (10 50 mm²)	
tightening torque	2X (10 33 11111), 1X (10 30 11111)	
for main contacts for ring cable lug	4.5 6 N·m	
outer diameter of the usable ring cable lug maximum	19 mm	
	19 111111	
tightening torque	4.5 6 N·m	
• for main contacts with screw-type terminals	4.5 6 N·III	
design of the thread of the connection screw	MO	
• for main contacts	M8	
Safety related data		
B10 value		
with high demand rate according to SN 31920	5 000	
proportion of dangerous failures	-0.04	
 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	Test Certificates
Confirmation KC	r UK cc	Special Test Certificate

Test Certificates

Marine / Shipping

Type Test Certificates/Test Report





EAC







<u>ate</u>

other Railway



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=3RV2041-4FA10-0DA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2041-4FA10-0DA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4FA10-0DA0

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

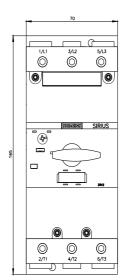
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2041-4FA10-0DA0&lang=en

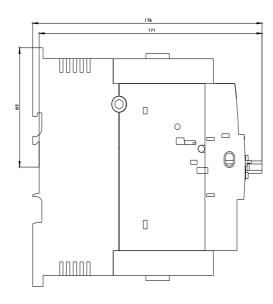
Characteristic: Tripping characteristics, I2t, Let-through current

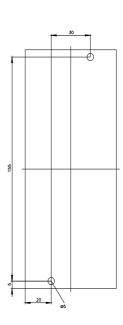
https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4FA10-0DA0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4FA10-0DA0&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸