## **SIEMENS**

Data sheet 3RV2041-4FA10



Circuit breaker size S3 for motor protection, CLASS 10 A-release 28...40 A N-release 520 A screw terminal Standard switching capacity

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	S3			
size of contactor can be combined company-specific	S3			
product extension auxiliary switch	Yes			
power loss [W] for rated value of the current				
<ul> <li>at AC in hot operating state</li> </ul>	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)				
<ul> <li>of the main contacts typical</li> </ul>	25 000			
of auxiliary contacts typical	25 000			
electrical endurance (operating cycles) typical	25 000			
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)	03/01/2017			
SVHC substance name	Blei - 7439-92-1			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
<ul> <li>during operation</li> </ul>	-20 +60 °C			
<ul> <li>during storage</li> </ul>	-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			
<ul> <li>at AC-3 rated value maximum</li> </ul>	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
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
Protective and monitoring functions	10 mi
product function	No
ground fault detection     phase failure detection	No Voc
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	400.14
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	100 000 kA
at 400 V rated value	30 000 kA
at 500 V rated value	6 000 kA
response value current of instantaneous short-circuit trip unit	520 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	40 A
at 600 V rated value	40 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	15 hp
— at 220/230 V rated value	15 hp
— at 460/480 V rated value	30 hp
— at 575/600 V rated value	40 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
Installation/ mounting/ dimensions	magnotio
	any
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
<ul> <li>for grounded parts at 400 V</li> </ul>	
<ul><li>downwards</li></ul>	70
	70 mm
— upwards	70 mm 70 mm

— at the side	10 mm	
<ul> <li>for live parts at 400 V</li> </ul>		
— downwards	70 mm	
— upwards	70 mm	
— at the side	10 mm	
<ul> <li>for grounded parts at 500 V</li> </ul>		
— 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	30 11111	
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)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (2.5 35 mm²), 1x (2.5 50 mm²)	
finely stranded without core end processing	2x (10 35 mm²), 1x (10 50 mm²)	
tightening torque		
for main contacts for ring cable lug	4.5 6 N·m	
outer diameter of the usable ring cable lug maximum	19 mm	
tightening torque	10 11111	
for main contacts with screw-type terminals	4.5 6 N·m	
Safety related data		
proportion of dangerous failures		
with low demand rate according to SN 31920	50 %	
with high demand rate according to SN 31920	50 %	
B10 value with high demand rate according to SN 31920	5 000	
IEC 61508		
T1 value for proof test interval or service life according to	10 a	
IEC 61508		
Electrical Safety	IDOO	
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	
Approvals Certificates  General Product Approval		









General Product Approval	For use in hazardous locations	Test Certificates	Marine / Shipping
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**Special Test Certific**ate

Type Test Certificates/Test Report



Marine / Shipping

other











**Miscellaneous** 

other

Railway

**Environment** 

Confirmation



Confirmation

EPD Typ II/III (with life cylce assessment)

## 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

Cax online generator

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

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

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

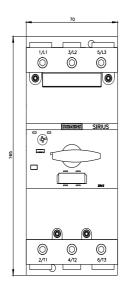
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

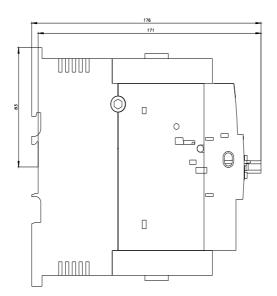
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2041-4FA10&lang=en

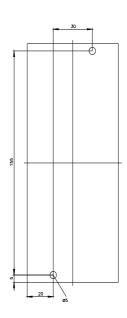
Characteristic: Tripping characteristics, I2t, Let-through current

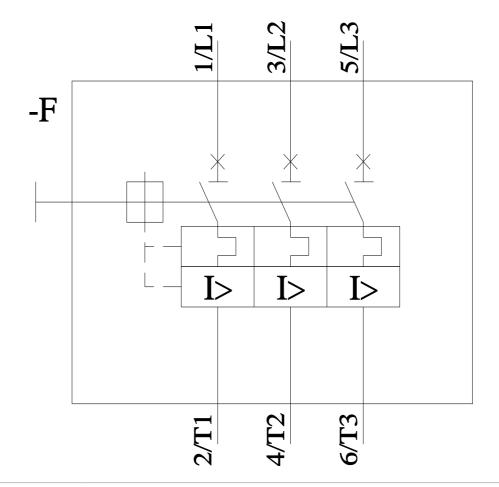
https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4FA10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4FA10&objecttype=14&gridview=view1









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