SIEMENS

Data sheet 3RV2041-4JA10



Circuit breaker size S3 for motor protection, CLASS 10 A-release 45...63 A N-release 819 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	
 at AC in hot operating state 	34 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
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
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	45 63 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	63 A

operational current	
at AC-3 at 400 V rated value	63 A
• at AC-3e at 400 V rated value	63 A
operating power	
• at AC-3	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	55 kW
• at AC-3e	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	55 kW
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
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 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	819 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	63 A
 at 600 V rated value 	63 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
 — at 110/120 V rated value 	5 hp
— at 230 V rated value	15 hp
 for 3-phase AC motor 	
 — at 200/208 V rated value 	20 hp
 at 220/230 V rated value 	25 hp
 — at 460/480 V rated value 	50 hp
— at 575/600 V rated value	60 hp
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

rrangement of electrical connectors for main current	Top and bottom
for main current circuit	screw-type terminals
/pe of electrical connection	
nnections/ Terminals	
— at the side	30 mm
— upwards	150 mm
— downwards	150 mm
for live parts at 690 V	
— at the side	30 mm
— upwards	150 mm
— downwards	150 mm
 for grounded parts at 690 V 	
— at the side	10 mm
— upwards	110 mm
— downwards	110 mm
 for live parts at 500 V 	
— at the side	10 mm
— upwards	110 mm
— downwards	110 mm
 for grounded parts at 500 V 	
— at the side	10 mm
— upwards	70 mm
— downwards	70 mm
 for live parts at 400 V 	
— at the side	10 mm
— upwards	70 mm

arr circuit

type of connectable conductor cross-sections

• for main contacts

- solid - solid or stranded

- finely stranded with core end processing

- finely stranded without core end processing

tightening torque

• for main contacts for ring cable lug

outer diameter of the usable ring cable lug maximum tightening torque

• for main contacts with screw-type terminals

2x (2.5 ... 16 mm²)

2x (2,5 ... 50 mm²), 1x (10 ... 70 mm²)

2x (2.5 ... 35 mm²), 1x (2.5 ... 50 mm²)

2x (10 ... 35 mm²), 1x (10 ... 50 mm²)

4.5 ... 6 N·m

19 mm

4.5 ... 6 N·m

Safety related data

B10 value

• with high demand rate according to SN 31920

proportion of dangerous failures

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

touch protection on the front according to IEC 60529

protection class IP on the front according to IEC

display version for switching status

5 000

50 %

50 %

10 y

IP20

finger-safe, for vertical contact from the front

Handle

Certificates/ approvals

General Product Approval



Confirmation





KC



For use in hazardous locations

Declaration of Conformity

Test Certificates









Special Test Certificate Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Confirmation

Vibration and Shock

Further information

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=3RV2041-4JA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2041-4JA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4JA10

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

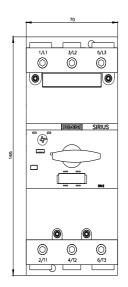
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2041-4JA10&lang=en

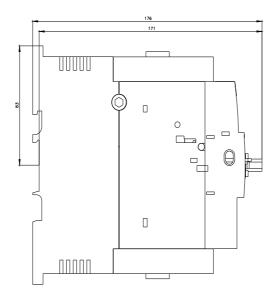
Characteristic: Tripping characteristics, I2t, Let-through current

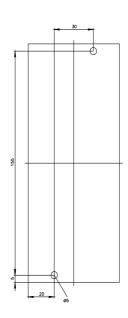
https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4JA10/char

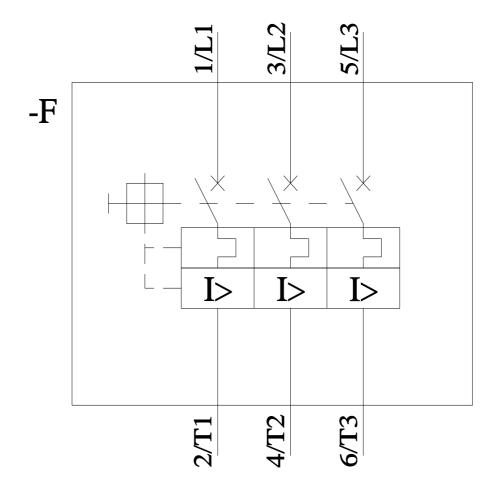
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4JA10&objecttype=14&gridview=view1









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