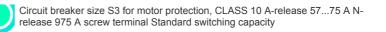
## SIEMENS

## Data sheet

## 3RV2041-4KA10





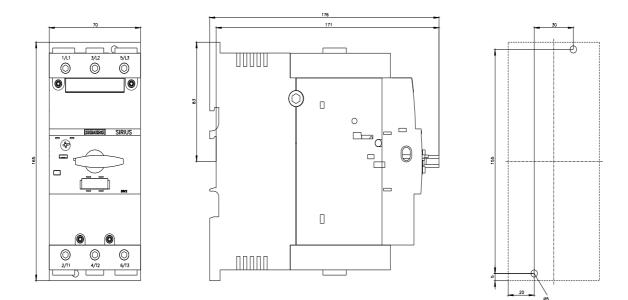
the case the			
product brand name	SIRIUS		
product designation	Circuit breaker		
design of the product	For motor protection		
product type designation	3RV2		
General technical data			
size of the circuit-breaker	S3		
size of contactor can be combined company-specific	S3		
product extension auxiliary switch	Yes		
power loss [W] for rated value of the current			
<ul> <li>at AC in hot operating state</li> </ul>	38 W		
<ul> <li>at AC in hot operating state per pole</li> </ul>	12.7 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		
<ul> <li>of auxiliary contacts typical</li> </ul>	25 000		
electrical endurance (operating cycles) typical	25 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	03/01/2017		
SVHC substance name	Lead - 7439-92-1		
Weight	2.235 kg		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
<ul> <li>during operation</li> </ul>	-20 +60 °C		
during storage	-50 +80 °C		
during transport	-50 +80 °C		
relative humidity during operation	10 95 %		
Environmental footprint			
global warming potential [CO2 eq] total	283.24 kg		
global warming potential [CO2 eq] during manufacturing	18.5 kg		
global warming potential [CO2 eq] during sales	1.24 kg		
global warming potential [CO2 eq] during operation	265 kg		
global warming potential [CO2 eq] after end of life	-1.5 kg		
Siemens Eco Profile (SEP)	Siemens EcoTech		
Main circuit			

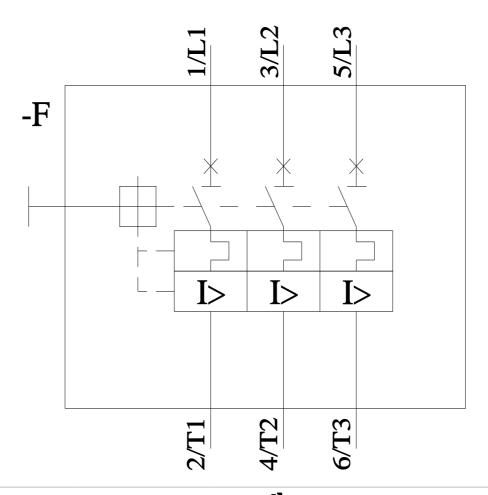
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	57 75 A
operating voltage	
rated value	20 690 V
at AC-3 rated value maximum	690 V
at AC-3 rated value maximum     at AC-3e rated value maximum	690 V
	50 60 Hz
operating frequency rated value	
operational current rated value	75 A
operational current	75.4
• at AC-3 at 400 V rated value	75 A
at AC-3e at 400 V rated value	75 A
operating power	
• at AC-3	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	45 kW
— at 690 V rated value	55 kW
• at AC-3e	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	45 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	
<ul> <li>ground fault detection</li> </ul>	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
<ul> <li>at AC at 400 V rated value</li> </ul>	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 240 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	975 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	75.0
at 480 V rated value	75 A
• at 600 V rated value	75 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	7.5 hp
— at 230 V rated value	15 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— at 200/208 V rated value	25 hp
— at 220/230 V rated value	30 hp
— at 460/480 V rated value	60 hp
— at 575/600 V rated value	75 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
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	70 mm
— upwards	70 mm
— at the side	10 mm
• for live parts at 400 V	
— downwards	70 mm
— upwards	70 mm
— at the side	10 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	110 mm
	110 mm
— upwards — at the side	10 mm
• for live parts at 500 V	10 11111
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
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	150 mm
— upwards	150 mm
— at the side	30 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	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 mm <sup>2</sup> ), 1x (10 70 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core and processing</li> </ul>	$2x (2.5 35 \text{ mm}^2), 1x (2.5 50 \text{ mm}^2)$ $2x (10 - 35 \text{ mm}^2), 1x (10 - 50 \text{ mm}^2)$
- finely stranded without core end processing	2x (10 35 mm²), 1x (10 50 mm²)
tightening torque	45 CNm
for main contacts for ring cable lug	4.5 6 N·m
	10 man
outer diameter of the usable ring cable lug maximum	19 mm
tightening torque	
• for main contacts with screw-type terminals	19 mm 4.5 6 N·m
tightening torque • for main contacts with screw-type terminals Safety related data	4.5 6 N·m
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function	
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use	4.5 6 N·m
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on	4.5 6 N·m
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use	4.5 6 N·m Yes
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum	4.5 6 N·m Yes No
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF	4.5 6 N·m Yes No Yes
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum	4.5 6 N·m Yes No Yes 10 a
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary	4.5 6 N·m Yes No Yes 10 a
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures	4.5 6 N·m Yes No Yes 10 a Yes
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920	4.5 6 N·m Yes No Yes 10 a Yes 40 %
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920	4.5 6 N·m Yes No Yes 10 a Yes 40 % 50 %
tightening torque • for main contacts with screw-type terminals Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	4.5 6 N·m Yes No Yes 10 a Yes 40 % 50 % 5 000

overdimensioning acc IEC 61508						
safety device type acc	ording to IEC 61508-2	Туре	A			
<ul> <li>T1 value</li> <li>for proof test inter 61508</li> </ul>	val or service life accord	ding to IEC 10 a				
Electrical Safety						
protection class IP on the front according to IEC 60529			IP20			
touch protection on th	e front according to IE	<b>C 60529</b> finge	finger-safe, for vertical contact from the front			
Display						
display version for switc	hing status	Hand	lle			
Approvals Certificates						
General Product Appr	oval	нν	Confirmation	~	KC	
	EG-Konf.	UK CA		Ű		
General Product Approval	For use in hazardou	s locations	Test Certificates		Marine / Shipping	
EHC	KEx ATEX	IECE×	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	ABS	
Marine / Shipping					other	
B UREAU VERITAS		Lloyds Kegister us	PRS	RINA	<u>Miscellaneous</u>	
other		Railway		Environment		
<u>Confirmation</u>		Special Test Certific- ate	<u>Confirmation</u>	EPD	Siemens EcoTech	
Environment						
Environmental Con- firmations						
Further information						
Further information Information on the pac	kaging					
https://support.industry.s Information- and Dowr https://www.siemens.com	siemens.com/cs/ww/en/ iloadcenter (Catalogs, m/ic10					
	nens.com/mall/en/en/Ca	talog/product?mlfb=3RV20	041-4KA10			
Cax online generator						
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2041-4KA10 Service&Support (Manuals, Certificates, Characteristics, FAQs,)						
https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4KA10						
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2041-4KA10⟨=en						
Characteristic: Tripping characteristics, I <sup>2</sup> t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2041-4KA10/char Further characteristics (e.g. electrical endurance, switching frequency)						
			, ,			

 $\underline{http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2041-4KA10\&objecttype=14\&gridview=view1$ 





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11/6/2024 🖸

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