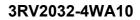
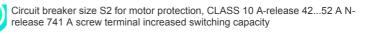
SIEMENS

Data sheet



Siemens EcoTech



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	\$2
size of contactor can be combined company-specific	S2
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	24.5 W
 at AC in hot operating state per pole 	8.2 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms Sinus
mechanical service life (operating cycles)	
 of the main contacts typical 	50 000
 of auxiliary contacts typical 	50 000
electrical endurance (operating cycles) typical	50 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/15/2014
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	42 52 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	52 A
operational current	
 at AC-3 at 400 V rated value 	52 A
 at AC-3e at 400 V rated value 	52 A
operating power	
• at AC-3	
— at 230 V rated value	15 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	15 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
Protective and monitoring functions	
product function	
ground fault detection	No
-	Yes
phase failure detection	CLASS 10
trip class	
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	400 1 4
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	10 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 	50 kA
 at 500 V rated value 	5 kA
 at 690 V rated value 	4 kA
response value current of instantaneous short-circuit trip unit	741 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	52 A
• at 600 V rated value	52 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	5 hp
— at 230 V rated value	10 hp
• for 3-phase AC motor	
— at 200/208 V rated value	15 hp
— at 220/230 V rated value	20 hp
— at 460/480 V rated value	40 hp
— at 575/600 V rated value	50 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit	
protection of the main circuit	
• at 240 V	none required
• at 400 V	160
• at 500 V	125
• at 690 V	100
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	140 mm

width	55 mm
depth	149 mm
required spacing	
with side-by-side mounting at the side	0 mm
 for grounded parts at 400 V 	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 400 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
 for grounded parts at 500 V 	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 500 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
 for grounded parts at 690 V 	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— at the side	10 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 or stranded	2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
 for AWG cables for main contacts 	2x (18 2), 1x (18 1)
tightening torque	
 for main contacts with screw-type terminals 	3 4.5 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
 for main contacts 	M6
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	

			•			
safety device type acc	ording to IEC 61508-2	Туре	A			
 T1 value for proof test interval or service life according to IEC 61508 		ding to IEC 10 a	10 a			
Electrical Safety						
protection class IP on	the front according to	IEC 60529 IP20				
			r-safe, for vertical contact	from the front		
Display						
display version for switching status			lle			
Approvals Certificates						
General Product Appr	oval					
CE EG-Konf.	UK CA	<u>Confirmation</u>		(UL)	KC	
General Product Ap- proval	For use in hazardou	s locations	Test Certificates		Marine / Shipping	
EHC	KEx ATEX	IECEx IECEx	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	ABS	
Marine / Shipping					other	
BUREAU VERITAS		Llovd's Register us	PRS	RINA	<u>Confirmation</u>	
other		Railway		Environment		
Miscellaneous		Special Test Certific- ate	<u>Confirmation</u>	EPD	Siemens EcoTech	
Environment						
Environmental Con- firmations						
urther information	kaning					
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875						
Information- and Down https://www.siemens.co Industry Mall (Online of	nloadcenter (Catalogs, <u>m/ic10</u> ordering system)	Brochures,)	222 404440			
https://mail.industry.sien	nens.com/maii/en/en/Ca	atalog/product?mlfb=3RV20	<u>132-499A IU</u>			

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2032-4WA10

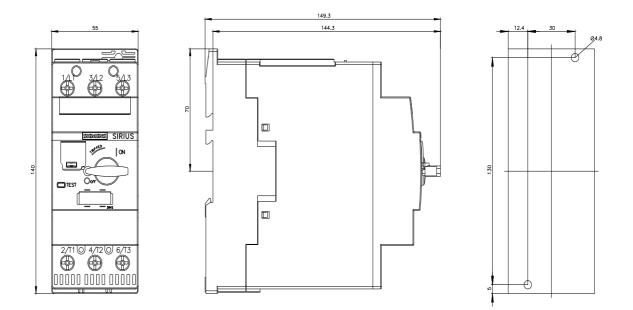
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
- https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA10

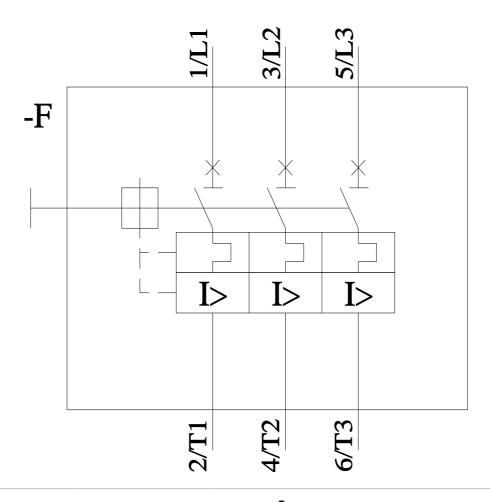
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2032-4WA10&lang=en

- Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4WA10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=S RV2032-4WA10&objecttype=14&gridview=view1





4/12/2024 🖸