SIEMENS

Data sheet 3RV2342-4RC10



Circuit breaker size S3 for starter combination Rated current 84 A N-release 1170 A screw terminal Increased switching capacity 100 kA





product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For starter combinations
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
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	2.24 kg
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 %
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 operating votage - rated value - at AC-3 rated value maximum 600 V - part AC-3 rated value maximum 600 V - part AC-3 rated value maximum 500 NB PZ operational current trated value 94 A operational current trated value 84 A - at AC-3 at 400 V rated value 84 A - at AC-3 at 400 V rated value 48 A - at AC-3 at 400 V rated value 48 A - at AC-3 at 400 V rated value 48 A - at AC-3 at 400 V rated value 48 AV - at 500 V rated value 55 KW - at 600 V rated value 22 KW - at 230 V rated value 55 KW - at 230 V rated value 45 KW - at 400 V rated value 55 KW - at 500 V rated value 55 KW - at 500 V rated value 15 Th - at AC-3 answarm 15 Th - at AC-3 answarm 15 Th - at AC-3 answarm 15 Th - at AC-4 AC-40 V rated value 10 KA - at 4 AC-4 AC-40 V rated value <	number of pales for main current circuit	3
and AC-3er anded value maximum	-	
* at AC-3 erated value maximum		20 600 V
### AAC-3e rated value maximum operational current rated value operational current rated value ### AC-3e and 400 V rated value ### AC-3e and 400 V rated valu		
Operational current rated value		
operational current rated value		
Special Current # al AC-3 at 400 V rated value # 84 A # 84		
# at AC-3 at 400 V rated value	· ·	04 A
## AR AG-3e at 400 V rated value		04.0
		84 A
		22 144
→ at AQ-3e		
		75 KVV
		00 144
— at 690 V rated value 55 kW		
operating frequency		
• at AC-3 maximum 15 1/h 15 1/h 16 1/h 17 16 1		/ O KVV
• at AC-3e maximum Protective and monitoring functions product function • ground fault detection • ponda fault detection • phase failure detection • design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at 600 V rated value • at 500 V rated value • 500 V rated value • 500 V rated value • 600 V rated value		4E 4 lb
Protective and monitoring functions product function • ground fault detection • prase failure detection No design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 250 V rated value • at AC at 600 V rated value • at 240 V rated value • at 360 V rated value • at 400 V rated value • at 400 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 250 hp • at 375/500 V rated value • at 575/500 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 575/500 V rated value • at 600 V rat		
product function		10 1/11
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• phase failure detection No	•	
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at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value bat AC at 500 V rated value at AC at 500 V rated value bat AC at 500 V rated value at 240 V rated value at 240 V rated value bat 500 KA at 500 V rated value bat 600 V rated value bat		thermal
at AC at 400 V rated value at AC at 500 V rated value berating short-circuit current breaking capacity (lcs) at AC at AC at 690 V rated value berating short-circuit current breaking capacity (lcs) at AC at 240 V rated value at 400 V rated value 50 kA at 500 V rated value 51 kA at 690 V rated value 51 kA at 690 V rated value 52 kA response value current of instantaneous short-circuit trip unit 51 trip A UL/CSA ratings full-load current (FLA) for 3-phase AC motor 41 480 V rated value 54 kA 46 A 54 A 54 A 54 A 55 kB 56 A 56 A 57 Shp 57 Shp 58 Short-circuit value 59 Short-circuit value 50 kB 50		400 A
at AC at 500 V rated value at AC at 690 V rated value 6 kA operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value 50 kA at 400 V rated value 55 kA at 690 V rated value 51 kA at 890 V rated value 1100 kA response value current of instantaneous short-circuit trip unit 1170 A ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 84 A yielded mechanical performance [hp] 6 for single-phase AC motor —at 110/120 V rated value 5 kp 4 to single-phase AC motor —at 230 V rated value 5 kp 6 for 3-phase AC motor —at 220/230 V rated value 5 kp 4 to single-phase AC motor —at 220/230 V rated value 5 kp 6 kp		
• at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 480 V rated value • at 1400 V rated value • at 690 V rated value • at 110/120 V rated value • for single-phase AC motor — at 290 V rated value • for 3-phase AC motor — at 220/230 V rated value • for 3-phase AC motor — at 220/230 V rated value • 60 hp — at 660/480 V rated value • 60 hp — at 75/600 V rated value 75 hp Short-circuit protection product function short circuit protection product function short circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method		
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* at 690 V rated value response value current of instantaneous short-circuit trip unit ***DIL/CSA ratings** full-load current (FLA) for 3-phase AC motor * at 480 V rated value * at 600 V rated value * at 600 V rated value * at 600 V rated value * at 110/120 V rated value * at 110/120 V rated value * at 230 V rated value * at 230 V rated value * at 220/230 V rated value * at 220/230 V rated value * at 220/230 V rated value * at 2575/600 V rated value * at 600 N rated value * at 2575/600 V rated value * at 2575/600 V rated value * at 3575/600 V rated value ** at 300/200 V rated value ** at 300 V rated value ** at 300/200 V rated value ** at 3		
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yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 15 hp • for 3-phase AC motor — at 200/208 V rated value 25 hp — at 220/230 V rated value 30 hp — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value 75 hp Short-circuit protection product function short circuit protection design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method 7.5 hp 7.5 hp 7.5 hp 7.5 hp 80 hp 90 hp		
for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 375/600 V rated value — at 375/600 V rated value Product function short circuit protection any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		84 A
- at 110/120 V rated value - at 230 V rated value - at 230 V rated value - for 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 575/600 V rated value Product function short circuit protection any fastening method 7.5 hp 7.5 hp 7.5 hp 8.75 hp 8.		
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product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method Yes magnetic magnetic any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		75 hp
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		
Installation/ mounting/ dimensions mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	<u> </u>	
mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	<u> </u>	magnetic
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	Installation/ mounting/ dimensions	
	mounting position	any
height 165 mm	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
— 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
for grounded parts at 500 V	10 11111
— downwards	110 mm
— upwards	110 mm
— at the side	10 mm
• for live parts at 500 V	10 111111
— downwards	110 mm
— upwards	110 mm
·	10 mm
— at the sidefor grounded parts at 690 V	TO THILL
	450
— downwards	150 mm
— upwards	150 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
 for live parts at 690 V 	
— downwards	150 mm
— upwards	150 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 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	2x (2.5 16 mm²)
— 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 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	
for main contacts with screw-type terminals	4.5 6 N·m
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	
p. sperior or dangerous fallates	40.0/
 with low demand rate according to SN 31020 	
with low demand rate according to SN 31920 with high demand rate according to SN 31920	40 % 50 %
with high demand rate according to SN 31920	50 %
-	

ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
T1 value	
 for proof test interval or service life according to IEC 61508 	10 a
Electrical Safety	
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	
display version for switching status	Handle
Approvals Certificates	
General Product Approval	







Confirmation



<u>KC</u>

General Product Approval

Test Certificates

Marine / Shipping



Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report







Marine / Shipping









Miscellaneous

other

Confirmation



Railway

Environment

Special Test Certificate

Confirmation







Environmental Confirmations

Further information

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=3RV2342-4RC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2342-4RC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4RC10

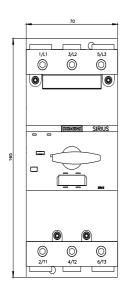
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

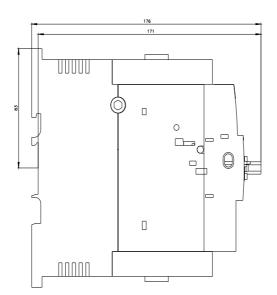
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2342-4RC10&lang=en

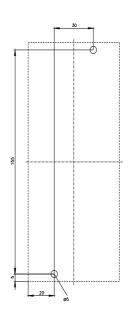
Characteristic: Tripping characteristics, I2t, Let-through current

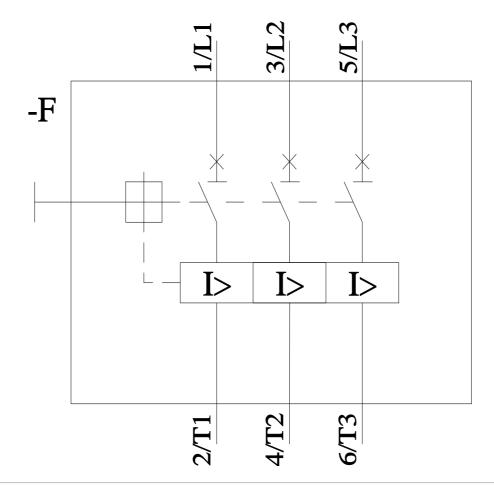
https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4RC10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2342-4RC10&objecttype=14&gridview=view1









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