



Circuit breaker size S3 for starter combination Rated current 75 A N-release 975 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	38 W
• at AC in hot operating state per pole	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 (switching cycles)	
• of the main contacts typical	25 000
• of auxiliary contacts typical	25 000
electrical endurance (switching cycles) typical	25 000
reference code according to IEC 81346-2	Q
Substance Prohibition (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
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	75 A
operational current	
• 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 — at 500 V rated value — at 690 V rated value • at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	37 kW 45 kW 55 kW 22 kW 37 kW 45 kW 55 kW
operating frequency • at AC-3 maximum • at AC-3e maximum	15 1/h 15 1/h
Protective and monitoring functions	
product function • ground fault detection • phase failure detection design of the overload release	No No thermal
breaking capacity maximum short-circuit current (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 690 V rated value	100 kA 100 kA 10 kA 6 kA
breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	100 kA 50 kA 5 kA 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 • at 480 V rated value • at 600 V rated value	75 A 75 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 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	7.5 hp 15 hp 25 hp 30 hp 60 hp 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 standard mounting 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 • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side • for grounded parts at 500 V	0 mm 70 mm 70 mm 10 mm 70 mm 70 mm 10 mm

— 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
— 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
- solid or stranded
- finely stranded with core end processing
- finely stranded without core end processing

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)

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

B10 value

- with high demand rate according to SN 31920

5 000

proportion of dangerous failures

- with low demand rate according to SN 31920
- with high demand rate according to SN 31920

50 %
50 %

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

10 y

protection class IP on the front according to IEC 60529

IP20

touch protection on the front according to IEC 60529

display version for switching status

finger-safe, for vertical contact from the front
Handle

Certificates/ approvals

General Product Approval



[Confirmation](#)



[KC](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificate/Test Report](#)




[Confirmation](#)

[Vibration and Shock](#)
[Confirmation](#)

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=3RV2342-4KC10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2342-4KC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4KC10>

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

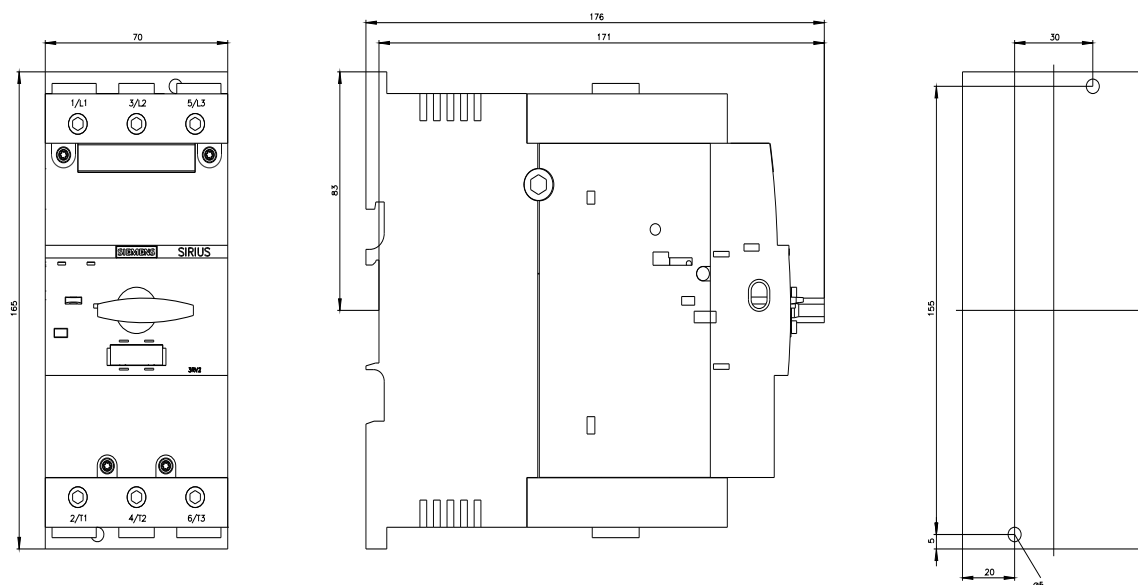
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2342-4KC10&lang=en

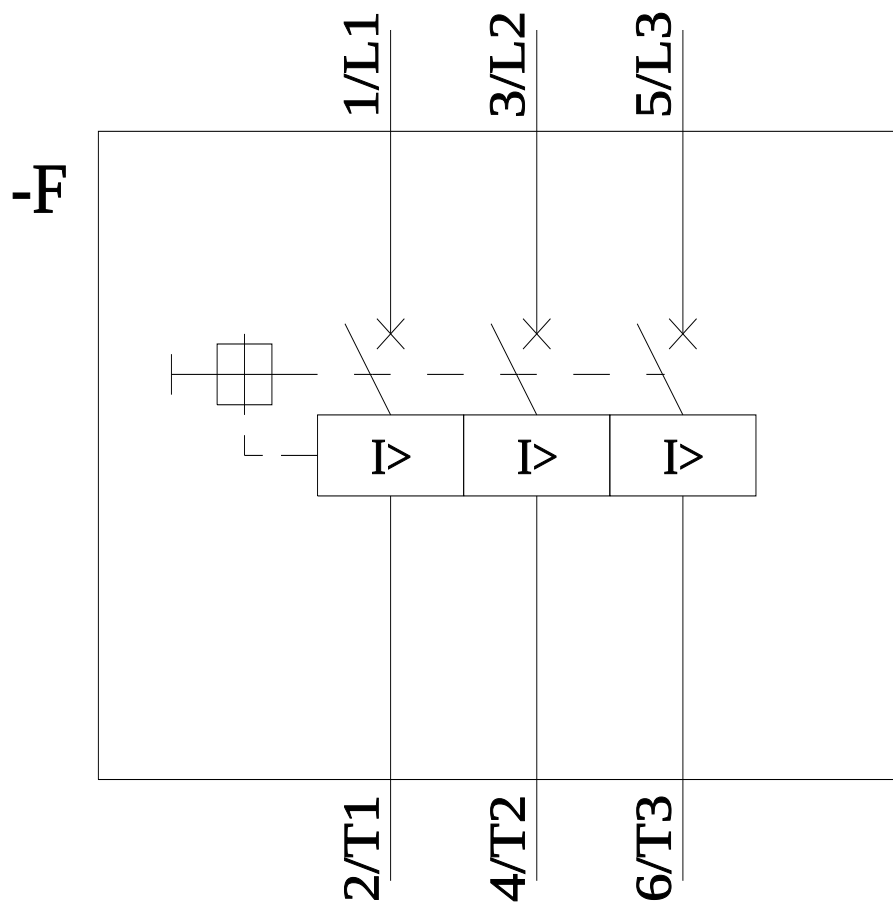
Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4KC10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2342-4KC10&objecttype=14&gridview=view1>





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