SIEMENS

Data sheet 3RV2331-4XC10



Circuit breaker size S2 for starter combination Rated current 59 A N-release 845 A screw terminal Standard switching capacity





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	S2
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 	26 W
at AC in hot operating state per pole	8.7 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 	20 000
of auxiliary contacts typical	20 000
electrical endurance (operating cycles) typical	20 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
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
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	59 A
operational current	

• at AC-3 at 400 V rated value	59 A
at AC-3e at 400 V rated value	59 A
operating power	
• at AC-3	
— at 230 V rated value	15 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	15 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
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	No
trip class	CLASS 10
maximum short-circuit current breaking capacity (Icu)	OLAGO 10
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 at AC at 500 V rated value	8 kA
at AC at 500 V rated value at AC at 690 V rated value	4 kA
	4 KA
operating short-circuit current breaking capacity (Ics) at AC	400 kA
• at 240 V rated value	100 kA
• at 400 V rated value	30 kA
• at 500 V rated value	4 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	845 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	59 A
at 600 V rated value	59 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 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
— backwards	0 mm
— at the side	10 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side — forwards	10 mm 0 mm
	V IIIII
Connections/ Terminals	
Connections/ Terminals type of electrical connection	screw-type terminals Top and bottom
Connections/ Terminals type of electrical connection • for main current circuit	screw-type terminals
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections	screw-type terminals
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	screw-type terminals Top and bottom
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded	screw-type terminals Top and bottom 2x (1 35 mm²), 1x (1 50 mm²)
type of electrical connection	screw-type terminals Top and bottom 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²)
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type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque	screw-type terminals Top and bottom 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1)
type of electrical connection	screw-type terminals Top and bottom 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 3 4.5 N·m
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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







Marine / Shipping



<u>KC</u>

General Product Approval

EAC

Test Certificates

Special Test Certific-

ate



other





Marine / Shipping







Miscellaneous

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=3RV2331-4XC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2331-4XC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4XC10

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

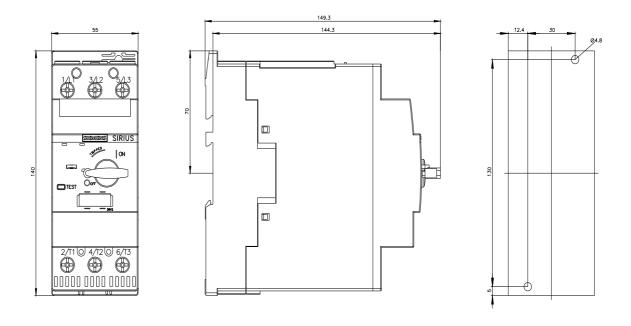
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2331-4XC10\&lang=en}}$

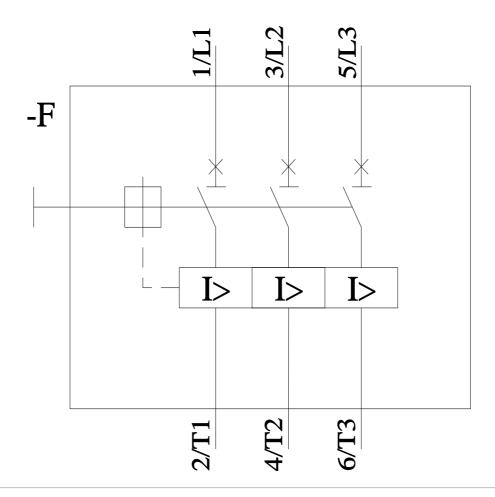
Characteristic: Tripping characteristics, I^2t , Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4XC10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2331-4XC10&objecttype=14&gridview=view1





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