SIEMENS

Data sheet 3RV2331-4SC10



Circuit breaker size S2 for starter combination Rated current 14 A N-release 208 A screw terminal Standard switching capacity

product designation design of the product product type designation 3RV2 General technical data size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch 10 the power loss [W] for rated value of the current 10 the AC in hot operating state per pole 11 the power loss and provided the provided state pole 12 the power loss and provided the provided state provided the provided state provided state provided the provided state provided the provided state provided state provided the provided state provided the provided state provided starp provided starp provided the provided starp provided starp provided the provided starp	product brand name	SIRIUS
Seneral technical data	product designation	Circuit breaker
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole Insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main contacts typical • of auxiliary contacts typical selectrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3 • operating voltage at AC-3 rated value • operating voltage at AC-3 rated value operating frequency rated value • operating frequency rated value operating frequency rated value • operating frequency rated value	design of the product	For starter combinations
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main contacts typical • of the main contacts typical • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Quustiance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value • operating voltage at AC-3 rated value maximum operating frequency rated value operating frequency rated value 5060 Hz	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation • operating voltage at AC-3 rated value • operating voltage at AC-3 rated value maximum operating frequency rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	General technical data	
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power loss [W] for rated value of the current • at AC in hot operating state 12.5 W • at AC in hot operating state per pole 4.2 W insulation voltage with degree of pollution 3 at AC rated value 690 V surge voltage resistance rated value 6 kV maximum permissible voltage for safe isolation in networks with grounded star point 400 V • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 25g / 11 ms Sinus 25g / 11 m	size of contactor can be combined company-specific	S2
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at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit between main and sunce to the common state of the main contacts typical of the main contacts typical of auxiliary contacts typical ference code acc. to IEC 81346-2 Questiance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage ambient temperature during transport relative humicity during operation ambient temperature during transport relative humicity during operation ambient temperature during transport relative humicity during operation operating voltage at AC-3 rated value operating requency rated value operating frequency rated value 50 60 Hz	power loss [W] for rated value of the current	
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surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 25g / 11 ms Sinus mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage rated value • operating frequency rated value ovaluation in the solution i		4.2 W
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reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport relative humidity during operation • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	of auxiliary contacts typical	50 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • ambient temperature during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	electrical endurance (switching cycles) typical	50 000
installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • ambient temperature during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	reference code acc. to IEC 81346-2	Q
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relative humidity during operation 10 95 % Main circuit number of poles for main current circuit • operating voltage rated value • operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz	ambient temperature during storage	-50 +80 °C
Main circuit number of poles for main current circuit 3 ● operating voltage rated value 690 V ● operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	 ambient temperature during transport 	-50 +80 °C
number of poles for main current circuit 3 ● operating voltage rated value 690 V ● operating voltage at AC-3 rated value maximum 690 V operating frequency rated value 50 60 Hz	relative humidity during operation	10 95 %
 operating voltage rated value operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz 	Main circuit	
 operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz 	number of poles for main current circuit	3
 operating voltage at AC-3 rated value maximum operating frequency rated value 50 60 Hz 	operating voltage rated value	690 V
operating frequency rated value 50 60 Hz		690 V
operational current rated value 14 A		50 60 Hz
	operational current rated value	14 A

operational current at AC-3 at 400 V rated value	14 A
operating power at AC-3	
 at 230 V rated value 	3 000 W
 at 400 V rated value 	5 500 W
 at 500 V rated value 	7 500 W
● at 690 V rated value	11 000 W
operating frequency at AC-3 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	Na
ground fault detection	No
phase failure detection	No
breaking capacity operating short-circuit current (Ics) at AC	
at 240 V rated value	100 kA
at 400 V rated value at 400 V rated value	30 kA
at 500 V rated value	6 kA
• at 690 V rated value	3 kA
breaking capacity maximum short-circuit current (Icu)	400 1.4
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 	12 kA
at AC at 690 V rated value	5 kA
response value current of instantaneous short-circuit trip unit	208 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	14 A
• at 600 V rated value	14 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	1.5 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	5 hp
— at 460/480 V rated value	10 hp
— at 575/600 V rated value	15 hp
	13 TIP
Short-circuit protection	V
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
	none required
• at 400 V	100
• at 500 V	80
• at 690 V	63
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
	according to DİN EN 60715
height	140 mm
width	55 mm
depth	149 mm
required spacing	
 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	10 111111
— downwards	50 mm
	50 mm
— upwards — at the side	10 mm
	10 111111
• for live parts at 500 V	50
— 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	10 mm
— forwards	0 mm
Connections/ Terminals	
product function removable terminal for auxiliary and	No
control circuit	
type of electrical connection	
 for main current circuit 	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
 for main contacts 	
— solid or stranded	2x (1 25 mm²), 1x (1 35 mm²)
 finely stranded with core end processing 	2x (1 16 mm²), 1x (1 25 mm²)
at AWG cables for main contacts	2x (18 3), 1x (18 2)
• 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 2
design of the thread of the connection screw	
• for main contacts	M6
Safety related data	
B10 value	
	5 000
with high demand rate acc. to SN 31920 Proportion of dangerous failures	0 000
proportion of dangerous failures	E0 9/
with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920	50 %
with high demand rate acc. to SN 31920 failure rate IEITI	50 %
failure rate [FIT]	EO FIT
with low demand rate acc. to SN 31920 The state of	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Handle
Certificates/ approvals	







<u>KC</u>





Declaration of Conformity

Test Certificates

Marine / Shipping

Miscellaneous

Type Test
Certificates/Test
Report

Special Test Certificate







Marine / Shipping

other









Confirmation



Railway

Confirmation Vibration and Shock

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=3RV2331-4SC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2331-4SC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4SC10

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

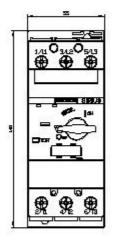
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2331-4SC10&lang=en

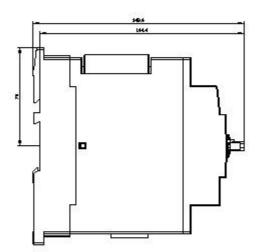
Characteristic: Tripping characteristics, I²t, Let-through current

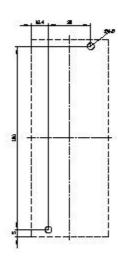
https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4SC10/char

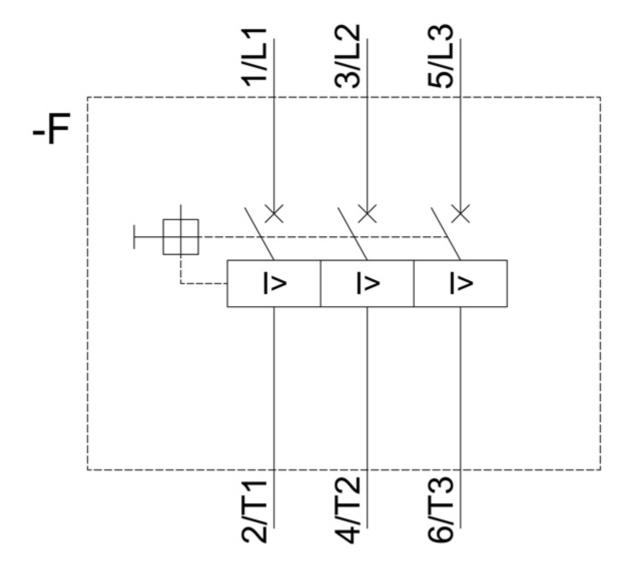
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2331-4SC10&objecttype=14&gridview=view1









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