## **SIEMENS**

Data sheet 3RV2332-4RC10



Circuit breaker size S2 for starter combination Rated current 80 A N-release 1040 A screw terminal increased switching capacity

product type designation  design of the product product type designation  size of the circuit-breaker size of contactor can be combined company-specific size of contactor can be combined company-specific 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 at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value surge voltage resistance rated value surge voltage resistance rated value of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) electrical e	product brand name	SIRIUS
product type designation  General technical data  size of the circuit-breaker  size of contactor can be combined company-specific product extension auxiliary switch  e at AC in hot operating state e at AC in hot operating state e at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  surge voltage resistance rated value  for the main contacts typical of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature during storage during storage during transport elative humidity during operation elative at AC-3 rated value at AC-3 rated value at AC-3 rated value maximum operating voltage e at AC-3 rated value maximum en at AC-3 rated value maximum operational current rated value operational current rated value elat AC-3 rated value maximum operational current rated value operating frequency rated value elat AC-3 rated value maximum elatic AC-3 rated value ela	product designation	Circuit breaker
Size of the circuit-breaker  size of contactor can be combined company-specific  size of contactor can be combined company-specific  product extension auxiliary switch  • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole  surge voltage resistance rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  et at main contacts typical • of auxiliary contacts typical  20 000  operation of the main current circuit • of auxiliary contacts typical  20 000 • of aux	design of the product	For starter combinations
size of the circuit-breaker  size of contactor can be combined company-specific  product extension auxiliary switch  e 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  surge voltage resistance rated value  • of the main contacts typical  • of auxiliary contacts typical  electrical endurance (switching cycles) typical 20 000  reference code according to IEC 80348-2  Substance Prohibitance (Date)  mabient temperature  • during operation  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  • at AC-3 rated value  • at AC-3 rated value  • at AC-3 at 400 V rated value	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 insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus  mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical 20 000 electrical endurance (switching cycles) typical 20 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation  40 und properation 10 95 %  Main circuit number of poles for main current circuit operating requency rated value • at AC-3 at 400 V rated value operation current • at AC-3 at 400 V rated value operating power	General technical data	
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 • at AC in hot operating state per pole 9,8 W insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 6 kV shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical 20 000 electrical endurance (switching cycles) typical 20 000 electrical endurance (switching cycles) typical 20 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 0 erated value 0 at AC-3 rated value maximum 690 V 0 operating frequency rated value 0 operational current • at AC-3 at 400 V rated value 0 at AC-3 at 400 V rated value	size of the circuit-breaker	S2
power loss [W] for rated value of the current  at AC in hot operating state 29.5 W at AC in hot operating state per pole 9.8 W insulation voltage with degree of pollution 3 at AC rated value 690 V value 500 V surge voltage resistance rated value 600 V shock resistance according to IEC 60068-2-27 25g / 11 ms Sinus 600 V mechanical service life (switching cycles) 600 V 600 of the main contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts typical 20 000 600 C 600 of auxiliary contacts of auxili	size of contactor can be combined company-specific	S2
at AC in hot operating state 29.5 W  at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  shock resistance according to IEC 60068-2-27  of the main contacts typical  of the main contacts typical  of auxillary contacts typical  electrical endurance (switching cycles) typical  preference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  O3/01/2017  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  oduring operation  oduring storage  oduring transport  eluting operation  oduring transport  relative humidity during operation  Main circuit  number of poles for main current circuit  operating voltage  orated value  at AC-3 rated value maximum  690 V  operational current rated value  operational current rated value  at AC-3 at 400 V rated value  operating power	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation olduring storage olduring transport relative humidity during operation and incircuit number of poles for main current circuit operating voltage or at AC-3 rated value operational current rated value operational current rated value operating power	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical  of auxiliary contacts typical  electrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Quubstance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  oluring operation  oluring storage  oluring transport  relative humidity during operation  mumber of poles for main current circuit  operating voltage  orated value  at AC-3 rated value maximum  at AC-3 at 400 V rated value  operating power	<ul> <li>at AC in hot operating state</li> </ul>	29.5 W
surge voltage resistance rated value shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum during operation during operation of during transport relative humidity during operation  Main circuit  number of poles for main current circuit operating voltage orated value at AC-3 rated value maximum ender to AC-3 at 400 V rated value operating power	<ul> <li>at AC in hot operating state per pole</li> </ul>	9.8 W
shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical 20 000 electrical endurance (switching cycles) typical 20 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage of during transport relative humidity during operation  mumber of poles for main current circuit operating voltage orated value at AC-3 rated value maximum operational current rated value operational current of at AC-3 at 400 V rated value operating power	9 9	690 V
mechanical service life (switching cycles)  ● of the main contacts typical  ● of auxiliary contacts typical 20 000  electrical endurance (switching cycles) typical 20 000  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature  ● during operation ● during storage ● during storage ● during transport  relative humidity during operation  Main circuit  number of poles for main current circuit operating voltage ● rated value ● at AC-3 rated value maximum  operational current ● at AC-3 at 400 V rated value  operating power	surge voltage resistance rated value	6 kV
of the main contacts typical     of auxiliary contacts typical     electrical endurance (switching cycles) typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)     Ambient conditions     installation altitude at height above sea level maximum     ambient temperature     ouring operation     ouring storage     ouring transport     relative humidity during operation     10 95 %  Main circuit number of poles for main current circuit     operating voltage	shock resistance according to IEC 60068-2-27	25g / 11 ms Sinus
of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature     ouring operation     during storage     ouring storage     ouring transport relative humidity during operation  Inumber of poles for main current circuit operating voltage     rated value     at AC-3 rated value maximum operational current operational current operational current     at AC-3 at 400 V rated value operating power  20 000  03/01/2017  20 000  03/01/2017  20 000  03/01/2017  20 000  03/01/2017  20 000  04 0°C  -50 +80 °C  -50 .	mechanical service life (switching cycles)	
electrical endurance (switching cycles) typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value  • at AC-3 at 400 V rated value	<ul> <li>of the main contacts typical</li> </ul>	20 000
reference code according to IEC 81346-2 Q Substance Prohibitance (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 operating frequency rated value 50 60 Hz operational current rated value 80 A operating power	of auxiliary contacts typical	20 000
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  operating voltage • rated value • at AC-3 rated value maximum  operational current rated value  operational current • at AC-3 at 400 V rated value  operating power	electrical endurance (switching cycles) typical	20 000
installation altitude at height above sea level maximum  ambient temperature  during operation during storage during transport relative humidity during operation  mumber of poles for main current circuit  number of poles for main current circuit  number of poles for main current circuit  according to a control of the co	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value  operational current  • at AC-3 at 400 V rated value  operating power  20 690 V  80 A  operating power	Substance Prohibitance (Date)	03/01/2017
ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value  operational current rated value  operational current  • at AC-3 at 400 V rated value  operating power	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>50 +80 °C</li> <li>telative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>at AC-3 at 400 V rated value</li> </ul> Operating power <ul> <li>80 A</li> </ul> Operating power <ul> <li>80 A</li> </ul> Operating power <ul> <li>80 A</li> </ul> Operating power <ul> <li>A</li> </ul>	installation altitude at height above sea level maximum	2 000 m
<ul> <li>during storage</li> <li>during transport</li> <li>-50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>80 A</li> </ul> operating power <ul> <li>80 A</li> </ul> operating power <ul> <li>80 A</li> </ul>	ambient temperature	
<ul> <li>during transport</li> <li>-50 +80 °C</li> <li>relative humidity during operation</li> <li>10 95 %</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>3</li> <li>operating voltage <ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>at AC-3 at 400 V rated value</li> <li>80 A</li> </ul> </li> <li>operating power</li> <li>80 A</li> </ul>	<ul> <li>during operation</li> </ul>	-20 +60 °C
relative humidity during operation  10 95 %  Main circuit  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  • at AC-3 at 400 V rated value  operating power	<ul> <li>during storage</li> </ul>	-50 +80 °C
Main circuit  number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  • at AC-3 at 400 V rated value  operating power	during transport	-50 +80 °C
number of poles for main current circuit  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current rated value  operational current  • at AC-3 at 400 V rated value  operating power	relative humidity during operation	10 95 %
operating voltage  • rated value  • at AC-3 rated value maximum  690 V  operating frequency rated value  50 60 Hz  operational current rated value  • at AC-3 at 400 V rated value  80 A  operating power	Main circuit	
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>50 60 Hz</li> <li>operational current rated value</li> <li>at AC-3 at 400 V rated value</li> <li>operating power</li> </ul>	number of poles for main current circuit	3
■ at AC-3 rated value maximum     Operating frequency rated value     Operational current rated value     ● at AC-3 at 400 V rated value     ● operating power	operating voltage	
operating frequency rated value  operational current rated value  operational current  o at AC-3 at 400 V rated value  80 A  operating power	rated value	20 690 V
operational current rated value 80 A operational current  • at AC-3 at 400 V rated value 80 A operating power	at AC-3 rated value maximum	690 V
operational current  • at AC-3 at 400 V rated value  80 A  operating power	operating frequency rated value	50 60 Hz
• at AC-3 at 400 V rated value 80 A  operating power	operational current rated value	80 A
operating power	operational current	
	at AC-3 at 400 V rated value	80 A
• at AC-3	operating power	
	• at AC-3	

— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	55 kW
— at 690 V rated value	75 kW
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	
ground fault detection	No
phase failure detection	No
breaking capacity maximum short-circuit current (Icu)	
at AC at 240 V rated value	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	10 kA
• at AC at 690 V rated value	6 kA
breaking capacity operating short-circuit current (lcs)	
at AC	
<ul> <li>at 240 V rated value</li> </ul>	100 kA
• at 400 V rated value	50 kA
<ul> <li>at 500 V rated value</li> </ul>	8 kA
at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	1 040 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	77 A
at 600 V rated value	77 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	7.5 hp
• for 3-phase AC motor	·
— at 200/208 V rated value	25 hp
— at 220/230 V rated value	30 hp
<ul> <li>at 460/480 V rated value</li> </ul>	60 hp
<ul> <li>at 575/600 V rated value</li> </ul>	75 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 240 V • at 400 V	none required 160
• at 400 V	125
• at 500 V • at 690 V	125
	100
Installation/ mounting/ dimensions	CDV .
mounting position fastening method	any screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN 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
<ul><li>— at the side</li><li>● for live parts at 400 V</li></ul>	10 mm

— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul> <li>for live parts at 500 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— 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	OTHILL
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)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
tightening torque	2x (10 2), 1x (10 1)
	3 4.5 N·m
for main contacts with screw-type terminals  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	M6
• for main contacts	M6
Safety related data	
B10 value	
with high demand rate according to SN 31920	5 000
proportion of dangerous failures	<b>70</b> 0/
with low demand rate according to SN 31920	50 %
with high demand rate according to SN 31920	50 %
failure rate [FIT]	
with low demand rate according to SN 31920	50 FIT
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	finger-safe, for vertical contact from the front
display version for switching status	Handle
Certificates/ approvals	

## **General Product Approval**





Confirmation







**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping

other











Confirmation

other

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=3RV2332-4RC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2332-4RC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2332-4RC10

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

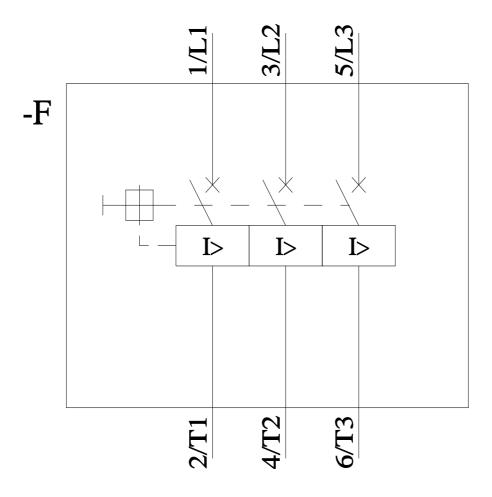
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2332-4RC10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2332-4RC10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2332-4RC10&objecttype=14&gridview=view1



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