## **SIEMENS**

Data sheet 3RV2431-4EA10



circuit breaker size S2 for transformer protection A-release 22...32 A short-circuit release 656 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 yes power loss [W] for rated value of the current at AC in hot operating state that AC in hot operating state to the will degree of pollution 3 at AC rated value surge voltage resistance rated value surge voltage resistance rated value of the main contacts typical electrical endurance (switching cycles) of dauxiliary 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 of uduring storage of uduring storage of uduring transport relative humidity during operation of uduring transport relative humidity during operation at AC-3 at 400 V rated value operational current out rated value out rated v	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 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 poliution 3 at AC rated value surge voltage resistance rated value 6 kW surge voltage resistance rated value 6 kW shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical plectrical endurance (switching cycles) typical sustaince Prohibitance (Date) Ambient conditions 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 adjustable current response value current of the current-dependent overload release operational current rated value • at AC-3 arted value maximum • at AC-3 arted value	product designation	Circuit breaker
Size of the circuit-breaker   S2	design of the product	For transformer protection
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 shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) • 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 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  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • operating frequency rated value operational current 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   18 W   • at AC in hot operating state per pole   6 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   50 000   • of auxiliary contacts typical   50 000   electrical endurance (switching cycles)   50 000   reference code according to IEC 81346-2   Q   Substance Prohibitance (Date)   10/15/2014   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   eduring transport   -50 +80 °C   relative humidity during operation   10 95 %    Main circuit   number of poles for main current circuit   3   adjustable current response value current of the current-dependent overload release   operating voltage   • rated value   20 690 V   • at AC-3 rated value maximum   690 V   • at AC-3 rated value maximum   690 V   operating frequency rated value   50 60 Hz   operational current rated value   operational current rated value   50 60 Hz   operational current rated value   operational curr	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 insulation voltage with degree of pollution 3 at AC rated value  surge voltage resistance rated value shock resistance according to IEC 60068-2-27 gets for the main contact typical of the main contact typical of auxiliary contacts typical of auxiliary contacts typical substance Prohibitance (Date) installation altitude at height above sea level maximum ambient temperature of during operation of during storage of utring transport relative humidity during operation adjustable current response value current of the current-dependent overload release operating voltage operating voltage operating frequency rated value operational current rated value	size of the circuit-breaker	S2
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  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  • of the main contacts typical  • of auxiliary contacts typical  so 000  electrical endurance (switching cycles) typical pollution 3 to 000  reference code according to IEC 81346-2  Questiance Prohibitance (Date)  Ambient conditions  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 adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3e rated value maximum  operational current rated value operational current rated value operational current operational current rated value operational current rated value operational current rated value operational current of the current rated value operational current rated value operational current of the current rated value operational current rated value	size of contactor can be combined company-specific	S2
at AC in hot operating state per pole 6 W insulation voltage with degree of pollution 3 at AC rated value 8	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  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical lelectrical endurance (switching cycles) typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical preference 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 during storage of during transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage arted value at AC-3e rated value maximum energy at AC-3e rated value maximum energy at AC-3e rated value operational current	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  pechanical service life (switching cycles)  of the main contacts typical  of auxiliary contacts typical  electrical endurance (switching cycles) typical  ference code according to IEC 81346-2  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  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  orated value  at AC-3e rated value maximum  operational current rated value  operational current  of both volume is sinus  end of KV  sound  of the Sound  of KV  sound  of the Sound	<ul> <li>at AC in hot operating state</li> </ul>	18 W
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  lectrical 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  oduring operation  oduring storage  oduring storage  oduring transport  relative humidity during operation  minimiter of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  orated value  at AC-3e rated value maximum  operational current rated value  operational current  of poles for rated value  operational current rated value  operational current rated value  operational current rated value  operational current  of the main current sponse of the current of the	at AC in hot operating state per pole	6 W
shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles)  of the main contacts typical of auxiliary contacts typical feference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during storage during transport elative humidity during operation  adjustable current response value current of the current-dependent overload release operating voltage  rated value at AC-3 rated value maximum at 10 m. 95 m. 60 Hz operational current rated value operational current		690 V
mechanical service life (switching cycles)  • of the main contacts typical • of auxiliary contacts typical so 000  electrical endurance (switching cycles) typical so 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  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3 rated value maximum  operating frequency rated value operational current rated value	surge voltage resistance rated value	6 kV
of the main contacts typical     of auxiliary contacts typical     electrical endurance (switching cycles) typical     so 000  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     ouring storage     ouring storage     ouring storage     ouring transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value     at AC-3 rated value maximum     eat AC-3 rated value maximum operational current rated value operational current      so 000      conditions      so 000      conditions     conditions      conditions	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     ouring storage     ouring transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value     at AC-3 rated value maximum electrical endurance (switching cycles) typical 50 000  50 000  50 000  60 000	mechanical service life (switching cycles)	
electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Intellation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation  Inumber of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • at AC-3 rated value maximum • at AC-3e rated value maximum operational current rated value operational current	<ul> <li>of the main contacts typical</li> </ul>	50 000
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 transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum  operational current rated value  32 A  10/15/2014  Albiert AB-90 on main current circuit a adjustable current response value current of the current-dependent overload release  operating voltage • rated value maximum 690 V  operational current rated value 32 A  operational current rated value	of auxiliary contacts typical	50 000
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  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operational current rated value  operational current rated value  operational current rated value  32 A  operational current rated value  32 A  operational current rated value  32 A	electrical endurance (switching cycles) typical	50 000
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 adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operational current rated value  operational current rated value  operational current rated value  32 000 m  20 +60 °C  -20 +80 °C  -50 +80 °C  -5	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  10 95 %  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  32	Substance Prohibitance (Date)	10/15/2014
ambient temperature  • during operation  • during storage  • during transport  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operational current rated value  operational current rated value  operational current rated value  32 460 °C  -50 +80 °C  -60 V	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>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>at AC-3e rated value</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>at AC-3e rated value<th>installation altitude at height above sea level maximum</th><th>2 000 m</th></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>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>32 A</li> </ul> operational current <ul> <li>50 60 Hz</li> </ul> operational current <ul> <li>32 A</li> </ul>	ambient temperature	
<ul> <li>◆ during transport</li> <li>relative humidity during operation</li> <li>10 95 %</li> <li>Main circuit</li> <li>number of poles for main current circuit</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> <li>• at AC-3e rated value maximum</li> <li>• operating frequency rated value</li> <li>operational current rated value</li> <li>32 A</li> <li>operational current</li> </ul>	<ul> <li>during operation</li> </ul>	-20 +60 °C
relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  32 A  operational current	<ul> <li>during storage</li> </ul>	-50 +80 °C
mumber of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current  operational current  3  22 32 A  22 32 A  20 690 V  690 V  690 V  390 V  390 V  390 V  390 V  390 V	during transport	-50 +80 °C
number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  3  22 32 A  20 690 V  690 V  690 V  30  30  31  32  32  33  34  34  35  36  36  37  38  38  39  30  30  30  30  30  30  30  30  30	relative humidity during operation	10 95 %
adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  32 32 A  22 32 A  20 690 V  • at AC-3 rated value maximum  690 V  operating frequency rated value  32 A	Main circuit	
current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  • at AC-3e rated value maximum  operating frequency rated value  operational current rated value  32 A  operational current	number of poles for main current circuit	3
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>		22 32 A
<ul> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> </ul>	operating voltage	
<ul> <li>at AC-3e rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current rated value</li> <li>operational current</li> <li>32 A</li> </ul>	• rated value	20 690 V
operating frequency rated value 50 60 Hz operational current rated value 32 A operational current	<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operational current rated value 32 A operational current	at AC-3e rated value maximum	690 V
operational current	operating frequency rated value	50 60 Hz
	operational current rated value	32 A
• at AC-3 at 400 V rated value 32 A	operational current	
	at AC-3 at 400 V rated value	32 A

at AC-3e at 400 V rated value	32 A
operating power	32 A
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	30 kW
at AC-3e	30 KW
	7.5 140
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW 18.5 kW
— at 500 V rated value	
— at 690 V rated value	30 kW
operating frequency  • at AC-3 maximum	15 1/h
	15 1/h
at AC-3e maximum	15 1/11
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	M.
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity maximum short-circuit current (lcu)	
at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	65 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	10 kA
at AC at 690 V rated value	4 kA
breaking capacity operating short-circuit current (Ics) at AC	
<ul> <li>at 240 V rated value</li> </ul>	100 kA
<ul> <li>at 400 V rated value</li> </ul>	30 kA
<ul> <li>at 500 V rated value</li> </ul>	5 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	656 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul> <li>at 480 V rated value</li> </ul>	32 A
at 600 V rated value	32 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	3 hp
— at 230 V rated value	5 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	25 hp
— at 575/600 V rated value	30 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	140 mm
width	55 mm
depth	149 mm

required spacing	
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— at the side	10 mm
<ul><li>for live parts at 400 V</li></ul>	
— 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
• 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	· min
type of electrical connection	screw-type terminals
type of electrical connection • for main current circuit arrangement of electrical connectors for main current	screw-type terminals Top and bottom
type of electrical connection • for main current circuit  arrangement of electrical connectors for main current circuit	
type of electrical connection  • for main current circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections	
type of electrical connection	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	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²)
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	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²)
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     • at AWG cables for main contacts	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²)
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         • at AWG cables for main contacts  tightening torque	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²)  2x (1 16 mm²), 1x (1 25 mm²)  2x (18 3), 1x (18 2)
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m
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         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m Diameter 5 to 6 mm
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2
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         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw         • for main contacts	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m Diameter 5 to 6 mm
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2  M6
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value     • with high demand rate according to SN 31920	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2
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         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw         • for main contacts  Safety related data  B10 value         • with high demand rate according to SN 31920  proportion of dangerous failures	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6
type of electrical connection	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000
type of electrical connection	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value     • with high demand rate according to SN 31920  proportion of dangerous failures     • with low demand rate according to SN 31920  failure rate [FIT]	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 %
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value     • with high demand rate according to SN 31920  proportion of dangerous failures     • with low demand rate according to SN 31920  failure rate [FIT]     • with low demand rate according to SN 31920	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 % 50 FIT
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value     • with high demand rate according to SN 31920  proportion of dangerous failures     • with low demand rate according to SN 31920  failure rate [FIT]     • with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 % 50 FIT 10 y
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     • at AWG cables for main contacts  tightening torque     • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw     • for main contacts  Safety related data  B10 value     • with high demand rate according to SN 31920  proportion of dangerous failures     • with low demand rate according to SN 31920  failure rate [FIT]     • with low demand rate according to SN 31920  T1 value for proof test interval or service life according to	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 % 50 FIT
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         • at AWG cables for main contacts  tightening torque         • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw         • for main contacts  Safety related data  B10 value         • with high demand rate according to SN 31920  proportion of dangerous failures         • with low demand rate according to SN 31920  failure rate [FIT]         • with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 % 50 FIT 10 y
• 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 • at AWG cables for main contacts  tightening torque • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw • for main contacts  Safety related data  B10 value • with high demand rate according to SN 31920  proportion of dangerous failures • with low demand rate according to SN 31920  failure rate [FIT] • with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M6  5 000  50 % 50 % 50 FIT 10 y  IP20
type of electrical connection	Top and bottom  2x (1 25 mm²), 1x (1 35 mm²) 2x (1 16 mm²), 1x (1 25 mm²) 2x (18 3), 1x (18 2)  3 4.5 N·m Diameter 5 to 6 mm Pozidriv size 2  M6  5 000  50 % 50 % 50 % IP20  finger-safe, for vertical contact from the front



Confirmation





<u>KC</u>



**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

**Special Test Certific**ate





Marine / Shipping







Confirmation

other

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=3RV2431-4EA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2431-4EA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2431-4EA10

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2431-4EA10&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2431-4EA10/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2431-4EA10&objecttype=14&gridview=view1

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