## **SIEMENS**

Data sheet 3RH2131-2AF00



Contactor relay, 3 NO + 1 NC, 110 V AC, 50 / 60 Hz, Size S00, Spring-type terminal

product brand name	SIRIUS
product designation	Auxiliary contactor
product type designation	3RH2
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (switching cycles)	
<ul> <li>of contactor typical</li> </ul>	30 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code acc. to IEC 81346-2	K
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
no-load switching frequency	
• at AC	10 000 1/h
• at DC	10 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	110 V
at 60 Hz rated value	110 V
control supply voltage frequency	
• 1 rated value	50 Hz

	00.11
2 rated value	60 Hz
operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	37 V·A
inductive power factor with closing power of the coil	0.8
apparent holding power of magnet coil at AC	5.7 V·A
inductive power factor with the holding power of the coil	0.25
closing delay	
• at AC	8 33 ms
opening delay	
• at AC	4 15 ms
arcing time	10 15 ms
Auxiliary circuit	10 10 1113
number of NC contacts for auxiliary contacts	1
instantaneous contact	1
number of NO contacts for auxiliary contacts	3
instantaneous contact	3
identification number and letter for switching	31 E
elements	
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul> <li>at 230 V rated value</li> </ul>	10 A
<ul> <li>at 400 V rated value</li> </ul>	3 A
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at 1 current path at DC-12	
• at 24 V rated value	10 A
at 110 V rated value	3 A
at 220 V rated value	1.4
• at 440 V rated value	0.3 A
at 600 V rated value	0.15 A
operational current with 2 current paths in series at DC-12	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul><li>at 60 V rated value</li></ul>	10 A
<ul> <li>at 110 V rated value</li> </ul>	4 A
<ul> <li>at 220 V rated value</li> </ul>	2 A
<ul> <li>at 440 V rated value</li> </ul>	1.3 A
● at 600 V rated value	0.65 A
operational current with 3 current paths in series at DC-12	
at 24 V rated value	10 A
at 60 V rated value	10 A
at 110 V rated value	10 A
at 220 V rated value	3.6 A
at 440 V rated value	2.5 A
at 600 V rated value	1.8 A
operating frequency at DC-12 maximum	1 000 1/h
	1 000 1/11
operational current at 1 current path at DC-13	10.0
• at 24 V rated value	10 A
at 110 V rated value	1 A
at 220 V rated value	0.3 A
<ul> <li>at 440 V rated value</li> </ul>	0.14 A
at 600 V rated value	0.1 A
operational current with 2 current paths in series at DC-13	
<ul><li>at 24 V rated value</li></ul>	10 A

a did 0V rated value al 10 / rated value al 220 V rated value al 600 V	e at 60 V rated value	2.5. \( \)
at 440 V rated value at 600 V rated value operational current with 3 current paths in series at DC-13 at 24 V rated value at 60 V rated value at 60 V rated value 3. A 4. 7 A 4.		
a the SOV rated value operational current with 3 current paths in series at Do-13 to 24 V rated value a to 40 V rated value a to 60 V rated value a to 100 V rated value a to 100 V rated value a to 100 V rated value b to 100 V rated value a to 100 V rated value b to 100 V rated value a to 100 V rated value b to 100 V rated value b to 100 V rated value c to 100 V rated value b to 100 V rated value b to 100 V rated value c to 100 V rated value b to 100 V rated value c to 100 V rated value b to 100 V rated value c to 26 A correct rate value to 20 V rated value c to 26 A correct rate value value to 20 V rated value c to 26 A correct rated pathy or survivary or contacts c to 40 V rated value c to 26 A correct rated pathy or survivary or contacts c to 40 V rated value c to 40 V rated value c to 26 A correct rated pathy or survivary or contacts c to 40 V rated value c to 20 V rated value c to 40 V rated value		
poperational current with 3 current paths in series at 0C-13  C-13 24 V rated value  at 80 V rated value  3 A  4 7 A  4 A  4		
a 16 DV reled value at 10 V reled value 4 7 A 3 A 3 A 4 7 A 3 A 4 7 A 3 A 4 7 A 4 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 7 A 4 A 4 7 A 4 A 4 7 A 4 A 4 7 A 4 A 4 7 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4		U.1 A
at 160 V rated value at 110 V rated value at 110 V rated value 1 2A 1 2A 1 2A 1 2A 2 440 V rated value 2 840 V rated value 3 1 00 0 5A 2 840 V rated value 0 28 A 2 90 28 A 2 9	DC-13	
at 110 V rated value at 220 V rated value at 220 V rated value 0.5 A 1.2 A 1.2 A 1.2 A 1.2 A 1.2 A 1.2 A 1.3 400 V rated value 0.5 A 0.26 A 0.27 A 0.27 A 0.28 A 0		
at 220 V rated value at 440 V rated value b at 600 V rated value 0.26 A 0.06 A 0.06 A 0.07 A rated value 0.26 A 0.26 A 0.26 A 0.26 A 0.26 A 0.37 A 0.38 A 0.48 A 0.50 A 0.48 A 0.50 A 0.48 A 0.50 A 0		
at 440 V rated value operating frequency at DC-13 maximum 1 to 00 1/h design of the ministure circuit breaker for short-circuit protection of the auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)  ULCSA ratings contact rating of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)  ULCSA ratings contact rating of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)  ULCSA ratings contact rating of auxiliary contacts  ULCSA ratings contact rating of auxiliary contacts according to UL  A600 / Q600  Short-circuit protection design of the fase link for short-circuit protection of the auxiliary switch required Installation/mounting/ dimensions  mounting position 4/-180* rotation possible on vertical mounting surface; can be tilted forward and backward by 1/- 22.5* on vertical mounting rail  fastening method screw and snap-on mounting onto 35 mm standard mounting rail 70 mm width 45 mm depth 73 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — upwards 10 mm  — upwards 10 mm  • for grounded parts  — forwards 10 mm  • of grounded parts  — forwards 10 mm  • of grounded parts  — forwards 10 mm  • of live parts  — forwards 10 mm  • of live parts  — forwards 10 mm  • of live parts  — forwards 10 mm  • of auxiliary contacts  — solid or stranded — solid or stranded — solid or stranded — solid or stranded — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing • of auxiliary contacts  • with low demand rate acc. to SN 31920  proportion of dangerous failures  • with low demand rate acc. to SN 31920  with live demand rate acc. to SN 31920  with this pid demand rate acc. to SN 31920  with this pid demand rate acc. to SN 31920  with live demand rate acc. to SN 31920  with this pid demand rate acc. to SN 31920  with this pid demand rate acc. to SN 31920  with live d		
oparating frequency at DC-13 maximum     design of the ministure circuit breaker for short-circuit protection of the auxiliary contacts     contact reliability of auxiliary contacts     ULCSA natings     contact reliability of auxiliary contacts     ULCSA natings     contact reliability of auxiliary contacts     ULCSA natings     contact rating of auxiliary contacts according to UL     Short-circuit protection     design of the fuse link for short-circuit protection of the auxiliary switch required     Installation/ mounting/ dimensions     mounting position		1. <del>-</del>
Doperating frequency at DC-13 maximum   Doperating frequency		
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)  ULCSA ratings  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link for short-circuit protection of the auxiliary switch required  Installation mounting idmensions  mounting position  4-180° rotation possible on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface; can be titled forward and backward by 4-7.22.5° on vertical mounting surface;		
protection of the auxiliary contacts UL/CSA ratings contact rating of auxiliary contacts UL/CSA ratings contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the auxiliary switch required Installation mounting dimensions mounting position  frastaliarion mounting dimensions mounting position  frastaliarion mounting dimensions mounting position  frastaliarion mounting dimensions  fastening method height 70 mm  width 45 mm  depth 73 mm  required spacing  with side-by-side mounting — forwards — upwards — of mornade parts — forwards — at the side — of orgrounded parts — forwards — at the side — downwards — of the parts — forwards — to fine parts — forwards — of orgrounded parts — forwards — at the side — downwards — to fine parts — forwards — at the side — downwards — to fine parts — forwards — to fine parts — solid or stranded — finely stranded with ore end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  Safety rolated data  Bit O'slaw with high demand rate acc. to SN 31920  proportion of dangerous failures — with loy demand rate acc. to SN 31920  with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920		
contact rating of auxiliary contacts according to UL  A600 / Q600  Mont-circuit protection  design of the fuse link for short-circuit protection of the auxiliary switch required  Installation mounting / dimensions  mounting position  fastening method  fastening method  foward and backward by +/- 22.5" on vertical mounting surface; can be tilted foward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of ward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of ward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of ward and backward by +/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of ward and packward by +/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of ward and packward by +/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of oward and packward by +/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil of oward and packward by +/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard moun	protection of the auxiliary circuit up to 230 V	C characteristic: 6 A; 0.4 kA
contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  4/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface served and snap-on mounting not 35 mm standard mounting surface served and snap-on mounting onto 35 mm standard mounting rail  height  70 mm  width  45 mm  depth  73 mm  required spacing  • with side-by-side mounting  — forwards — upwards — downwards — of upwards — of orgrounded parts — forwards — upwards — at the side — downwards — on mm  • for grounded parts — forwards — upwards — 10 mm — on the side — downwards — on mm  • for live parts — forwards — upwards — the side — downwards — other wards — upwards — the side — downwards — ownwards — ownwards — ownwards — of mm — ownwards — ownwards — ownwards — of mm — ownwards — own		1 faulty switching per 100 million (17 V, 1 mA)
design of the fuse link for short-circuit protection of the auxiliary switch required Installation/ mounting dimensions  mounting position	UL/CSA ratings	
design of the fuse link for short-circuit protection of the auxiliary switch required  Installation mounting/dimensions  mounting position  fastening method height 70 mm  width depth 73 mm  required spacing • with side-by-side mounting — forwards — at the side — downwards — at the side — downwards — at the side — downwards — of rilve parts — for live parts — for live parts — of rowards — at the side — downwards — at the side — downwards — for live parts — for wards — upwards — of rilve parts — for wards — to switch a side — downwards — to switch a side — side  Connections/ Terminals  Type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920	contact rating of auxiliary contacts according to UL	A600 / Q600
Installation/ mounting/dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting  — of mowards — at the side — downwards — at the side — downwards — of worwards — ownwards — ownwards — at the side — forwards — ownwards — ownwa	Short-circuit protection	
mounting position  ## 180* rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 70 mm  ## 180* rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 70 mm  ## 180* rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on mm and surface and snap-on mounting onto 35 mm standard mounting surface; can be tilted forward snapped mounting surface; can be tilted forward and sackward by +/- 22.5* on mm and snapped mounting surface; can be tilted forward and sackward by +/- 22.5* on mm and snapped mounting surface; can be tilted forward mounting surface; can be tilted forward mounting surface; can be tilted forward nounting surface; can be tilted forward mounting surface; can be tilted forward mounting surface; can be surface and snapped mounting surface and snapped mounting surface and snapped mounting surface and snapped		fuse gL/gG: 10 A
mounting position  #/-180" rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and sand sand-pan mounting onto 35 mm standard mounting rall rate and sand-pan mounting onto 35 mm standard mounting rall rate acc. to SN 31920  ### ### ### ### ### ### ### ### ### #		
fastening method height 70 mm width depth 73 mm  required spacing • with side-by-side mounting — forwards — upwards — downwards — 10 mm — downwards — forwards — the side • for grounded parts — forwards — upwards — 10 mm — own many — at the side • for grounded parts — forwards — upwards — 10 mm — ownwards — upwards — ownwards — 10 mm — ownwards — upwards — ownwards — ownwa		
height width 45 mm depth 73 mm  required spacing  • with side-by-side mounting  — forwards 10 mm — upwards 10 mm — at the side 0 mm  • for grounded parts — forwards 10 mm — upwards 10 mm — at the side 0 mm  • for grounded parts — forwards 10 mm — at the side 6 mm — at the side 6 mm — downwards 10 mm  • for live parts — forwards 10 mm  • for live parts — forwards 10 mm  • for live parts — forwards 10 mm  • for wards 10 mm  • for live parts — forwards 10 mm  • for live parts — forwards 10 mm  • for wards 10 mm  • for live parts — at the side 6 mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit sype of connectable conductor cross-sections • for auxiliary contacts — solid or stranded 2x (0.5 4 mm²) — finely stranded with core end processing - finely stranded with core end processing - finely stranded with core end processing - at AWG cables for auxiliary contacts 2x (20 2.5 mm²) • at AWG cables for auxiliary contacts 2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920 40 % • with high demand rate acc. to SN 31920 40 % • with high demand rate acc. to SN 31920 73 %	fastening method	
width   depth		
required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — upwards — upwards — upwards — upwards — at the side — downwards — of rive parts — for live parts — forwards — upwards — to five parts — forwards — upwards — to mm — of rive parts — forwards — upwards — upwards — upwards — downwards — downwards — at the side — 6 mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²) — x (0.5 2.5 mm²) — x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920 — 37 %		
required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parls — forwards — upwards — upwards — upwards — upwards — upwards — upwards — at the side — downwards — of rive parls — forwards — if or ive parls — forwards — upwards — of or ive parls — forwards — upwards — the side — downwards — of or ive parls — forwards — upwards — lo mm	depth	73 mm
with side-by-side mounting — forwards — upwards — downwards — 10 mm — at the side 0 mm  of or grounded parts — forwards — upwards — upwards — at the side 0 mm  of or live parts — for live parts — for live parts — downwards — 10 mm  of or live parts — forwards — 10 mm  of or live parts — forwards — 10 mm  of or live parts — forwards — 10 mm  of or live parts — forwards — 10 mm  converting to the side  connections / Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  of or auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded with core end processing at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  of at AWG cables for auxiliary contacts  at AWG cables for auxiliary contacts  of at AWG cables for auxiliary contacts  at AWG cables for auxiliary contacts  of the side  10 mm  10 mm  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  10 mm	<u> </u>	
- upwards 10 mm - downwards 0 mm - at the side 0 mm  • for grounded parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm • for live parts - forrwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 5 mm - at the side 7 mm - at the side 7 mm - at the side 7 mm - at the side 8 mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 2.5 mm²) - finely stranded without core end processing 2x (0.5 2.5 mm²) • at AWG cables for auxiliary contacts 2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920 1000 000; With 0.3 x le  proportion of dangerous failures • with low demand rate acc. to SN 31920 40 % • with high demand rate acc. to SN 31920 73 %		
- downwards - at the side of or grounded parts - forwards - upwards - at the side of mm - at the side of mm - at the side of mm - downwards of or live parts - forwards - upwards of or live parts - forwards - upwards - downwards - downwards - at the side - downwards - upwards - the side - formands - type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections of or auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of with high demand rate acc. to SN 31920 of mm  of mm	— forwards	10 mm
- at the side  • for grounded parts  - forwards  - upwards  - at the side  - downwards  • for live parts  - forwards  - to mm  - downwards  • for live parts  - forwards  - upwards  - downwards  - upwards  - downwards  - upwards  - downwards  - downwards  - downwards  - at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  - finely stranded without core end processing  - finely stranded without core end processing  • at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  4x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  4x (0.5 2.5 mm²)	— upwards	10 mm
• for grounded parts  — forwards — upwards — at the side — downwards 10 mm  • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — downwards — at the side — downwards — of mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG cables for auxiliary contacts  2x (0.5 4 mm²) — finely stranded without core end processing — at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  1 000 000; With 0.3 x le  proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920	— downwards	10 mm
— forwards — upwards — at the side — downwards — for live parts — forwards — upwards — forwards — upwards — upwards — upwards — upwards — downwards — at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 — with high demand rate acc. to SN 31920	— at the side	0 mm
- upwards - at the side - downwards 10 mm  • for live parts - forwards 10 mm  - upwards 10 mm  - upwards 10 mm  - upwards 10 mm  - upwards 10 mm  - downwards 10 mm  - at the side 6 mm   Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts 2x (0.5 2.5 mm²) - finely stranded without core end processing - at AWG cables for auxiliary contacts  810 value with high demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with high demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920 - with low demand rate acc. to SN 31920	<ul> <li>for grounded parts</li> </ul>	
- at the side - downwards • for live parts - forwards - upwards - upwards - downwards - at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts  8 at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920	— forwards	10 mm
- downwards • for live parts - forwards - upwards - downwards - downwards - at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing • at AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  73 %	— upwards	10 mm
• for live parts  — forwards — upwards — downwards — at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920	— at the side	6 mm
- forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • for auxiliary contacts  - solid or stranded 2x (0,5 4 mm²)  - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts  • at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920 1000 000; With 0.3 x le  proportion of dangerous failures  • with low demand rate acc. to SN 31920 40 %  • with high demand rate acc. to SN 31920 73 %	— downwards	10 mm
- upwards 10 mm - downwards 10 mm - at the side 6 mm  Connections/ Terminals  type of electrical connection for auxiliary and control circuit spring-loaded terminals  type of connectable conductor cross-sections  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing 2x (0.5 4 mm²)  - finely stranded without core end processing 2x (0.5 2.5 mm²)  • at AWG cables for auxiliary contacts 2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920 1 000 000; With 0.3 x le  proportion of dangerous failures  • with low demand rate acc. to SN 31920 40 %  • with high demand rate acc. to SN 31920 73 %	<ul><li>for live parts</li></ul>	
- downwards - at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts  2x (0.5 4 mm²) 2x (0.5 2.5 mm²) 2x (0.5 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920	— forwards	
— at the side  Connections/ Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing 2x (0.5 2.5 mm²)  — at AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920	— upwards	
type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts  B10 value with high demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920  • With high demand rate acc. to SN 31920		10 mm
type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing 2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %		6 mm
type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing • at AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate acc. to SN 31920  • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • 73 %	Connections/ Terminals	
<ul> <li>for auxiliary contacts  — solid or stranded  — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing  • at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (0.5 2.5 mm²)  2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures  • with low demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %</li> </ul>	type of electrical connection for auxiliary and control circuit	spring-loaded terminals
<ul> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> <li>— at AWG cables for auxiliary contacts</li> <li>Eafety related data</li> <li>B10 value with high demand rate acc. to SN 31920</li> <li>■ with low demand rate acc. to SN 31920</li> <li>■ with high demand rate acc. to SN 31920</li> <li>■ with high demand rate acc. to SN 31920</li> <li>■ with high demand rate acc. to SN 31920</li> <li>■ with high demand rate acc. to SN 31920</li> <li>T3 %</li> </ul>	type of connectable conductor cross-sections	
— finely stranded with core end processing — finely stranded without core end processing • at AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %	<ul> <li>for auxiliary contacts</li> </ul>	
— finely stranded without core end processing  • at AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  2x (20 12)  Safety related data  B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures  • with low demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %	<ul><li>— solid or stranded</li></ul>	
<ul> <li>at AWG cables for auxiliary contacts</li> <li>Safety related data</li> <li>B10 value with high demand rate acc. to SN 31920</li> <li>proportion of dangerous failures</li> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>73 %</li> </ul>	<ul> <li>finely stranded with core end processing</li> </ul>	
B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures  with low demand rate acc. to SN 31920  with high demand rate acc. to SN 31920  with high demand rate acc. to SN 31920  73 %		
B10 value with high demand rate acc. to SN 31920  proportion of dangerous failures  • with low demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %	at AWG cables for auxiliary contacts	2x (20 12)
proportion of dangerous failures  • with low demand rate acc. to SN 31920  • with high demand rate acc. to SN 31920  73 %	Safety related data	
<ul> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> <li>73 %</li> </ul>	B10 value with high demand rate acc. to SN 31920	1 000 000; With 0.3 x le
• with high demand rate acc. to SN 31920 73 %	proportion of dangerous failures	
	<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
failure rate [FIT] with low demand rate acc. to SN 31920 100 FIT	with high demand rate acc. to SN 31920	73 %
	failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT

afe, for vertical contact from the front

Certificates/ approvals

**General Product Approval** 

**EMC** 













Functional
Safety/Safety of
Machinery

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

**Type Examination** Certificate



**UK Declaration of** Conformity

Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>



## Marine / Shipping













## other

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=3RH2131-2AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2131-2AF00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2131-2AF00

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

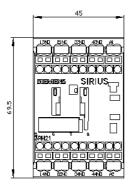
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AF00&lang=en

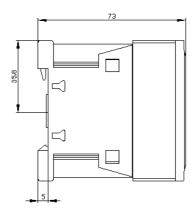
Characteristic: Tripping characteristics, I2t, Let-through current

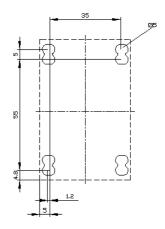
https://support.industry.siemens.com/cs/ww/en/ps/3RH2131-2AF00/char

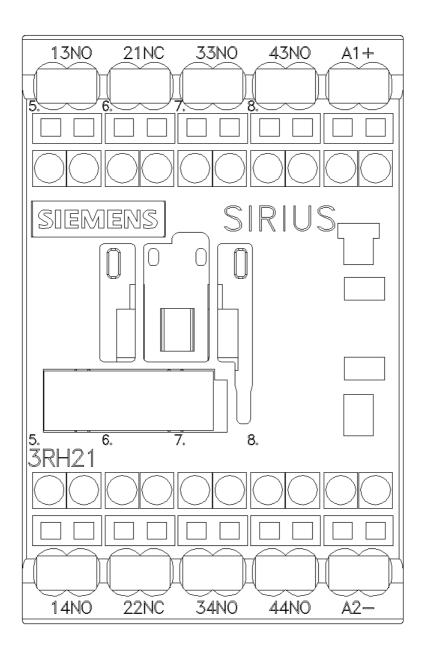
Further characteristics (e.g. electrical endurance, switching frequency)

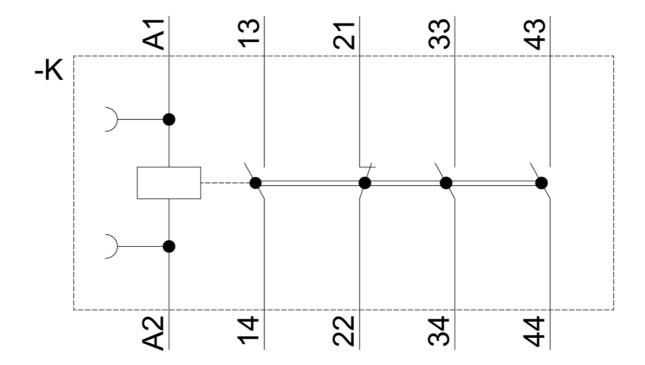
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2131-2AF00&objecttype=14&gridview=view1











last modified: 12/15/2020 🖸