## **SIEMENS**

Data sheet 3RH2122-1AB00



Contactor relay, 2 NO + 2 NC, 24 V AC, 50 / 60 Hz, Size S00, screw 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)	
of contactor typical	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 according to IEC 81346-2	K
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C
<ul><li>during storage</li></ul>	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
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	
at 50 Hz rated value	24 V
at 60 Hz rated value	24 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 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 VA
inductive power factor with closing power of the coil	0.8
apparent holding power of magnet coil at AC	5.7 VA
inductive power factor with the holding power of the	0.25
coil	
closing delay	
• at AC	8 33 ms
opening delay	
• at AC	4 15 ms
arcing time	10 15 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
<ul> <li>instantaneous contact</li> </ul>	2
number of NO contacts for auxiliary contacts	2
<ul> <li>instantaneous contact</li> </ul>	2
identification number and letter for switching	22 E
elements	
operational current at AC-12 maximum	10 A
operational current at AC-15	40.4
at 230 V rated value	10 A
• at 400 V rated value	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	40.4
<ul> <li>at 24 V rated value</li> <li>at 110 V rated value</li> </ul>	10 A 3 A
at 220 V rated value	1 A
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	0.13 A
DC-12	
at 24 V rated value	10 A
at 60 V rated value	10 A
at 110 V rated value	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
<ul><li>at 600 V rated value</li></ul>	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
operational current at 1 current path at DC-13	10 A
at 24 V rated value     at 110 V rated value	10 A
• at 110 V rated value	1 A
at 220 V rated value     at 440 V rated value	0.3 A
• at 440 V rated value	0.14 A 0.1 A
at 600 V rated value  Operational current with 2 current paths in series at	U.I A
operational current with 2 current paths in series at DC-13	
at 24 V rated value	10 A
at 60 V rated value	3.5 A
at 110 V rated value	1.3 A
at 220 V rated value	0.9 A
at 440 V rated value	0.2 A
at 600 V rated value	0.1 A
operational current with 3 current paths in series at	
·	

a cat 24 virated value at 60 virated value be at 60 virated value at 60 virated value at 60 virated value be at 60 virated value at 60 virated val		
at 60 V rated value at 110 V rated value 3 A 112 A 3 A 1220 V rated value 3 A 128 V rated value 3 A 1000 1/h 1		
e at 110 V rated value e at 220 V rated value 1.2 A 1.		
at 220 V rated value at 440 V rated value but 440 V rated value control value value at 440 V rated value control value value control value value control value value control value design of he ministure circuit up to 230 V control value value control value value design of the final value value value design of the ministure circuit up to 230 V control value value control value value design of the final value value desig		
a 440 V rated value a 600 V rated value operating frequency at DC-13 maximum design of the ministure circuit breaker for short-circuit protection of the auxiliary contacts  Viconator reliability of auxiliary contacts according to UL  Short-circuit protection design of the fuse link for short-circuit protection of the auxiliary switch required long of the fuse link for short-circuit protection of the auxiliary switch required  Viconator required specific for the fuse link for short-circuit protection of the auxiliary switch required  Viconator required specific for the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary switch required of the fuse link for short-circuit protection of the auxiliary and control circuit fuse link fuse l		
a ti 600 V rated value operating frequency at DC-13 maximum design of the ministure circuit breaker for short-circuit protection of the auxiliary contacts contact reliability of auxiliary contacts  UCSA ratings  UCSA ratings  Turner of the service of the service of the auxiliary contacts according to UL  Short-circuit protection  design of the fuse link for short-circuit protection of the auxiliary with required  design of the fuse link for short-circuit protection of the auxiliary switch required  Installation mounting idmensions  mounting position  fastening method height  syntamic of the service of the service of the auxiliary width  depth  - forwards  - upwards  - downwards  - of orwards  - of orwards  - of remainded  - at the side  - downwards  - of rive parts  - forwards  - other is deside  - downwards  - other is deside  - for grounded parts  - for auxiliary and control circuit type of connectable conductor cross-sections  - for auxiliary contacts  - seld or stranded  - finely stranded with core end processing  - at NYG cables for auxiliary contacts  - seld or stranded  - finely stranded with core end processing  - at NYG cables for auxiliary contacts  - seld or stranded  - finely stranded with core end processing  - at NYG cables for auxiliary contacts  - seld or stranded  - finely stranded with core end processing  - at NYG cables for auxiliary contacts  - seld or stranded  - finely stranded with core end		
operating frequency at DC-13 maximum design of the ministure circuit treates for short-circuit protection of the auxiliary circuit up to 230 V contact reliability of auxiliary contacts V 1 faulty switching per 100 million (17 V, 1 mA) UL/GSA ratings  contact rating of auxiliary contacts according to UL. A600 / C600  Short-circuit protection  design of the fuse link for short-circuit protection of the auxiliary switch required Installation mounting dimensions  mounting position  fastening method facility of the short of the series of the short of the series of the short of the series of the short of the sunding of the short of the sunding surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertical mounting surface; can be till forward and backward by 4/- 22.5° on vertic		
design of the miniature circuit breaker for short-circuit protection of the auxillary counture to 200 V contact reliability of auxillary contacts  ULICSA ratings  Total faulty switching per 100 million (17 V, 1 mA)  **Memory of the fuse link for short-circuit protection of the auxiliary switch required leavillary switch required installation mounting position  fastening method height witth 45 mm depth 73 mm required spacing  — with side-by-side mounting — with side-by-side mounting — orwards 10 mm — orwards 10 mm — at the side 0 for grounded parts — forwards 10 mm — at the side 0 downwards 10 mm — at the side 0 downwards 10 mm — ownwards 10 mm		
protection of the auxiliary circuit up to 230 V contact relating of auxiliary contacts  ULICSA ratings  contact rating of auxiliary contacts according to UL Short-circuit protection of the auxiliary switch required Installation mounting protection  design of the fuse link for short-circuit protection of the auxiliary switch required Installation mounting dimensions  mounting position  fastening method height		
contact rating of auxiliary contacts according to UL  A600 / Q600  A600 / Q600 / Q600 / Q600  A600 / Q600 / Q600 / Q600  A600 / Q600 / Q	protection of the auxiliary circuit up to 230 V	
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  fastening method height width depth 75 mm  required spacing  • with side-by-side mounting  • with side-by-side mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and backward by +f- 22.5" on vertical mounting surface, can be till forward and sange, on		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  fastening method height 57.5 mm 45 mm 73 mm required spacing  • with side-by-side mounting  — forwards 10 mm 1	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	contact rating of auxiliary contacts according to UL	A600 / Q600
auxiliary switch required installation/ mounting/ dimensions mounting position fastening method height width depth required spacing  • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — for wards — at the side — downwards — to river parts — for live parts — for live parts — for live parts — downwards — at the side — for live parts — for rounds — at the side — downwards — at the side — downwards — at the side — downwards — at the side — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded or stranded — stranded stranded — finely stranded stranded — finely stranded stranded — finely stranded stranded — finely stranded stranded — stranded — stranded stranded — finely stranded — stranded — stranded stranded — finely stranded stranded — finely stranded stranded — finely stranded — stranded — stranded stranded — str	Short-circuit protection	
mounting position  fastening method height width depth  with ide-by-side mounting  with side-by-side mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the foreward and backward by +f- 22.5° on vertical mounting surface; can be the form and backward by +f- 22.5° on vertical mounting surface; can be the form and backward by +f- 22.5° on vertical mounting surface screw and snap-on mounting onto 10 mm  20 mm  40 m		fuse gL/gG: 10 A
mounting position  fastening method height width depth required spacing  • with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — at the side — downwards — at the side — downwards — at the side — downwards — upwards — to finely after — forwards — at the side — downwards — to five parts — forwards — upwards — to five parts — forwards — upwards — to five parts — forwards — upwards — to five parts — forwards — to five parts — to fi		
forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail 57.5 mm 45 mm 45 mm 73 mm 75 mm 73 mm 75 mm 73 mm 75 mm 73 mm 75		+/-180° rotation possible on vertical mounting surface; can be tilted
helght width d5 mm depth required spacing  • with side-by-side mounting  — forwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm — upwards 10 mm — upwards 10 mm — at the side 0 mm — ownwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — to rorwards 10 mm — to rorwards 10 mm — ownwards 20 mm — ownwards 20 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 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² — 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) — 2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 609475—1  B10 value with high demand rate according to SN 31920 — with low demand rate according to SN 31920 — with low demand rate according to SN 31920 — with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 61529  touch protection on the front according to IEC 6529  touch protection on the front according to IEC 6529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529  touch protection on the front according to IEC 66529		forward and backward by +/- 22.5° on vertical mounting surface
width depth 73 mm 73 mm 72 mm 72 mm 73 mm 74 mm 75 mm	_	
depth required spacing  with side-by-side mounting — forwards 10 mm — upwards 10 mm — at the side 0 mm — forwards 10 mm — forwards 10 mm — at the side 0 mm — at the side 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm  Connections/ Torminals  Upe 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 — at AWG cables for auxiliary contacts  Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 — with high demand rate according to SN 31920 — with ligh demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 60529  touch protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529  touch protection case in point in the front according to IEC 60529	_	
required spacing  with side-by-side mounting  — forwards — upwards — downwards — downwards — at the side — for grounded parts — upwards — of mm — upwards — of mm — of		
with side-by-side mounting  forwards  upwards  downwards  downwards  at the side  for grounded parts  forwards  upwards  for for prounded parts  forwards  upwards  for mm  forwards  upwards  for live parts  forwards  for live parts  downwards  downwards  for live parts  forwards  upwards  for live parts  formands  which give provided the side  connections for auxiliary and control circuit type of connection for auxiliary and control circuit type of connectable conductor cross-sections  for auxiliary contacts  for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary contacts  for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary and control circuit type of connectable conductor cross-sections  for auxiliary contacts  for auxiliary contacts  for auxiliary contacts  at AWG cables for auxiliary and control circuit type of connectable conductor cross-sections  for auxiliary contacts  at the side  for mm  fo	•	7.5 mm
forwards upwards downwards at the side for grounded parts forwards forwards forwards forwards upwards forwards upwards at the side downwards at the side downwards for live parts forwards forwards forwards forwards forwards forwards forwards forwards forwards upwards downwards downwards at the side downwards at the side formatist 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 at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with ore end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded finely stranded finely stranded finely stranded finely stranded finely stranded finely strander solid or stranded finely strander solid or stra		
- upwards - downwards - at the side  • for grounded parts - forwards - upwards - upwards - upwards - downwards - downwards - upwards - downwards - for live parts - forwards - upwards - forwards - upwards - downwards - upwards - downwards - upwards - downwards - downwards - downwards - at the side - downwards - 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 - at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 1 000 FIT 31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529	, c	10 mm
- downwards - at the side • for grounded parts - forwards - upwards - at the side • for mands - upwards - at the side - downwards - downwards • for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - upwards - upwards - downwards - upwards - downwards - upwards - at the side - downwards - at the side - downwards - at the side - for auxiliary and control circuit type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (20 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (20 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (20 1.6), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low d		
- at the side  • for grounded parts  - forwards  - upwards  - at the side  - downwards  • for live parts  - forwards  10 mm  • for live parts  - forwards  10 mm  • for live parts  - forwards  10 mm  - at the side  - downwards  10 mm  - townwards  - upwards  - upwards  - downwards  - at the side  - forwards  - upwards  - the side  - formals  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  • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  • with low demand rat	•	
• for grounded parts     — forwards     — upwards     — at the side     — downwards     • for live parts     — forwards     — upwards     — forwards     — upwards     — forwards     — upwards     — downwards     — downwards     — upwards     — downwards     — downwards     — downwards     — at the side     — 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     • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12  Safety related data product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures     • with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to IEC 60529 for the form the front according to IEC 60529 finger-safe, for vertical contact from the front		
forwards upwards at the side downwards for live parts forwards upwards forwards forwards upwards forwards upwards upwards 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 at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing screw-type terminals to mm the mm		U mm
- upwards - at the side - downwards • for live parts  - forwards - upwards - upwards - upwards - downwards - at the side - downwards - upwards - downwards - at the side - 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 • at AWG cables for auxiliary contacts  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 11 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		40
- at the side - downwards • for live parts - forwards - 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 • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 till by the first interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
<ul> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>form</li> <li>connections/ Terminals</li> <li>type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>screw-type terminals</li> <li>screw-type terminals</li> <li>xcrew-type terminals</li> <li>xcrew-type terminals</li> <li>ye for auxiliary contacts</li> <li>screw-type terminals</li> <li>xcrew-type terminals</li> <li>xcrew-ty</li></ul>		
• 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 • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60549  • with low demand rate according to SN 31920 • with high 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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
		10 mm
- 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 • at AWG cables for auxiliary contacts  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high 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 60529 touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	•	40
- 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 • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920  1 000 000; With 0.3 x Ie  1 000 FIT  31920  73 %  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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
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 • at AWG cables for auxiliary contacts  Product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 1 value for proof test interval or service life according to IEC 60529  touch protection on the front according to IEC 60529  touch protection on the front according to IEC 60529  screw-type terminals  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to SN 31920  1 000 000; With 0.3 x le  1 000 000; With 0.3 x le  1 000 000; With 0.3 x le  2 0 y Screw-type terminals  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x (0.75 2.5 mm²), 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x (0.5 1.5 mm²), 2x (0.5 .	·	
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 • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  • at AWG cables for auxiliary contacts  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high 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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		
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 • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920 • with high demand rate according to SN 31920  • with high demand rate according to SN 31920  • with low demand rate according to SN 31920		6 mm
• for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     • at AWG cables for auxiliary contacts      2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²     2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)     • at AWG cables for auxiliary contacts      2x (20 16), 2x (18 14), 2x 12      Safety related data      product function positively driven operation according to IEC 60947-5-1     B10 value with high demand rate according to SN 31920     • with low demand rate according to SN 31920     • with high demand rate according to SN 31920     • with high demand rate according to SN 31920     73 %     failure rate [FIT] with low demand rate according to SN 31920     71 value for proof test interval or service life according to IEC 60529      protection class IP on the front according to IEC 60529      finger-safe, for vertical contact from the front		
• for auxiliary contacts  — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  2x (20 16), 2x (18 14), 2x 12  Safety related data  product function positively driven operation according to IEC 60947-5-1  B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT  31920  T1 value for proof test interval or service life according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		screw-type terminals
- solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts  Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 60529  touch protection on the front according to IEC 60529  • (25 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.5 1.5 mm²) 2x (0.5	3.	
<ul> <li>finely stranded with core end processing <ul> <li>at AWG cables for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> <li>2x (20 16), 2x (18 14), 2x 12</li> </ul> </li> <li>Safety related data  <ul> <li>product function positively driven operation according to IEC 60947-5-1</li> <li>B10 value with high demand rate according to SN 31920</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>T1 value for proof test interval or service life according to IEC 61508</li> <li>protection class IP on the front according to IEC 60529</li> <li>finger-safe, for vertical contact from the front</li> </ul> </li> </ul>	-	0 (0 5 4 5 3) 0 (0 5 5 0 5 3)
at AWG cables for auxiliary contacts     2x (20 16), 2x (18 14), 2x 12      Safety related data  product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures     with low demand rate according to SN 31920     with high demand rate according to SN 31920     with high 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 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front		
product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] 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 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	· · · · · · · · · · · · · · · · · · ·	
product function positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high 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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		ZX (ZU 16), ZX (18 14), ZX 12
IEC 60947-5-1 B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  • with high 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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		V
proportion of dangerous failures  • with low demand rate according to SN 31920 • with high 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 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	IEC 60947-5-1	res
<ul> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>T1 value for proof test interval or service life according to IEC 61508</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> <li>finger-safe, for vertical contact from the front</li> </ul>		1 000 000; With 0.3 x le
<ul> <li>with high demand rate according to SN 31920</li> <li>failure rate [FIT] with low demand rate according to SN 31920</li> <li>T1 value for proof test interval or service life according to IEC 61508</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> <li>finger-safe, for vertical contact from the front</li> </ul>	-	
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  touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front	_	
31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		100 FIT
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529  finger-safe, for vertical contact from the front		20 y
touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front		IP20
		finger-safe, for vertical contact from the front
General Product Approval	General Product Approval	





Confirmation







**EMC** 

Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

## Marine / Shipping













Marine / Shipping

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=3RH2122-1AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2122-1AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2122-1AB00

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

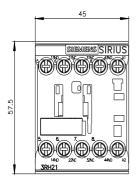
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2122-1AB00\&lang=en}}$ 

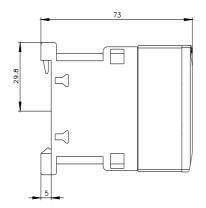
Characteristic: Tripping characteristics, I²t, Let-through current

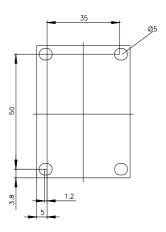
https://support.industry.siemens.com/cs/ww/en/ps/3RH2122-1AB00/char

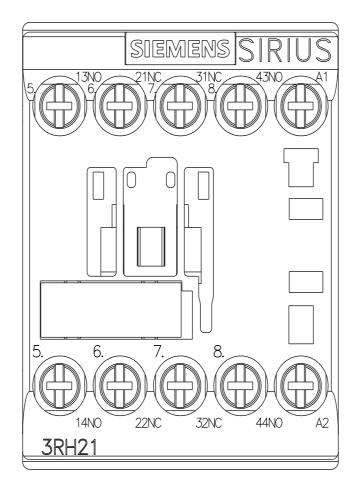
Further characteristics (e.g. electrical endurance, switching frequency)

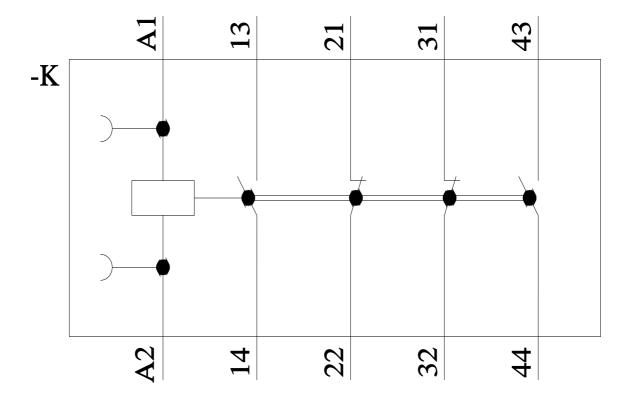
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2122-1AB00&objecttype=14&gridview=view1











last modified: 11/21/2022 🖸