## **SIEMENS**

Data sheet 3RH2131-2AP00



Contactor relay, 3 NO + 1 NC, 230 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
power loss [W] for rated value of the current without load current share typical	1.43 W
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 (operating 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
of the contactor with added auxiliary switch block typical	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	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	49.2 kg
Global Warming Potential [CO2 eq] during manufacturing	1.15 kg
Global Warming Potential [CO2 eq] during operation	48.2 kg
Global Warming Potential [CO2 eq] after end of life	-0.139 kg
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	230 V
at 60 Hz rated value	230 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 coil	0.25
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	1
• instantaneous contact	1
number of NO contacts for auxiliary contacts	3
instantaneous contact	3
identification number and letter for switching elements	31 E
operational current at AC-12 maximum	10 A
operational current at AC-15	
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	
• at 24 V rated value	10 A
at 110 V rated value	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 DC-12	
• at 24 V rated value	10 A
• at 60 V rated value	10 A
• at 110 V rated value	4 A
• at 220 V rated value	2 A
• at 440 V rated value	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
operational current at 1 current path at DC-13	
at 24 V rated value	10 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
• at 440 V rated value	0.14 A
• at 600 V rated value	0.1 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 Å   3.6 Å   4.1 ± 20 V rated value   2.0 Å   3.6 Å   4.1 ± 20 V rated value   2.2 Å   4.1 ± 20 V rated value   3.4 Å   4.1 Å   4.1 ± 20 V rated value   4.1 Å   4.1 Å   4.1 ± 20 V rated value   4.1 Å   4.1 Å   4.1 ± 20 V rated value   4.1 Å   4.1 Å   4.1 ± 20 V rated value   4.2 Å   4.1 ± 20 V rated value   4.2 Å   4.1 Å   4.1 ± 20 V rated value   4.2 Å   4.1 ± 20 V rated value   4.1 ± 20 V rated value		
a 220 V rated value	at 60 V rated value	3.5 A
e. al. 44 0V rated value	at 110 V rated value	1.3 A
operational current with 3 current paths in series at DC-13  * all 24 V rided value * all 60 V rated value * oze A * oze A * all 60 V rated value * oze A * o	at 220 V rated value	0.9 A
operational current with 3 current paths in series at DC-13  • at 24 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 120 V rated value • at 140 V rated value • at 160 V rated value • with side-by-side mounting • forwards • at the side • or grounded parts • forwards • at the side • or grounded parts • forwards • at the side • or grounded parts • forwards • for inve parts • forwards • for inve parts • forwards • for inve parts  - forwards • fo	at 440 V rated value	0.2 A
a 10 A 7 A A   a 11 10 V rated value   a 11 10 V rated value   12 A	at 600 V rated value	0.1 A
a et 10 V rated value at 140 V rated value at 150 A at 150 V rated value at 1	operational current with 3 current paths in series at DC-13	
at 110 V rated value at 220 V rated value 1.2 A 2.6 A 2.6 to 0.7 rated value 2.6 A 2.6 to 0.7 rated value 2.6 A 2.7 to 0.7 A 3.6 to 0.7 rated value 2.7 to 0.7 A 3.7 to 0.7 A 3.8 to 0.7 V 1 to 0.7 A 3.9 to 0.7 A 3.0 to 0.7 A 3	at 24 V rated value	10 A
e. 31 220 V rated value   0.5 A   0	at 60 V rated value	4.7 A
e at 400 V rated value at 600 V rated value operating frequency at DC-13 maximum design of the ministure circuit breaker for short-circuit protection for the auxiliary contact up to 200 V contact retiability of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to UL A000 / G000  Contact rating of auxiliary contacts according to State Sta	at 110 V rated value	3 A
• at 800 V rated value Operating frequency at DC-13 maximum design of the ministure circuit broader for short-circuit protection of the auxiliary circuit up to 230 V Contact ratelaity of auxiliary contacts    United Strating   Vision	at 220 V rated value	1.2 A
design of the ministure circuit breaker for short-circuit protection of the auxiliary cortuit up to 20 V   faulty switching per 100 million (17 V, 1 mA)	at 440 V rated value	
design of the ministure circuit preads of the abusiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  1UCGSA rating is  1 faulty switching per 100 million (17 V, 1 mA)  1UCGSA rating is  1UCCSA ra		
of the auxiliary circuit up to 230 V contact relainity of auxiliary contacts  UCGSA ratings  contact rating of auxiliary contacts according to UL Short-circuit protection  design of the fuse link for short-circuit protection of the auxiliary which required Installation/ mounting/dimensions  mounting position  +/180" rotation possible on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be tilted forward and backward by 1/-225" on vertical mounting surface; can be t	operating frequency at DC-13 maximum	1 000 1/h
contact rating of auxiliary contacts according to UL  A600 / Q600  Storckincuit protection  design of the fuse link for short-circuit protection of the auxiliary witch required  Installation mounting dimensions  mounting position  fastening method height // O mm  width // O mm  outhing space outher of the fuse of the	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 screw and snap-on mounting onto 35 mm DIN rail height 70 mm width 45 mm  depth 73 mm  required spacing  • with side-by-side mounting — forwards — upwards — of owards — of or grounded parts — forwards — owards — of the side — owawards — of owards — of owawards — of owards — owards — owawards — of owards — owawards — owawards — owawards — of owards — owards — owawards — owawards — owards — owards — owards — owawards — owards		1 faulty switching per 100 million (17 V, 1 mA)
design of the fuse link for short-circuit protection of the auxiliary winth required  Installation/ mounting/ dimensions  mounting position  fastening method  height  70 mm  width  45 mm  depth  70 mm  vidth  45 mm  fequired spacing  • with side-by-side mounting  • for ownerds  — upwards — ownwards — ownwards — of grounded parts  • for grounded parts  • for grounded parts  • for grounded parts  • for live parts  — the side — downwards — ownwards — ownwar	UL/CSA ratings	
design of the fuse link for short-circuit protection of the auxiliary which required installation mounting dimensions  mounting position	contact rating of auxiliary contacts according to UL	A600 / Q600
switch required    Installation / mounting / dimensions	Short-circuit protection	
mounting position  #-180" rotation possible on vertical mounting surface; can be tilted forward and backward by 4'- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail  ## vidth ## vidth ## vidth ## vidth ## vimits side by-side mounting ## of with side by-side mounting ## of awalting awalting ## vimits side by-side mounting ## of with side by-side mounting ## of w		fuse gL/gG: 10 A
backward by +/- 22.5" on vertical mounting surface fastening method height 70 mm width 45 mm depth 73 mm  required spacing  • with side-by-side mounting — forwards — upwards — at the side • for grounded parts — forwards — upwards — at the side • for grounded parts — at the side — downwards — upwards — 10 mm — at the side • for mm — downwards — 10 mm  • forwards — 10 mm  • forwards — 10 mm  • forwards — 10 mm  • at the side — downwards • for live parts — forwards • for live parts — forwards • for live parts — forwards • for live parts — at the side — downwards • for live parts — forwards — at the side — downwards • for live parts — forwards — at the side — for grounded parts — solid or stranded — downwards — at the side  Connectable conductor cross-sections • for auxiliary contacts  • for auxiliary contacts — solid or stranded — finely stranded without core end processing — finely stranded without core end processing • for AWG cables for auxiliary contacts  • with low demand rate according to SN 31920 • with liph demand rate according to SN 31920  • with high demand rate according to SN 319	Installation/ mounting/ dimensions	
height width 45 mm  depth 73 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — upwards 10 mm  — at the side 6 mm  — torwards 10 mm  • forwards 10 mm  — upwards 10 mm  • at the side 6 mm  — downwards 10 mm  • for live parts 20 mm  — upwards 10 mm  • for live parts 20 mm  — at the side 6 mm  Connections/ Forminals  type of electrical connection for auxiliary and control circuit 3 spring-loaded terminals  type of onnectable conductor cross-sections • for auxiliary contacts 2x (0,5 4 mm²)  — finely stranded with core end processing 2x (0,5 2.5 mm²)  • for AWG cables for auxiliary contacts 2x (20 2)  Safety related data 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 Forduct function positively driven operation according to EC 60947-5-1	mounting position	
width depth 73 mm  required spacing  • with side-by-side mounting  — forwards 10 mm — downwards 10 mm — at the side 0 0 mm  • for grounded parts — forwards 10 mm — at the side 6 mm — upwards 10 mm — upwards 10 mm — at the side 6 mm — upwards 10 mm — at the side 6 mm — ownwards 10 mm — at the side 6 mm — downwards 10 mm — downwards 10 mm  • for live parts — forwards 10 mm — upwards 10 mm — upwards 10 mm — downwards 10 mm — ownwards 10 mm — upwards 10 mm — upwards 10 mm — ownwards 10 mm — ownwards 10 mm — ownwards 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 2x (0.5 4 mm²) — finely stranded with core end processing 2x (0.5 25 mm²) — finely stranded without core end processing 2x (0.5 25 mm²) • for AWG cables for auxiliary contacts  • with load cables for auxiliary contacts • with load cables for auxiliary contacts • with load wemand rate according to SN 31920 • with high demand rate according to SN 31920 BBO value with high demand rate according to SN 31920  Brouter function positively driven operation according to EC 60947-5-1	fastening method	screw and snap-on mounting onto 35 mm DIN rail
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — 10 mm  • for grounded parts — forwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards • for live parts — forwards • for live parts — forwards — upwards — 10 mm — downwards • for live parts — forwards — upwards — at the side — downwards — 10 mm — of live parts — forwards — at the side — at the side — at many and a 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 • for AWG cables for auxiliary contacts  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT  BIO value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920  Flou value with high demand rate according to SN 31920	height	70 mm
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — the side • for grounded parts — forwards — upwards — upwards — at the side — downwards — to mm  • for live parts — forwards — upwards — downwards — to mm  • for live parts — forwards — upwards — downwards — upwards — downwards — to mm  • for live parts — forwards — to mm  • for live parts — forwards — upwards — to mm  • for live parts — forwards — odomnwards — to mm  • for auxiliary and control circuit  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 with core end processing • for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²) • for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²) • for 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 • with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  For according to SN 319	width	45 mm
with side-by-side mounting  forwards  upwards  downwards  10 mm  at the side  for grounded parts  forwards  upwards  10 mm  for grounded parts  forwards  upwards  10 mm  at the side  for mm  upwards  for mm  for live parts  forwards  for mm  connections/ Terminals  type of electrical connection for auxiliary and control circuit  for auxiliary contacts  for AWG cables for auxiliary contacts  with live demand rate according to SN 31920  with liph demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to SN 31920  product function positively driven operation according to SN 31920  product function positively driven operation according to SN 31920  For solution is a control of the cont	depth	73 mm
forwards	required spacing	
- upwards - downwards - 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 - forwards 10 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/ 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 2x (0,5 4 mm²)  - finely stranded without core end processing 2x (0,5 2,5 mm²)  - finely stranded without core end processing 2x (0,5 2,5 mm²)  • for AWG cables for auxiliary contacts 2x (20 12)  Safoty related data  proportion of dangerous failures  • with low demand rate according to SN 31920 40 %  • with high demand rate according to SN 31920 100 FIT  31920  B10 value with high demand rate according to SN 31920 100 FIT  31920  B10 value with high demand rate according to SN 31920 Yes	<ul><li>with side-by-side mounting</li></ul>	
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - at the side - downwards • for live parts - forwards - upwards - forwards - upwards - forwards - forwards - forwards - upwards - downwards - downwards - downwards - downwards - at the side - downwards - at the side - forwards - at the side - forwards - at the side - forwards - at the side - formections/Terminals  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded without core end processing - finely stranded without core end processing - for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²) - for AWG cables for auxiliary contacts 2x (20 12)  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT  31920  B10 value with high demand rate according to SN 31920 Product function positively driven operation according to Pes	— forwards	10 mm
- at the side  • for grounded parts  - forwards  - upwards  - upwards  - at the side  - downwards  • for live parts  - forwards  - upwards  • for live parts  - forwards  - upwards  - upwards  - upwards  - upwards  - downwards  - upwards  - upwards  - downwards  - at the side  - downwards  - upwards  - upwards  - the side  - formatility  - at the side  - formatility  - formatility  - at the side  - formatility  - formatility  - for eauxility  - for eauxility  - for auxility  - finely stranded with core end processing  - finely stranded with core end processing  - finely stranded without core end processing  - for AWG cables for auxility contacts  - for AWG cables for auxility contacts  - with low demand rate according to SN 31920  - with low demand rate according to SN 31920  - with ligh demand rate according to SN 31920  - with high demand rate according to SN 31920  - Incompositive the first own the side of the side	— upwards	10 mm
• for grounded parts  — forwards — upwards — at the side — downwards — for live parts — forwards — upwards — to mm  • for live parts — forwards — upwards — upwards — upwards — upwards — to mm — downwards — 10 mm — downwards — at the side — at 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 — finely stranded without core end processing • for AWG cables for auxiliary contacts  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 I 000 000; With 0.3 x le  Product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation according to III of the product function positively driven operation a	— downwards	10 mm
- forwards 10 mm - upwards 6 mm - at the side 6 mm - downwards 10 mm  • for live parts - forwards 10 mm - upwards 10 mm - at the side 6 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 electrical connection for auxiliary and control circuit spring-loaded terminals  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded 2x (0.5 4 mm²) - finely stranded with core end processing 2x (0.5 2.5 mm²) - finely stranded without core end processing 2x (0.5 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 12)  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 40 % • with high demand rate according to SN 31920 73 %  failure rate [FIT] with low demand rate according to SN 31920 1000 FIT 31920  B10 value with high demand rate according to SN 31920 Yes	— 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  - downwards 10 mm  - downwards 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 - finely stranded without core end processing - finely stranded without core end processing - for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²) - for AWG cables for auxiliary contacts  2x (20 12)  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT 31920  B10 value with high demand rate according to SN 31920 100 FIT 31920  B10 value with high demand rate according to SN 31920 Ves	<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 spring-loaded terminals  type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - for AWG cables for auxiliary contacts  • for AWG cables for auxiliary contacts  • 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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to Incompleted	— 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 - for AWG cables for auxiliary contacts 2x (0.5 4 mm²) - finely stranded without core end processing - for AWG cables for auxiliary contacts 2x (20 12)  Safety related data  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 1000 FIT 31920  Product function positively driven operation according to IEC 60947-5-1	— upwards	10 mm
• for live parts  forwards forwards upwards 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 finely stranded without core end processing finely stranded without core end processing finely stranded without core end processing for AWG cables for auxiliary contacts  Safety related data  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 with high demand rate according to SN 31920 volume with high demand rate according to SN 31920 volume with high demand rate according to SN 31920 volume with high demand rate according to SN 31920 volume v	— at the side	6 mm
- forwards 10 mm - upwards 10 mm - downwards 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 2x (0,5 4 mm²) - finely stranded with core end processing 2x (0.5 2.5 mm²) - finely stranded without core end processing 2x (0.5 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 12)  Safety related data  proportion of dangerous failures • with low demand rate according to SN 31920 40 % • with high demand rate according to SN 31920 73 %  failure rate [FIT] with low demand rate according to SN 31920 1000 000; With 0.3 x le  product function positively driven operation according to IEC 60947-5-1	— downwards	10 mm
- upwards	• for live parts	
	— forwards	10 mm
	— upwards	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) — finely stranded without core end processing 9	— downwards	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 • for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  • for AWG cables for auxiliary contacts  2x (20 12)  Safety related data  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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to IEC 60947-5-1	— at the side	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 2x (0.5 2.5 mm²) 2x (0.5 2.5 mm²)  • for AWG cables for auxiliary contacts 2x (20 12)  Safety related data  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  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to IEC 60947-5-1  Yes	Connections/ Terminals	
• for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     — finely stranded without core end processing     2x (0.5 2.5 mm²)     2x (20 12)  Safety related data  proportion of dangerous failures     • with low 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  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to I 000 000; With 0.3 x le  Yes	type of electrical connection for auxiliary and control circuit	spring-loaded terminals
- solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - finely stranded without core end processing - for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  2x (20 12)  Safety related data  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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to IEC 60947-5-1	type of connectable conductor cross-sections	
- finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing • for AWG cables for auxiliary contacts  2x (0.5 2.5 mm²)  2x (20 12)  Safety related data  proportion of dangerous failures • with low 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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to I 000 000; With 0.3 x le  Product function positively driven operation according to I Yes	for auxiliary contacts	
— finely stranded without core end processing  • for AWG cables for auxiliary contacts  2x (20 12)  Safety related data  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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  Product function positively driven operation according to IEC 60947-5-1   2x (20 12)  40 %  40 %  100 FIT  1000 000; With 0.3 x le	— solid or stranded	2x (0,5 4 mm²)
	<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm²)
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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to IEC 60947-5-1	<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
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  B10 value with high demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to IEC 60947-5-1		2x (20 12)
<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>B10 value with high demand rate according to SN 31920</li> <li>product function positively driven operation according to IEC 60947-5-1</li> <li>with low demand rate according to SN 31920</li> <li>1 000 000; With 0.3 x le</li> <li>Yes</li> </ul>	Safety related data	
● with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to IEC 60947-5-1  ■ With high demand rate according to SN 31920  1 000 000; With 0.3 x le  Yes	proportion of dangerous failures	
failure rate [FIT] with low demand rate according to SN 31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to IEC 60947-5-1  100 FIT  100 FIT  100 FIT  Yes	_	
31920  B10 value with high demand rate according to SN 31920  product function positively driven operation according to IEC 60947-5-1  1 000 000; With 0.3 x le  Yes	with high demand rate according to SN 31920	73 %
product function positively driven operation according to IEC 60947-5-1		100 FIT
IEC 60947-5-1	B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x le
IEC 61508		Yes
	IEC 61508	

T1 value for proof test interval or service life according to IEC 61508

Electrical Safety

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

Approvals Certificates

## **General Product Approval**







Confirmation





**General Product Approval** 

EMV

**Test Certificates** 

Marine / Shipping

<u>KC</u>





Type Test Certificates/Test Report Special Test Certificate



## Marine / Shipping













other

Environment

**Miscellaneous** 

Confirmation

EPD Typ II/III (with life cylce assessment)

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RH2131-2AP00

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RH2131-2AP00}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2131-2AP00

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

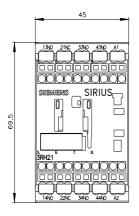
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00\&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00\&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH2131-2AP00&lang=endown.siemens.com/bilddb/cax\_de.aspx.com/bilddb/cax_de.aspx.c$ 

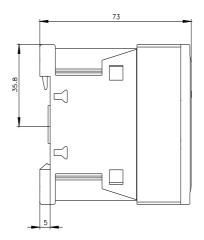
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

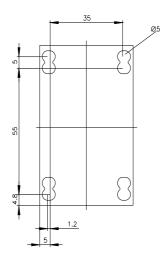
https://support.industry.siemens.com/cs/ww/en/ps/3RH2131-2AP00/char

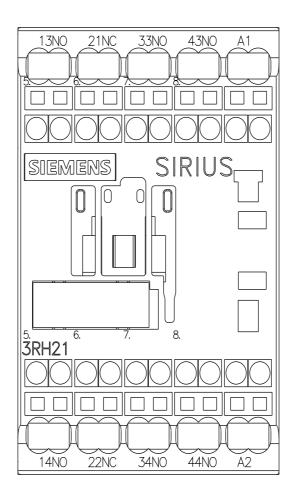
Further characteristics (e.g. electrical endurance, switching frequency)

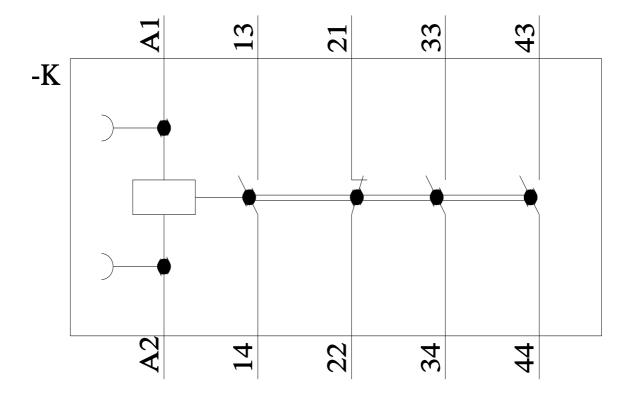
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2131-2AP00&objecttype=14&gridview=view1











last modified: 10/31/2023 🖸