SIEMENS

Data sheet 3RH2140-1AN20



Contactor relay, 4 NO, 220 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	
 of the contactor with added electronically optimized auxiliary switch block typical 	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 %	
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	220 V	
• at 60 Hz rated value	220 V	
control supply voltage frequency		

1 rated value	50 Hz
1 rated value 2 rated value	60 Hz
operating range factor control supply voltage rated value of magnet coil at AC	00112
• 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 NO contacts for auxiliary contacts	4
instantaneous contact	4
identification number and letter for switching	40 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
at 24 V rated value at 110 V rated value	10 A 3 A
at 110 V rated valueat 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	0.10 A
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	40.4
at 24 V rated value	10 A
at 60 V rated value at 110 V rated value	10 A
at 110 V rated value at 220 V rated value	10 A 3.6 A
at 220 V rated valueat 440 V rated value	2.5 A
at 440 V rated value at 600 V rated value	2.5 A 1.8 A
operating frequency at DC-12 maximum	1 000 1/h
operating frequency at BC-12 maximum operational current at 1 current path at DC-13	1 000 1/11
• 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 A
• at 110 V rated value	1.3 A

el 220 V rated value el et 800 V rated value el rated value value value value value value el rated value		
e at 600 V rated value	• at 220 V rated value	0.9 A
poperational current with 3 current paths in series at DC-13 • at 24 V stated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value • at 400 V rated value • at 600 V rated value • at 60	 at 440 V rated value 	0.2 A
a at 24 V rated value at 80 V rated value 4.7 A 3.8 A 4.7 220 V rated value 3.9 A 4.7 220 V rated value 4.7 A 4.7	at 600 V rated value	0.1 A
at 10 V rated value at 110 V rated value at 110 V rated value at 140 V rated value bet 100 V rated value at 140 V rated value at 100 V rated value 0.26 A 1.00 t h 1.00		
at 110 V rated value at 220 V rated value at 220 V rated value be at 440 V rated value at 600 V rated value be at 600 V rated value correction of the miniature circuit breaker for short-circuit protection of the auxiliary contacts contact reliability of auxiliary contacts contact rating of auxiliary contacts according to UL Short-circuit protection cleasing of the lose link for short-circuit protection of the auxiliary switch required flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts according to UL Short-circuit protection flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts according to UL Short-circuit protection of the auxiliary switch required flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux facility switching per 100 million (17 V, 1 mA) LICSA ratings contact rating of auxiliary contacts flux flux flux flux flux flux flux flux	at 24 V rated value	10 A
a till 20 V rated value at 440 V rated value at 440 V rated value 0.26 A at 600 V rated value 0.26 A 1 000 fb design of the miniature circuit up to 230 V contact reliability of auxiliary contacts protection of the auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULOSA ratings ULOSA ratings Contact rating of auxiliary contacts contact rating of auxiliary contacts auxiliary switch required design of the fuse link for short-circuit protection of the auxiliary switch required finatiliation mounting dimensions mounting position fastening method screw and snap-on mounting onto 35 mm standard mounting surface; can be titled forward and backward by ± 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting ratil 45.5 mm depth 73 mm required spacing • with side by-side mounting — forwards — odwnwards — odwnwards — odwnwards — of ravaudiary and screw and snap-on mounting note of the side — downwards — of minimized contacts — of maxiliary and control circuit type of electrical connection for suxiliary and control circuit type of connectable conductor cross-sections • for favaudiary contacts - solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary and control circuit type of connectable connection for suxiliary and control circuit type of decircial connection for suxiliary and control circuit type of electrical connection for suxiliary and control circuit type of oronectable 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 • 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 a	 at 60 V rated value 	4.7 A
at 440 V rated value at 600 V rated value poprating frequency at DC-13 maximum design of the miniature circuit breaker for short-circuit protection of the auxiliary contacts ULCSA ratings contact rating of auxiliary contacts 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 histalization mounting dimensions mounting position fastening method height forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting surface can be titled forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by +2-2.5° on vertical mounting rail height forward and backward by -2-2.5° on vertical mounting rail height forward and backward by -2-2.5° on vertical mounting rail height forward and backward by -2-2.5° on vertical mounting rail height forward and backward by -2-2.5° on vertical mounting rail height	at 110 V rated value	3 A
e at 600 V rated value operating frequency at DC-13 maximum design of the ministure circuit protection of the auxiliary contact training or contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings contact rating of auxiliary contacts ULCSA ratings design of the fuse link for short-circuit protection of the auxiliary switch required design of the fuse link for short-circuit protection of the auxiliary switch required Installation mounting dimensions mounting position fastening method fastening method screw and snap-on mounting onto 35 mm standard mounting surface; can be titled forward and backward by +/- 22.5" on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm standard mounting rail height 57.5 mm required spacing • with side by-side mounting • with side by-side mounting • with side by-side mounting • or owards - opwards - owards	at 220 V rated value	1.2 A
design of the miniature circuit preater of short-circuit protection of the auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)	at 440 V rated value	0.5 A
design of the ministure circuit breaker for short-circuit protection of the auxilliary contacts ULCSA ratings Contact reliability of auxillary contacts ULCSA rating of auxillary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the auxillary switch required Installation/ mounting/ dimonsions mounting position fastening method screw-and snap-on-mounting onto 35 mm standard mounting rail beight forwards width depth required spacing with side-by-side mounting — forwards — downwards — at the side — downwards — at the side — downwards — of rive parts — forwards — of rive parts — forwards — ownwards — ownward	at 600 V rated value	0.26 A
protection of the auxiliary contacts Contact reliability of auxiliary contacts UL/GSA ratings Contact rating of auxiliary contacts Contact rating of auxiliary	operating frequency at DC-13 maximum	1 000 1/h
contact rating of auxiliary contacts according to UL A600 / G600 Short-circuit protection design of the fuse ink for short-circuit protection of the auxiliary switch required Installation/ mounting / dimensions mounting position fastening method height 57.5 mm width 45 mm depth required spacing • with side-by-side mounting — forwards — upwards — odwnwards — of the side — downwards — at the side — downwards — at the side — downwards — of the least — odwnwards — of the least — odwnwards — of the least — odwnwards — of the wards — odwnwards — of the wards — odwnwards — of the wards — odwnwards — of the side — downwards — of the parts — forwards — of the side — odwnwards — of the parts — forwards — of the side — odwnwards — odwn		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 fastening method height width 45 nm depth 73 mm required spacing • with side-by-side mounting • with side-by-side mounting • of ornwards — otherwards	contact reliability of auxiliary contacts	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	contact rating of auxiliary contacts according to UL	A600 / Q600
design of the fuse link for short-circuit protection of the auxiliary swiftch required installation mounting protection of the auxiliary swiftch required installation mounting protection for auxiliary swiftch required installation mounting protection for auxiliary swiftch required spacing for stranded screw and snap-on mounting onto 35 mm standard mounting rail forward and backward by 4+. 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail forwards depth 73 mm forwards 45 mm forwards 10 mm forward		
mounting position fastening method height width depth	design of the fuse link for short-circuit protection of the	fuse gL/gG: 10 A
### required spacing Fastening method		
forwards and backward by **- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm width 45 mm	<u> </u>	+/-180° rotation possible on vertical mounting surface: can be tilted
height width 45 mm 45 mm 73 mm 74 mm² 75 mm		forward and backward by +/- 22.5° on vertical mounting surface
width depth 73 mm required spacing • with side-by-side mounting — forwards 10 mm — at the side 0 mm • for grounded parts — forwards 10 mm — the side 0 mm • for grounded parts — forwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts — forwards 10 mm Connections/ Torminals 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 (20 16), 2x (18 14), 2x 12 Safety related data B10 value with high demand rate according to SN 31920 right of the fort according to SN 31920 fielder rate (FIT) with low demand rate according to SN 31920 fielder for proof test interval or service life according to EC fitos protection class IP on the front according to EC fitos protection class IP on the front according to EC fitos from the fitos from the front according to EC fitos from the front according to EC fitos from the		
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — upwards — upwards — the side — ownwards — at the side — ownwards — ownwards — ownwards — ownwards — ownwards — for live parts — forwards — upwards — ownwards — ownwards — ownwards — ownwards — upwards — ownwards —		
required spacing • with side-by-side mounting — forwards — upwards — downwards — of the side — forwards — forwards — forwards — forwards — upwards — forwards — upwards — at the side — downwards — of with side by side — downwards — of mm — ownwards — of mile parts — forwards — for live parts — forwards — upwards — upwards — upwards — downwards — upwards — ownwards — at the side — formards — upwards — ownwards — ow		
with side-by-side mounting — forwards — upwards — downwards — at the side of or grounded parts — forwards — upwards — to make side of or grounded parts — forwards — upwards — upwards — at the side — downwards — to five parts — for live parts — for live parts — forwards — upwards — downwards — upwards — to make side — downwards — to make side — downwards — upwards — to make side — downwards — upwards — to make side — downwards — to make side — downwards — at the side Connections/ Torminals 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 Safety related data B10 value with high demand rate according to SN 31920 proportion of dangerous failures — with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 11 value for proof test interval or service life according to EC protection class IP on the front according to IEC IP20 IP20 IP20	•	73 111111
- forwards - upwards - downwards - at the side • for grounded parts - forwards - upwards - the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - at the side - downwards - for live parts - for live parts - for rowards - upwards - downwards - at the side - formards - upwards - downwards - downwards - downwards - for mands - type of electrical connection for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of sounded - 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 - with low demand rate according to SN 31920 - with low demand rate according to SN 31920 • with low demand ra		
- upwards 10 mm 10		10 mm
- downwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - for live parts - forwards - upwards - 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 Safety related data B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 1 000 000; With 0.3 x le 1 000 FIT 1 value for proof test interval or service life according to EC P20 Protection class IP on the front according to IEC IP20		
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards • for live parts - forwards - upwards - downwards - upwards - downwards - downwards - at the side - downwards - 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 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 **evith low demand rate according to SN 31920 **proportion of test interval or service life according to EC IP20 **proportion of test interval or service life according to IP20 **proportion of test interval or service life according to IP20 **proportion of test interval or service life according to IP20 **protection class IP on the front according to IP20 **protection class IP on the front according to IP20	·	
• for grounded parts — forwards — upwards — at the side — downwards — 10 mm • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — downwards — upwards — at the side — forwards — upwards — the side — formatic side — formatic side — at the side — formatic side — at the side Connections/ Terminals type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • for auxiliary contacts — soild or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts Safety related data B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high d		
- forwards		U mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm - upwards - downwards 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 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 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC IP20 In the side 6 mm 20 mm 5 mm 6 mm Connections/ Terminals 5 crew-type terminals 5 crew-type terminals 5 crew-type terminals 5 crew-type terminals 10 mm 6 mm 6 mm Connections/ Terminals 10 mm 10 mm 6 mm Connections/ Terminals 10 mm 6 mm Connections/ 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 (20 16), 2x (18 14), 2x 12 Safety related data B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 1 000 000; With 0.3 x le 7 3 % failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC		40
- at the side - downwards • 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 B10 value with high demand rate according to SN 31920 • 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 ID mm 10 mm 20 mm 20 mm 20 cerew-type terminals screw-type terminals 20 cerew-type terminals 21 cerew-type terminals 22 cerew-type terminals 23 cerew-type terminals 24 cerew-type terminals 25 cerew-type terminals 26 cerew-type terminals 27 cerew-type terminals 28 cerew-type terminals 29 cerew-type terminals 29 cerew-type terminals 20 cerew-type terminals 20 cerew-type terminals 20 cerew-type terminals 26 cerew-type terminals 27 cerew-type terminals 28 cerew-type terminals 29 cerew-type terminals 29 cerew-type terminals 20 cerew-type		
- 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 • 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 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 1 000 000; With 0.3 x le proportion of the foot according to SN 31920 1 000 FIT 1 value for proof test interval or service life according to EC IP20	·	
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 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC protection class IP on the front according to IEC Ip20		
- 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 screw-type terminals 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 - finely stranded with core end processing 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 B10 value with high demand rate according to SN 31920 1000 000; With 0.3 x le 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 100 FIT 31920 T1 value for proof test interval or service life according to IEC IP20		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 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 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	·	
- 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 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 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC ID mm 6 mm Connections/ Terminals 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 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 • 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 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		
- 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 - at the side 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 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 100 FIT 31920 T1 value for proof test interval or service life according to IEC IP20	•	
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 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 1000 FIT 11 value for proof test interval or service life according to IEC Protection class IP on the front according to IEC Proportion of Lagrange according to IEC Protection class IP on the front according to IEC Screw-type terminals screw-type terminals screw-type terminals \$\$ screw-type terminals \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$		
type of electrical connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 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 propertion class IP on the front according to IEC IP20	37 37 57 57	6 mm
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 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 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC T2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12 1 000 000; With 0.3 x le 1 000 000; With 0.3 x le 40 % 73 % 100 FIT 20 y FIT value for proof test interval or service life according to IEC 1 P20		
 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 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 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC IP20 		screw-type terminals
- solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts Safety related data 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 1 000 000; With 0.3 x le 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 T1 value for proof test interval or service life according to IEC IP20		
 — finely stranded with core end processing at AWG cables for auxiliary contacts 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12 Safety related data 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 IP20 	 for auxiliary contacts 	
 at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 2x 12 Safety related data 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 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 IP20 		
Safety related data B10 value with high demand rate according to SN 31920 proportion of dangerous failures with low demand rate according to SN 31920 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 IP20		
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 IP20	-	2x (20 16), 2x (18 14), 2x 12
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 T1 value for proof test interval or service life according to IEC IP20	Safety related data	
 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 IP20 IP20 	B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x le
 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 IP20 	proportion of dangerous failures	
failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC IP20 protection class IP on the front according to IEC IP20	 with low demand rate according to SN 31920 	40 %
31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC IP20	with high demand rate according to SN 31920	73 %
Protection class IP on the front according to IEC IP20		100 FIT
		20 y
		IP20

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination
Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













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=3RH2140-1AN20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2140-1AN20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2140-1AN20

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2140-1AN20&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RH2140-1AN20/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2140-1AN20&objecttype=14&gridview=view1

last modified:

12/1/2021