SIEMENS

Data sheet 3RA6120-2EB32



SIRIUS Compact load feeder DOL starter 690 V 24 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: Spring-type terminal Connection auxiliary circuit: Spring-type terminal

| product brand name | SIRIUS |
|---|--|
| product designation | compact starter |
| design of the product | direct starter |
| product type designation | 3RA61 |
| General technical data | |
| product function control circuit interface to parallel wiring | Yes |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| at AC in hot operating state | 5.4 W |
| at AC in hot operating state per pole | 1.8 W |
| without load current share typical | 3.5 W |
| insulation voltage rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 6 000 V |
| maximum permissible voltage for protective separation | |
| between main and auxiliary circuit | 400 V |
| between auxiliary and auxiliary circuit | 250 V |
| between control and auxiliary circuit | 300 V |
| degree of protection NEMA rating | other |
| shock resistance | a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes |
| vibration resistance | f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s ² ; 10 cycles |
| mechanical service life (operating cycles) | |
| of the main contacts typical | 10 000 000 |
| of auxiliary contacts typical | 10 000 000 |
| of the signaling contacts typical | 10 000 000 |
| electrical endurance (operating cycles) of auxiliary contacts | |
| • at DC-13 at 6 A at 24 V typical | 30 000 |
| at AC-15 at 6 A at 230 V typical | 200 000 |
| type of assignment | continous operation according to IEC 60947-6-2 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 05/01/2012 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 |
| Weight | 1.532 kg |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| during operation | -20 +60 °C |
| during storage | -55 +80 °C |
| during transport | -55 +80 °C |

| relative humidity during operation | 10 90 % |
|---|--|
| Main circuit | |
| number of poles for main current circuit | 3 |
| adjustable current response value current of the current- | 8 32 A |
| dependent overload release | 6 32 A |
| formula for making capacity limit current | 12 x le |
| formula for limit current breaking capacity | 10 x le |
| yielded mechanical performance for 4-pole AC motor | |
| at 400 V rated value | 15 kW |
| at 500 V rated value | 11 kW |
| • at 690 V rated value | 11 kW |
| operating voltage at AC-3 rated value maximum | 690 V |
| operational current | |
| at AC at 400 V rated value | 32 A |
| at AC-3 at 400 V rated value | 32 A |
| • at AC-43 | |
| — at 400 V rated value | 29 A |
| — at 500 V rated value | 17.6 A |
| — at 690 V rated value | 12.8 A |
| operating power | 12.07 |
| at AC-3 at 400 V rated value | 15 kW |
| at AC-3 at 400 v Taled value at AC-43 | I V KVI |
| | 15 000 W |
| — at 400 V rated value | 15 000 W |
| — at 500 V rated value | 11 000 W |
| — at 690 V rated value | 11 000 W |
| no-load switching frequency | 3 600 1/h |
| operating frequency | |
| at AC-41 according to IEC 60947-6-2 maximum | 750 1/h |
| at AC-43 according to IEC 60947-6-2 maximum | 250 1/h |
| Control circuit/ Control | |
| type of voltage | AC/DC |
| control supply voltage 1 at AC | |
| at 50 Hz rated value | 24 V |
| ● at 50 Hz | 24 24 V |
| at 60 Hz rated value | 24 V |
| • at 60 Hz | 24 V |
| control supply voltage frequency | |
| 1 rated value | 50 Hz |
| 2 rated value | 60 Hz |
| control supply voltage 1 at DC rated value | 24 V |
| control supply voltage 1 at DC | 24 24 V |
| holding power | |
| at AC maximum | |
| • at AC maximum | 3.5 W |
| • at DC maximum | 3.5 W 3.1 W |
| | |
| at DC maximum | |
| at DC maximum Auxiliary circuit | 3.1 W |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for | 3.1 W |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload | 3.1 W 1 1 |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact | 3.1 W 1 1 1 |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum | 3.1 W 1 1 1 1 1 1 1 10 A |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V | 3.1 W 1 1 1 1 |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions | 3.1 W 1 1 1 1 1 10 A 0.27 A |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class | 3.1 W 1 1 1 1 1 1 1 10 A |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) | 3.1 W 1 1 1 1 1 1 0 A 0.27 A CLASS 10 and 20 adjustable |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V rated value | 3.1 W 1 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) at 400 V rated value at 500 V rated value | 3.1 W 1 1 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 1 kA |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) at 400 V rated value at 500 V rated value at 690 V rated value | 3.1 W 1 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA |
| at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) at 400 V rated value at 500 V rated value | 3.1 W 1 1 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 1 kA |

| yelloid mechanical performance (ptg) for S-phase AC motor e 20/00209 V ratiod value e 10/00209 V ratiod value contact rating of auxilliary contects according to UL contact rating of auxilliary contects according to UL contacts 21:22, 13-14, 43-44 (660 / A600, contacts 77-78 (300 / 8300). Contacts 21:22, 13-14, 43-44 (660 / A600, contacts 77-78 (300 / 8300). Contacts 35:96-98 (7800 / 10300) Short-circuit protection yes design of short-circuit protection design of the fuse link * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of the signaling switch of the control of classes required * or short-circuit protection of classes required switch or control classes required * or nation of classes r | at 480 V rated value | 32 A |
|--|---|---|
| ## 20/2028 V rated value 10 hp 20 | | 32 A |
| ## 220230 V rated value ## 20 hp 20 | | 7.5 hp |
| e at 480480 V rated value contact rating of auxiliary contacts according to UL contacts rating of auxiliary contacts according to UL contacts 95-96-98 R300 / D300 Short-circuit protection design of a five rise link | | · |
| contact rating of auxiliary contacts according to UL Short-Gircuit protection product function short circuit protection design of short-circuit protection design of the fuse link I of short-circuit protection of the auxiliary switch required I of short-circuit protection of the auxiliary switch required I of short-circuit protection of the signaling switch of the short-circuit received in of the signaling switch of the short-circuit protection of the signaling switch of the signaling switch of the short-circuit protection of the signaling switch of the signaling switch of the signaling switch of the short-circuit such samples of the signaling switch | | · |
| Short-circuit protection product function short circuit protection design of short-circuit protection design of short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the signaling switch of the short-circuit release required • for short-circuit protection of the signaling switch of the vorefload release required • for short-circuit protection of the signaling switch of the vorefload release required • for short-circuit protection of the signaling switch of the vorefload release required • for short-circuit protection of the signaling switch of the vorefload release required • for short-circuit protection of the signaling switch of the vorefload load search of the vorefload search of the vorefload search of the vorefload search of the vorefload load search of the vorefload load search of the vorefload load search of the vorefload search of the vorefload load search of the vorefload search of the vorefload load search of the vorefload load search of the vorefload load search of the vorefload search of the vorefloa | | contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, |
| product function short circuit protection design of short-circuit protection elserge of the fuse link • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the signaling switch of the short-circuit release required • for short-circuit protection of the signaling switch of the short-circuit release required • for short-circuit protection of the signaling switch of the short-circuit release required • for short-circuit protection of the signaling switch of the short-circuit release required • for sand can be short for short sh | Short-circuit protection | CONTACTS 95-96-96 R300 / D300 |
| design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the signaling switch of the short-circuit release required • for short-circuit protection of the signaling switch of the vertical criteriaes required • for short-circuit protection of the signaling switch of the vertical criteriaes required • for short-circuit protection of the signaling switch of the vertical criteriaes required • for short-circuit protection of the signaling switch of the vertical criteriaes required finalishow mounting position recommended | | Vac |
| design of the fuse link • for short-circul protection of the suciliary switch required • for short-circul protection of the signaling switch of the short-circul release required • for short-circul protection of the signaling switch of the short-circul release required installation mounting dimensions mounting position mounting position mounting position recommended fastening method leight vertical, on horizontal standard DIN rail screw and shap-on mounting filt minimum of the signaling switch of the spread of the spr | <u> </u> | |
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| short-direct release required Installation' mounting densition mounting position mounting position recommended stering the stering of the stering of the signaling switch of the overload release required mounting position recommended verrical, on horizontal standard DIN rail stering mounting densition width stering the stering of the stering | | |
| mounting position recommended vertical, on horizontal standard DIN rail fastening method screw and snap-on mounting bettion recommended vertical, on horizontal standard DIN rail fastening method screw and snap-on mounting standard DIN rail fastening method depth 191 mm 191 mm 195 m | short-circuit release required | |
| mounting position recommended | | 4A gL/gG/400V |
| mounting position recommended fastening method screw and snap-on mounting height 191 mm width 45 mm depth Connections/Terminals product component removable terminal for main circuit Yes product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • for auxiliary contacts — solid — finely stranded without core end processing • for AWG cables for auxiliary contacts • solid — finely stranded without core end processing • for AWG cables for auxiliary contacts Safety related data proportion of dangerous fallures • 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 Electrical Safety protection class IP on the front according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 IEC 61508 T1 value for proof test interval or service life according to IEC 60 | Installation/ mounting/ dimensions | |
| fastening method height width 45 mm depth 191 mm width 45 mm 165 mm Connections/Torminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • for own contacts - solid - finely stranded without core end processing • for favxiliary contacts - solid - finely stranded without core end processing - with lingh demand rate according to SN 31920 soft with lingh demand rate according to SN 31920 soft with lingh demand rate according to SN 31920 soft with lingh demand rate according to SN 31920 soft with lingh demand rate according to SN 31920 soft with lingh demand rate according to SN 31920 soft with lingh demand rate according to EC 60529 soft with lingh demand rate according to EC 60529 finger-safe communication front according to IEC 60529 product function bus communication No protection on the front according to IEC 60529 product function on two circuit interface with IO link No electromagnetic compatibility conducted interference | mounting position | any |
| height width 45 mm 45 mm 45 mm 165 mm | mounting position recommended | vertical, on horizontal standard DIN rail |
| width depth 165 mm Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • solid spring-loaded terminals • solid 2x (2.5 6 mm²), 1x 10 mm² • finely stranded with core end processing 2x (2.5 6 mm²) • finely stranded without core end processing 2x (2.5 6 mm²) • for auxiliary contacts • solid 2x (0.25 1.5 mm²) • for auxiliary contacts • for AWC cables for auxiliary contacts • for AWC cables for auxiliary contacts • 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 val | fastening method | screw and snap-on mounting |
| Connections/ Terminals Terminals Terminals Yes Terminals Yes Terminals Yes Terminals Yes Terminals Yes | height | 191 mm |
| Connections/ Terminals product component removable terminal for main circuit type of electrical connection • for main current circuit • for auxiliary and control circuit • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • spring-loaded terminals type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded without core end processing • for auxiliary contacts • solid — finely stranded without core end processing • for auxiliary contacts — solid — finely stranded with core end processing • for auxiliary contacts — solid — finely stranded with core end processing • for auxiliary contacts — solid — 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 Fill outure te [FIT] with low demand rate according to SN 31920 Fill outure te [FIT] with low demand rate according to EC 60529 IT Value for proof test interval or service life according to IEC 60529 protection class IP on the front according to IEC 60529 product function bus communication No protection is supported • A-Si-interface protocol • Oil-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | width | 45 mm |
| product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit spring-loaded terminals • solid • finely stranded with core end processing • for onectable conductor cross-sections • for auxiliary contacts • solid - finely stranded with core end processing • for faviliary contacts - solid - finely stranded with 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 • 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 ligh demand rate according to SN 31920 • with ligh demand rate according to SN 31920 • with ligh demand rate according to SN 31920 • with ligh demand rate according to SN 31920 • with ligh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with pigh demand rate according to SN 31920 • with p | depth | 165 mm |
| product component removable terminal for auxiliary and control circuit type of electrical connection • for auxiliary and control circuit • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts • solid • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for finely stranded with core end processing • finely stranded with 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 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 product with figh demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 B20 value with high demand rate according to SN 31920 B20 value with high demand rate according to SN 31920 B20 value for proof test interval or service life according to IEC 61508 T1 value for proof test interval or service life according to IEC 60529 B20 value for proof test interval or service life according to IEC 60529 B20 value for proof test interval or service life according to IEC 60529 Communication/Protocol product function bus communication No | Connections/ Terminals | |
| control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit spring-loaded terminals type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts — solid — finely stranded with core end processing • for auxiliary contacts — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts • 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 • B10 value with high demand rate according to SN 31920 • B10 value with high demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 Electrical Safety protection class IP on the front according to IEC 60529 Finger-safe Communication Protocol product function bus communication protocol is supported • AS-Interface protocol • (O-Link protocol producted interference | product component removable terminal for main circuit | Yes |
| type of electrical connection • for main current circuit • for auxillary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxillary contacts • solid — finely stranded without core end processing • for auxillary contacts — solid — finely stranded with core end processing • for auxillary contacts — solid — finely stranded with core end processing • for AwG cables for auxillary contacts Safety related data proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 1810 value with high demand rate according to SN 31920 1810 value with high demand rate according to SN 31920 1810 value for proof test interval or service life according to IEC 61508 T1 value for proof test interval or service life according to 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 finger-safe communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • (O-Link protocol product function control circuit interface with IO link No | product component removable terminal for auxiliary and | Yes |
| • for main current circuit • for auxiliary and control circuit spring-loaded terminals spring-loaded t | control circuit | |
| • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts • solid - solid - solid - finely stranded with core end processing • for auxiliary contacts - solid - finely stranded with core end processing • for auxiliary contacts - solid - finely stranded without core end processing • for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) - finely stranded without core end processing • for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) - finely stranded without 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 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 IEC 61508 T1 value for proof test interval or service life according to IEC 60529 T1 value for proof test interval or service life according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe Communication/ Protocol product function bus communication No - AS-Interface protocol • (O-Link protocol product function control circuit interface with IO link Flectromagnetic compatibility conducted interference | type of electrical connection | |
| type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing • finely stranded without core end processing 2x (2.5 6 mm²) type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing — for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) — finely stranded without core end processing — for AWG cables for auxiliary contacts 2x (2.4 16) 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 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate 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 Communication/ Protocol product function bus communication No Protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | for main current circuit | spring-loaded terminals |
| * solid * finely stranded with core end processing * finely stranded with core end processing * finely stranded without core end processing * finely stranded without core end processins * for auxiliary contacts * — solid * — solid * — finely stranded with core end processing * — finely stranded without core end processing * — solid | for auxiliary and control circuit | spring-loaded terminals |
| • finely stranded without core end processing • finely stranded without core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid - finely stranded with core end processing - finely stranded with core end processing - finely stranded with 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 100 FIT 11 value for proof test interval or service life according to IEC 61508 11 value for proof test interval or service life according to IEC 61508 11 value for proof test interval or service life according to IEC 60529 Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • (O-Link protocol product function control circuit interface with IO link No Electromagnetic compatibility conducted interference | type of connectable conductor cross-sections for main contacts | |
| • finely stranded without core end processing type of connectable conductor cross-sections • for auxiliary contacts | • solid | 2x (2.5 6 mm²), 1x 10 mm² |
| type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) • for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) • for AWG cables for auxiliary contacts 2x (24 16) 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 100 FIT 31920 IEC 61508 Ti 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 formunication/Protocol product function bus communication No protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | finely stranded with core end processing | 2x (2.5 6 mm²) |
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| • for auxiliary contacts — solid — finely stranded with core end processing — finely stranded without core end processing 2x (0.25 1.5 mm²) — finely stranded without core end processing 2x (0.25 1.5 mm²) • for AWG cables for auxiliary contacts 2x (24 16) 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 100 FIT 1100 F | type of connectable conductor cross-sections | |
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| 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 (24 16) 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 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 for FIT 31920 failure rate [FIT] with low demand rate according to IEC 320 a fit of SN 31920 fit | • | 2x (0.25 1.5 mm²) |
| - finely stranded without core end processing • for AWG cables for auxiliary contacts 2x (24 16) Safety related data proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 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 Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | | |
| for AWG cables for auxiliary contacts 2x (24 16) Safety related data proportion of dangerous failures with low 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 B10 value with high demand rate according to SN 31920 EIC 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 Communication/ Protocol product function bus communication No • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | | |
| 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 failure rate [FIT] with low demand rate according to SN 31920 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 Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol No product function control circuit interface with IO link Electromagnetic compatibility conducted interference | | 27 (27 10) |
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| with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 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 Communication/ Protocol product function bus communication protocol is supported | • • | 40.9% |
| B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 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 Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | _ | |
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| 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 IP20 touch protection on the front according to IEC 60529 finger-safe Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link No Electromagnetic compatibility conducted interference | | |
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| touch protection on the front according to IEC 60529 finger-safe Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol No • IO-Link protocol No product function control circuit interface with IO link No Electromagnetic compatibility conducted interference | | IP20 |
| Communication/ Protocol product function bus communication No protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility conducted interference | · · · · · · · · · · · · · · · · · · · | |
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| protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link No Electromagnetic compatibility conducted interference | | N. |
| AS-Interface protocol IO-Link protocol Product function control circuit interface with IO link No Electromagnetic compatibility conducted interference | · | No |
| No product function control circuit interface with IO link No Electromagnetic compatibility conducted interference No | | |
| product function control circuit interface with IO link Electromagnetic compatibility conducted interference | AS-Interface protocol | No |
| Electromagnetic compatibility conducted interference | IO-Link protocol | No |
| conducted interference | product function control circuit interface with IO link | No |
| | Electromagnetic compatibility | |
| • due to burst according to IEC 61000-4-4 4 kV main contacts, 2 kV auxiliary contacts | conducted interference | |
| | due to burst according to IEC 61000-4-4 | 4 kV main contacts, 2 kV auxiliary contacts |

| due to conductor-earth surge according to IEC 61000-4-5 | 4 kV main contacts, 2 kV auxiliary contacts |
|---|---|
| due to conductor-conductor surge according to IEC 61000-4-5 | 2 kV main contacts, 1 kV auxiliary contacts |
| due to high-frequency radiation according to IEC 61000- 4-6 | 0.15-80Mhz at 10V |
| field-based interference according to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge according to IEC 61000-4-2 | 8 kV |
| conducted HF interference emissions according to CISPR11 | 150 kHz 30 MHz Class A |
| field-bound HF interference emission according to CISPR11 | 30 1000 MHz Class A |
| Supply voltage | |
| Supply voltage required Auxiliary voltage | No |
| Display | |
| number of LEDs | 2 |
| Approvals Certificates | |
| General Product Approval | |







Confirmation





EMV **Functional Saftey** **Test Certificates**

Marine / Shipping

other

Dangerous goods





Type Test Certificates/Test Report



Confirmation

Transport Information

Environment

Environmental Confirmations

Information on the packaging

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

Information- and Downloadcenter (Catalogs, Brochures,...)

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6120-2EB32

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-2EB32

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

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

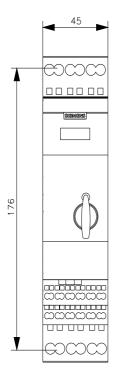
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb

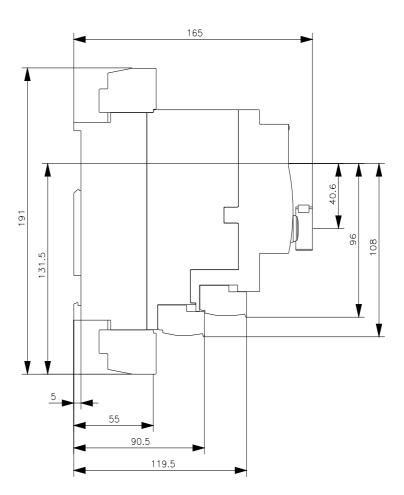
Characteristic: Tripping characteristics, I2t, Let-through current

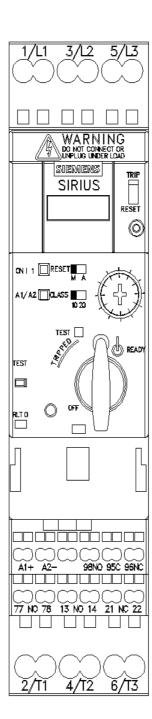
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2EB32/char

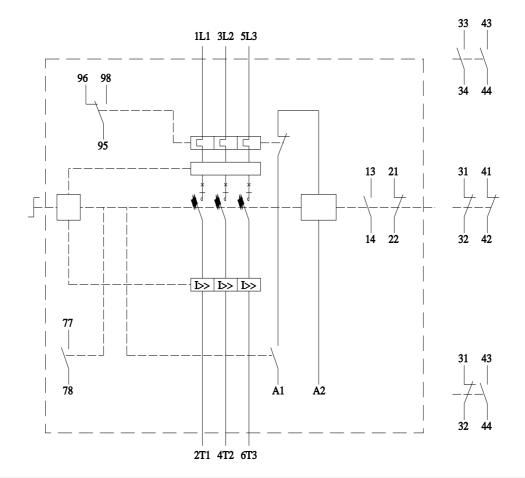
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-2EB32&objecttype=14&gridview=view1









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