SIEMENS

Data sheet 3RA6400-2BB42



SIRIUS compact starter direct-on-line starter for IO-Link 690 V 24 V DC 0.32...1.25 A IP20 connection main circuit: spring-loaded terminal connection control circuit: spring-loaded terminal "phase-out type" alternative 3RK1308 or 3RA8

| product brand name | SIRIUS |
|---|--|
| product designation | Compact starter for IO-Link |
| design of the product | direct starter |
| product type designation | 3RA64 |
| General technical data | |
| product function control circuit interface to parallel wiring | No |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| at AC in hot operating state | 0.1 W |
| at AC in hot operating state per pole | 0.03 W |
| without load current share typical | 2.9 W |
| insulation voltage rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 6 000 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 | 1.47 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- | 0.32 1.25 A |

| dependent overload release | |
|---|---|
| dependent overload release formula for making capacity limit current | 38.4 x le |
| formula for making capacity limit current formula for limit current breaking capacity | 38.4 x le 32 x le |
| yielded mechanical performance for 4-pole AC motor | 32 X IC |
| at 400 V rated value | 0.37 kW |
| at 500 V rated value at 500 V rated value | 0.55 kW |
| at 690 V rated value at 690 V rated value | 0.75 kW |
| operating voltage at AC-3 rated value maximum | 690 V |
| operational current | 030 V |
| at AC at 400 V rated value | 1.25 A |
| at AC-3 at 400 V rated value | 1.25 A |
| • at AC-43 | |
| — at 400 V rated value | 1.1 A |
| — at 500 V rated value | 1.2 A |
| — at 690 V rated value | 1.1 A |
| operating power | |
| at AC-3 at 400 V rated value | 0.37 kW |
| • at AC-43 | |
| — at 400 V rated value | 370 W |
| — at 500 V rated value | 550 W |
| — at 690 V rated value | 750 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 | DC |
| control supply voltage 1 at DC rated value | 24 V |
| control supply voltage 1 at DC | 24 24 V |
| holding power | 0.014 |
| at DC maximum Auxiliary circuit | 2.9 W |
| | |
| ar or by . compacts for allymary contacts | \cap |
| number of NO contacts for auxiliary contacts | 0 |
| number of NO contacts for auxiliary contacts | 0 |
| - | |
| 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 | 0 |
| 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 | 0 0 |
| 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 | 0 0 0 10 A |
| 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 | 0 0 |
| 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 | 0 0 0 10 A 0.27 A |
| 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 | 0 0 0 10 A |
| 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 (lcs) | 0 0 0 10 A 0.27 A CLASS 10 and 20 adjustable |
| 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 | 0 0 0 10 A 0.27 A |
| 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 | 0 0 0 10 A 0.27 A CLASS 10 and 20 adjustable |
| 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 | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable |
| 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 ULI/CSA ratings | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable |
| 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 | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable |
| 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 ILI/CSA ratings full-load current (FLA) for 3-phase AC motor | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value vielded mechanical performance [hp] for 3-phase AC motor | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value • at 575/600 V rated value | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value • at 575/600 V rated value Short-circuit protection | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp 0.5 hp |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value • at 575/600 V rated value Short-circuit protection product function short circuit protection | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp 0.5 hp |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value • at 575/600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp 0.5 hp |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value sat 575/600 V rated value • at 575/600 V rated value Short-circuit protection product function short circuit protection design of the fuse link | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp 0.5 hp Yes electromagnetic |
| 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 UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value vielded mechanical performance [hp] for 3-phase AC motor • at 460/480 V rated value sat 575/600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required | 0 0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 1.25 A 1.25 A 0.5 hp 0.5 hp Yes electromagnetic |

| reasoning memon width width 40 mm 40 | fortaging grathed | | |
|--|---|----------------------------|--|
| After making Afte | fastening method | screw and snap-on mounting | |
| depth | | | |
| product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit your of lectrical connection • for main current circuit yope of connectable conductor cross-sections for main control singly and control circuit yope of connectable conductor cross-sections for main contacts • circuit • finally stranded with one end processing • finally stranded without one end processing • for auxiliary contacts • with high demand rate according to SN 31920 50 % 510 value with high demand rate according to SN 31920 510 value with high demand rate according to IEC 68529 front function class IP on the front according to IEC 68529 front function bus communication protection class IP on the front according to IEC 68529 product function bus communication your of voltage supply via input output link master • All-Interface protocol • All-Interface protocol • Outland transfer rate • Of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outp | | | |
| product component removable terminal for auxiliary and control circuit. ye of relatorical connection spring-loaded terminals of auxiliary and control circuit. ye of relatorical connection spring-loaded terminals spring-l | · | 165 mm | |
| product component removable terminal for auxillary and control circuit Type of connectable conductor cross sections for main contacts • circuit and connectable conductor cross-sections or main contacts • circuit and connectable conductor cross-sections or main contacts • circuit and connectable conductor cross-sections or main contacts • circuit and connectable conductor cross-sections • inergy stranded with core end processing 2x (1.5 6 mm²) 2x (1.5 | | | |
| control circuit yppe of electrical connection • for main current circuit yppe of correctable conductor cross-sections for main contacts • cold • linely stranded with core end processing • finely stranded with core end processing • fine | | | |
| For main current circuit For auxiliary and control circuit Spring-loaded terminals Spring-loaded | | res | |
| sping-loaded terminals 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 finely stranded with core end processing for auxiliary contacts solid finely stranded with core end processing finely stranded without core end processing finely stranded with core end processing | type of electrical connection | | |
| 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 — finely stranded with core end processing | for main current circuit | spring-loaded terminals | |
| * solid * finely stranded with core end processing * finely stranded without core end processing * finely stranded without core end processing * variety connectable conductor cross-sections * for available your conductor cross-sections * end of available your contexts * solid * finely stranded with core end processing * finely stranded with core end processing * variety stranded with core end processing * vari | for auxiliary and control circuit | spring-loaded terminals | |
| • finely stranded with core end processing | type of connectable conductor cross-sections for main contacts | | |
| type of connectable conductor cross-sections of a suciliary contacts — solid of newly stranded with core end processing for a suciliary contacts — solid of newly stranded with core end processing of newly stranded with core end processing of newly stranded without core end processing of new years of new years of new stranded without core end processing of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer | • solid | 2x (1.5 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 — finely stranded with end processing — finely stranded with end processing — finely stranded with end processing — finely stranded w | finely stranded with core end processing | 2x (1.5 6 mm²) | |
| • for auxillary contacts — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — with high demand rate according to SN 31920 — 50 % Stoty rolated with high demand rate according to SN 31920 — 50 % Stoty rolate with high demand rate according to IEC 60529 — finely stranded read according to IEC 60529 — finely strander finely protected finely protec | finely stranded without core end processing | 2x (1.5 6 mm²) | |
| solid | type of connectable conductor cross-sections | | |
| finely stranded with core end processing finely stranded without core and processing finely stranded without core and processing for AVIC cables for auxility contacts Safoty related data proportion of dangerous failures with high demand rate according to SN 31920 BIO value with high demand rate according to SN 31920 BIO value with high demand rate according to IEC 60529 BIO value with high demand rate according to IEC 60529 Frotection class IP on the front according to IEC 60529 product function on the front according to IEC 60529 product function bus communication Protocol Product function bus communication Protocol (A-Interface protocol (A-Interface pro | • for auxiliary contacts | | |
| - finely stranded without core end processing of or AWC cables for auxiliary contacts Safety related data proportion of dangerous failures • with high demand rate according to SN 31920 810 value with high demand rate according to SN 31920 50 % 810 value with high demand rate according to SN 31920 50 % 910 value with high demand rate according to EC 60529 touch protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe Communication Protecol product function bus communication Yes protect in supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Ves OL-Link protocol Insure of the address range of the inputs with cyclical transfer tofal • of the address range of the inputs with cyclical transfer tofal • of the address range of the inputs with cyclical transfer tofal • due to conductor-centh surge according to IEC 61000-4-5 • due to conductor-centh surge according to IEC 61000-4-5 • due to conductor-centh surge according to IEC 61000-4-5 • due to b high-frequency radiation according to IEC 61000-4-2 • due to conductor-centh surge according to IEC 61000-4-2 • due to conductor-centh surge according to IEC 61000-4-2 • due to conductor-centh surge according to IEC 61000-4-2 • due to b high-frequency radiation according to IEC 61000-4-2 • due to b high-frequency radiation according to IEC 61000-4-2 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-3 • due to b high-frequency radiation according to IEC 61000-4-2 • due to b | — solid | 2x (0.25 1.5 mm²) | |
| * for AWG cables for auxiliary contacts * and tyrelated data proportion of dangerous failures * 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 B10 value 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 B10 value 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 B10 value with high demand rate according to SN 31920 B10 value with high demand rate according to IEC 60529 IP20 touch protection class IP on the front according to IEC 60529 IP20 Ivale P10 value P | finely stranded with core end processing | 2x (0.25 1.5 mm²) | |
| Safety related data proportion of dangerous failures • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe Communication Protocol product function bus communication yes product function bus communication Yes product function control circuit interface with IO link Ves IO-Link transfer rate COM2 (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum 1, yes of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • due to burst according to IEC 61000-4-4 • due to conductor-conductor surge according to IEC 61000-4-5 • due to burst according to IEC 61000-4-5 • due to onductor-conductor surge according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 | finely stranded without core end processing | 2x (0.25 1.5 mm²) | |
| proportion of dangerous failures • with high demand rate according to SN 31920 50 % B10 value with high demand rate according to SN 31920 50 % 50 | for AWG cables for auxiliary contacts | 2x (24 16) | |
| with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 S10 value with high demand rate according to SN 31920 S10 value with high demand rate according to SN 31920 S10 value vith vith rate according to SN 31920 S10 value vith vith rate vith rate according to SN 31920 S10 value vith vith rate vith rate vith rate according to SN 31920 S10 value vith vith rate vith rate vith rate according to SN 31920 S10 value vith vith rate vi | Safety related data | | |
| B10 value with high demand rate according to SN 31920 3 000 000 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 IO-Link protocol Product function control circuit interface with IO link Yes IO-Link transfer rate point-to-point cycle time between master and IO-Link device minimum Type of voltage supply via input/output link master data volume of the address range of the outpuls with cyclical transfer total of the address range of the outpuls with cyclical transfer total of the address range of the outpuls with cyclical transfer total et due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-6 due to high-frequency radiation according to IEC 61000-4-8 due to high-frequency radiation according to IEC 61000-4-9 due to high-frequency radiation according to IEC | proportion of dangerous failures | | |
| 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 Yes protocol is supported A-AS-Interface protocol Yes product function control circuit interface with IO link Yes IO-Link transfer rate COM2 (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master No data volume of the address range of the inputs with cyclical transfer total 2 byte | with high demand rate according to SN 31920 | 50 % | |
| protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe product function bus communication protocol is supported | B10 value with high demand rate according to SN 31920 | 3 000 000 | |
| touch protection on the front according to IEC 60529 communication/ Protocol product function bus communication yes protocol is supported • AS-Interface protocol • (IO-Link protocol) • (IO-Link protocol) • (IO-Link transfer rate COM2 (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master data volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • due to burst according to IEC 61000-4-4 • due to conductor-cardh surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 field-based interference emissions according to CISPR11 field-bound HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage Supply voltage required Auxiliary voltage umber of LEDs field-based interference emission according to CISPR11 supply voltage Supp | Electrical Safety | | |
| product function bus communication Yes protocol is supported | protection class IP on the front according to IEC 60529 | IP20 | |
| product function bus communication protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Ves IO-Link transfer rate COM2 (38.4 kBaud) 2.5 ms COM2 (38.4 kBaud) 2.5 ms (3.5 ms COM2 (38.4 kBaud) 2.5 ms (3.6 ms COM2 (38.4 kBaud) 2.5 ms (4.7 ms COM2 (38.4 kBaud) 2.5 ms (5.8 ms COM2 (38.4 kBaud) 2.5 ms (6.8 ms COM2 (38.4 kBaud) 2.5 ms COM2 (38.4 k | touch protection on the front according to IEC 60529 | finger-safe | |
| protocol is supported • AS-Interface protocol • IO-Link protocol Pes IO-Link protocol Pres IO-Link transfer rate COM2 (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master ata volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • due to burst according to IEC 61000-4-4 • due to conductor-carth surge according to IEC 61000-4-5 • due to conductor-carth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-7 • due to high-frequency radiation according to IEC 61000-4-8 field-based interference according to IEC 61000-4-2 conducted HF interference emissions according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 Supply voltage Total Radia R | Communication/ Protocol | | |
| AS-Interface protocol O-Link protocol O-Link protocol Pes IO-Link protocol Pes IO-Link protocol Pes IO-Link transfer rate COM2 (38,4 kBaud) 2.5 ms COM2 (38,4 kBaud) 2.5 ms COM2 (38,4 kBaud) 2.5 ms Asia volume of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to burst according to IEC 61000-4-4 of due to conductor-carth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 alectrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 Supply voltage No As Wasin circuits, 2 kV auxiliary voltage with upstream overvoltage protection 0.15-80Mhz at 10V 150 kHz 30 MHz Class A Supply voltage Ves Display number of LEDs 3 3 3 | product function bus communication | Yes | |
| IO-Link protocol | protocol is supported | | |
| product function control circuit interface with IO link IO-Link transfer rate point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master data volume of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to burst according to IEC 61000-4-4 of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-3 of lield-based interference emissions according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs Yes | AS-Interface protocol | No | |
| IO-Link transfer rate | IO-Link protocol | Yes | |
| point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master data volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • A kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection • A kV main circuits, 0.5 kV auxiliary voltage with upstream overvolta | product function control circuit interface with IO link | Yes | |
| type of voltage supply via input/output link master data volume of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to burst according to IEC 61000-4-4 of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 shown and incredits, 0.5 kV auxiliary voltage with upstream overvoltage protection 0.15-80Mhz at 10V | IO-Link transfer rate | COM2 (38,4 kBaud) | |
| data volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with cyclical transfer • of the address range of the outputs with upstream overvoltage protection • of the address range of the outputs with upstream overvoltage with upstream overvoltage protection • of the address range of the outputs with upstream overvoltage with upstream overvoltage protection • of the address range of the outputs, 0.5 kV auxiliary voltage with upstream overvoltage at NV and circuits, 0.5 kV auxiliary voltage with upstream overvoltage at NV and circuits, 0.5 kV auxiliary voltage with upstream overvoltage or other total voltage at NV and circuits, 0.5 kV auxiliary voltage with upstream overvoltage at NV and circuits, 0.5 kV auxiliary voltage with upstream overvoltage or other total | device minimum | 2.5 ms | |
| of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total included interference of due to burst according to IEC 61000-4-4 of the address range of the outputs with cyclical transfer total included interference of due to burst according to IEC 61000-4-5 of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs of the address range of the outputs with cyclical transfer to 2 byte 4 kV main circuits, 2 kV auxiliary circuits, 2 kV lo-Link, 2 kV limit switches, 2 kV line hand-held device 4 kV main circuits, 2 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 2 kV auxiliary voltage with upstream overvoltage and visual survival su | type of voltage supply via input/output link master | No | |
| of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference oue to burst according to IEC 61000-4-4 oue to conductor-earth surge according to IEC 61000-4-5 oue to conductor-conductor surge according to IEC 61000-4-5 oue to conductor-conductor surge according to IEC 61000-4-5 oue to high-frequency radiation according to IEC 61000-4-3 output to high-frequency radiation accordi | | | |
| Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 | . , | 2 byte | |
| conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs A kV main circuits, 2 kV auxiliary circuits, 2 kV lo-Link, 2 kV limit switches, 2 kV line hand-held device 4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage with upstream overvoltage according to CISPR11 Style AV auxiliary voltage with upstream overvoltage according to CISPR11 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary voltage with upstream overvoltage according to CISPR12 Style AV auxiliary vo | total | 2 byte | |
| due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 30 1000 MHz Class A Supply voltage Supply voltage Yes Display number of LEDs | | | |
| line hand-held device | | | |
| of due to conductor-conductor surge according to IEC | • | line hand-held device | |
| 61000-4-5 • due to high-frequency radiation according to IEC 61000- 4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs protection 0.15-80Mhz at 10V 8 kV 150 kHz 30 MHz Class A 150 kHz 30 MHz Class A 30 1000 MHz Class A | Ç Ç | protection | |
| field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs 80 3000 MHz at 10V/m 8 kV 150 kHz 30 MHz Class A 150 kHz 30 MHz Class A 90 1000 MHz Class A 150 kHz 30 MHz class A 150 | 61000-4-5 | protection | |
| electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs 8 kV 150 kHz 30 MHz Class A 30 1000 MHz Class A 9 yes 3 3 | 4-6 | | |
| conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs 150 kHz 30 MHz Class A 30 1000 MHz Class A 30 1000 MHz Class A 31 | | | |
| CISPR11 field-bound HF interference emission according to CISPR11 30 1000 MHz Class A Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs 3 | | | |
| Supply voltage Supply voltage required Auxiliary voltage Pisplay number of LEDs 3 | | 150 kHz 30 MHz Class A | |
| Supply voltage required Auxiliary voltage Display number of LEDs 3 | field-bound HF interference emission according to CISPR11 | 30 1000 MHz Class A | |
| Display number of LEDs 3 | Supply voltage | | |
| number of LEDs 3 | Supply voltage required Auxiliary voltage | Yes | |
| | Display | | |
| display version as status display of the input/output link device green/red dual LED | number of LEDs | 3 | |
| | display version as status display of the input/output link device | green/red dual LED | |

General Product Approval





Confirmation







EMV

Functional Saftey

Test Certificates

other

Dangerous goods

Environment





Type Test Certificates/Test Report

Confirmation

Transport Information

Environmental Confirmations

Further information

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=3RA6400-2BB42

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6400-2BB42}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6400-2BB42

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

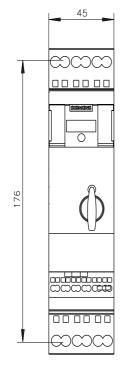
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6400-2BB42&lang=en

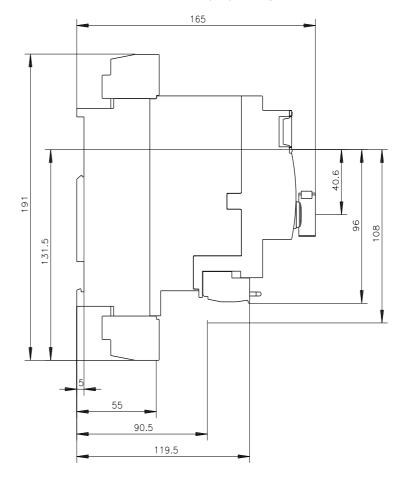
Characteristic: Tripping characteristics, I²t, Let-through current

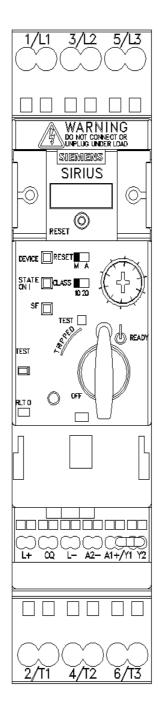
https://support.industry.siemens.com/cs/ww/en/ps/3RA6400-2BB42/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6400-2BB42&objecttype=14&gridview=view1







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