## **SIEMENS**

Data sheet 3RA6120-2EP32



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: Spring-type terminal Connection auxiliary circuit: Spring-type terminal

	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	5.8 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	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 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
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	
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	
<ul> <li>at 400 V rated value</li> </ul>	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	
at AC-3 at 400 V rated value	15 kW
• at AC-43	
— at 400 V rated value	15 000 W
— at 500 V rated value	11 000 W
— at 690 V rated value	11 000 W
	3 600 1/h
no-load switching frequency	3 000 1/II
operating frequency	750.1/b
at AC-41 according to IEC 60947-6-2 maximum     at AC-42 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	1000
type of voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz rated value	240 V
• at 50 Hz	110 240 V
● at 60 Hz	110 240 V
control supply voltage frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
control supply voltage 1	
at DC rated value	240 V
• at DC	110 240 V
holding power	
at AC maximum	5.2 W
at DC maximum	5.8 W
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of NO contacts of instantaneous short-circuit trip unit for signaling contact	1
number of CO contacts of the current-dependent overload release for signaling contact	1
operational current of auxiliary contacts at AC-12 maximum	10 A
operational current of auxiliary contacts at DC-13 at 250 V	0.27 A
Protective and monitoring functions	
trip class	CLASS 10 and 20 adjustable
operating short-circuit current breaking capacity (lcs)	
• at 400 V	53 kA
• at 500 V rated value	1 kA
• at 690 V rated value	1 kA
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	32 A
	32 A

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product function short circuit protection design of the fuse link	contact rating of auxiliary contacts according to UL	
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for short-circuit protection of the auxiliary switch required     for short-circuit release required     for short-circuit release required     restallations mounting dimensions     mounting position     recommended     services of the signaling switch of the overlead release required     recommended     services, on horizontal standard DN rail     services, on horizontal s	design of short-circuit protection	electromagnetic
For short-circuit protection of the signating switch of the short-circuit protection of the signating switch of the overload release required     For short-circuit protection of the signating switch of the overload release required     Installation mounting dimensions  mounting position     *recommended     vertical, on horizontal standard DIN rail     Sarrow and snap-on mounting     Installation mounting dimensions  sorrow and snap-on mounting     As mm	design of the fuse link	
shot-circuit release required  **restaliation** circuit protection of the signaling switch of the overload release required  **restaliation** circuit protection of the signaling switch of the overload release required  **restaliation** counting dimensions  **mounting position**  **ecommended**  **ecommended**  **stering method**  **stering meth	• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/mounting/dimensions  mounting position  recommended  retaining method  height  width  depth  Connections/Torminals  product component removable terminal for main circuit  reproduct component removable terminal for main circuit  yes  product component removable terminal for auxiliary and control circuit  for main current circuit  for main current circuit  for main current circuit  yes of connectable conductor cross-sections for main contacts  • solid  finely stranded with ourse end processing  • finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - solid  - finely stranded without core end processing  • for auxiliary contacts  • solid  - solid  - solid		6A gL/gG/400V
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mounting position any vertical, on horizontal standard DIN rail retarening method screw and snap-on mounting screw and snap-on mounting width	·	
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fasterling method   191 mm		
height with 45 mm depth 25 mm 165 mm		
width depth 15 mm 155 m		
depth  Connections/Terminals product component removable terminal for main circuit product component removable terminal for main circuit type of electrical connection  • for main current circuit  **tor availiary 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  • for auxiliary contacts  • solid  — finely stranded without core end processing  • for auxiliary contacts  — solid  — finely stranded without core end processing  — for auxiliary contacts  — solid  — finely stranded without core end processing  — for AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate according to SN 31920  • with low demand rate according t		
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type of electrical connection  • for main current circuit  • for auxillary and control circuit  • for auxillary and control circuit  • for auxillary and control circuit  • for energy and control circuit  • for electrical conductor cross-sections for main contacts  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for auxillary contacts  • for AWG cables for auxillary contacts  82x (2.5 6 mm²)  2x (2.5 1.5 mm²)  2x (2.5		
• 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 without 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 - 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  810 value with high demand rate according to SN 31920  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  failure rate [FIT] with low demand rate according to EN 31920  protection class IP on the front according to IEC 60529  protection class IP on the front according to IEC 60529  protection class IP on the front according to IEC 60529  product function bus communication  protocol is supported • A-Sh-Interface protocol • IO-Link protocol  product function bus communication  No  protocol is supported • A-Briefface protocol • IO-Link protocol  product function control circuit interface with IO link  locution protocol is conductor-earth surge according to IEC 61000-4-5 • Gue to conductor-earth surge according to IEC 61000-4-5 • Gue to conductor-conductor surge according to IEC 61000-4-6 • Gue to conductor-conductor surge according to IEC 61000-4-6 • Gue to conductor-conductor surge according to IEC 61000-4-6 • Gue to high-frequency radiation according to IEC 61000-4-6 • Gue to high-frequency radiation according to IEC 61000-4-6 • Gue to high-frequency radiation according to IEC 61000-4-6 • Gue to high-frequency radiation according to IEC 61000-4-10 • Gue to high-frequency radiation according to IEC		
• 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  • for auxiliary contacts  • of auxiliary contacts  - solid  — finely stranded without core end processing  • for auxiliary contacts  — solid  — finely stranded without core end processing  • for auxiliary contacts  — solid  — finely stranded without core end processing  • for AWG cables for auxiliary contacts  Safety rolated data  B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to IEC 60529  frownunication protocol  protection class IP on the front according to IEC 60529  product function bus communication  protocol is supported  • AS-Interface protocol  • (O-Link protocol  product function control circuit interface with IO link  Electromagnatic compatibility  conducted interference  • due to burst according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-6  • due to brigh-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 61000-4-6  • 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 61000-4-6  • 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 61000-4-7  • due to bright frequency radiation according to IEC 61000-4-7  • due to thigh-frequency	type of electrical connection	
Salid	<ul> <li>for main current circuit</li> </ul>	spring-loaded terminals
• solid • 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 auxiliary contacts  - solid - 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  2x (0.25 1.5 mm²) • for AWG cables for auxiliary contacts  2x (24 16)  Safety related data  B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT  11 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  product function bus communication  protocol is supported • AS-Interface protocol • OI-Link protocol  product function control circuit interface with IO link  Pictoromagnetic 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 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 brigh-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 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-7 • due to high-frequency radiation according to IEC 61000-4-7	for auxiliary and control circuit	spring-loaded terminals
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  B10 value with high demand rate according to SN 31920 — with high demand rate according to SN 31920 — with high demand rate according to SN 31920 — with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  proportion of tangerous failures — with low demand rate according to IEC 60529  failure rate [FIT] with low demand rate according to IEC 60529  protection class IP on the front according to IEC 60529  formunication/ Protocol  product function bus communication  protocol is supported — AS-Interface protocol — (IO-Link protocol — product function control circuit interface with IO link  Electromagnetic compatibility  conducted interference — due to burst according to IEC 61000-4-4 — due to conductor-conductor surge according to IEC 61000-4-5 — 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 61000-4-6 — 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 conductor-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 61000-4-7 — due to high-frequency rad	2.	2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections  • for auxillary contacts  — solid — 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 auxillary contacts  2x (0.25 1.5 mm²)  2x (0.25 1.5 mm²)  2x (24 16)  Safety related data  B10 value with high demand rate according to SN 31920  • with low demand rate according to SN 31920 • with low demand rate according to SN 31920  • with low demand rate according to SN 31920 • with low demand rate according to SN 31920  • with low demand rate according to SN 31920  failure rate [FIT] with low demand rate according to IEC 61508  failure rate [FIT] with low demand rate according to IEC 60529  failure rate [FIT] with low demand rate according to IEC 60529  protection class IP on the front according to IEC 60529  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  • IO-Link protocol  • IO-Link protocol  • IO-Link protocol  • IO-Link protocol  • Conductor control circuit interface with IO link  Conducted interference  • due to burst 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 61000-4-6  • 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 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6	<ul> <li>finely stranded with core end processing</li> </ul>	2x (2.5 6 mm²)
• for auxiliary contacts  — solid — finely stranded with core end processing — finely stranded without core end processing 2 x (0.25 1.5 mm²)  • for AWG cables for auxiliary contacts 2 x (24 16)  Safety related data  B10 value with high demand rate according to SN 31920  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920  100 FIT  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  product function bus communication protocol is supported • AS-Interface protocol    OI-Link protocol   OI-Link protocol   OI-Link protocol   OI-Link protocol   No   Oroduct function control circuit interface with IO link   Electromagnetic compatibility  conducted interference • due to burst 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 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to bigh-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 61000-4-6 • 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 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to conductor -conductor -c	<ul> <li>finely stranded without core end processing</li> </ul>	2x (2.5 6 mm²)
solid	type of connectable conductor cross-sections	
finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing finely stranded without core end processing for AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate according to SN 31920  proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 to strain the first according to SN 31920 to strain the first interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection bus communication protocol is supported AS-Interface protocol IO-Link protocol IO-Link protocol IO-Link protocol IO-Link protocol IO-Link protocol due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to burst according to IEC 61000-4-5 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	<ul> <li>for auxiliary contacts</li> </ul>	
- finely stranded without core end processing • for AWG cables for auxiliary contacts  2x (24 16)  Safety related data  B10 value with high demand rate according to SN 31920  proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • 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 61509  failure rate [FIT] with low demand rate according to IEC 61509  protection class IP on the front according to IEC 60529  protection class IP on the front according to IEC 60529  product function on the front according to IEC 60529  product function bus communication  protocol is supported • AS-Interface protocol • IO-Link protocol  product function control circuit interface with IO link  No  Electromagnetic compatibility  conducted interference • due to burst according to IEC 61000-4-5 • 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 • 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	— solid	2x (0.25 1.5 mm²)
• for AWG cables for auxiliary contacts  Safety related data  B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  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 some for proof test interval or service life according to IEC 61509  protection class IP on the front according to IEC 60529  product function bus communication  protocol is supported  • AS-Interface protocol  product function control circuit interface with IO link  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 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	<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
B10 value with high demand rate according to SN 31920 2 000 000  proportion of dangerous failures  • with low demand rate according to SN 31920 40 %  • with high demand rate according to SN 31920 50 %  failure rate [FIT] with low demand rate according to SN 31920 100 FIT  T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529 IP20  touch protection on the front according to IEC 60529 inger-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  • due to burst 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  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  • outer to high-frequency radiation according to IEC 61000-4-6  • outer to high-frequency radiation according to IEC 61000-4-6  • outer to high-frequency radiation according to IEC 61000-4-6  • outer to high-frequency radiation according to IEC 61000-4-6  • outer to high-frequency radiation according to IEC 61000-4-6	<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)
B10 value with high demand rate according to SN 31920 2 000 000  proportion of dangerous failures  • with low demand rate according to SN 31920 40 %  • with high demand rate according to SN 31920 50 %  failure rate [FIT] with low demand rate according to SN 31920 100 FIT  T1 value for proof test interval or service life according to IEC 61508  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  • due to burst 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  • 0.15-80Mhz at 10V	<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (24 16)
proportion of dangerous failures  • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 50 %  failure rate [FIT] with low demand rate according to SN 31920 100 FIT  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  product function bus communication  protocol is supported • AS-Interface protocol  Product function control circuit interface with IO link  No  product function control circuit interface with IO link  No  Electromagnetic compatibility  conducted interference • due to burst 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 • due to high-frequency radiation according to IEC 61000-4-6 • with high demand rate according to IEC 61000-65 50 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 %  40 W  40	Safety related data	
with low demand rate according to SN 31920     with high demand rate according to SN 31920     failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  product protection on the front according to IEC 60529  product function bus communication  protocol is supported      • AS-Interface protocol  product function control circuit interface with IO link  No  Electromagnetic compatibility  conducted interference      • due to burst according to IEC 61000-4-4     • due to conductor-conductor surge according to IEC 61000-4-5     • 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 61000-4-6      • 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 61000-4-6      • 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 61000-4-6      • 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 61000-4-6      • d	B10 value with high demand rate according to SN 31920	2 000 000
with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe  Communication/ Protocol  product function bus communication  No  protocol is supported	proportion of dangerous failures	
failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  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  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  No  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 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6	<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  finger-safe  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  No  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 high-frequency radiation according to IEC 61000-4-6  0.15-80Mhz at 10V	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  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  No  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 high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  0.15-80Mhz at 10V		100 FIT
touch protection 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  No  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 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		
product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  No  Electromagnetic compatibility  conducted interference  • due to burst 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  • due to high-frequency radiation according to IEC 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  • O.15-80Mhz at 10V	<u> </u>	
product function bus communication  protocol is supported  AS-Interface protocol  IO-Link protocol  Product function control circuit interface with IO link  No  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 high-frequency radiation according to IEC 61000-  4-6		finger-safe
protocol is supported  AS-Interface protocol  IO-Link protocol  Product function control circuit interface with IO link  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 high-frequency radiation according to IEC 61000- 4-6		
■ AS-Interface protocol     ■ IO-Link protocol     Product function control circuit interface with IO link     No  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 high-frequency radiation according to IEC 61000-4-6     ● due to high-frequency radiation according to IEC 61000-4-6	•	No
IO-Link protocol     product function control circuit interface with IO link     No  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 high-frequency radiation according to IEC 61000- 4-6  No  No  No  No  No  No  No  No  No  N		
product function control circuit interface with IO link  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 high-frequency radiation according to IEC 61000- 4-6		
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  • due to high-frequency radiation according to IEC 61000-4-6	·	
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  • due to high-frequency radiation according to IEC 61000-4-6	·	NO
<ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>4 kV main contacts, 2 kV auxiliary contacts</li> <li>2 kV main contacts, 1 kV auxiliary contacts</li> <li>0.15-80Mhz at 10V</li> </ul>		
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>4 kV main contacts, 2 kV auxiliary contacts</li> <li>2 kV main contacts, 1 kV auxiliary contacts</li> <li>0.15-80Mhz at 10V</li> </ul>		AlM main annia de Oliviani III
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> <li>due to high-frequency radiation according to IEC 61000-4-6</li> <li>2 kV main contacts, 1 kV auxiliary contacts</li> <li>0.15-80Mhz at 10V</li> </ul>	-	· · · · · · · · · · · · · · · · · · ·
<ul> <li>due to high-frequency radiation according to IEC 61000-</li> <li>4-6</li> <li>0.15-80Mhz at 10V</li> </ul>	due to conductor-conductor surge according to IEC	
	• due to high-frequency radiation according to IEC 61000-	0.15-80Mhz at 10V
		10 V/m

8 kV electrostatic discharge according to IEC 61000-4-2 150 kHz ... 30 MHz Class A conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 30 ... 1000 MHz Class A Supply voltage Supply voltage required Auxiliary voltage No Displa number of LEDs 2 Certificates/ approvals

**General Product Approval** 

**EMC** 

Functional Safety/Safety of Machinery



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

**Dangerous Good** 





Confirmation

**Transport Information** 

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

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

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

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

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6120-2EP32

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-2EP32

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2EP32

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

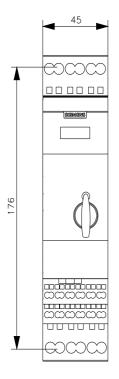
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6120-2EP32&lang=en

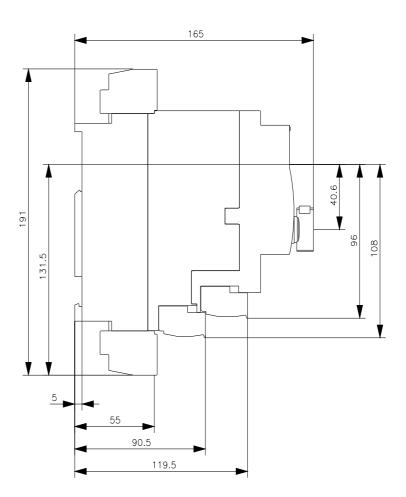
Characteristic: Tripping characteristics, I2t, Let-through current

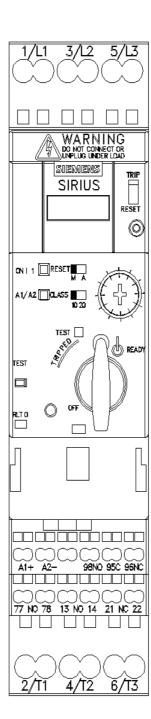
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2EP32/char

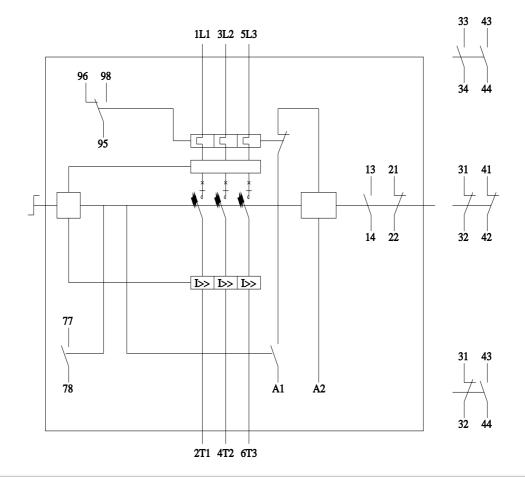
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-2EP32&objecttype=14&gridview=view1









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