SIEMENS

Data sheet 3RA6120-1EP33



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: plug-in, without terminals Connection auxiliary circuit: screw terminal

product designation design of the product design of the product produc	product brand name	SIRIUS
design of the product product type designation 3RA81 General technical data product function control circuit interface to parallel wirring product extension auxiliary switch power loss IW for rated value of the current • at AC in hot operating state • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical insulation voltage rated value degree of pollution 3 surge voltage resistance rated value 690 V degree of pollution • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit • between mortrol and auxiliary circuit • between ontrol and auxiliary circuit 400 V • between ontrol and auxiliary circuit • between switch Iffe (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of the si	•	
product type designation General technical data product function control circuit interface to parallel wiring product function control circuit interface to parallel wiring product extension auxiliary switch **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 600 V **maximum permissible voltage for protective separation 500 V **petween main and auxiliary circuit 250 V ** between auxiliary and auxiliary circuit 250 V ** between control and auxiliary circuit 300 V **degree of protection NEMA rating 500 V **shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes **mechanical service life (operating cycles) 10 000 000 10 000 000 10 000 000		·
General technical data product function control circuit interface to parallel wiring product extension auxiliary switch yes prower loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • without load current share typical insulation voltage rated value 690 V degree of pollution 3 surge voltage resistance rated value • between main and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit 400 V • between control and auxiliary circuit • between control and auxiliary circuit 9 shock resistance mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling contacts typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical type of assignment reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Piest and C-1262-81-2 Substance Prohibitance (Date) SVHC substance name Piest and C-1262-81-2 2, 2, 6, 6, 6-Tetrabrom-4, 4-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C		
product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state e		
power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical fusulation voltage rated value 690 V degree of pollution 3 surge voltage resistance rated value 600 V maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • of protection NEMA rating shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts typical 10 000 000 • of the signaling contacts typical • of the signaling contacts typical • of the 3 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical value Continous operation according to IEC 60947-8-2 Substance Prohibitance (Date) SVHC substance name Biei - 7439-92-1 Bieimonoxid (Bieioxid) - 1317-36-8 Bielitanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	product function control circuit interface to parallel wiring	Yes
at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical for some voltage rated value degree of pollution surge voltage resistance rated value as without load current share typical for some voltage rated value for some voltage resistance rated value as without load current share value for some voltage resistance rated value for some voltage resistance voltage vol	product extension auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical insulation voltage rated value degree of pollution surge voltage resistance rated value between operating virtuel between main and auxiliary circuit between main and auxiliary circuit between control and auxiliary circuit between ontrol and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit between ontrol and auxiliary circuit between ontrol and auxiliary circuit between ontrol and auxiliary circuit between control and auxiliary circuit between ontrol auxiliary circuit between ontrol auxiliary circuitary and on the condition on to an auxiliary circu	power loss [W] for rated value of the current	
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 0 ther shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes 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 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 Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittanzirkonoxid - 12626-81-2 2,2,6,6"-Tetrabrom-4,4"-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -20 +60 °C	at AC in hot operating state	5.4 W
insulation voltage rated value degree of pollution surge voltage resistance rated value 6 000 V maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit degree of protection NEMA rating shock resistance mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the CC-13 at 6 A at 24 V typical • at DC-13 at 6 A at 24 V typical • at DC-13 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • at DC-13 at 6 A at 24 V typical • at DC-13 at 6 A at 25 V typical • at DC-15 at 6 C AT-25 B C B C B C B C B C B C B C B C B C B	• at AC in hot operating state per pole	1.8 W
degree of pollution surge voltage resistance rated value maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • other shock resistance mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • of assignment continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Blei -7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzi/konoxid - 12626-81-2 2,2°.6.6°-Tetrabrom-4,4°-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	 without load current share typical 	5.8 W
surge voltage resistance rated value maximum permissible voltage for protective separation • between anin and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • ae60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) • of the main contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at DC-13 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • on thous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Bleit -7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittianzirkonoxid - 12626-81-2 2,2'.6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	insulation voltage rated value	690 V
maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit 300 V degree of protection NEMA rating shock resistance mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical verification of the signament continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name lelei-7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2,6,6"-Tetrabrom-4,4"-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	degree of pollution	3
between main and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of the signaling contacts typical of auxiliary contacts typical of the signaling contac	surge voltage resistance rated value	6 000 V
between auxiliary and auxiliary circuit between control and auxiliary circuit degree of protection NEMA rating shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical of the signaling contacts typical of at DC-13 at 6 A at 24 V typical at DC-13 at 6 A at 22 V typical at AC-15 at 6 A at 230 V typical ontinous operation according to IEC 60947-6-2 Treference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Blei-7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittanzirkonoxid - 12626-81-2 2,2,6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation -20 +60 °C	maximum permissible voltage for protective separation	
between control and auxiliary circuit degree of protection NEMA rating shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) of the main contacts typical of the signaling contacts of the signaling cont	 between main and auxiliary circuit 	400 V
degree of protection NEMA rating shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation other al=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes	 between auxiliary and auxiliary circuit 	250 V
shock resistance mechanical service life (operating cycles) of the main contacts typical of the signaling contacts typical of the main contacts typical of the contact typical of the main contacts typical of the main contacts typical of the contact typical of the conta	between control and auxiliary circuit	300 V
mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • 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) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	degree of protection NEMA rating	other
of the main contacts typical for auxiliary contacts typical for five signaling contacts typical for the signaling contacts typical for five signaling contacts typical for fi	shock resistance	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes
of auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of the signaling contacts typical old 200 000 electrical endurance (operating cycles) of auxiliary contacts old 200 000 old 200 000 type of assignment continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature oluring operation -20 +60 °C	mechanical service life (operating cycles)	
of the signaling contacts typical electrical endurance (operating cycles) of auxiliary contacts at DC-13 at 6 A at 24 V typical 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 Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation -20 +60 °C	of the main contacts typical	10 000 000
electrical endurance (operating cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical • 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) 5VHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	 of auxiliary contacts typical 	10 000 000
 at DC-13 at 6 A at 24 V typical 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 Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation -20 +60 °C 	of the signaling contacts typical	10 000 000
● at AC-15 at 6 A at 230 V typical type of assignment continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature ● during operation -20 +60 °C	electrical endurance (operating cycles) of auxiliary contacts	
type of assignment reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleiittanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation continous operation according to IEC 60947-6-2 Q Q Abstract Conditions 2000 m	• at DC-13 at 6 A at 24 V typical	30 000
reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation Q 05/01/2012 Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7	• at AC-15 at 6 A at 230 V typical	200 000
Substance Prohibitance (Date) SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation 05/01/2012 Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7	type of assignment	continous operation according to IEC 60947-6-2
SVHC substance name Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C	reference code according to IEC 81346-2	Q
Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7	Substance Prohibitance (Date)	05/01/2012
installation altitude at height above sea level maximum ambient temperature ● during operation 2 000 m -20 +60 °C	SVHC substance name	Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2
ambient temperature ◆ during operation -20 +60 °C	Ambient conditions	
◆ during operation −20 +60 °C	installation altitude at height above sea level maximum	2 000 m
	ambient temperature	
	during operation	-20 +60 °C
◆ during storage −55 +80 °C	during storage	-55 +80 °C
• during transport -55 +80 °C	during transport	-55 +80 °C
relative humidity during operation 10 90 %	relative humidity during operation	10 90 %

Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	8 32 A
formula for making capacity limit current	12 x le
formula for limit current breaking capacity	10 x le
yielded mechanical performance for 4-pole AC motor	
at 400 V rated value	15 kW
at 500 V rated value	11 kW
at 690 V rated value	11 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
• at AC at 400 V rated value	32 A
• at AC-3 at 400 V rated value	32 A
• at AC-43	
— at 400 V rated value	29 A
— at 500 V rated value	17.6 A
— at 690 V rated value	12.8 A
operating power	
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
no-load switching frequency	3 600 1/h
operating frequency	
 at AC-41 according to IEC 60947-6-2 maximum 	750 1/h
 at AC-43 according to IEC 60947-6-2 maximum 	250 1/h
Control circuit/ Control	
type of voltage	AC/DC
control supply voltage 1 at AC	
at 50 Hz rated value	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)	5014
• at 400 V	53 kA
at 500 V rated value	1 kA
	1 kA
at 690 V rated value	
UL/CSA ratings	
	32 A

yielded mechanical performance [hp] for 3-phase AC motor	
at 200/208 V rated value	7.5 hp
• at 220/230 V rated value	10 hp
• at 460/480 V rated value	20 hp
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300
Short-circuit protection	
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	,
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A
 for short-circuit protection of the signaling switch of the 	6A gL/gG/400V
short-circuit release required	
 for short-circuit protection of the signaling switch of the overload release required 	4A gL/gG/400V
Installation/ mounting/ dimensions	
mounting position	any
• recommended	vertical, on horizontal standard DIN rail
fastening method	screw and snap-on mounting
height	170 mm
width	45 mm
depth	165 mm
Connections/ Terminals	
product component removable terminal for main circuit	Yes
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	
for main current circuit	plug-in without terminals
 for auxiliary and control circuit 	screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (2.5 6 mm²), 1x 10 mm²
 finely stranded with core end processing 	2x (2.5 6 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)
 finely stranded with core end processing 	0.5 2.5 mm², 2x (0.5 1.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 14)
Safety related data	
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	100 FIT
31920	
B10 value with high demand rate according to SN 31920	2 000 000
T1 value for proof test interval or service life according to IEC 61508	20 a
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	No
IO-Link protocol	No
product function control circuit interface with IO link	No
Electromagnetic compatibility	
conducted interference	
 due to burst according to IEC 61000-4-4 	4 kV main contacts, 2 kV auxiliary contacts
due to conductor-earth surge according to IEC 61000-4-5	4 kV main contacts, 2 kV auxiliary contacts
 due to conductor-conductor surge according to IEC 61000-4-5 	2 kV main contacts, 1 kV auxiliary contacts
 due to high-frequency radiation according to IEC 61000- 4-6 	0.15-80Mhz at 10V
field-based interference according to IEC 61000-4-3	10 V/m

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

General Product Approval

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=3RA6120-1EP33

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-1EP33

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1EP33

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

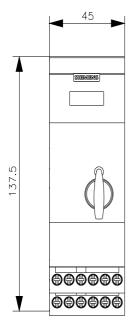
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-1EP33&lang=en

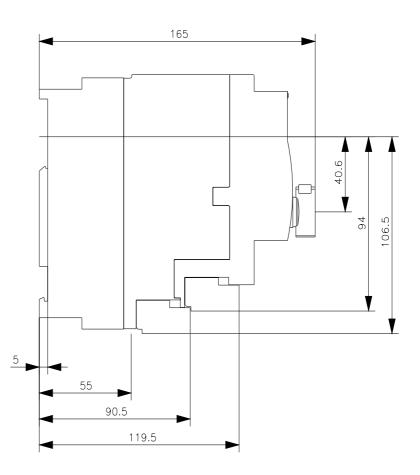
Characteristic: Tripping characteristics, I2t, Let-through current

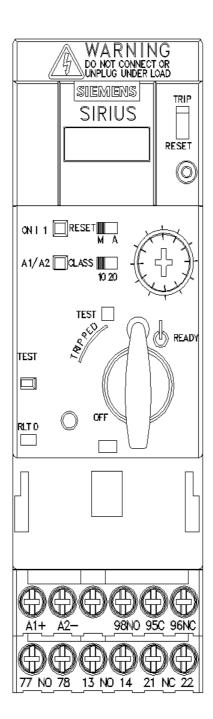
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1EP33/char

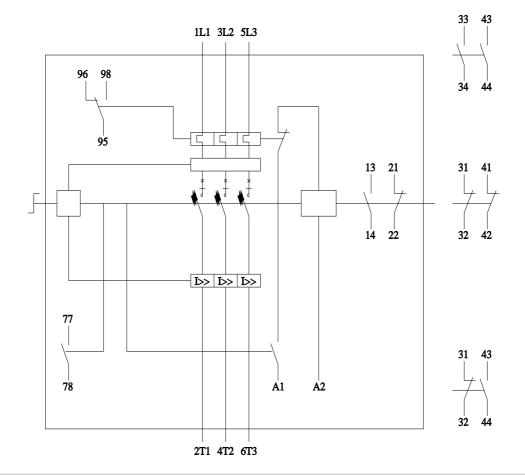
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-1EP33&objecttype=14&gridview=view1









last modified: 8/7/2023 🖸