SIEMENS

Data sheet 3RA6120-0DB30



SIRIUS Compact load feeder DOL starter 690 V 24 V AC/DC 50...60 Hz 3...12 A IP20 Connection main circuit: plug-in, without terminals Connection auxiliary circuit: plug-in, without terminals

product designation compact starter design of the product product gode signation General technical data product function control circuit interface to parallel wiring product product product starter product product product starter at AC in hot operating state at AC in hot operating state at AC in hot operating state but to at AC in hot operating state at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole without load current share typical but to accord to the current at AC in hot operating state per pole but to accord to the current at AC in hot operating state per pole but to accord to the current at AC in hot operating state per pole but to accord to the current at AC in hot operating state per pole but to accord to the current at AC in hot operating state at AC in accord to the current at AC in accord to the curr	product brand name	SIRIUS
design of the product product type designation 3RA61 General technical data product function control circuit interface to parallel wiring product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state 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 690 V maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between suxiliary and auxiliary circuit • between control and auxiliary circuit • of the main contacts typical • of the main contacts typical • of the main contacts typical • of the signaling contact typical • of the signaling c	•	
product type designation General technical data product funcion control circuit interface to parallel wiring product reclaim control circuit interface to parallel wiring product product extension auxiliary switch Yes 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 2.9 W insulation voltage rated value degree of pollution 3 surge voltage resistance rated value degree of pollution 3 surge voltage resistance rated value 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 degree of protection NEMA rating shock resistance mechanical service life (operating cycles) of the main contacts typical of the main contacts typical of the signaling contacts typical of the signaling contacts typical at DC-13 at 6 A at 24 V Vypical between auxiliary contacts volument at DC-13 at 6 A at 230 V typical 200 000 type of assignment reference code according to IEC 81346-2 Substance Prohibitance (Date) SYHC substance name Bisi - 7439-92-1 Bisi monoxid (Bisoidd) - 1317-36-8 Bisimonoxid (Bisoidd) -		
General technical data product function control circuit interface to parallel wiring product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical general surger voltage resistance rated value degree of pollution surge voltage resistance rated value between main and auxiliary circuit between main and auxiliary circuit between main and auxiliary circuit between auxiliary and auxiliary circuit between auxiliary and auxiliary circuit between control mEMA rating there are a convict (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 auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of the signaling contacts typical of at AC-15 at 6 A at 230 typical 200 000 type of assignment continous operation according to IEC 60947-6-2 Terference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Biel: -7439-92-1 Biel: -7439-92-1 Biel: -7439-92-1 Biel: -7439-92-1 Biel: -7439-92-1 Biel: -7439-92-1 Ambient conditions installation altitude at height above sea level maximum abiliation altitude at height above sea level maximum abiliation goperation - during operation - during operation - 20 +60 °C - 55 +80 °C		
product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state 1.8 W 0.6 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 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 0ther shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) 10 000 000 of the main 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 of the C-13 at 6 A at 24 V typical 30 000 of at AC-15 at 6 A at 230 V typical 200 000 type of assignment continuous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 05/01/2012 SVHC substance name Blein-moxid (Beloxid) - 1317-96-8 Bleintanzirkonoxid - 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 during storage -55 +80 °C		
product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state per pole without load current share typical 2.9 W insulation voltage rated value degree of pollution 3 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 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 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 in hot Operating cycles) of auxiliary contacts at DC-13 at 6 A at 230 V typical 200 000 Substance Prohibitance (Date) SVHC substance name Blein-monoxid (Beloxid) - 1317-36-8 Bleintianzirkonoxid - 12626-81-2 2.2',6,6'-Tetrabrom-4,4'-isopropyildendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage -55 +80 °C	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 general value degree of pollution surge voltage reststance rated value 6900 V maximum permissible voltage for protective separation between main and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit between operating virtuel and auxiliary circuit between operating virtuel and auxiliary circuit between fontrol and auxiliary circuit between operating virtuel and and auxiliary contacts (big) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) of the main contacts typical and 000 000 of auxiliary contacts typical and 000 000 of auxiliary contacts typical and 000 000 electrical endurance (operating cycles) of auxiliary contacts at DC-13 at 6 A at 24 V typical and 000 000 electrical endurance (operating cycles) of auxiliary contacts at AC-15 at 6 A at 230 V typical and 000 000 type of assignment continous operation according to IEC 60947-6-2 Gubstance Prohibitance (Date) 05/01/2012 SVHC substance name Beleititanzi/konoxid - 12626-81-2 2,2,6,6,7-Tetrabrom-4,4,-isopropylidendi - 79-94-7 Ambient conditions installation altitude at height above sea level maximum 2000 m ambient temperature of during operation -20 +60 °C -55 +80 °C	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 6 000 V maximum permissible voltage for protective separation between main and auxiliary circuit between auxiliary and auxiliary circuit between control service life (operating cycles) between control service life (operating cycles) between contacts typical continuous operation according to IEC 60947-6-2 Substance Prohibitance (Date) SVHC substance name Beliemonoxid (Belexid) - 1317-36-8 Belietitariz/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 beduring operation current share typical continuous operation continuous	power loss [W] for rated value of the current	
without load current share typical	• at AC in hot operating state	1.8 W
insulation voltage rated value degree of pollution surge voltage resistance rated value maximum permissible voltage for protective separation • between main and auxiliary circuit • between naviliary 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 signaling contacts typical • of the 2.15 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 veference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name SVHC substance name Ambient conditions installation altitude at height above sea level maximum above the signal of the signa	• at AC in hot operating state per pole	0.6 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 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 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 • other according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Bieli-7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleittanziknoxid - 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 • during storage	 without load current share typical 	2.9 W
surge voltage resistance rated value maximum permissible voltage for protective separation • between auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • of the etween control mEMA rating shock resistance 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 the conditions operation according to IEC 80947-6-2 Terference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Biei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzir(knoxid) - 1317-36-8 Bleititanzir(knoxid) - 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 -55 +80 °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 • 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 the signaling contacts typical • at DC-13 at 6 A at 24 V 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 • byp of assignment continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Biei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititranificnoxid - 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 - 55 +80 °C	degree of pollution	3
between main and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit soo v between control and auxiliary circuit 300 V degree of protection NEMA rating 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 of auxiliary contacts typical of auxiliary contacts typical of the signaling contact	surge voltage resistance rated value	6 000 V
between auxiliary and auxiliary circuit between control 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 the signaling contacts typical of the signaling contacts typical of at NC-13 at 6 A at 24 V typical at NC-15 at 6 A at 230 V typical other continous operation according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Biei - 7439-92-1 Bieimonoxid (Bleioxid) - 1317-36-8 Bieititanzirkonoxid - 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 -55 +80 °C	maximum permissible voltage for protective separation	
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 of the sig	 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 the signaling contacts typical of the of the signaling contacts typical of the signaling contacts ty	 between auxiliary and auxiliary circuit 	250 V
shock resistance mechanical service life (operating cycles) of the main contacts typical of the signaling	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 • ontinous 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 Bleititanzirknooxid - 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 • during storage	degree of protection NEMA rating	other
of the main contacts typical of auxiliary contacts typical of the signaling contacts typical one of the signaling contacts one of	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 electrical endurance (operating cycles) of auxiliary contacts o at DC-13 at 6 A at 24 V typical o at AC-15 at 6 A at 230 V typical ontinous 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 oduring operation oduring storage of auxiliary contacts 10 000 000 10 000 000 20 000 200 0	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 • 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 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 -55 +80 °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) 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 -55 +80 °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 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 during storage -55 +80 °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) 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 during storage -55 +80 °C	electrical endurance (operating cycles) of auxiliary contacts	
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 • during storage continous operation according to IEC 60947-6-2 Q Q Q D O O O O O O O O O O O O	• 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 -20 +60 °C • during storage -55 +80 °C	• 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 • during storage 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 2 000 m -20 +60 °C -55 +80 °C	type of assignment	continous operation according to IEC 60947-6-2
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 2 000 m ambient temperature • during operation • during storage -20 +60 °C -55 +80 °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 • during storage Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 2 000 m -20 +60 °C -55 +80 °C	Substance Prohibitance (Date)	05/01/2012
installation altitude at height above sea level maximum ambient temperature • during operation • during storage 2 000 m -20 +60 °C -55 +80 °C	SVHC substance name	Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2
ambient temperature • during operation • during storage -20 +60 °C -55 +80 °C	Ambient conditions	
 during operation during storage -20 +60 °C -55 +80 °C 	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C	ambient temperature	
	during operation	-20 +60 °C
• during transport -55 +80 °C	during storage	-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	3 12 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	5.5 kW
• at 500 V rated value	5.5 kW
• at 690 V rated value	7.5 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
at AC at 400 V rated value	12 A
• at AC-3 at 400 V rated value	12 A
• at AC-43	
— at 400 V rated value	11.5 A
— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
operating power	
at AC-3 at 400 V rated value	5.5 kW
• at AC-43	
— at 400 V rated value	5 500 W
— at 500 V rated value	5 500 W
— at 690 V rated value	7 500 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	200 1/11
type of voltage	AC/DC
control supply voltage 1 at AC	AOIDO
at 50 Hz rated value	24 V
• at 50 Hz	24 24 V
at 60 Hz rated value	24 V. 24 V
• at 60 Hz	24 V
control supply voltage frequency	Z4 V
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1	00 112
at DC rated value	24 V
• at DC rated value	24 ··· 24 V
	24 24 V
holding power ● at AC maximum	2.8 W
at AC maximum at DC maximum	2.9 W
Auxiliary circuit	2.0 VV
	1
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	3 kA
at 690 V rated value	3 kA
UL/CSA ratings	

• at 480 V rated value	12 A
at 600 V rated value	12 A
yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	3 hp
at 220/230 V rated value	3 hp
at 460/480 V rated value	7.5 hp
at 575/600 V rated value	10 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 short-circuit release required 	6A gL/gG/400V
 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	plug-in without terminals
Safety related data	plag in without terminale
proportion of dangerous failures	
proportion of dangerous failures	40.94
with low demand rate according to SN 31920	40 %
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	40 % 50 % 100 FIT
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	50 % 100 FIT
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 B10 value with high demand rate according to SN 31920	50 % 100 FIT 3 000 000
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	50 % 100 FIT
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 B10 value with high demand rate according to SN 31920 T1 value for proof test interval or service life according to	50 % 100 FIT 3 000 000
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 B10 value with high demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 61508	50 % 100 FIT 3 000 000 20 a
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 B10 value with high 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	50 % 100 FIT 3 000 000 20 a
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 B10 value with high 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	50 % 100 FIT 3 000 000 20 a
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 B10 value with high 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 Communication/ Protocol	50 % 100 FIT 3 000 000 20 a IP20 finger-safe
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 B10 value with high 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 Communication/ Protocol product function bus communication	50 % 100 FIT 3 000 000 20 a IP20 finger-safe
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported	50 % 100 FIT 3 000 000 20 a IP20 finger-safe
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported AS-Interface protocol	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported AS-Interface protocol IO-Link protocol	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported AS-Interface protocol IO-Link protocol product function control circuit interface with IO link	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported AS-Interface protocol IO-Link protocol product function control circuit interface with IO link Electromagnetic compatibility	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No
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 B10 value with high 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 Communication/ 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	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No No
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 B10 value with high 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 Communication/ 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-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts
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 B10 value with high 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 Communication/ Protocol 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	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts 2 kV main contacts, 1 kV auxiliary contacts
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 B10 value with high 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 Communication/ 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-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 61000-4-3	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No Vo A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts 2 kV main contacts, 1 kV auxiliary contacts 0.15-80Mhz at 10V
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 B10 value with high 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 Communication/ Protocol product function bus communication protocol is supported AS-Interface protocol i 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	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No No No 1 kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts 2 kV main contacts, 1 kV auxiliary contacts 0.15-80Mhz at 10V
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 B10 value with high 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 Communication/ 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-earth 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	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No No 100 No No No No No No No No No
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 B10 value with high 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 Communication/ 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-earth surge according to IEC 61000-4-5 due to conductor-conductor surge 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	50 % 100 FIT 3 000 000 20 a IP20 finger-safe No No No No No No O No

Supply voltage required Auxiliary voltage	No
Display	
number of LEDs	2
Approvals Cortificatos	

Approvals Certificate

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

Further 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=3RA6120-0DB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-0DB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-0DB30

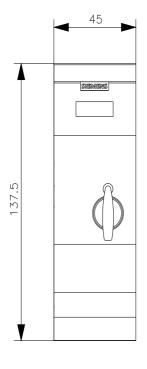
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-0DB30&lang=en

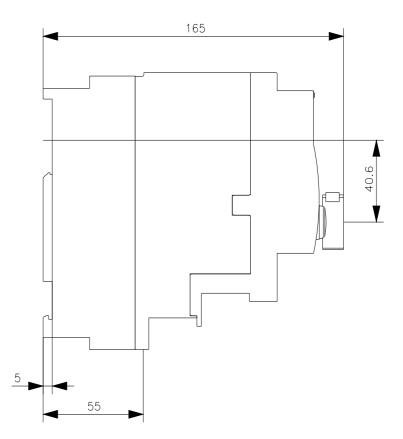
Characteristic: Tripping characteristics, I2t, Let-through current

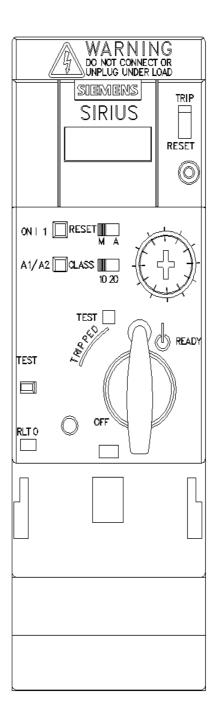
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-0DB30/char

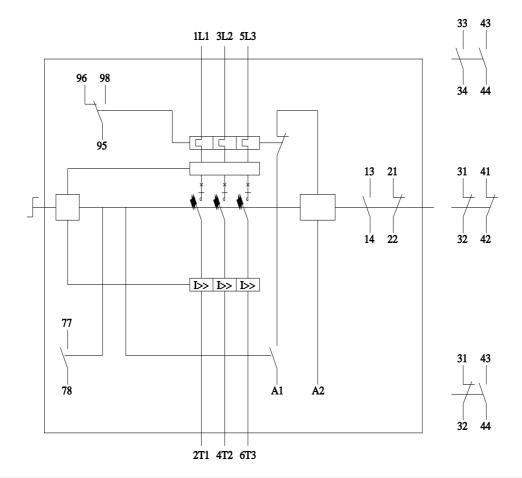
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-0DB30&objecttype=14&gridview=view1









last modified: 8/7/2023 🖸