SIEMENS

Data sheet 3RA6120-1DB32



SIRIUS Compact load feeder DOL starter 690 V 24 V AC/DC 50...60 Hz 3...12 A IP20 Connection main circuit: screw terminal Connection auxiliary circuit: screw terminal

product designation design of the product product type designation General technical data product function control circuit interface to parallel wiring product type designation General technical data product function control circuit interface to parallel wiring product stension auxiliary switch prover 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 • between main and auxiliary circuit • between main and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • of the main contacts typical • of the main contacts typical • of the signaling contacts typical • at AC-15 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 AC-15 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 AC-15 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 AC-15 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 AC-15 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		
design of the product product type designation SRA61 General tochincla data product function control circuit interface to parallel wiring product extension auxillary switch at AC in hot operating state at AC in hot operating state per pole awithout load current share typical awithout load current share typical awithout load current share typical between or pollution surge voltage resistance rated value between auxillary and auxillary circuit between control and auxillary circuit ae6 on vs2 (6g) with 10 ms per 3 shocks in all axes mechanical service life (operating cycles) of the main contacts typical of the main contacts typical of the main contact sypical of the signaling contacts typical of the main contact sypical of the signaling contacts typical of the signaling contacts typical of the main contact sypical of the signaling contacts typical of the si	product brand name	SIRIUS
Product type designation SPA61	product designation	compact starter
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 per pole without load current share typical egree of pollution surge voltage resistance rated value degree of pollution between and auxiliary circuit between main and auxiliary circuit between main and auxiliary circuit between control and auxiliary circuit between ontrol and auxiliary circuit between order of protection NEMA rating control service life (operating cycles) of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical of auxiliary contacts typical of auxiliary contacts typical at AC-15 at 6 A at 24 V typical at AC-15 at 6 A at 23 OV typical at AC-15 at 6 A at 23 OV typical cat AC-15 at 6 A at 24 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat AC-15 at 6 A at 25 OV typical cat	design of the product	direct starter
product function control circuit interface to parallel wiring product extension auxiliary switch yes power loss [W] for rated value of the current	product type designation	3RA61
product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state 1.8 W • at AC in hot operating state per pole 0.6 W • without load current share typical 2.9 W Insulation voltage rated value 6690 V degree of pollution 3 surge voltage resistance rated value 6000 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 sistance are forms 0 ther sistance 0 ther sistance 0 ther signaling contacts typical 0 ther signaling	General technical data	
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at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical sugger of pollution sugger of protective separation between auxiliary and auxiliary circuit between auxiliary and auxiliary circuit sugger of protection NEMA rating shock resistance sugger of protection New rating shock resistance sugger of protection NEMA rating shock resistance sugger of protection NEMA rating shock resistance sugger of protection NEMA rating shock resistance sugger of protection New rating shock resistance sugger of shock sugger of shoc	product extension auxiliary switch	Yes
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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 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 20 000 000 electrical endurance (operating cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical 200 000 type of assignment continuous operation according to IEC 60947-6-2 Treference code according to IEC 81346-2 Q Substance Prohibitance (Date) 05/01/2012 SVHC substance name Lead 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation20 +60 °C • during storage55 +80 °C relative humidity during operation 10 90 %	 without load current share typical 	2.9 W
surge voltage resistance rated value maximum permissible voltage for protective separation • between main and auxiliary circuit • between control and auxiliary circuit • and control of the main contacts typical • of the main contacts typical • of the main 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 • at AC-15 at 6 A at 230 V typical • ontinous operation according to IEC 60947-6-2 Substance Prohibitance (Date) SVHC substance name • Lead - 7433-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead monoxide (lead oxide) - 1317-36-8 Lead monoxide (lead oxide) - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during operation • during storage • during transport -20 +60 °C relative humidity during operation 10 90 %	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 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 • oon time to a coording to IEC 81346-2 Substance Prohibitance (Date) SUSHStance Prohibitance (Date) SUSHStance Prohibitance (Date) SUSHSTANCE AND SUSH AND SUS	degree of pollution	3
 between main and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit 300 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 of auxiliary contacts (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 continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead "7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum a uning operation during storage during storage during transport c55 +80 °C relative humidity during operation 10 90 % 	surge voltage resistance rated value	6 000 V
between auxiliary and auxiliary circuit between control and auxiliary circuit 300 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 auxiliary contacts typical of the signaling contacts typical of the main contacts typical	maximum permissible voltage for protective separation	
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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 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 continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Qubstance Prohibitance (Date) SVHC substance name Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of uning storage of during transport -55 +80 °C relative humidity during operation 10 90 %	 between auxiliary and auxiliary circuit 	250 V
shock resistance mechanical service life (operating cycles) of the main contacts typical of the main contacts typical of the signaling contac	 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 of th	degree of protection NEMA rating	other
 of the main contacts typical 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) 5VHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -20 +60 °C during storage during transport relative humidity during operation 10 90 % 	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 one of the signaling to IEC 81346-2 reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage oduring storage oduring transport relative humidity during operation 10 90 %	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 continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during storage • during transport relative humidity during operation 10 90 %	 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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation -20 +60 °C • during storage • during transport -55 +80 °C relative humidity during operation 10 90 %	 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 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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport -20 +60 °C -55 +80 °C relative humidity during operation 10 90 %	 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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation during storage olduring storage olduring transport relative humidity during operation 10 90 %	electrical endurance (operating cycles) of auxiliary contacts	
type of assignment reference code according to IEC 81346-2 Q Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage oduring storage oduring transport relative humidity during operation 10 90 %	• 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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during storage during transport relative humidity during operation 10 90 %	• at AC-15 at 6 A at 230 V typical	200 000
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during storage during transport relative humidity during operation 10 90 %	type of assignment	continous operation according to IEC 60947-6-2
SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport eduring transport relative humidity during operation Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 2 000 m 2 000 m -20 +60 °C -55 +80 °C -55 +80 °C relative humidity during operation 10 90 %	reference code according to IEC 81346-2	Q
Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport elative humidity during operation Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 2 000 m -20 +60 °C -55 +80 °C -55 +80 °C 10 90 %	Substance Prohibitance (Date)	05/01/2012
installation altitude at height above sea level maximum ambient temperature during operation during storage during transport relative humidity during operation 2 000 m -20 +60 °C -55 +80 °C -55 +80 °C 10 90 %	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8
ambient temperature • during operation • during storage • during transport -55 +80 °C relative humidity during operation -20 +60 °C -55 +80 °C -55 +80 °C	Ambient conditions	
 during operation during storage turing transport telative humidity during operation 	installation altitude at height above sea level maximum	2 000 m
 during storage during transport relative humidity during operation -55 +80 °C 10 90 % 	ambient temperature	
● during transport -55 +80 °C relative humidity during operation 10 90 %	during operation	-20 +60 °C
relative humidity during operation 10 90 %	during storage	-55 +80 °C
relative humidity during operation 10 90 %	during transport	-55 +80 °C
Main circuit	relative humidity during operation	10 90 %
	Main circuit	

number of poles for main current circuit	3
number of poles for main current circuit	3 12 A
adjustable current response value current of the current- dependent overload release	J 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
	0.5 A
operating power ● at AC-3 at 400 V rated value	5.5 kW
• at AC-43	O.O RVV
at AC-43 — at 400 V rated value	5 500 W
	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	
type of voltage	AC/DC
control supply voltage 1 at AC	
at 50 Hz rated value	24 V
at 50 Hz	24 24 V
at 60 Hz rated value	24 V
• at 60 Hz	24 V
control supply voltage frequency	
1 rated value	50 Hz
a 2 voted value	60 Hz
2 rated value	60 FZ
• 2 rated value control supply voltage 1 at DC	00 H2
	24 V
control supply voltage 1 at DC	
control supply voltage 1 at DC • rated value	24 V
control supply voltage 1 at DC • rated value •	24 V
control supply voltage 1 at DC • rated value • holding power	24 V 24 24 V
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum	24 V 24 24 V 2.8 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum	24 V 24 24 V 2.8 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	24 V 24 24 V 2.8 W 2.9 W
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 10 A 0.27 A
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 10 A 0.27 A
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics)	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 CLASS 10 and 20 adjustable
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V rated value	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V rated value • at 690 V rated value	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA 3 kA
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V rated value • at 500 V rated value • at 690 V rated value	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA 3 kA
control supply voltage 1 at DC • rated value • holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V rated value • at 500 V rated value	24 V 24 24 V 2.8 W 2.9 W 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA 3 kA

at COO V rated value	40.4
• 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	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
mounting position recommended	any vertical, on horizontal standard DIN rail
fastening method	screw and snap-on mounting 170 mm
height	170 mm 45 mm
width	
depth Connections/Terminals	165 mm
Connections/ Terminals	Voc
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	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1.5 6 mm²), 1x 10 mm²
 finely stranded with core end processing 	2x (1.5 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 %
B10 value with high demand rate according to SN 31920	3 000 000
failure rate [FIT] with low demand rate according to SN	100 FIT
31920	
IEC 61508	20.0
T1 value for proof test interval or service life according to IEC 61508	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Communication/ Protocol	
product function bus communication	No
protocol is supported	
AS-Interface protocol	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
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, , , , , , , , , , , , , , , , , , , ,

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

General Product Approval



Confirmation









EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







other

Dangerous Good

Environment

Confirmation

Transport Information

Environmental Con-firmations

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=3RA6120-1DB32

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6120-1DB32}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1DB3

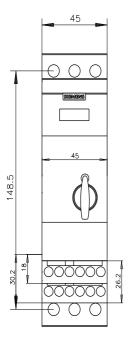
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

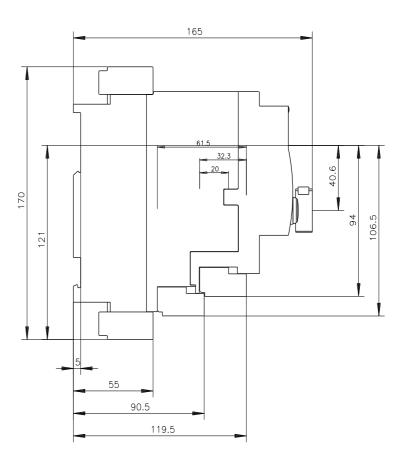
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-1DB32&lang=en

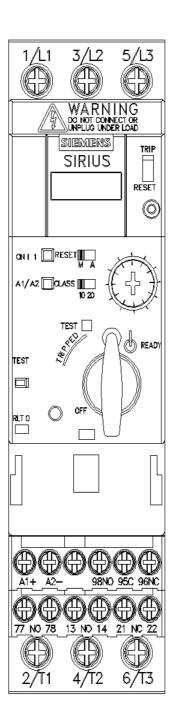
Characteristic: Tripping characteristics, I²t, Let-through current

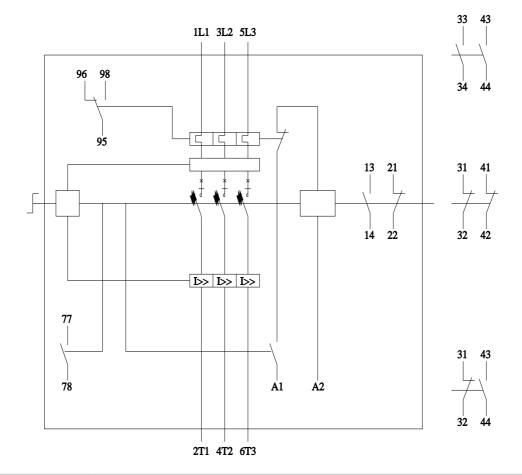
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1DB32/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-1DB32&objecttype=14&gridview=view1









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