SIEMENS

Data sheet 3RA6120-1EB32



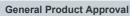
SIRIUS Compact load feeder DOL starter 690 V 24 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: screw terminal Connection auxiliary circuit: screw terminal

product designation design of the product product product type designation 3RA61 General technical data product function control circuit interface to parallel wiring yes product extension auxiliary switch Yes product extension auxiliary switch Yes power loss [W] for rated value of the current • 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 insulation voltage rated value degree of pollution 3 surge voltage resistance rated value • between main and auxiliary circuit • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between fail auxiliary circuit • between control and auxiliary circuit • between main contacts typical • of the signaling contact typical •	product brand name	SIRIUS
product type designation General technical data product function control circuit interface to parallel wiring 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 insulation voltage rated value degree of pollution 3 surge voltage resistance rated value 6 6 000 V maximum permissible voltage for protective separation • between auxiliary and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between technical service life (operating cycles) • of the main contacts typical • of the sipanling contact typical • of the sipa	product designation	compact starter
Central 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 5.4 W • at AC in hot operating state per pole 1.8 W • without load current share typical 3.5 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 400 V • between main and auxiliary circuit 250 V • between control and auxiliary circuit 300 V degree of protection NEMA rating other 300 V degree of protection NEMA rating other 300 V degree of protection NEMA rating other 360 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles of the main contacts typical 10 000 000 000 000 000 000 000 000	design of the product	direct starter
product function control circuit interface to parallel wiring product extension auxiliary switch Pes 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 sharet vpical • without load current sharet vpical insulation voltage rated value 699 V degree of pollution 3 surge voltage resistance rated value 6000 V maximum permissible voltage for protective separation • between main and auxiliary circuit • between auxiliary and auxiliary circuit 250 V • 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 vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes ### vibration resistance ### a=60 m/s2 (6g) with 10 ms pe	product type designation	3RA61
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 operation • at AC in hot operating state per pole • at AC in hot operation • at AC in hot operating state per pole • at AC in hot operation • at AC in hot operation • at AC in hot operating state pe	General technical data	
power loss [W] for rated value of the current at AC in hot operating state 5.4 W at AC in hot operating state per pole 18 W without load current share typical 3.5 W insulation voltage rated value 690 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 other shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s², 10 cycles mechanical service life (operating cycles) of the main contacts typical 10 000 000 of auxiliary contacts typical 10 000 000 of the signaling contacts typical 10 000 000 electrical endurance (operating cycles) of auxiliary contacts at DC -13 at 6 At 24 V typical 20 000 electrical endurance (operating cycles) of auxiliary contacts at DC -13 at 6 At 24 V typical 20 0000 ype of assignment contacts of the continuous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 05/10/2012 SVHC substance name Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation - 20 +60 °C during operation - 40 uring storage - 55 +80 °C	product function control circuit interface to parallel wiring	Yes
at AC in hot operating state at AC in hot operating state per pole without load current share typical without load current share typical surge voltage rated value 690 V degree of pollution 3 surge voltage resistance rated value 6000 V maximum permissible voltage for protective separation between auxiliary and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit between spring that the state of the s	product extension auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical insulation voltage rated value 690 V degree of pollution 3 surge voltage resistance rated value 6000 V maximum permissible voltage for protective separation between main and auxiliary circuit 500 V ebetween auxiliary and auxiliary circuit 500 V between control and auxiliary circuit 500 V 500	power loss [W] for rated value of the current	
without load current share typical insulation voltage rated value degree of pollution surge voltage resistance rated value	 at AC in hot operating state 	5.4 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 navillary and auxiliary circuit • between control 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 vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s², 10 cycles mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of auxiliary contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 • of the 3 at 6 A at 24 V typical 200 000 electrical endurance (operating cycles) of auxiliary contacts • at DC-13 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 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage -55 +80 °C	 at AC in hot operating state per pole 	1.8 W
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 • 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 vibration resistance wibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) • of the main contacts typical 10 000 000 • of auxiliary contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 electrical endurance (operating cycles) of auxiliary contacts • at DC-13 at 6 A at 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 Weight Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage -55 +80 °C	without load current share typical	3.5 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 • other shock resistance • a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance • f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) • of the main contacts typical • of auxiliary contacts typical • of the signaling 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 DC-13 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • continous operation according to IEC 80947-6-2 treference 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 Weight Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -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 degree of protection NEMA rating shock resistance shock resistance 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 wibration resistance	degree of pollution	3
between main and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit other between control and auxiliary circuit other shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles 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 con	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 vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical of the signaling contacts typical	maximum permissible voltage for protective separation	
between control and auxiliary circuit degree of protection NEMA rating shock resistance shock resistance vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of the signaling contacts typical of at 24 V typical at DC-13 at 6 A at 24 V typical at AC-15 at 6 A at 230 V typical other of auxiliary contacts typical other of auxiliary contacts of auxiliary	 between main and auxiliary circuit 	400 V
degree of protection NEMA rating shock resistance shock resistance vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) of the main contacts typical of auxiliary contacts typical of the signaling contacts typical leterical 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 of assignment reference code according to IEC 81346-2 Substance Prohibitance (Date) SYHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation -20 +60 °C -55 +80 °C	 between auxiliary and auxiliary circuit 	250 V
shock resistance vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (operating cycles) e of the main contacts typical for the signaling contacts typical of the signaling contacts typical to 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 type of assignment continous operation 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 Weight Ambient conditions installation altitude at height above sea level maximum ambient temperature e during operation e during storage -20 +60 °C -55 +80 °C	between control and auxiliary circuit	300 V
vibration resistance mechanical service life (operating cycles) of the main contacts typical of the signaling contacts typical of the signal	degree of protection NEMA rating	other
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 • ontinous 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 itianium zirconium oxide - 12626-81-2 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -20 +60 °C • during storage	shock resistance	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes
of the main contacts typical of auxiliary contacts typical of the signaling contacts	vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s ² ; 10 cycles
of auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of the signaling contacts typical old 000 000 electrical endurance (operating cycles) of auxiliary contacts old DC-13 at 6 A at 24 V typical old 000 old AC-15 at 6 A at 230 V typical old 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 Weight Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage 10 000 000 20 000	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 • continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2	 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 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 Weight Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation -20 +60 °C • during storage -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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight 1.594 kg 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 	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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature o during operation other installation altitude at height above sea level maximum -20 +60 °C other installation altitude at height above sea level maximum -20 +60 °C -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 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage continous operation according to IEC 60947-6-2 Q Q SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight - 20 +60 °C - 55 +80 °C	• 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 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -20 +60 °C -55 +80 °C	• 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 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage 05/01/2012 Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 0 0 0 m -20 +60 °C -55 +80 °C	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 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -20 +60 °C -55 +80 °C	reference code according to IEC 81346-2	Q
Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 Weight 1.594 kg Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2 1.594 kg 2 000 m -20 +60 °C -55 +80 °C	Substance Prohibitance (Date)	05/01/2012
Ambient conditions 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	Lead monoxide (lead oxide) - 1317-36-8
installation altitude at height above sea level maximum ambient temperature ● during operation • during storage 2 000 m -20 +60 °C -55 +80 °C	Weight	1.594 kg
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	
3 44 3	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 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-	8 32 A
dependent overload release	6 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	12.07
at AC-3 at 400 V rated value	15 kW
at AC-3 at 400 v Taled value at AC-43	I V KYY
	15 000 W
— 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	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
2 rated value	60 Hz
control supply voltage 1 at DC rated value	24 V
control supply voltage 1 at DC	24 24 V
holding power	
at AC maximum	
• at AC maximum	3.5 W
• at DC maximum	3.5 W 3.1 W
at DC maximum	
at DC maximum Auxiliary circuit	3.1 W
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	3.1 W
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	3.1 W 1 1
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	3.1 W 1 1 1
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	3.1 W 1 1 1 1 1 1 1 10 A
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	3.1 W 1 1 1 1
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	3.1 W 1 1 1 1 1 10 A 0.27 A
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	3.1 W 1 1 1 1 1 1 1 10 A
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)	3.1 W 1 1 1 1 1 1 0 A 0.27 A CLASS 10 and 20 adjustable
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	3.1 W 1 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA
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	3.1 W 1 1 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 1 kA
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	3.1 W 1 1 1 1 1 1 CLASS 10 and 20 adjustable 53 kA
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	3.1 W 1 1 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 1 kA

a at 400 V rated value	22.4
• at 480 V rated value	32 A
yielded mechanical performance [hp] for 3-phase AC motor	7.5 h
• 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
mounting position 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	Yes
control circuit	
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	0.40 - 0.00 4.40 0
• 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	0.5 4 man 2 2 1/0.5 2.5 man 2
— 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 Sofety related date.	2x (20 14)
Safety related data	
proportion of dangerous failures	40.07
with low demand rate according to SN 31920 with high demand rate according to SN 31920	40 %
with high demand rate according to SN 31920 R10 value with high demand rate according to SN 31920	2 000 000
B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	2 000 000 100 FIT
31920	100111
IEC 61508	
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
due to conductor-conductor surge according to IEC	2 kV main contacts, 1 kV auxiliary contacts

61000-4-5	
 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	
Concret Draduct Americal	









Confirmation





EMV Functional Saftey **Test Certificates**

Marine / Shipping





Type Test Certificates/Test Report







other **Environment Dangerous goods**

Confirmation **Transport Information** **Environmental Con**firmations

Further information

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6120-1EB32

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-1EB32

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1EB32

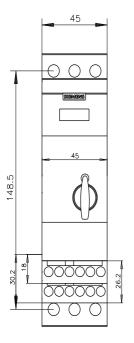
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

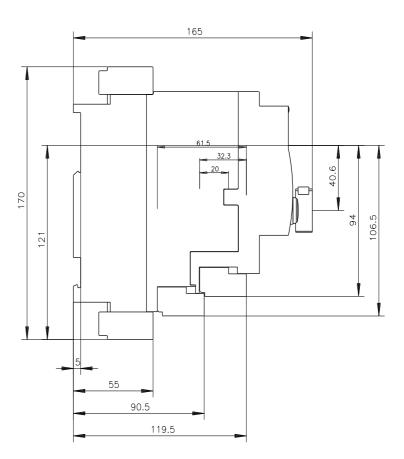
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-1EB32&lang=en

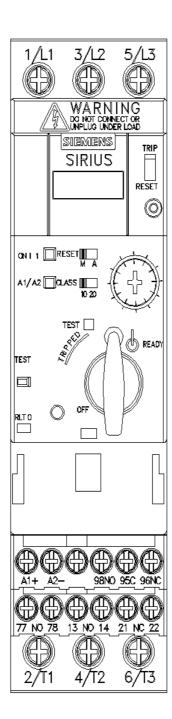
Characteristic: Tripping characteristics, I2t, Let-through current

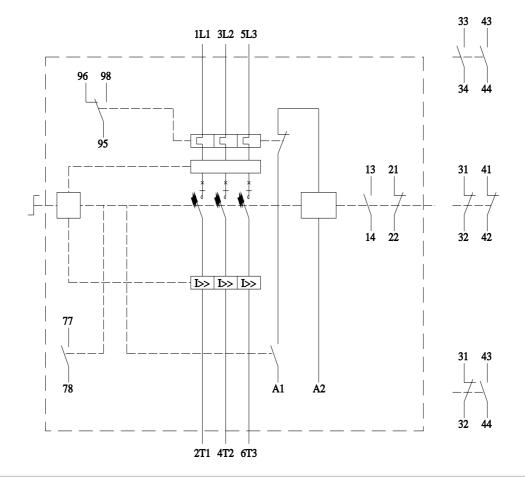
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1EB32/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-1EB32&objecttype=14&gridview=view1









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