SIEMENS

Data sheet 3RA6120-2DP32



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 3...12 A IP20 Connection main circuit: Spring-type terminal Connection auxiliary circuit: Spring-type terminal

product designation design of the product product type designation General technical data product function control circuit interface to parallel wiring product designation product function control circuit interface to parallel wiring product designation product designation Yes product designation Yes power loss [W] for rated value of the current at AC in hot operating state • per pole 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 • between main and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit subtraction resistance • of the main contacts typical • of the main contacts typical • of the signaling 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 23	product brand name	SIRIUS
Product type designation SRA61	product designation	compact starter
product function control circuit interface to parallel wiring product extension auxiliary switch per solver for safed value of the current at AC in hot operating state • per pole • per pole power loss [W] for rated value of the current without load current share typical insulation voltage rated value • ger of pollution surge voltage resistance rated value • between main and auxiliary circuit • between maxiliary and auxiliary circuit • between ontrol and auxiliary circuit • between ontrol and auxiliary circuit • between fortrol and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • for the main contacts typical • of auxiliary contacts typical • of the main contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the signaling contacts typical • of auxiliary con	design of the product	direct 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 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 • between main and auxiliary circuit • between auxiliary circuit • between control and auxiliary circuit • between auxiliary on the state of protection NEMA rating shock resistance vibration resistance if 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the signaling contacts typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical type of assignment reference code acc. to IEC 81346-2 Q Substance Prohibitonace (Date) Ambient temperature during operation • ambient temperature during operation • ambient temperature during storage - 20 +60 °C - 55 +80 °C	product type designation	3RA61
product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole 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 • between main and auxiliary circuit • 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 reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions e ambient temperature during operation • ambient temperature during storage 1.8 W 1.8 W 1.8 W 6 W 6 W 6 W 6 W 6 W 6 W 6 W	General technical data	
power loss [W] for rated value of the current at AC in hot operating state • per pole • per pole power loss [W] for rated value of the current without load current share typical insulation voltage rated value • 690 V • degree of pollution • 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 share atting • both resistance • a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes • vibration resistance mechanical service life (switching cycles) • of the main contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the signaling contacts typical • of the C-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	product function control circuit interface to parallel wiring	Yes
	product extension auxiliary switch	Yes
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 • between main and auxiliary circuit • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit shock resistance in a =60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance if = 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (switching 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 DC-13 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • ot at C-15 at 6 A at 230 V typical continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Quality contacts Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during storage	,	1.8 W
insulation voltage rated value degree of pollution surge voltage resistance rated value ebetween main and auxiliary circuit between namin and auxiliary circuit between control and auxiliary circuit control nesistance reference code acc. to IEC 81346-2 Substance Prohibitance (Date) a the voltage for safe isolation 690 V 400 V	• per pole	0.6 W
degree of pollution surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit shock resistance • a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance ref + 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles rechanical service life (switching 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 • continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Substance Prohibitance (Date) installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during storage		6 W
surge voltage resistance rated value maximum permissible voltage for safe isolation • 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 ribration resistance mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 23 V typical • at AC-15 at 6 A at 23 V typical other shock resistance 10 000 000 10 000 000 electrical endurance (switching cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 23 V typical other stage of m/s2 (6g) with 10 ms per 3 shocks in all axes f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles 10 000 000 10 000 000 other signaling contacts typical electrical endurance (switching cycles) of auxiliary contacts other signaling contacts typical electrical endurance (switching cycles) of auxiliary contacts other signaliance contacts typical 10 000 000 electrical endurance (switching cycles) of auxiliary contacts other signaliance contacts typical other signaliance contacts typical 10 000 000 other signaliance contacts contacts continuous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) 10 000 000 other signaliance contacts contacts contacts continuous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) 10 000 000 other signaliance contacts contact	insulation voltage rated value	690 V
maximum permissible voltage for safe isolation • 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 f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (switching cycles) • of the main contacts typical • of auxiliary 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 AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical value of assignment continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during storage -20 +60 °C -55 +80 °C	degree of pollution	3
between main and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit 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 (switching 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 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 vat AC-15 at 6 A at 230 V typical vat AC-15 at 6 B at 230 V typical vat AC-15 at 6 A at 230 V typical		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 vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (switching 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 Activation of the signaling cycles of auxiliary contacts oat DC-13 at 6 A at 24 V typical oat AC-15 at 6 A at 230 V typical oat AC-15 at 6 A at 230 V typical vertical endurance (Date) Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum oambient temperature during operation oambient temperature during storage 20 +60 °C obs in the signal auxiliary circuit 300 V degree of protection NEMA rating other 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 index of the signal axes index of the signal axes index of the signal axes on shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes index of the signal axes index of the signal axes index of the signal axes on shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes index of the signal axes	maximum permissible voltage for safe isolation	
between control and auxiliary circuit degree of protection NEMA rating shock resistance	 between main and auxiliary circuit 	400 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 (switching cycles) 10 000 000 • of the main contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 electrical endurance (switching cycles) of auxiliary contacts 30 000 • at DC-13 at 6 A at 24 V typical 200 000 • 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 acc. to IEC 81346-2 Q Substance Prohibitance (Date) 01.05.2012 00:00:00 Ambient conditions installation altitude at height above sea level maximum 2 000 m • ambient temperature during operation -20 +60 °C • ambient temperature during storage -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 (switching cycles) of the main contacts typical for fthe signaling contacts typ	between control and auxiliary circuit	300 V
vibration resistance f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles mechanical service life (switching cycles) 10 000 000 • of the main contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 electrical endurance (switching cycles) of auxiliary contacts 30 000 • at DC-13 at 6 A at 24 V typical 200 000 • 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 acc. to IEC 81346-2 Q Substance Prohibitance (Date) 01.05.2012 00:00:00 Ambient conditions installation altitude at height above sea level maximum 2 000 m • ambient temperature during operation -20 +60 °C • ambient temperature during storage -55 +80 °C	degree of protection NEMA rating	other
mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical of the signaling contacts typical of th	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 typical 10 000 000 electrical endurance (switching 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 acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage -20 +60 °C ambient temperature during storage 	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 electrical endurance (switching 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 other independent of the signal o	mechanical service life (switching cycles)	
 of the signaling contacts typical electrical endurance (switching 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 reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation -20 +60 °C ambient temperature during storage 10 000 000 000 000<td> of the main contacts typical </td><td>10 000 000</td>	 of the main contacts typical 	10 000 000
electrical endurance (switching 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 acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -20 +60 °C • ambient temperature during storage	 of auxiliary contacts typical 	10 000 000
ontacts output at DC-13 at 6 A at 24 V typical output at AC-15 at 6 A at 230 V typical type of assignment continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum output ambient temperature during operation output and and at 24 V typical 200 000 01.05.2012 00:00:00 200 000 -20 +60 °C output ambient temperature 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 acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ● ambient temperature during operation • ambient temperature during storage 200 000 200 000 200 000 -20 +60 °C -55 +80 °C		
type of assignment reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage continous operation according to IEC 60947-6-2 Q 01.05.2012 00:00:00 2 000 m -20 +60 °C -55 +80 °C	at DC-13 at 6 A at 24 V typical	30 000
reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -55 +80 °C	● at AC-15 at 6 A at 230 V typical	200 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -20 +60 °C -55 +80 °C	type of assignment	continous operation according to IEC 60947-6-2
Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -20 +60 °C -55 +80 °C	reference code acc. to IEC 81346-2	Q
installation altitude at height above sea level maximum ■ ambient temperature during operation ■ ambient temperature during storage 2 000 m -20 +60 °C -55 +80 °C	Substance Prohibitance (Date)	01.05.2012 00:00:00
 ambient temperature during operation ambient temperature during storage -20 +60 °C -55 +80 °C 	Ambient conditions	
• ambient temperature during storage -55 +80 °C	installation altitude at height above sea level maximum	2 000 m
5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 ambient temperature during operation 	-20 +60 °C
	ambient temperature during storage	-55 +80 °C
	·	-55 +80 °C

relative humidity during operation	10 90 %
Main circuit	
	2
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 breaking capacity limit current	10 x le
yielded mechanical performance for 4-pole AC motor	10 x 16
at 400 V rated value	5.5 kW
at 500 V rated value at 500 V rated value	5.5 kW
at 690 V rated value 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-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 acc. to IEC 60947-6-2 maximum	750 1/h
 at AC-43 acc. to IEC 60947-6-2 maximum 	250 1/h
Control circuit/ Control	
tune of voltage	ACIDO
LVDE OT VOITAGE	AC/DC
type of voltage control supply voltage 1 at AC	AC/DC
control supply voltage 1 at AC	
control supply voltage 1 at AC • at 50 Hz	110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz	
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency	110 240 V 110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value	110 240 V 110 240 V 50 Hz
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value	110 240 V 110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value	110 240 V 110 240 V 50 Hz
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC	110 240 V 110 240 V 50 Hz 60 Hz
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC holding power	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC holding power • at AC maximum • at DC maximum	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC holding power • at AC maximum • at DC maximum Auxiliary circuit	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value control supply voltage 1 at DC holding power at AC maximum at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value control supply voltage 1 at DC holding power at AC maximum at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value control supply voltage 1 at DC 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	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value control supply voltage 1 at DC 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 release for signaling contact	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency • 1 rated value • 2 rated value control supply voltage 1 • at DC 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	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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 release for signaling contact operational current of auxiliary contacts at AC-12 maximum	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W 1 1 1 1 10 A
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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 breaking capacity operating short-circuit current (Ics)	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W 1 1 1 1 CLASS 10 and 20 adjustable
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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 breaking capacity operating short-circuit current (Ics) at 400 V	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W 1 1 1 1 10 A 0.27 A
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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 breaking capacity operating short-circuit current (Ics) at 400 V at 500 V rated value	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W 1 1 1 1 CLASS 10 and 20 adjustable 53 kA 3 kA
control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 rated value 2 rated value at DC 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 breaking capacity operating short-circuit current (Ics) at 400 V	110 240 V 110 240 V 50 Hz 60 Hz 110 240 V 6 W 5.1 W 1 1 1 1 CLASS 10 and 20 adjustable 53 kA

full-load current (FLA) for 3-phase AC motor			
 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	electromagnetic		
for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A		
required			
 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 mounting rail		
fastening method	screw and snap-on mounting		
height	191 mm		
width	45 mm		
depth	165 mm		
Connections/ Terminals			
product function			
removable terminal for main circuit	Yes		
removable terminal for auxiliary and control circuit	Yes		
type of electrical connection	163		
for main current circuit	opring loaded terminals		
for auxiliary and control circuit	spring-loaded terminals		
<u> </u>	spring-loaded terminals		
type of connectable conductor cross-sections			
• for main contacts	0 (4.5 0 2) 4 40 2		
— solid	2x (1.5 6 mm²), 1x 10 mm²		
 finely stranded with core end processing 	2x (1.5 6 mm²)		
 finely stranded without core end processing 	2x (1.5 6 mm²)		
at AWG cables for main contacts	2x (16 10), 1x 8		
type of connectable conductor cross-sections			
 for auxiliary contacts 			
— solid	2x (0.25 1.5 mm²)		
 finely stranded with core end processing 	2x (0.25 1.5 mm²)		
 finely stranded without core end processing 	2x (0.25 1.5 mm²)		
 at AWG cables for auxiliary contacts 	2x (24 16)		
Safety related data			
B10 value with high demand rate acc. to SN 31920	3 000 000		
proportion of dangerous failures			
 with low demand rate acc. to SN 31920 	40 %		
 with high demand rate acc. to SN 31920 	50 %		
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT		
T1 value for proof test interval or service life acc. to IEC 61508	20 y		
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 acc. to IEC 61000-4-4	4 kV main contacts, 2 kV auxiliary contacts				
 due to conductor-earth surge acc. to IEC 61000-4-5 	4 kV main contacts, 2 kV auxiliary contacts				
 due to conductor-conductor surge acc. to IEC 61000-4-5 	2 kV main contacts, 1 kV auxiliary contacts				
 due to high-frequency radiation acc. to IEC 61000- 4-6 	0.15-80Mhz at 10V				
field-based interference acc. to IEC 61000-4-3	10 V/m				
electrostatic discharge acc. to IEC 61000-4-2	8 kV				
conducted HF interference emissions acc. to CISPR11	150 kHz 30 MHz Class A				
field-bound HF interference emission acc. to CISPR11	30 1000 MHz Class A				
Supply voltage					
Supply voltage required Auxiliary voltage	No				
Display					
number of LEDs	2				
Certificates/ approvals					
General Product Approval		EMC	Functional Safety/Safety of Machinery		













Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Type Test Certificates/Test Report







Marine / Shipping

other









Confirmation

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=3RA6120-2DP32

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6120-2DP32}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2DP3

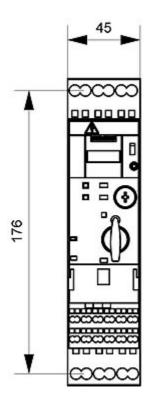
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

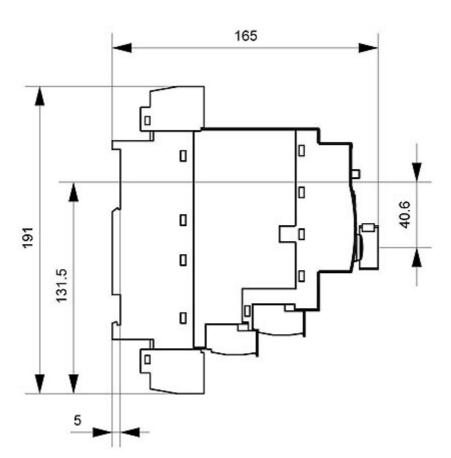
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-2DP32&lang=en

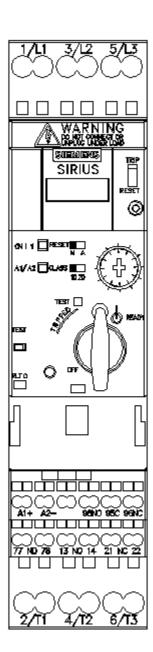
Characteristic: Tripping characteristics, I2t, Let-through current

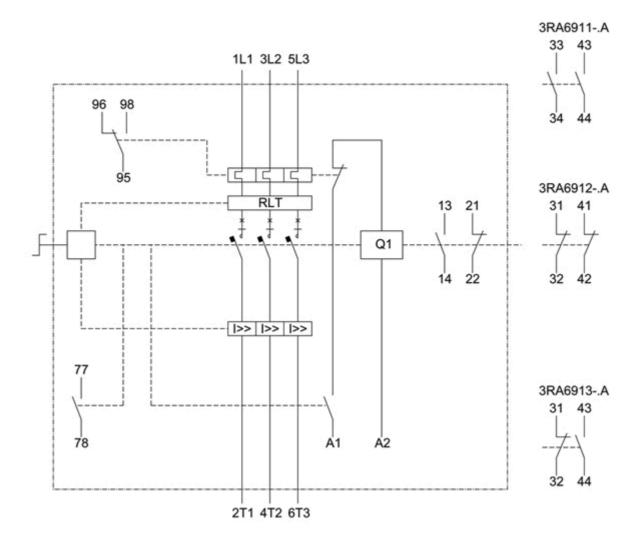
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2DP32/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-2DP32&objecttype=14&gridview=view1









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