SIEMENS

Data sheet 3RA6120-2AP32



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 0.1...0.4 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 growth type designation Sense of the main substance and 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 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 shock resistance vibration resistance mechanical service life (switching cycles) • of the main 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 230 V typical verification and survine (Date) Ambient conditions installation altitude at height above sea level maximum • ambient temperature during torsage • feech in the signation of the conditions direct starter direct starter 3RA61 3RA61 3RA61 3RA61 3RA61 3RA61 3RA61 3RA61 3RA61 48 49 49 49 40 40 40 40 40 40 40	product brand name	SIRIUS
Product type designation SRA61	product designation	compact starter
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 • 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 maximum permissible voltage for safe isolation • between main and auxiliary circuit • between maxiliary and auxiliary circuit • between nortrol and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between 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 • of auxiliary contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of the signaling contacts typical • of auxiliary contacts typical • of a	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 and auxiliary circuit • between control in the wind auxiliary circuit • between control and auxiliary circuit • between control in the wind auxiliary circuit • between control and auxiliary circuit • between auxiliary circuit • between auxiliary circuit • between auxiliary circuit • between auxiliary circuit • ae60 m/s2 (6g) with 10 ms per 3 shocks in all axes vibration resistance	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 • 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 fain and auxiliary circuit • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between self for the main contacts typical shock resistance reference code acc. to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions • ambient temperature during operation • ambient temperature during operation • ambient temperature during poration • ambient temperature during storage 0.01 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 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 tating shock resistance mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of the signaling contacts typical • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 At 25 at 6 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 • other shock 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 auxiliary contacts typical • of the signaling contacts t	,	0.01 W
insulation voltage rated value degree of pollution surge voltage resistance rated value between main and auxiliary circuit between auxiliary and auxiliary circuit between other of protection NEMA rating shock resistance vibration resistance mechanical service life (switching cycles) of the main 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 value of axiliary contacts reference code acc. to IEC 81346-2 Substance Prohibitance (Date installation altitude at height above sea level maximum and auxiliary coracte 690 V 400 V	• per pole	0.01 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 • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • and ck resistance • and on/s2 (6g) with 10 ms per 3 shocks in all axes • therefore is mm; f= 5.8 500 Hz, a= 20 m/s²; 10 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 • continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Substance Prohibitance (Date) • anbient conditions 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 control 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 • 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 • at AC-15 at 6 A at 230 V typical reference code acc. to IEC 81346-2 Substance Prohibitance (Date) notations installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage 6 000 V 400 V	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 the signaling contacts typical • 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 200 000 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 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 dauxiliary 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 other at AC-15 at 6 A at 230 V typical vat AC-15 at 6 A at 230 V typical other continous operation according to IEC 60947-6-2 reference code acc. to IEC 81346-2 Q Substance Prohibitance (Date) other ambient temperature during operation ambient temperature during operation ambient temperature during storage other ambient temperature during storage other another shock in all axes another shock in all axes other another shock in all axes other another shock in all axes another shock in all axes other another shock in all axes another shock in all axes other another shock in all axes another shock in all axes other another shock in all axes another shock in all axes other another shock in all axes another shock in all		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 auxiliary contacts or at DC-13 at 6 A at 24 V typical or at AC-15 at 6 A at 230 V typical or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 230 V typical vertical endurance (switching cycles) of auxiliary contacts or at AC-15 at 6 A at 24 V typical vertical endurance (switching cycles) of auxiliary contacts vertical en	maximum permissible voltage for safe isolation	
between control and auxiliary circuit degree of protection NEMA rating shock resistance	•	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 • 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 2 000 m 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 of the signaling contacts typica	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 01.05.2012 00:00:00 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 of the signaling contacts typical of the signa	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 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 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 	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 auxiliary 30 000 200 000 Q 01.05.2012 00:00:00 2 000 m -20 +60 °C -55 +80 °C 	 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 Q 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
e at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical type of assignment reference code 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 30 000 200 000 200 000 Q 01.05.2012 00:00:00 -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 acc. to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum e ambient temperature during operation ambient temperature during storage 200 000 201.05.2012 00:00:00 200 m -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
2	 ambient temperature during operation 	-20 +60 °C
	ambient temperature during storage	-55 +80 °C
	ambient temperature during transport	-55 +80 °C

relative humidity during operation	10 90 %
Main circuit	10 00 /0
	2
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	0.1 0.4 A
formula for making capacity limit current	120 x le
formula for breaking capacity limit current	100 x le
yielded mechanical performance for 4-pole AC motor	100 X 10
at 400 V rated value	0.09 kW
at 500 V rated value at 500 V rated value	0.12 kW
at 690 V rated value	0.18 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
at AC at 400 V rated value	0.4 A
• at AC-43	
— at 400 V rated value	0.3 A
— at 500 V rated value	0.32 A
— at 690 V rated value	0.35 A
operating power	
at AC-3 at 400 V rated value	90 W
• at AC-43	
— at 400 V rated value	90 W
— at 500 V rated value	120 W
— at 690 V rated value	180 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	
type of voltage	AC/DC
type of voltage control supply voltage 1 at AC	AC/DC
	AC/DC 110 240 V
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	110 240 V
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 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	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	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 holding power • at AC 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
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 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 of instantaneous short-circuit trip	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	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 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 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 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 • 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 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 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 • 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 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 • 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 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 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 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
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 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 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 1 10 A 0.27 A

full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	0.4 A
at 600 V rated value	0.4 A
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300
Short-circuit protection	
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A
 for short-circuit protection of the signaling switch of the short-circuit release required 	6A gL/gG/400V
 for short-circuit protection of the signaling switch of the overload release required 	4A gL/gG/400V
Installation/ mounting/ dimensions	
mounting position	any
• recommended	vertical, on horizontal standard 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	
 for main current circuit 	spring-loaded terminals
for auxiliary and control circuit	spring-loaded 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)
 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
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. 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	
223401040001100	

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=3RA6120-2AP32

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-2AP32

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2AP32

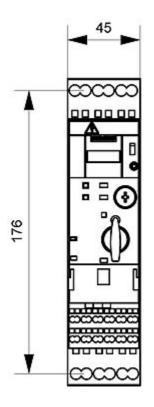
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

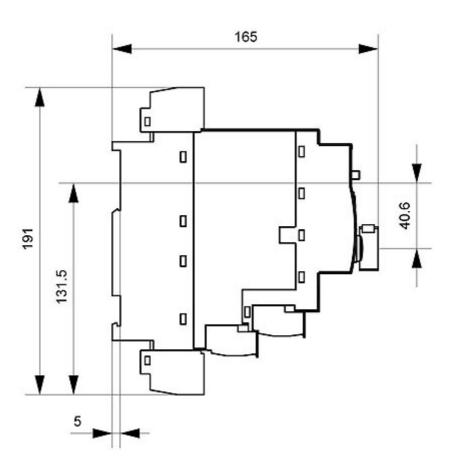
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6120-2AP32&lang=en

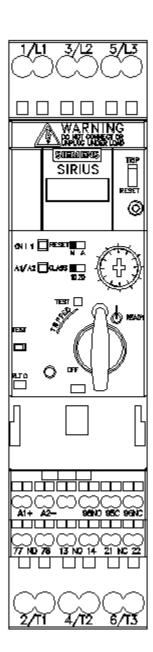
Characteristic: Tripping characteristics, I2t, Let-through current

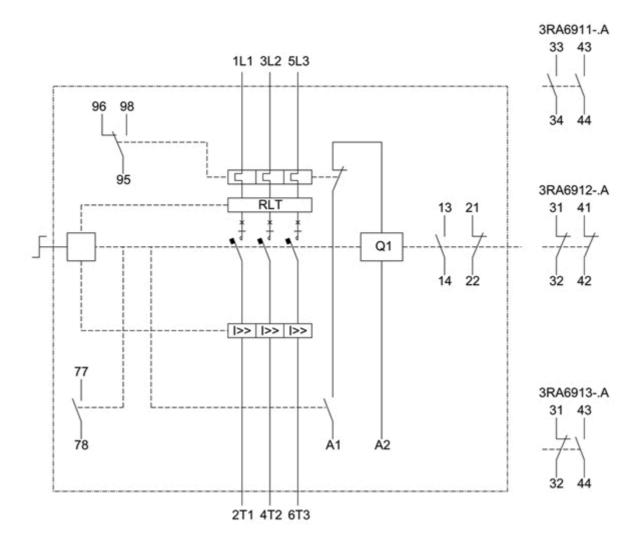
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2AP32/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-2AP32&objecttype=14&gridview=view1









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