## **SIEMENS**

Data sheet 3RA6120-1CB34



SIRIUS Compact load feeder DOL starter 690 V 24 V AC/DC 50...60 Hz 1...4 A IP20 Connection main circuit: screw terminal Connection auxiliary circuit: plug-in, without terminals

product designation design of the product product type designation General technical data product type designation General technical data product tunction control circuit interface to parallel wiring product tunction 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 • 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 680 V 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 auxiliary and auxiliary circuit  • a to a t	product brand name	SIRIUS
product type designation   SRA61	product designation	compact starter
Product function control circuit interface to parallel wiring	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 = 1 W  • at AC in hot operating state per pole 0.33 W  • without load current share typical 2.9 W  insulation voltage rated value 660 V  degree of pollution 3  surge voltage resistance rated value 6000 V  maximum permissible voltage for protective separation  • between main and auxiliary circuit 400 V  • between auxiliary and auxiliary circuit 250 V  • between control and auxiliary circuit 300 V  degree of protection NEMA rating 0ther shock resistance a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes fea 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 the signaling 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 0000  type of assignment contacts of the contact of the contacts of the contact of the	product type designation	3RA61
product extension auxillary switch power loss [W] for rated value of the current  • at AC in hot operating state   1 W  • at AC in hot operating state per pole   0,33 W  • without load current share typical   2.9 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   250 V • between auxiliary and auxiliary circuit   250 V • between control and auxiliary circuit   300 V  degree of protection NEMA rating   0ther shock resistance   a=60 ms2 (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 the signaling contacts typical   10 000 000 • of the signaling contacts typical   10 000 000 • of the signaling contacts typical   10 000 000 • of the signaling contacts typical   200 000 • of the signaling contacts typical   200 000 • at AC-15 at 6 At 24 V typical   200 000 • at AC-15 at 6 At 24 V typical   200 000  * of auxiliary contacts typical   200 000 • at AC-15 at 6 At 24 V typical   200 000  * substance Prohibitance (Date)   05/01/2012  Ambient conditions  installation altitude at height above sea level maximum   2 000 m    ambient temperature   4 during tansport   -20 +60 °C   • during tansport   -55 +80 °C   relative humidity during operation   10 90 %  Main circuit	General technical data	
power loss [W] for rated value of the current  • at AC in hot operating state • at AC in hot operating state pole • without load current share typical • power of pollution  surge voltage resistance rated value • 6000 V  maximum permissible voltage for protective separation • between main and auxiliary circuit • between main and auxiliary circuit • between auxiliary and auxiliary circuit • between control and suxiliary circuit • other • between auxiliary and auxiliary circuit • other • shock resistance • fe4 5.8 Hz, d= 15 mm; fe 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 williary 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 24 V typical • at AC-15 at 6 A at 230 V typical  value of auxiliary contacts • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A at 24 V typical	product function control circuit interface to parallel wiring	Yes
at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical insulation voltage rated value degree of pollution 3 surge voltage resistance rated value maximum permissible voltage for protective separation between main and auxiliary circuit between auxiliary and auxiliary circuit between auxiliary and auxiliary circuit between control and auxiliary circuit between control and auxiliary circuit degree of protection NEMA rating shock resistance fe 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 suxiliary contacts typical of the signaling contacts typical at DC-13 at 6 A at 24 V typical at DC-13 at 6 A at 220 V typical at DC-15 at 6 A at 230 V typical continuous operation according to IEC 80947-6-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) of uning operation -20 +60 °C -4 udring storage -4 during transport relative humidity during operation  Main circuit	product extension auxiliary switch	Yes
at AC in hot operating state per pole  without load current share typical insulation voltage rated value degree of pollution surge voltage resistance rated value between main and auxiliary circuit between namin and auxiliary circuit between control and auxiliary circuit and there between control and auxiliary circuit between control and auxiliary circuit and there between control and auxiliary circuit and vive and auxiliary circuit and v	power loss [W] for rated value of the current	
without load current share typical   2.9 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 main and auxiliary circuit   300 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     of the main contacts typical   10 000 000     of auxiliary contacts typical   10 000 000     of the signaling contacts typical   10 000 000     of the signaling contacts typical   10 000 000     electrical endurance (operating cycles) of auxiliary contacts     at DC-13 at 6 A at 24 V typical   30 000     at AC-15 at 6 A at 230 V typical   200 000     type of assignment   continous operation according to IEC 60947-6-2     Substance Prohibitance (Date)   05/01/2012     Ambient conditions   contact typical   200 000     ambient temperature   during operation   -20 +60 °C     during storage   -55 +80 °C     relative humidity during operation   10 90 %	<ul> <li>at AC in hot operating state</li> </ul>	1 W
Insulation voltage rated value  degree of pollution  surge voltage resistance rated value  maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between 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  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 signaling contacts typical  • of auxiliary contacts typical  • of the 3 at 3 A 23 V typical  • at DC-13 at 6 A at 23 V typical  • at AC-15 at 6 A at 23 V typical  • at AC-15 at 6 A at 23 V typical  • at AC-15 at 6 A at 23 V typical  • of assignment  continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Quo 000  type of assignment  continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Quo 000  diving transport  • during operation  -20 +60 °C  -40 uring transport  -55 +80 °C  relative humidity during operation  10 90 %  Main circuit	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.33 W
degree of pollution  surge voltage resistance rated value  maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between auxiliary and auxiliary circuit  • between control and auxiliary circuit  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  fe 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 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  • onlinous operation according to IEC 60947-6-2  Teference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  -20 +60 °C  relative humidity during operation  10 90 %  Main circuit	without load current share typical	2.9 W
surge voltage resistance rated value  maximum permissible voltage for protective separation  • between amin and auxiliary circuit  • between auxiliary and auxiliary circuit  • between control and auxiliary circuit  • 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 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 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 • of auxiliary contacts typical • of the signaling contacts typical • of the signaling contacts (operating cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • at AC-15 at 6 A at 230 V typical • other conditions  type of assignment continous operation according to IEC 60947-6-2  Q Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature • during operation • during storage • during transport -55 +80 °C relative humidity during operation  10 90 %  Main circuit	degree of pollution	3
between main and auxiliary circuit     between auxiliary and auxiliary circuit     between control and auxiliary circuit     other     shock resistance     pribration resistance     vibration resistance     in an interest of the main contacts typical     of the main contacts typical     of the signaling contacts typical     on th	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 auxiliary contacts typical of the signaling contacts typical of the signaling contacts typical of auxiliary contacts (operating cycles) of auxiliary contacts at DC-13 at 6 A at 24 V typical at AC-15 at 6 A at 230 V typical type of assignment reference code according to IEC 81346-2 Question of auxiliary contacts of a continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 Question of auxiliary contacts of a continous operation according to IEC 60947-6-2 reference code according to IEC 81346-2 question of according to IEC 81346-2 question of according to IEC 81346-2 question of according to IEC 60947-6-2 reference code according to IEC 81346-2 question of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 60947-6-2 reference of according to IEC 81346-2 question of according to IEC 81346-	maximum permissible voltage for protective separation	
between control and auxiliary circuit      degree of protection NEMA rating     shock resistance     vibration resistance     vibration resistance     fe 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 AC-15 at 6 A at 230 V typical             • at AC-15 at 6 A at 230 V typical             • on the signaling to time to time to time to time to the time to t	<ul> <li>between main and auxiliary circuit</li> </ul>	400 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 10 000 000 • of the signaling contacts typical 10 000 000  electrical endurance (operating cycles) of auxiliary contacts • at DC-13 at 6 A at 24 V typical 200 000  type of assignment continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum 2 000 m  ambient temperature • during operation • during storage • during transport -55 +80 °C relative humidity during operation 10 90 %  Main circuit	<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	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)  of the main contacts typical of the signaling contact	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 (operating cycles)       10 000 000         • of the main contacts typical       10 000 000         • of the signaling contacts typical       10 000 000         • of the signaling contacts typical       10 000 000         • electrical endurance (operating cycles) of auxiliary contacts       30 000         • at DC-13 at 6 A at 24 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)       05/01/2012         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       4 during operation       -20 +60 °C         • during storage       -55 +80 °C         • during transport       -55 +80 °C         relative humidity during operation       10 90 %         Main circuit	degree of protection NEMA rating	other
mechanical service life (operating cycles)  of the main contacts typical  of auxiliary contacts typical  of the signaling contacts  of the signaling co	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     one contacts typical	vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles
of auxiliary contacts typical     of the signaling contacts typical     of the signaling contacts typical     leectrical endurance (operating cycles) of auxiliary contacts     out DC-13 at 6 A at 24 V typical     out AC-15 at 6 A at 230 V typical     out AC-15 at 6 A at 230 V typical     vertical endurance (operating cycles) of auxiliary contacts     out AC-15 at 6 A at 230 V typical     vertical endurance (operating cycles) of auxiliary contacts     out AC-15 at 6 A at 230 V typical     vertical endurance continuous operation according to IEC 60947-6-2     vertical endurance (operation according to IEC 81346-2     vertical endurance (operation according to IEC 60947-6-2     vertical endura	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	<ul> <li>of the main contacts typical</li> </ul>	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)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  -55 +80 °C  relative humidity during operation  10 90 %  Main circuit	<ul> <li>of auxiliary contacts typical</li> </ul>	10 000 000
<ul> <li>at DC-13 at 6 A at 24 V typical</li> <li>at AC-15 at 6 A at 230 V typical</li> <li>200 000</li> <li>type of assignment</li> <li>continous operation according to IEC 60947-6-2</li> <li>reference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>05/01/2012</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>-20 +60 °C</li> <li>during storage</li> <li>-55 +80 °C</li> <li>eduring transport</li> <li>relative humidity during operation</li> <li>10 90 %</li> <li>Main circuit</li> </ul>	of the signaling contacts typical	10 000 000
<ul> <li>at AC-15 at 6 A at 230 V typical</li> <li>type of assignment</li> <li>continous operation according to IEC 60947-6-2</li> <li>reference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>05/01/2012</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>55 +80 °C</li> <li>during transport</li> <li>eduring operation</li> <li>-55 +80 °C</li> <li>relative humidity during operation</li> <li>Main circuit</li> </ul>	electrical endurance (operating cycles) of auxiliary contacts	
reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  relative humidity during operation  Main circuit  continous operation according to IEC 60947-6-2  Q  Q  Substance Prohibitance (Date)  05/01/2012  2 000 m  2 000 m  -20 +60 °C  -55 +80 °C  -55 +80 °C  relative humidity during operation  10 90 %	• at DC-13 at 6 A at 24 V typical	30 000
reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  relative humidity during operation  Main circuit	• 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 • during storage • during transport • during transport • 20 +60 °C • during transport • 55 +80 °C relative humidity during operation  Main circuit	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 • during storage • during transport  -55 +80 °C  relative humidity during operation  Main circuit	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport • during transport • 10 90 %  Main circuit	Substance Prohibitance (Date)	05/01/2012
ambient temperature  • during operation  • during storage  • during transport  • during transport  • during transport  • during transport  • 20 +60 °C  -55 +80 °C  relative humidity during operation  10 90 %  Main circuit	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>-55 +80 °C</li> <li>during transport</li> <li>-55 +80 °C</li> <li>relative humidity during operation</li> <li>Main circuit</li> </ul>	installation altitude at height above sea level maximum	2 000 m
<ul> <li>during storage</li> <li>during transport</li> <li>-55 +80 °C</li> <li>relative humidity during operation</li> <li>Main circuit</li> </ul>	ambient temperature	
● during transport -55 +80 °C relative humidity during operation 10 90 %  Main circuit	during operation	-20 +60 °C
relative humidity during operation 10 90 %  Main circuit	during storage	-55 +80 °C
Main circuit	during transport	-55 +80 °C
	relative humidity during operation	10 90 %
number of poles for main current circuit 3	Main circuit	
	number of poles for main current circuit	3

adjustable current response value current of the current-	1 4 A
dependent overload release	
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	1.5 kW
• at 500 V rated value	2.2 kW
at 690 V rated value	3 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
<ul> <li>at AC at 400 V rated value</li> </ul>	4 A
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	4 A
• at AC-43	
— at 400 V rated value	3.6 A
— at 500 V rated value	3.9 A
— at 690 V rated value	3.8 A
operating power	
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	1.5 kW
• at AC-43	
— at 400 V rated value	1 500 W
— at 500 V rated value	2 200 W
— at 690 V rated value	3 000 W
no-load switching frequency	3 600 1/h
operating frequency	
<ul> <li>at AC-41 according to IEC 60947-6-2 maximum</li> </ul>	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
• at DC	24 24 V
holding power	
at AC maximum	2.8 W
at DC maximum	2.9 W
	2.9 W
Auxiliary circuit	
Auxiliary circuit number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts number of NO contacts for auxiliary contacts	1 1
Auxiliary circuit number of NC contacts for auxiliary contacts	1
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	1 1
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	1 1 1
number of NC contacts for auxiliary contacts number of NO 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	1 1 1
number of NC contacts for auxiliary contacts number of NO 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	1 1 1 1 10 A
number of NC contacts for auxiliary contacts number of NO 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	1 1 1 1 10 A
number of NC contacts for auxiliary contacts number of NO 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	1 1 1 1 10 A 0.27 A
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	1 1 1 1 10 A 0.27 A
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 (lcs)	1 1 1 1 1 1 1 0 A 0.27 A  CLASS 10 and 20 adjustable
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	1 1 1 1 1 10 A 0.27 A  CLASS 10 and 20 adjustable
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  • at 500 V rated value • at 690 V rated value	1 1 1 1 1 10 A 0.27 A  CLASS 10 and 20 adjustable  53 kA 3 kA
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  • at 500 V rated value • at 690 V rated value	1 1 1 1 1 10 A 0.27 A  CLASS 10 and 20 adjustable  53 kA 3 kA
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  • at 500 V rated value  • at 690 V rated value	1 1 1 1 1 10 A 0.27 A  CLASS 10 and 20 adjustable  53 kA 3 kA
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)	1 1 1 1 10 A 0.27 A  CLASS 10 and 20 adjustable  53 kA 3 kA 3 kA

yielded mechanical performance [hp] for 3-phase AC motor	
• at 200/208 V rated value	0.75 hp
• at 220/230 V rated value	0.75 hp
• at 460/480 V rated value	2 hp
at 575/600 V rated value	3 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
<ul> <li>for short-circuit protection of the signaling switch of the short-circuit release required</li> </ul>	6A gL/gG/400V
<ul> <li>for short-circuit protection of the signaling switch of the overload release required</li> </ul>	4A gL/gG/400V
Installation/ mounting/ dimensions	
mounting position	any
• recommended	vertical, on horizontal standard DIN rail
fastening method	screw and snap-on mounting
height	170 mm
width	45 mm
depth	165 mm
Connections/ Terminals	
product component removable terminal for main circuit	Yes
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	plug-in without terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1.5 6 mm²), 1x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1.5 6 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm², 2x (0.5 1.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 14)
Safety related data	
B10 value with high demand rate according to SN 31920	3 000 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920	50 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
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
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	2 kV main contacts, 1 kV auxiliary contacts
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>	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
Certificates/ approvals	

**General Product Approval** 

EMC

Functional Safety/Safety of Machinery

Confirmation











**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

**Dangerous Good** 





Confirmation

**Transport Information** 

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6120-1CB34

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-1CB34

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1CB34

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

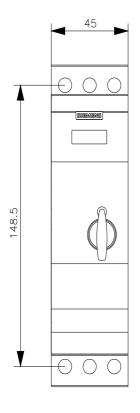
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6120-1CB34&lang=en

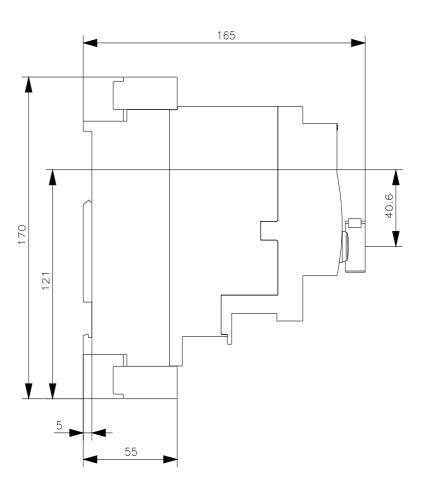
Characteristic: Tripping characteristics, I²t, Let-through current

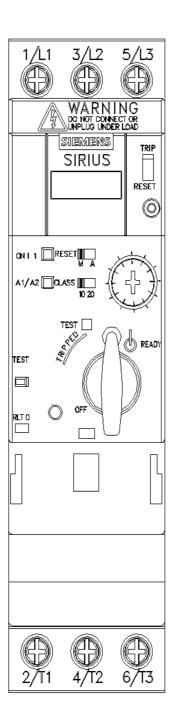
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1CB34/char

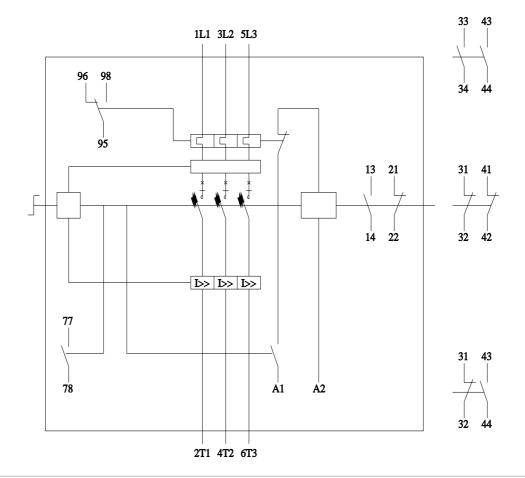
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-1CB34&objecttype=14&gridview=view1









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