## **SIEMENS**

Data sheet 3RA6120-2CP32



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 1...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 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 prole • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical • without load current share typical • degree of pollution 3 surge voltage resistance rated value • between anian and auxiliary circuit • between main and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between control and auxiliary circuit • between orbiton NEMA rating shock resistance  • afo m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  • of the main contacts typical • of the main 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  vertices and a contacts and a contact and a	product brand name	SIRIUS
product type designation  General technical data product function control circuit interface to parallel wiring product extension auxiliary switch  power loss [W] for rated value of the current  • at AC in hot operating state   1 W  • at AC in hot operating state pole   0.33 W  • without load current share typical   6 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 control and auxiliary circuit   300 V  degree of protection NEMA rating   other   300 V  degree of protection NEMA rating   other   300 V  degree of protection NEMA rating   other   360 M/s Rating   360 M/s Rati	product designation	compact starter
Product function control circuit interface to parallel wiring   Yes	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 • at AC in hot operating state per pole • without load current share typical insulation voltage rated value  • degree of pollution  • 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 • of the resistance  • a 60 m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  • a 60 m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  • a 60 m/s2 (6g) with 10 ms per 3 shocks in all axes  • of the main contacts typical • of the main 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  • at AC-15 at 6 A at 230 V typical  • of auxiliary contacts • at DC-13 at 6 A at 230 V typical • of the signaling contact to the contacts • at AC-15 at 6 A at 24 V typical • at AC-15 at 6 A	product type designation	3RA61
product extension auxiliary switch  power loss [W] for rated value of the current  at AC in hot operating state at AC in hot operating state pole at AC in hot operating state per pole without load current share typical be without load current share typical  without load current share typical be without load current share typical  for W  insulation voltage rated value be goo V  degree of pollution surge voltage resistance rated value between duxiliary circuit between auxiliary 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 other shock resistance  a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes  wibration resistance  f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s², 10 cycles  mechanical service life (operating cycles)  of the main contacts typical of auxiliary contacts typical of auxiliary contacts typical 10 000 000  electrical endurance (operating cycles) of auxiliary contacts at DC-13 at 6 A at 24 V typical  et at CC-15 at 6 A at 230 V typical  to continous operation according to IEC 60947-6-2  treference code according to IEC 81346-2 Q Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight	General technical data	
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 6 W insulation voltage rated value 690 V degree of pollution 3 surge voltage resistance rated value 6 000 V maximum permissible voltage for protective separation • between main and auxiliary circuit 400 V • between auxiliary and auxiliary circuit 250 V • between control and auxiliary circuit 300 V degree of protection NEMA rating other shock resistance = a60 m/s2 (6g) with 10 ms per 3 shocks in all axes  **Wibration resistance fet 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s², 10 cycles  mechanical service life (operating cycles) • of the main contacts typical 10 000 000 • of auxiliary contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 • of the signaling contacts typical 10 000 000 • of the C-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 continuous operation according to IEC 60947-6-2  reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 05/01/2012  SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight	product function control circuit interface to parallel wiring	Yes
at AC in hot operating state   at AC in hot operating state per pole   without load current share typical   insulation voltage rated value   degree of pollution   asurge voltage resistance rated value   6000 V  maximum permissible voltage for protective separation   between main and auxiliary circuit   between auxiliary and auxiliary circuit   between control and auxiliary circuit   between control and auxiliary circuit   300 V  degree of protection NEMA rating   shock resistance    "between control in degree of protection state   "between control in degree of protection of the main contacts typical   "between control in degree of protection of the main contacts typical   between control of auxiliary cortacts typical   "between control of the main contacts typical   between control of the main contacts typical	product extension auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical  by without load current share typical  certain voltage rated value  degree of pollution  surge voltage resistance rated value  6 000 V  maximum permissible voltage for protective separation between main and auxiliary circuit  between main and auxiliary circuit  between control and auxiliary circuit  between control and auxiliary circuit  between 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 the signaling contacts typical  at DC-13 at 6 A at 24 V typical  at DC-13 at 6 A at 230 V typical  vertical endurance (operating cycles) of auxiliary contacts  at DC-13 at 6 A at 230 V typical  other according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight	power loss [W] for rated value of the current	
without load current share typical     insulation voltage rated value     degree of pollution     3     surge voltage resistance rated value         6 000 V      maximum permissible voltage for protective separation         • between main and auxiliary circuit         • between auxiliary and auxiliary circuit         • between control and auxiliary circuit         • between control and auxiliary circuit         300 V          degree of protection NEMA rating         shock resistance	<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 auxiliary 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  • 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  electrical endurance (operating cycles) of auxiliary contacts  • at DC-13 at 6 A at 24 V typical  • at DC-15 at 6 A at 230 V typical  200 000  type of assignment  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titralnum zirconium oxide - 12626-81-2  Weight	<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  • between control and auxiliary circuit  • between control and auxiliary circuit  300 V  degree of protection NEMA rating  shock resistance  • a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  • f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles  mechanical service life (operating cycles)  • of the main contacts typical  • of auxiliary contacts typical  • of auxiliary contacts typical  • of 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  • at AC-15 at 6 A at 230 V typical  • at AC-15 at 6 C at 230 V typical  • at Continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titlanium zirconium oxide - 12626-81-2  Weight	without load current share typical	6 W
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  • between control and auxiliary circuit  300 V  degree of protection NEMA rating  shock resistance  a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles  mechanical service life (operating cycles)  • of the main contacts typical  • of auxiliary contacts typical  • of 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  • on the continuous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead ittanium zirconium oxide - 12626-81-2  Weight	insulation voltage rated value	690 V
maximum permissible voltage for protective separation  • between main and auxiliary circuit  • between auxiliary and auxiliary circuit  • between control and auxiliary circuit  • between control and auxiliary circuit  300 V  degree of protection NEMA rating  shock resistance  a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes  vibration resistance  f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles  mechanical service life (operating cycles)  • of the main contacts typical  • of auxiliary contacts typical  • of the signaling contacts typical  • of the signaling contacts typical  • at DC-13 at 6 A at 24 V typical  • at DC-13 at 6 A at 24 V typical  • at AC-15 at 6 A at 230 V typical  • at AC-15 at 6 A at 230 V typical  • of assignment  reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Used - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight	degree of pollution	3
between main and auxiliary circuit     between auxiliary and auxiliary circuit     between control and auxiliary circuit     between control and auxiliary circuit     shock resistance     shock resistance     indicate the main contacts typical     of auxiliary contacts typical     of the signaling contacts typical     of the signaling contacts typical     of the CP-13 at 6 A at 24 V typical     at AC-15 at 6 A at 230 V typical     verificate of assignment     reference code according to IEC 81346-2 Substance Prohibitance (Date)  SVHC substance name  400 V 250 V 260 V 260 V 260 V 300	surge voltage resistance rated value	6 000 V
between auxiliary and auxiliary circuit     between control and auxiliary circuit     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 typical     of the signaling contacts typical     of the 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     ontacts type of assignment     continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  SVHC substance name  Lead -7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight	maximum permissible voltage for protective separation	
between control and auxiliary circuit      degree of protection NEMA rating     other      shock resistance	<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 the signaling contacts typical of the main contacts typical of t	<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 contacts  of the	between control and auxiliary circuit	300 V
vibration resistance  mechanical service life (operating cycles)  of the main contacts typical  of the signaling contacts	degree of protection NEMA rating	other
mechanical service life (operating cycles)  • of the main contacts typical  • of auxiliary contacts typical  • of the signaling contacts typical  • at DC-13 at 6 A at 24 V typical  • at AC-15 at 6 A at 230 V typical  • at AC-15 at 6 A at 230 V typical  • continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight	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     of the signaling con	vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s <sup>2</sup> ; 10 cycles
<ul> <li>of auxiliary contacts typical</li> <li>of the signaling contacts typical</li> <li>10 000 000</li> <li>electrical endurance (operating cycles) of auxiliary contacts</li> <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>continous operation according to IEC 60947-6-2</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>SVHC substance name</li> <li>Lead - 7439-92-1</li> <li>Lead monoxide (lead oxide) - 1317-36-8</li> <li>Lead titanium zirconium oxide - 12626-81-2</li> <li>Weight</li> <li>1.492 kg</li> </ul>	mechanical service life (operating cycles)	
of the signaling contacts typical  electrical endurance (operating cycles) of auxiliary contacts     o at DC-13 at 6 A at 24 V typical     o at AC-15 at 6 A at 230 V typical     otype of assignment     continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	of the main contacts typical	10 000 000
electrical endurance (operating cycles) of auxiliary contacts  • at DC-13 at 6 A at 24 V typical  • at AC-15 at 6 A at 230 V typical  200 000  type of assignment continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	<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>SVHC substance name</li> <li>Lead - 7439-92-1</li> <li>Lead monoxide (lead oxide) - 1317-36-8</li> <li>Lead titanium zirconium oxide - 12626-81-2</li> <li>Weight</li> <li>1.492 kg</li> </ul>	of the signaling contacts typical	10 000 000
● at AC-15 at 6 A at 230 V typical  type of assignment  continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	electrical endurance (operating cycles) of auxiliary contacts	
type of assignment  continous operation according to IEC 60947-6-2  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	• at DC-13 at 6 A at 24 V typical	30 000
reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	at AC-15 at 6 A at 230 V typical	200 000
Substance Prohibitance (Date)         05/01/2012           SVHC substance name         Lead - 7439-92-1           Lead monoxide (lead oxide) - 1317-36-8         Lead titanium zirconium oxide - 12626-81-2           Weight         1.492 kg	type of assignment	continous operation according to IEC 60947-6-2
SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	reference code according to IEC 81346-2	Q
Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2  Weight  1.492 kg	Substance Prohibitance (Date)	05/01/2012
	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8
Ambient conditions	Weight	1.492 kg
Ambient conditions	Ambient conditions	
installation altitude at height above sea level maximum 2 000 m	installation altitude at height above sea level maximum	2 000 m
ambient temperature	ambient temperature	
• during operation -20 +60 °C	during operation	-20 +60 °C
• during storage -55 +80 °C	during storage	-55 +80 °C
• during transport -55 +80 °C	during transport	-55 +80 °C

relative humidity during operation	10 90 %
Main circuit	
	3
number of poles for main current circuit  adjustable current response value current of the current-	1 4 A
dependent overload release	170
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	
at AC at 400 V rated value	4 A
at AC-3 at 400 V rated value	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	0.07.
at AC-3 at 400 V rated value	1.5 kW
at AC-3 at 400 v rated value     at AC-43	1.0 KVV
	1 500 W
— 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	240 V
● at 50 Hz	110 240 V
● at 60 Hz	110 240 V
control supply voltage frequency	
1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1 at DC rated value	240 V
control supply voltage 1 at DC	110 240 V
holding power	
at AC maximum	6 W
at AC maximum     at DC maximum	6 W
at AC maximum     at DC maximum  Auxiliary circuit	6 W 5.1 W
at AC maximum     at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts	6 W 5.1 W
at AC maximum     at DC maximum  Auxiliary circuit	6 W 5.1 W
at AC maximum     at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	6 W 5.1 W
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	6 W 5.1 W 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	6 W 5.1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
at AC maximum  at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  operating short-circuit current breaking capacity (Ics)	6 W 5.1 W  1 1 1 1 1 1 CLASS 10 and 20 adjustable
at AC maximum  at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  operating short-circuit current breaking capacity (Ics)  at 400 V rated value	6 W 5.1 W  1 1 1 1 1 1 CLASS 10 and 20 adjustable  53 kA
at AC maximum  at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  operating short-circuit current breaking capacity (Ics)  at 400 V rated value  at 500 V rated value	6 W 5.1 W  1 1 1 1 1 1 CLASS 10 and 20 adjustable  53 kA 3 kA
at AC maximum  at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  operating short-circuit current breaking capacity (Ics)  at 400 V rated value  at 500 V rated value  at 690 V rated value	6 W 5.1 W  1 1 1 1 1 1 CLASS 10 and 20 adjustable  53 kA 3 kA
at AC maximum  at DC maximum  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  operating short-circuit current breaking capacity (Ics)  at 400 V rated value  at 690 V rated value  at 690 V rated value  at 690 V rated value	6 W 5.1 W  1 1 1 1 1 1 CLASS 10 and 20 adjustable  53 kA 3 kA

a at 600 V rated value	4.0
• at 600 V rated value	4 A
yielded mechanical performance [hp] for 3-phase AC motor	0.75 ha
• 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	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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
mounting position recommended	vertical, on horizontal standard DIN rail
fastening method	screw and snap-on mounting
height	191 mm
width	45 mm
depth	165 mm
Connections/ Terminals	
product component removable terminal for main circuit	Yes
product component removable terminal for auxiliary and	Yes
control circuit	
type of electrical connection	
for main current circuit	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
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1.5 6 mm²)
finely stranded without core end processing	2x (1.5 6 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.25 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (24 16)
Safety related data	
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %
B10 value with high demand rate according to SN 31920	3 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
IEC 61508	
T1 value for proof test interval or service life according to IEC 61508	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Communication/ Protocol	
product function bus communication	No
protocol is supported	
AS-Interface protocol	No
IO-Link protocol	No
product function control circuit interface with IO link	No
Electromagnetic compatibility	
conducted interference	

<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	4 kV main contacts, 2 kV auxiliary contacts
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	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
Approvals Certificates	
General Product Approval	







Confirmation





**EMV** 

**Functional Saftey** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







other

Dangerous goods

**Environment** 

Confirmation

**Transport Information** 

**Environmental Con**firmations

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6120-2CP32

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6120-2CP32

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2CP3

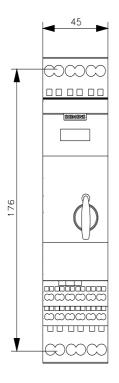
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

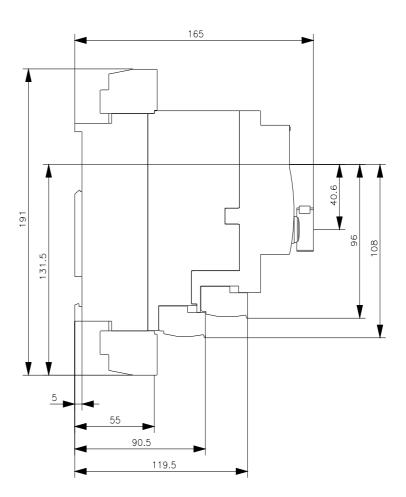
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6120-2CP32&lang=en

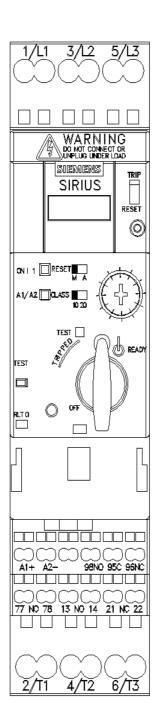
Characteristic: Tripping characteristics, I²t, Let-through current

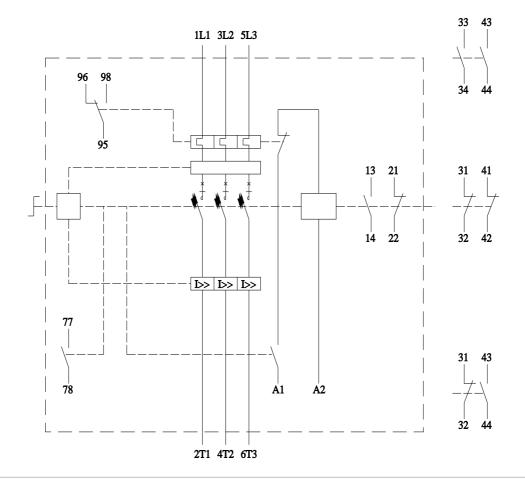
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-2CP32/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-2CP32&objecttype=14&gridview=view1









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