## **SIEMENS**

Data sheet 3RA6120-1CP33



SIRIUS Compact load feeder DOL starter 690 V 110...240 V AC/DC 50...60 Hz 1...4 A IP20 Connection main circuit: plug-in, without terminals Connection auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	compact starter
design of the product	direct starter
product type designation	3RA61
General technical data	
product function control circuit interface to parallel wiring	Yes
product extension auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	1 W
• per pole	0.33 W
power loss [W] for rated value of the current 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 safe isolation	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	250 V
between control and auxiliary circuit	300 V
degree of protection NEMA rating	other
shock resistance	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes
vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s <sup>2</sup> ; 10 cycles
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	10 000 000
<ul> <li>of auxiliary contacts typical</li> </ul>	10 000 000
of the signaling contacts typical	10 000 000
electrical endurance (switching cycles) of auxiliary contacts	
<ul><li>at DC-13 at 6 A at 24 V typical</li></ul>	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
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.05.2012
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
during storage	-55 +80 °C
during transport	-55 +80 °C
relative humidity during operation	10 90 %

adjustable current response value current of the current dependent overboard release of current of the current violed mechanical performance for 4-pole AC motor ** at 400 V reted value ** 2.2 kW ** ** at 500 V reted value ** 2.2 kW ** ** at 500 V reted value ** 2.2 kW ** ** at 600 V reted value ** 2.2 kW ** ** at 600 V reted value ** 4.4 A **	Main circuit	
adjustable current response value current of the current-dependent overload releases   1 4 A		3
1	-	
Violated mechanical performance for 4-pole AC motor		
vielded mechanical performance for 4-pole AC motor   • 14 00 V rated value   2.2 kW	formula for making capacity limit current	12 x le
	formula for breaking capacity limit current	10 x le
	yielded mechanical performance for 4-pole AC motor	
• at 890 V rated value operating voltage at AC-3 rated value maximum operational current  • at AC at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value — at 590 V rated value — at 590 V rated value — at 590 V rated value • at AC-3 at 400 V rated value — at 590 V rated value • at AC-41 acc. to IEC 60947-6-2 maximum • at AC-42 acc. to IEC 60947-6-2 maximum • at AC-42 acc. to IEC 60947-6-2 maximum • at BC-42 acc. to IEC 60947-6-2 maximum • at BC-42 acc. to IEC 60947-6-2 maximum • at BC-43 acc. to IEC 60947-6-2 maximum • at BC	<ul> <li>at 400 V rated value</li> </ul>	1.5 kW
Operating voltage at AC-3 rated value maximum	<ul> <li>at 500 V rated value</li> </ul>	2.2 kW
operational current  at AC at 400 V rated value  at 400 V rated value  at 500 V rated value  at 500 V rated value  at 500 V rated value  at 600 V rated value  at 500 V rated value  at 600 V rated value  3000 W	at 690 V rated value	3 kW
• at AC at 400 V rated value	operating voltage at AC-3 rated value maximum	690 V
• at AC-3 at 400 V rated value • at AC-43 — at 400 V rated value — at 500 V rated value — at 600 V rated value 3.9 A 3.8 A  operating power • at AC-3 • at 400 V rated value • at AC-3 — at 600 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 600 V rated value — at 600 V rated value — 3.000 W — at 600 V rated value — 3.000 W — at 600 V rated value — 3.000 W — at 600 V rated value — 3.000 W — at 600 V rated value — 3.000 W — at 600 V rated value — 3.000 W — at AC-41 acc. to IEC 60947-6-2 maximum — 500 I/h  control supply voltage control supply voltage 1 at AC — at 50 Hz rated value — at 50 Hz — at 50 Hz — at 50 Hz — at 60 Hz  control supply voltage frequency • 1 rated value — 2 rated value — 2 rated value — 2 rated value — 2 rated value — 3 at DC — 110 240 V — at 50 Hz — at DC — to at DC — at	operational current	
	<ul> <li>at AC at 400 V rated value</li> </ul>	4 A
at 900 V rated value	<ul> <li>at AC-3 at 400 V rated value</li> </ul>	4 A
	• at AC-43	
Act	— at 400 V rated value	3.6 A
Operating power	— at 500 V rated value	3.9 A
• at AC-3 at 400 V rated value • at AC-43 — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 690 V rated value — 3 000 W  no-load switching frequency • at AC-41 acc. to IEC 60947-6-2 maximum	— at 690 V rated value	3.8 A
■ at AC-43     — at 400 V rated value     — at 500 V rated value     — at 690 V rated value     — at 690 V rated value     3 000 W  no-load switching frequency     ● at AC-41 acc. to IEC 60947-6-2 maximum     ● at AC-43 acc. to IEC 60947-6-2 maximum     ● at AC-43 acc. to IEC 60947-6-2 maximum     250 I/h  Control circuit/ Control  type of voltage     Control supply voltage 1 at AC     ● at 60 Hz rated value     ● at 50 Hz     ● at 60 Hz     ○ bull of the first of the current of the first of the current of the first of the current of auxiliary contacts     □ at DC maximum     ● at DC maximum     ● at DC contacts for auxiliary contacts     □ number of NC cont		
at 400 V rated value at 500 V rated value 2 200 W 3 000 W 0 000 W		1.5 kW
at 500 V rated value 3 000 W 3 000	• at AC-43	
no-load switching frequency operating frequency		
no-load switching frequency eat AC-41 acc. to IEC 60947-6-2 maximum eat AC-43 acc. to IEC 60947-6-2 maximum 250 1/h  Control circuit/ Control  type of voltage control supply voltage 1 at AC eat 50 Hz rated value eat 50 Hz at 60 Hz 110 240 V eat 60 Hz control supply voltage frequency e1 rated value 50 Hz 2 rated value 60 Hz control supply voltage frequency e1 rated value 50 Hz e2 rated value 60 Hz control supply voltage frequency e1 rated value 60 Hz control supply voltage frequency e1 rated value 60 Hz control supply voltage frequency e1 rated value 60 Hz control supply voltage frequency e1 rated value 60 Hz control supply voltage frequency e1 at CD rated value 60 Hz control supply voltage frequency e1 at CD rated value 60 Hz control supply voltage frequency e1 CO rate of voltage frequency fre	— at 500 V rated value	2 200 W
operating frequency  • at AC-41 acc. to IEC 60947-6-2 maximum  • at AC-43 acc. 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  • at 50 Hz  • at 60 Hz  control supply voltage frequency  • 1 rated value  • 2 rated value  • 2 rated value  • 2 rated value  • 10 Hz  control supply voltage frequency  • 1 rated value  • 2 rated value  • 2 rated value  • 2 rated value  • 2 rated value  • at DC at Control supply voltage 1  • at DC rated value  • at DC  110 240 V  holding power  • at AC maximum  • at DC maximum  • at DC maximum  • at DC 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  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 690 V rated value  • 3 kA		
at AC-41 acc. to IEC 60947-6-2 maximum at AC-43 acc. to IEC 60947-6-2 maximum 250 1/h 250 1/h  Control circuit/ Control  type of voltage  control supply voltage 1 at AC  at 50 Hz rated value 240 V at 60 Hz at 60 Hz 110 240 V  control supply voltage frequency 1 rated value 50 Hz control supply voltage frequency 1 rated value 60 Hz  control supply voltage 1 at DC rated value 10 LT rated value 60 Hz  control supply voltage 1 at DC rated value 60 Hz  control supply voltage 1 at DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz  control supply voltage 1 but DC rated value 60 Hz		3 600 1/h
e at AC-43 acc. to IEC 60947-6-2 maximum  Control circuit/ Control  type of voltage		
Control circuit/ Control type of voltage control supply voltage 1 at AC  • at 50 Hz rated value • at 50 Hz • at 50 Hz • at 60 Hz  control supply voltage frequency • 1 rated value • 2 rated value • 2 rated value • 2 rated value • 10 Hz • at DC  control supply voltage 1 • at DC  at DC  at DC  bolding power • at AC maximum • at DC  at DC  control supply voltage 1  in the control supply voltage 1		
type of voltage  control supply voltage 1 at AC  • at 50 Hz rated value • at 50 Hz • at 60 Hz  control supply voltage frequency • 1 rated value • 2 rated value • 30 Hz • at DC rated value • at DC maximum • at DC maximum • at DC maximum • at DC maximum • at DC motacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 1 number of NO contacts of instantaneous short-circuit trip unit for signaling contact 1 number of CO contacts of the current-dependent overload release for signaling contact 1 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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics) • at 400 V • at 500 V rated value • at 690 V rated value  3 kA		250 1/h
control supply voltage 1 at AC  at 50 Hz rated value  at 50 Hz  at 60 Hz  tontrol supply voltage frequency  1 rated value  2 2 rated value  50 Hz  60 Hz  control supply voltage frequency  1 rated value  60 Hz  control supply voltage 1  at DC rated value  240 V  at DC rated value  60 Hz  control supply voltage 1  at DC rated value  60 W  at DC maximum  6 W  at DC maximum  5.1 W  Auxiliary circuit  number of NC contacts for auxiliary contacts  number of NC contacts of instantaneous short-circuit trip unit for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  number of AC contacts of the current-dependent overload release for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  number of CO contacts of the current-dependent overload release for signaling contact  0 perational 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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  at 400 V  at 500 V rated value  3 kA  4 to 500 V rated value  3 kA		
at 50 Hz rated value at 50 Hz at 60 Hz  tontrol supply voltage frequency 1 rated value 2 rated value 50 Hz 60 Hz  control supply voltage frequency 1 rated value 2 rated value 2 rated value 60 Hz  control supply voltage 1  at DC 110 240 V  holding power  at DC 110 240 V  holding power  at DC 110 240 V  holding power  at AC maximum 5.1 W  Auxiliary circuit number of NC contacts for auxiliary contacts 1 number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of C 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 CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics) at 400 V at 500 V rated value 3 kA		AC/DC
at 50 Hz at 60 Hz at 60 Hz  110 240 V  tontrol supply voltage frequency  1 rated value 2 rated value 60 Hz  control supply voltage 1 at DC rated value 240 V at DC rated value 110 240 V  holding power at AC maximum 3 th DC maximum 5 th W  Auxiliary circuit  number of NC contacts for auxiliary contacts number of NO contacts for instantaneous short-circuit tripunit for signaling contact number of NO contacts of instantaneous short-circuit tripunit for signaling contact number of NO 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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics) at 400 V at 50 KA at 500 V rated value 3 kA	control supply voltage 1 at AC	
at 60 Hz  control supply voltage frequency  1 rated value  2 rated value  60 Hz  control supply voltage 1  at DC rated value  10 at DC rated value  110 240 V  holding power  at DC maximum  at DC maximum  5.1 W  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (ics)  at 400 V  at 500 V rated value  3 kA  4 kA		
control supply voltage frequency  • 1 rated value  • 2 rated value  60 Hz  control supply voltage 1  • at DC rated value  • at DC  holding power  • at AC maximum  • at DC maximum  5.1 W  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics) • at 400 V • at 500 V rated value • at 690 V rated value  3 kA		
1 rated value     2 rated value     60 Hz  control supply voltage 1     at DC rated value     240 V     at DC     110 240 V  holding power     at AC maximum     51 W  Auxiliary circuit  number of NC contacts for auxiliary contacts     1 number of NC contacts for auxiliary contacts     1 number of NO contacts for 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 250 V  Protective and monitoring functions  trip class  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)     at 400 V     at 500 V rated value     3 kA     at 690 V rated value		110 240 V
o 2 rated value     control supply voltage 1		
control supply voltage 1  • at DC rated value • at DC  holding power • at AC maximum • at DC maximum 5.1 W  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics) • at 400 V • at 500 V rated value • at 690 V rated value  240 V  10 240		
at DC rated value at DC holding power  at AC maximum by at DC maximum  at DC maximum by at DC maximum by at DC maximum by at DC maximum  at DC maximum by at DC maximu		60 Hz
at DC      holding power		
holding power  • at AC maximum  • at DC maximum  5.1 W  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V • at 500 V rated value • at 690 V rated value  • at 690 V rated value  3 kA		
at AC maximum  at DC maximum  5.1 W  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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (lcs)  at 400 V  at 500 V rated value  3 kA  at 690 V rated value  3 kA		110 240 V
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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  at 400 V  at 500 V rated value  at 690 V rated value  3 kA		
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 1 number of NO contacts of instantaneous short-circuit trip unit for signaling contact 1 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 • at 690 V rated value  • at 690 V rated value  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  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  • at 690 V rated value  3 kA		5.1 W
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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value • at 690 V rated value  • at 690 V rated value  3 kA		
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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA		
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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA		
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  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA  • at 690 V rated value  3 kA	unit for signaling contact	
maximum operational current of auxiliary contacts at DC-13 at 250 V  Protective and monitoring functions  trip class  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA	release for signaling contact	1
trip class  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA		10 A
trip class  CLASS 10 and 20 adjustable  breaking capacity operating short-circuit current (Ics)  • at 400 V  • at 500 V rated value  • at 690 V rated value  3 kA  • at 690 V rated value	operational current of auxiliary contacts at DC-13 at 250 V	0.27 A
breaking capacity operating short-circuit current (Ics)  • at 400 V 53 kA  • at 500 V rated value 3 kA  • at 690 V rated value 3 kA	Protective and monitoring functions	
<ul> <li>at 400 V</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>3 kA</li> <li>Ak</li> </ul>	trip class	CLASS 10 and 20 adjustable
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>3 kA</li> <li>kA</li> </ul>	breaking capacity operating short-circuit current (Ics)	
• at 690 V rated value 3 kA	• at 400 V	53 kA
	• at 500 V rated value	3 kA
UL/CSA ratings	• at 690 V rated value	3 kA
	UL/CSA ratings	

full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	4 A
• at 600 V rated value	4 A
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 mounting 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	plug-in without terminals
for auxiliary and control circuit	screw-type 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)
at AWG cables for main contacts	2x (16 10), 1x 8
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)
— finely stranded with core end processing	0.5 2.5 mm², 2x (0.5 1.5 mm²)
at AWG cables for auxiliary contacts	2x (20 14)
at AWG cables for auxiliary contacts  Safety related data	LA (LV 11)
	3 000 000
B10 value with high demand rate acc. to SN 31920	3 000 000
proportion of dangerous failures	40.0/
with low demand rate acc. to SN 31920      with high demand rate acc. to SN 34030	40 %
with high demand rate acc. to SN 31920  failure rate ICITI with law demand rate acc. to SN 31020	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	
<ul><li>due to burst acc. to IEC 61000-4-4</li></ul>	4 kV main contacts, 2 kV auxiliary contacts
<ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	4 kV main contacts, 2 kV auxiliary contacts
<ul> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	2 kV main contacts, 1 kV auxiliary contacts
<ul> <li>due to high-frequency radiation acc. to IEC 61000- 4-6</li> </ul>	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	
	Functional











**EMC** 



Safety/Safety of Machinery

**Declaration of Conformity** 

**General Product Approval** 

**Test Certificates** 

Marine / Shipping



UK Declaration of Conformity Type Test Certificates/Test Report







Marine / Shipping

Lloyd's Register







Confirmation

other

<u>Transport Information</u>

**Dangerous Good** 

## **Further information**

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=3RA6120-1CP33

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6120-1CP33}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1CP33

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

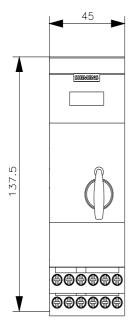
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6120-1CP33&lang=en

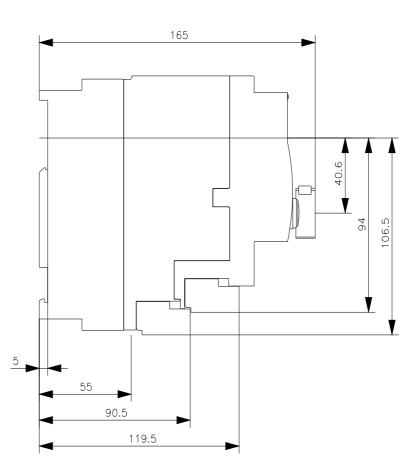
Characteristic: Tripping characteristics, I2t, Let-through current

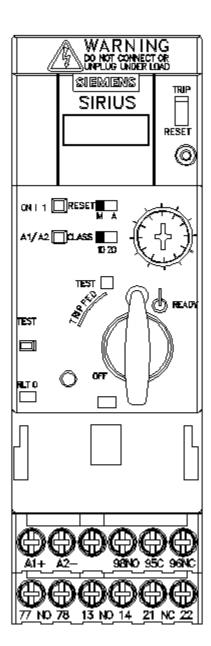
https://support.industry.siemens.com/cs/ww/en/ps/3RA6120-1CP33/char

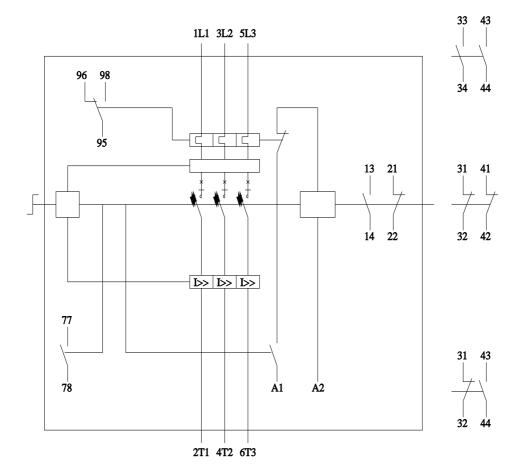
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6120-1CP33&objecttype=14&gridview=view1









last modified: 10/12/2021 🖸