## **SIEMENS**

## **Data sheet**

## 3RA2120-1EA23-0BB4



Fuseless motor starter Direct start 600VAC Size S0 2.8-4A 24V DC screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (contactor)

design of the product   direct starter	product brand name	SIRIUS	
manufacturer's article number  • of the supplied contactor • of the supplied contactor • of the supplied incluit-breakers • of the supplied link module 3RA2921-1BA00  General technical data size of the circuit-breaker size of toad feeder product extension auxiliary switch resultation voltage with degree of pollution 3 at AC rated value degree of pollution 3 surge voltage resistance rated value 4 shock resistance according to IEC 60068-2-27 6 g/11 ms mechanical service life (switching cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date)  Ambient conditions ambient temperature • during operation • during storage • during transport • during storage • during transport  adesign of the switching contact design of the switching current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • at AC-3 rated value maximum operating frequency rated value operating frequency rated value • at 4CO3 trated value • at 4CO3 rated value • at 4CO4 rated value • at 4CO4 rated value • at 4CO5 rated value • at 4CO5 rated value • at 4CO5 value • at 4CO5 value  Control circuit/ Control	product designation	non-fused motor starter 3RA2	
of the supplied contactor of the supplied circuit-breakers of the supplied link module  SRY2011-1EA10  Size of the circuit-breaker Size of load feeder product extension auxiliary switch value degree of pollution Surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment Substance Prohibitance (Date) Ambient conditions  ambient temperature during operation during storage during transport Source of the switching contact design of the switching contact design of the switching contact electromechanical adjustable current response value current of the current-dependent overload release operating rower at AC-3 at 400 V rated value at 4500 V rated value 1 500 W 1 500 W 2 500 M 2 500 M 3 8A2921-1BA00 S00 S00 S00 S00 S00 S00 S00 S00 S00	design of the product	direct starter	
of the supplied circuit-breakers of the supplied link module 3RA2921-1BA00  Size of the circuit-breaker size of the circuit-breaker size of load feeder product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date)  Ambient conditions ambient temperature olduring storage during storage during storage during transport -55 +80 °C  Main circuit number of poles for main current circuit adesign of the switching contact adjustable current response value current of the current-dependent overload release operating voltage rated value entate Value entate Value entate Value special value entate Value foour Value entate Value foour	manufacturer's article number		
of the supplied link module     Secretar Itechnical data     size of the circuit-breaker     size of the circuit-breaker     size of load feeder     product extension auxiliary switch     insulation voltage with degree of pollution 3 at AC rated value     degree of pollution     surge voltage resistance rated value     shock resistance according to IEC 60068-2-27     mechanical service life (switching cycles) of contactor typical     type of assignment     2     Substance Prohibitance (Date)     ambient temperature     during operation     during storage     during transport     design of the switching contact     adjustable current response value current of the current-dependent overload release     operating voltage     e at AC-3 rated value     al 400 V rated value     al 4500 V rated value     al 500 V rated value	<ul> <li>of the supplied contactor</li> </ul>	3RT2023-1BB40	
size of the circuit-breaker S00  size of load feeder Yee product extension auxiliary switch Yee insulation voltage with degree of pollution 3 at AC rated value 690 V value 690 V shock resistance according to IEC 60068-2-27 6g / 11 ms mechanical service life (switching cycles) of contactor typical 1000000000000000000000000000000000000	<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1EA10	
size of the circuit-breaker S00  size of load feeder S0  product extension auxiliary switch Sego V  resinsulation voltage with degree of pollution 3 at AC rated Value Sego voltage resistance rated value Sego voltage resistance rated value Sego voltage resistance according to IEC 60068-2-27 Sego voltage voltage voltage voltage Sego voltage volta	<ul> <li>of the supplied link module</li> </ul>	3RA2921-1BA00	
size of load feeder product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution 3 surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date) Ambient conditions  ambient temperature during operation during storage during transport -55 +80 °C -55 +80 °C  Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value at AC-3 rated value operational current at AC-3 at 400 V rated value at 500 V V rated value at 500 V valed value at 500 V valed value at 500 V valed value at 500 V rated value at 500 V valed value at 500 V valed value at 500 V valed value at 500 V rated value	General technical data	General technical data	
product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value  degree of pollution 3 surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date) 3/01/2017 Ambient conditions ambient temperature during operation during storage during transport -55 +80 °C  Main circuit number of poles for main current circuit design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage rated value 1 at AC-3 rated value maximum operating frequency rated value operational current at AC-3 at 400 V rated value 1 at 400 V rated value 1 at 500 V rated value 2 200 W Control circuit/Control	size of the circuit-breaker	S00	
insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  surge voltage resistance rated value  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  2  Substance Prohibitance (Date)  Ambient conditions  ambient temperature  during operation  during storage  during transport  -55 +80 °C  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  rated value  at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3  at 400 V rated value  at 400 V rated value  at 500 V V rated value  at 500 V rated value	size of load feeder	S0	
degree of pollution 3 surge voltage resistance rated value 6 kV shock resistance according to IEC 60068-2-27 6g / 11 ms mechanical service life (switching cycles) of contactor typical 10 000 000 typical 2 Substance Prohibitance (Date) 03/01/2017  Ambient conditions ambient temperature 4 during operation 20 -20 +60 °C 4 during storage 5 +80 °C 5 +80 °C 6 during transport 5 +80 °C 7 design of the switching contact 8 design of the switching contact 9 design of the switching contact 9 decrement overload release 9 operating voltage 1 each color operating voltage 1 each color operating frequency rated value 1 each color operating frequency rated value 1 50 60 Hz 0 operating power at AC-3 at 400 V rated value 1 500 W 1 eat 400 V rated value 2 200 W 2 control circuit/Control	product extension auxiliary switch	Yes	
surge voltage resistance rated value shock resistance according to IEC 60068-2-27 feethanical service life (switching cycles) of contactor typical type of assignment 2 Substance Prohibitance (Date)  Ambient conditions ambient temperature • during operation • during storage • during transport  number of poles for main current circuit  design of the switching contact adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value	9 9 1	690 V	
shock resistance according to IEC 60068-2-27  shock resistance according to IEC 60068-2-27  mechanical service life (switching cycles) of contactor typical  type of assignment  2  Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation  • during storage  • during transport  -50 +80 °C  4 during transport  -50 +80 °C  Main circuit  number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value	degree of pollution	3	
mechanical service life (switching cycles) of contactor typical  type of assignment  Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation • during storage • during transport  Adin circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • at AC-3 rated value operational current at AC-3 at 400 V rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value	surge voltage resistance rated value	6 kV	
type of assignment 2 Substance Prohibitance (Date) 03/01/2017  Ambient conditions  ambient temperature  • during operation -20 +60 °C  • during storage -50 +80 °C  • during transport -55 +80 °C  Main circuit  number of poles for main current circuit 3 design of the switching contact electromechanical adjustable current response value current of the current-dependent overload release  operating voltage  • rated value 690 V  operating frequency rated value 50 60 Hz operating power at AC-3  • at 400 V rated value 1500 W  • at 500 V rated value 2 200 W  Control circuit/ Control	shock resistance according to IEC 60068-2-27	6g / 11 ms	
Substance Prohibitance (Date)  Ambient conditions  ambient temperature  • during operation • during storage • during transport  Ambient circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3 • at 400 V rated value • at 400 V rated value • at 500 V rated value		10 000 000	
Ambient conditions  ambient temperature  • during operation • during storage • during transport  -50 +80 °C  -55 +80 °C  Main circuit  number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3 rated value maximum  operating frequency rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value • at 500 V rated value  • at 500 V rated value  2 200 W  Control circuit/ Control	type of assignment	2	
ambient temperature  • during operation  • during storage  • during transport  -50 +80 °C  • during transport  -55 +80 °C  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  • at 500 V rated value  • at 500 V rated value  2 2 200 W  Control circuit/ Control	Substance Prohibitance (Date)	03/01/2017	
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>55 +80 °C</li> </ul> Main circuit <ul> <li>number of poles for main current circuit</li> <li>design of the switching contact</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operating power at AC-3</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul>	Ambient conditions		
<ul> <li>during storage</li> <li>during transport</li> <li>-55 +80 °C</li> </ul> Main circuit number of poles for main current circuit <ul> <li>design of the switching contact</li> <li>adjustable current response value current of the current-dependent overload release</li> <li>operating voltage</li> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>operating frequency rated value</li> <li>operating frequency rated value</li> <li>operating power at AC-3</li> <li>at 400 V rated value</li> <li>at 500 W</li> </ul> Control circuit/ Control Control circuit/ Control	ambient temperature		
	<ul> <li>during operation</li> </ul>	-20 +60 °C	
Main circuit  number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  1 500 W  • at 500 V rated value  2 200 W  Control circuit/ Control	during storage	-50 +80 °C	
number of poles for main current circuit  design of the switching contact  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2.8 4 A  690 V  690 V  50 60 Hz  3.6 A	<ul> <li>during transport</li> </ul>	-55 +80 °C	
design of the switching contact  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2.8 4 A  690 V  690 V  50 60 Hz  3.6 A	Main circuit		
adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2.8 4 A  690 V  690 V  50 60 Hz  70	number of poles for main current circuit	3	
current-dependent overload release  operating voltage  • rated value  • at AC-3 rated value maximum  690 V  operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2 200 W  Control circuit/ Control	design of the switching contact	electromechanical	
<ul> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>2 200 W</li> </ul> Control circuit/ Control		2.8 4 A	
<ul> <li>at AC-3 rated value maximum</li> <li>690 V</li> <li>operating frequency rated value</li> <li>operational current at AC-3 at 400 V rated value</li> <li>operating power at AC-3</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>2 200 W</li> </ul> Control circuit/ Control	operating voltage		
operating frequency rated value  operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2 200 W  Control circuit/ Control	• rated value	690 V	
operational current at AC-3 at 400 V rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2 200 W  Control circuit/ Control	at AC-3 rated value maximum	690 V	
operating power at AC-3  • at 400 V rated value  • at 500 V rated value  2 200 W  Control circuit/ Control	operating frequency rated value	50 60 Hz	
at 400 V rated value     at 500 V rated value     at 500 V rated value  Control circuit/ Control	operational current at AC-3 at 400 V rated value	3.6 A	
at 500 V rated value     Control circuit/ Control	operating power at AC-3		
Control circuit/ Control	• at 400 V rated value	1 500 W	
	• at 500 V rated value	2 200 W	
control supply voltage at DC	Control circuit/ Control	Control circuit/ Control	
	control supply voltage at DC		

• rated value 24 V holding power of magnet coil at DC 5.9 W  Auxiliary circuit number of NC contacts for auxiliary contacts 1 protective and monitoring functions  trip class CLASS 10  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value 4A • at 600 V rated value 5 or single-phase AC motor — at 110/120 V rated value 0.33 hp • for 3-phase AC motor — at 220/2208 V rated value 0.33 hp • for 3-phase AC motor — at 220/2208 V rated value 0.75 hp — at 480/480 V rated value 0.75 hp — at 480/480 V rated value 2 hp — at 480/480 V rated value 2 hp — at 575/600 V rated value 2 hp — at 575/600 V rated value 2 hp — at 460/480 V rated value 2 hp — at 475/600 V rated value 3 hp  Short-circuit protection yes design of the short-circuit trip magnetic conditional short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value 153 000 A  Installation/ mounting/ dimensions mounting position 5 snap-mounted to DIN rail or screw-mounted with additional push-in height 45 mm  depth 107 mm  required spacing 10 for grounded parts 6 for grounded parts 10 mm	holding power of magnet coil at DC  Auxiliary circuit  number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Protective and monitoring functions  trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	1 1 1 CLASS 10 thermal (bimetallic) 52 A
Auxiliary circuit number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1  Protective and monitoring functions  trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 100 V rated value — at 230 V rated value • of or 3-phase AC motor — at 110/120 V rated value • of or 3-phase AC motor — at 200/208 V rated value • of 3-phase AC motor — at 200/208 V rated value • of 3-phase AC motor — at 200/208 V rated value — at 200/208 V rated value — at 2576/00 V rated value — at 460/480 V rated value — at 4575/600 V rated value — at 575/600 V rated value — at 400 V according to IEC 60947-4-1 rated value  product function short-circuit trip conditional short-circuit grip magnetic conditional short-circuit grip magnetic conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions mounting position fastening method height vertical for mounting for grounded parts	Auxiliary circuit  number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Protective and monitoring functions  trip class design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	1 1 CLASS 10 thermal (bimetallic) 52 A
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Protective and monitoring functions  trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  pielded mechanical performance [hp] • for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value — at 230 V rated value — at 200/208 V rated value — at 200/208 V rated value — at 200/208 V rated value — at 276/600 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 450/400 V rated value — at 400 V according to IEC 60947-4-1 rated value  less in of the short-circuit trip conditional short-circuit trip conditional short-circuit trip conditional short-circuit trip  conditional short-circuit trip  mounting position  fastening method height  for grounded parts	number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts  Protective and monitoring functions  trip class design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	CLASS 10 thermal (bimetallic) 52 A
number of NO contacts for auxiliary contacts    Protective and monitoring functions	number of NO contacts for auxiliary contacts  Protective and monitoring functions  trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	CLASS 10 thermal (bimetallic) 52 A
trip class design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 400/48 c rated value — at 400/48 c rated value — at 400/48 c rated value — at 30 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 400/48 c rated value — at 400/48 c rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions mounting position fastening method Installation/ mounting/ dimensions mounting position fastening method Installation/ mounting/ dimensions for grounded parts	Protective and monitoring functions  trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	CLASS 10 thermal (bimetallic) 52 A
trip class  design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 10/120 V rated value  - at 230 V rated value • of or 3-phase AC motor - at 200/208 V rated value • of or 3-phase AC motor - at 220/208 V rated value • of or 3-phase AC motor - at 220/230 V rated value - at 220/230 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 400 V according to IEC 60947-4-1 rated value  response to the short-circuit current (tq) • at 400 V according to IEC 60947-4-1 rated value  fastening method fastening method - snap-mounted to DIN rail or screw-mounted with additional push-in leight width - depth - required spacing • for grounded parts	trip class design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal (bimetallic) 52 A
design of the overload release response value current of instantaneous short-circuit trip unit  full-load current (FLA) for 3-phase AC motor	design of the overload release response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal (bimetallic) 52 A
response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  • at 1600 V rated value  / of r single-phase AC motor  - at 110/120 V rated value  - at 230 V rated value  • for 3-phase AC motor  - at 200/208 V rated value  - at 220/230 V rated value  - at 220/230 V rated value  - at 460/480 V rated value  - at 460/480 V rated value  - at 575/600 V rated value  - at 575/600 V rated value  - at 575/600 V rated value  - at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  45 mm  dequired spacing  • for grounded parts	response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	52 A
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  • for single-phase AC motor  — at 110/120 V rated value  • for 3-phase AC motor  — at 230 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  • for 3-phase AC motor  — at 220/230 V rated value  • at 220/330 V rated value  — at 220/330 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  — at 575/600 V rated value  — by tate of value  product function short circuit protection  product function short circuit protection  product function short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts	unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	
full-load current (FLA) for 3-phase AC motor	UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  0.13 hp  • at 230 V rated value  • for 3-phase AC motor  — at 220/230 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  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit trip  conditional short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • for grounded parts	full-load current (FLA) for 3-phase AC motor • at 480 V rated value	
at 480 V rated value at 600 V rated value  yielded mechanical performance [hp]  for single-phase AC motor  - at 110/120 V rated value  of 3 y V rated value  of 4 200/208 V rated value  of 4 200/208 V rated value  of 4 200/208 V rated value  of 5 y b y  of 5 y b  of 5 y	• at 480 V rated value	
• at 600 V rated value     yielded mechanical performance [hp]     • for single-phase AC motor     — at 110/120 V rated value     — at 230 V rated value     — at 230 V rated value     • for 3-phase AC motor     — at 200/208 V rated value     — at 220/230 V rated value     — at 460/480 V rated value     — at 460/480 V rated value     — at 575/600 V rated value     — at 575/600 V rated value     — at 575/600 V rated value  Product function short circuit protection  product function short circuit protection  product function short-circuit trip  conditional short-circuit current (lq)     • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  vertical  fastening method  height  193.1 mm  width  depth  required spacing  • for grounded parts		3 95 A
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value 0.33 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  Short-circuit protection  product function short circuit protection design of the short-circuit trip conditional short-circuit current (lq) • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position fastening method height width 45 mm depth required spacing • for grounded parts		
for single-phase AC motor         — at 110/120 V rated value         — at 230 V rated value         — at 200/208 V rated value         — at 200/208 V rated value         — at 220/230 V rated value         — at 220/230 V rated value         — at 460/480 V rated value         — at 575/600 V rated value         — at 60/480 V rated value         — at 576/600 V rated value         — at 675/600 V rated value         — at 675/600 V rated value  Short-circuit protection  product function short circuit protection  yes  design of the short-circuit trip  conditional short-circuit current (Iq)         • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  yertical  fastening method  Snap-mounted to DIN rail or screw-mounted with additional push-in I height  193.1 mm  width  45 mm  depth  required spacing         • for grounded parts	vielded mechanical performance [hp]	
- at 110/120 V rated value 0.33 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  Short-circuit protection  product function short circuit protection 4 design of the short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value 153 000 A  Installation/ mounting/ dimensions  mounting position 5 yerical 5 snap-mounted to DIN rail or screw-mounted with additional push-in I height 193.1 mm  width 45 mm  depth required spacing  • for grounded parts		
- at 230 V rated value  • for 3-phase AC motor  - at 200/208 V rated value  0.75 hp  - at 220/230 V rated value  - at 460/480 V rated value  - at 575/600 V rated value  2 hp  - at 575/600 V rated value  3 hp  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (lq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  193.1 mm  width  depth  required spacing  • for grounded parts		0 13 hp
for 3-phase AC motor         — at 200/208 V rated value         — at 220/230 V rated value         — at 460/480 V rated value         — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  product function short circuit trip         magnetic  conditional short-circuit current (lq)         • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position		·
- at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value 3 hp  Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions mounting position fastening method height 193.1 mm width depth 107 mm  required spacing • for grounded parts		
- 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  Short-circuit protection product function short circuit protection 4 design of the short-circuit trip 5 magnetic 6 conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value 153 000 A  Installation/ mounting/ dimensions 7 wertical 6 satening method 8 snap-mounted to DIN rail or screw-mounted with additional push-in I height 193.1 mm  width 45 mm  depth 107 mm  required spacing • for grounded parts	·	0.75 hp
- at 460/480 V rated value 2 hp - at 575/600 V rated value 3 hp  Short-circuit protection  product function short circuit protection 4 design of the short-circuit trip 5 magnetic 6 magnetic 7 magnet		·
— at 575/600 V rated value 3 hp  Short-circuit protection product function short circuit protection design of the short-circuit trip magnetic  conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height 193.1 mm width 45 mm depth 107 mm  required spacing • for grounded parts		·
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position vertical fastening method Snap-mounted to DIN rail or screw-mounted with additional push-in I height 193.1 mm width 45 mm depth required spacing • for grounded parts		
product function short circuit protection  design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  vertical  193.1 mm  width  45 mm  depth  required spacing  • for grounded parts		
design of the short-circuit trip  conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  vertical  fastening method  height  193.1 mm  width  45 mm  depth  required spacing  • for grounded parts  magnetic  magnetic  magnetic  magnetic  153 000 A  Installation/ mounting/ dimensions  vertical  Snap-mounted to DIN rail or screw-mounted with additional push-in I  193.1 mm  107 mm		Yes
conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  height  vertical  Snap-mounted to DIN rail or screw-mounted with additional push-in I  height  193.1 mm  width  45 mm  depth  required spacing  • for grounded parts		
<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> <li>required spacing</li> <li>for grounded parts</li> </ul>		ag.iouo
Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  of or grounded parts  vertical  Snap-mounted to DIN rail or screw-mounted with additional push-in I  193.1 mm  45 mm  107 mm		153 000 A
mounting position     vertical       fastening method     Snap-mounted to DIN rail or screw-mounted with additional push-in I       height     193.1 mm       width     45 mm       depth     107 mm       required spacing     o for grounded parts		
fastening method Snap-mounted to DIN rail or screw-mounted with additional push-in I height 193.1 mm width 45 mm depth 107 mm required spacing • for grounded parts		vertical
height 193.1 mm width 45 mm depth 107 mm required spacing • for grounded parts		
width 45 mm depth 107 mm required spacing • for grounded parts		
required spacing  • for grounded parts		
• for grounded parts	depth	107 mm
	required spacing	
— forwards 10 mm	for grounded parts	
	— forwards	10 mm
— backwards 0 mm	— backwards	0 mm
— upwards 30 mm	— upwards	30 mm
— at the side 9 mm	— at the side	9 mm
— downwards 10 mm	— downwards	10 mm
• for live parts	• for live parts	
— forwards 10 mm	— forwards	10 mm
— backwards 0 mm	— backwards	0 mm
— upwards 30 mm	— upwards	30 mm
— downwards 10 mm	— downwards	10 mm
— at the side 9 mm	— at the side	9 mm
Connections/ Terminals	Connections/ Terminals	
type of electrical connection for main current circuit screw-type terminals	type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections	type of connectable conductor cross-sections	
• for main contacts stranded 1 10 mm², 2x (2.5 6 mm²)	<ul> <li>for main contacts stranded</li> </ul>	1 10 mm², 2x (2.5 6 mm²)
• at AWG cables for main contacts 2x (16 12), 2x (14 8)	at AWG cables for main contacts	2x (16 12), 2x (14 8)
connectable conductor cross-section for main contacts  1 6 mm²		1 6 mm²
finely stranded with core end processing		
Safety related data		
B10 value with high demand rate according to SN 31920 1 000 000		
proportion of dangerous failures with high demand rate according to SN 31920	according to SN 31920	
protection class IP on the front according to IEC IP20 60529		IP20

touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

Certificates/ approvals

**General Product Approval** 

For use in hazardous locations Declaration of Conformity

other

**Dangerous Good** 

Confirmation







Confirmation

Transport Information

## **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=3RA2120-1EA23-0BB4

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA2120-1EA23-0BB4}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1EA23-0BB4

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2120-1EA23-0BB4&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1EA23-0BB4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1EA23-0BB4&objecttype=14&gridview=view1

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