## **SIEMENS**

## **Data sheet**

## 3RA2210-1CH15-2BB4



Load feeder fuseless, Reversing duty 400 V AC, Size S00 1.80...2.50 A 24 V DC Spring-type terminal for 60 mm busbar systems (also fulfills type of coordination 1) Type of coordination 2, Iq = 150 kA 1 NC (contactor)

product brand name	SIRIUS	
product designation	Reversing starter	
design of the product	for 60 mm busbars	
product type designation	3RA22	
manufacturer's article number		
<ul> <li>of the supplied contactor</li> </ul>	3RT2015-2BB42	
<ul> <li>of the supplied circuit-breakers</li> </ul>	3RV2011-1CA20	
<ul> <li>of the supplied RS assembly kit</li> </ul>	3RA2913-1DB2	
<ul> <li>of the supplied link module</li> </ul>	3RA2911-2AA00	
General technical data		
size of the circuit-breaker	S00	
size of load feeder	S00	
power loss [W] for rated value of the current		
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.6 W	
without load current share typical	4 W	
insulation voltage with degree of pollution 3 at AC rated value	690 V	
surge voltage resistance rated value	6 kV	
degree of protection NEMA rating	other	
shock resistance according to IEC 60068-2-27	6g / 11 ms	
mechanical service life (operating cycles) of contactor typical	30 000 000	
type of assignment	2	
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD	
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001	
reference code according to IEC 81346-2:2019	Q	
Substance Prohibitance (Date)	10/01/2009	
Ambient conditions		
ambient temperature		
<ul> <li>during operation</li> </ul>	-20 +60 °C	
<ul> <li>during storage</li> </ul>	-50 +80 °C	
during transport	-50 +80 °C	
temperature compensation	-20 +60 °C	
relative humidity during operation	10 95 %	
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	1.8 2.5 A	
operating voltage		
rated value	690 V	
• at AC-3 rated value maximum	690 V	

## An C-Ser rated value   50	at AC 2a vated value magningues	690 V		
operational current	at AC-3e rated value maximum			
		50 60 HZ		
earl AC-2e at 400 V rated value	-	0.5.4		
Operating power				
- at 400 V rated value		2.5 A		
* at AC-3e — at 400 V rated value 750 kW  Control circuit (control supply voltage DC				
		750 W		
Control circuit/ Control  Type of voltage of the control supply voltage  • rated value  • Ves  Protective and monitoring functions  trip class  class 10  design of the overload release  response value current of instantaneous short-circuit trip unit  UCCSX, ratings  full-oad current (FLA) for 3-phase AC motor  • at 800 V rated value  • at 800 V rated value  • of single-phase AC motor  — at 100 V rated value  • for single-phase AC motor  — at 202203 V rated value  • of 2-phase AC motor  — at 202203 V rated value  • of 2-phase AC motor  — at 202203 V rated value  • of 3-phase AC motor  — at 202203 V rated value  • of 3-phase AC motor  — at 480480 V rated value  • 1.5 hp  — at 480480 V rated value  • 1.5 hp  roduct function short circuit protection  yes  design of the short-circuit protection  yes  design of the short-circuit trip  conditional short-circuit trip  early of the short-circuit trip  conditional short-circuit trip  conditional short-circuit trip  conditional short-circuit trip  - at 460 V according to IEC 6047-4-1 rated value  • for grounded parts  - forwards  • puwards  • on mm  - upwards  • bekwards  • on mm  - upwards  • of five parts  - forwards  • at the side  • on mm  - upwards  • at the side  • on mm  - upwards  • at the side  • on mm  - upwards  • on mm  - upward	• at AC-3e			
type of voltage of the control supply voltage at DC control supply voltage at DC control supply voltage at DC careful value 24 24 V control supply voltage at DC careful value 24 24 V control value 25 cont		750 kW		
Control supply voltage at DC	Control circuit/ Control			
e rated value 24 ∨ 4 ∨ 4 ∨ 4 ∨ 4 ∨ 4 ∨ 4 ∨ 4 ∨ 4 ∨ 4	type of voltage of the control supply voltage	DC		
• rated value	control supply voltage at DC			
holding power of magnet coil at DC  Auxiliary circuit  product extension auxiliary switch  Protective and monitoring functions  trip class  design of the overload release  response value current of instantaneous short-circuit trip unit  ULCSA ratings  full-load current (FLA) for 3-phase AC motor  at 480 V rated value 2.5 A  at 600 V rated value 2.5 A  yloided mechanical performance (Inp)  of or single-phase AC motor  — at 110/120 V rated value 0.25 hp  of or single-phase AC motor  — at 200/208 V rated value 0.25 hp  of or single-phase AC motor  — at 200/208 V rated value 0.25 hp  of or single-phase AC motor  — at 200/208 V rated value 0.5 hp  — at 200/208 V rated value 0.75 hp  — at 480.0480 V rated value 1.5 hp  — at 480.0480 V rated value 2 hp  Short-circuit protection  product function short circuit protection  product function short circuit protection  product function short circuit current ((a)  at 400 V according to IEC 60947-4-1 rated value 150 0000 A  habitation/mounting/dimensions  mounting position  featening method for snapping onto 60 mm busbar systems  height 280 mm  of grounded parts — crowards 32 mm — bekwards — owwards — owmards — ow the side — owmards — ow the side — owmards — owmards — owmards — ow the side — owmards — owwards — owmards — owmards — owmards — owmards — owmards — owwards — owmards — owmards — owmards — owmards — owmards — owmards —	• rated value	24 V		
Auxiliary circuit product extension auxiliary switch Protective and monitoring functions trip class design of the overload release response value current of instantaneous short-circuit trip unit ULCSA 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 1101/20 V rated value • for single-phase AC motor • at 230 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • for 3-phase AC motor • at 200/20 V rated value • 1.5 hp • at 600 V rated value • 2 hp  Short-circuit protection product function short circuit trot value • at 600 V according to IEC 60847-4-1 rated value • at 400 V according to IEC 60847-4-1 rated value • at 400 V according to IEC 60847-4-1 rated value  for snapping onto 60 mm busbar systems height • for grounded parts • for live parts	rated value	24 24 V		
Product extension auxiliary switch   Yes	holding power of magnet coil at DC	4 W		
trip class CLASS 10 design of the overload release thermal (bimetallic) response value current of instantaneous short-circuit trip unit  UL/CSA ratings  (Tull-load current (FLA) for 3-phase AC motor  • at 480 V rated value 2.5 A  • at 480 V rated value 2.5 A  yiolded mechanical performance [hp] • for single-phase AC motor  — at 1101/20 V rated value 0.25 hp  • for single-phase AC motor  — at 2200 V rated value 0.5 hp  • for 3-phase AC motor  — at 2200 V rated value 0.5 hp  — at 2200 V rated value 0.5 hp  — at 2200 V rated value 0.75 hp  — at 2200 V rated value 0.75 hp  — at 460/480 V rated value 2 hp  Short-circuit protection Yes  product function short circuit protection Yes  design of the short-circuit current (q)  • at 400 V according to EC 604974-1 rated value 150 000 A  Installation mounting dimensions  mounting position vertical  required spacing  • for grounded parts  — forwards 32 mm  • for grounded parts  — orwards 32 mm  • for live parts  — at the side 10 mm  • for live parts  — backwards 0 mm  — upwards 50 mm  • for live parts  — backwards 0 mm  — upwards 50 mm  • for live parts  — backwards 0 mm  — upwards 50 mm  — orwards — backwards 0 mm  — orwards — backwards 0 mm  — orwards — at the side 10 mm  — orwards — backwards 0 mm  — orwards — ownwards	Auxiliary circuit			
trip class   CLASS 10	product extension auxiliary switch	Yes		
trip class   CLASS 10	· · · · · · · · · · · · · · · · · · ·			
design of the overload release response value current of instantaneous short-circuit trip unit  UICSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 480 V rated value • at 480 V rated value  • at 480 V rated value  • at 600 V rated value  • at 600 V rated value  • at 600 V rated value  • at 500 V rated value  • at 230 V rated value  • at 230 V rated value  • at 200/280 V rated value  • at 575/680 V rated value  • at 480/480 V rated value  • at 575/680 V rated value  • at 480/480 V rated value  • at 480 V rated value  • at 680 V rated value  • at 780 V rate		CLASS 10		
Tesponse value current of instantaneous short-circuit trip unit   33 A	·			
full-load current (FLA) for 3-phase AC motor         a at 480 V rated value         2.5 A           a at 800 V rated value         2.5 A           yielded mechanical performance [hp]         6 or single-phase AC motor           — at 110/120 V rated value         0.1 hp           — at 230 V rated value         0.25 hp           • for 3-phase AC motor         - at 200/203 V rated value           — at 44.04.90 V rated value         0.5 hp           — at 4.04.04.00 V rated value         0.75 hp           — at 4.04.04.00 V rated value         1.5 hp           — at 4.04.04.00 V rated value         2 hp           Short-circuit protection         yes           product function short circuit protection         magnetic           design of the short-circuit turp         magnetic           conditional short-circuit current (q)         4 at 40.04 vaccording to IEC 60947-4-1 rated value           installation/ mounting/ dimensions         vertical           mounting position         vertical           fastening method         for snapping onto 60 mm busbar systems           height         260 mm           width         90 mm           depth         155 mm           required spacing         • for grounded parts           — forwards         0 mm				
Mil-load current (FLA) for 3-phase AC motor	·			
• at 600 V rated value   2.5 A		2.5.Δ		
velided mechanical performance [hp]   • for single-phase AC motor   — at 1101/120 V rated value   0.25 hp     • for 3-phase AC motor     — at 200/208 V rated value   0.5 hp     — at 220/208 V rated value   0.75 hp     — at 220/208 V rated value   0.75 hp     — at 460/480 V rated value   1.5 hp     — at 575/600 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   50 000 A    - at 4400 V according to 150 000 A    -				
• for single-phase AC motor — at 110/120 V rated value 0.25 hp  • for 3-phase AC motor — at 2200/208 V rated value 0.5 hp — at 2200/230 V rated value 0.75 hp — at 2400/380 V rated value 0.75 hp — at 460/480 V rated value 1.5 hp — at 575/600 V rated value 2 hp  Short-circuit protection  product function short circuit protection 4 yes design of the short-circuit trip magnetic 5 magnetic 5 magnetic 7 magnet		2.3 A		
- at 110/120 V rated value				
- at 230 V rated value 0.25 hp  • for 3-phase AC motor  - at 200/208 V rated value 0.5 hp  - at 220/230 V rated value 0.75 hp  - at 460/480 V rated value 1.5 hp  - at 460/480 V rated value 2 hp  Short-circuit protection	• .	0.4 hp		
• for 3-phase AC motor  — at 200/208 V rated value — at 220/230 V rated value — at 420/30 V rated value — at 460/480 V rated value — 1.5 hp — at 450/480 V rated value — 2 hp  Short-circuit protection  product function short circuit trip — magnetic  conditional short-circuit trip — at 400 V according to IEC 60947-4-1 rated value  150 000 A  Installation/ mounting/ dimensions  mounting position fastening method for snapping onto 60 mm busbar systems height — 260 mm  width — 90 mm  depth — 155 mm  required spacing  • for grounded parts — forwards — upwards — at the side — downwards — for live parts — forwards — backwards — for live parts — forwards — backwards — hownwards — to mm				
- at 200/208 V rated value		0.25 np		
- at 220/230 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 fastening method for snapping onto 60 mm busbar systems height 260 mm width depth 155 mm  required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — obackwards — om • for live parts — forwards — backwards — upwards — backwards — upwards — obackwards — om • for live parts — forwards — backwards — upwards — backwards — upwards — obackwards — om • for live parts — forwards — backwards — upwards — backwards — upwards — obackwards — upwards — downwards — upwards — u				
Product function short circuit protection   Yes   design of the short-circuit trip   magnetic   conditional short-circuit trip   tal 400 V according to IEC 60947-4-1 rated value   150 000 A				
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  for snapping onto 60 mm busbar systems  height  260 mm  width  90 mm  depth  155 mm  required spacing  • for grounded parts  — forwards — backwards — upwards — at the side — downwards — forwards — forwards • for live parts — forwards — backwards — backwards — backwards — backwards — to mm  • for live parts — forwards — backwards — to mm  - downwards — to mm  - downwards — downwards — downwards — lupwards — downwards — downwards — downwards — downwards — downwards — downwards — to mm		2 hp		
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  for snapping onto 60 mm busbar systems  height  260 mm  width  90 mm  depth  155 mm  required spacing  • for grounded parts  — forwards — backwards — upwards — at the side — downwards — forwards — forwards — forwards — downwards  • for live parts — forwards — backwards — o mm  • for live parts — forwards — backwards — backwards — o mm  • for live parts — forwards — backwards — backwards — backwards — o mm — upwards — downwards — lo mm — upwards — downwards — lo mm — upwards — o mm — upwards — o mm — upwards — backwards — o mm — upwards — o m	Short-circuit protection			
conditional short-circuit current (Iq)  • at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method  for snapping onto 60 mm busbar systems  height  260 mm  width  90 mm  depth  155 mm  required spacing  • for grounded parts  — forwards — backwards — upwards — at the side  10 mm  • for live parts  — forwards — backwards — backwards 0 mm  • for live parts — forwards — backwards — backwards 0 mm  • for live parts — forwards — backwards — backwards — downwards • for live parts — forwards — backwards — bac	product function short circuit protection	Yes		
* at 400 V according to IEC 60947-4-1 rated value  Installation/ mounting/ dimensions  mounting position  fastening method for snapping onto 60 mm busbar systems  height 260 mm  width 90 mm  depth 155 mm  required spacing      * for grounded parts	design of the short-circuit trip	magnetic		
mounting position vertical fastening method for snapping onto 60 mm busbar systems height 260 mm width 90 mm depth 155 mm  required spacing	conditional short-circuit current (Iq)			
mounting position     vertical       fastening method     for snapping onto 60 mm busbar systems       height     260 mm       width     90 mm       depth     155 mm       required spacing     For grounded parts       - for grounded parts     0 mm       - backwards     0 mm       - upwards     50 mm       - at the side     10 mm       - for live parts       - backwards     0 mm       - backwards     0 mm       - upwards     50 mm       - downwards     10 mm       - downwards     10 mm       - at the side     10 mm	<ul> <li>at 400 V according to IEC 60947-4-1 rated value</li> </ul>	150 000 A		
fastening method for snapping onto 60 mm busbar systems   height 260 mm   width 90 mm   depth 155 mm   required spacing • for grounded parts   — forwards 32 mm   — backwards 0 mm   — upwards 50 mm   — at the side 10 mm   — downwards 10 mm   • for live parts 32 mm   — backwards 0 mm   — backwards 0 mm   — upwards 50 mm   — downwards 10 mm   — downwards 10 mm   — at the side 10 mm	Installation/ mounting/ dimensions			
height         260 mm           width         90 mm           depth         155 mm           required spacing         • for grounded parts           ● for grounded parts         32 mm           — backwards         0 mm           — upwards         50 mm           — at the side         10 mm           ● for live parts         10 mm           — backwards         0 mm           — upwards         50 mm           — downwards         10 mm           — downwards         10 mm           — at the side         10 mm	mounting position	vertical		
height         260 mm           width         90 mm           depth         155 mm           required spacing         • for grounded parts           ● for grounded parts         32 mm           — backwards         0 mm           — upwards         50 mm           — at the side         10 mm           ● for live parts         10 mm           — backwards         0 mm           — upwards         50 mm           — downwards         10 mm           — downwards         10 mm           — at the side         10 mm	fastening method	for snapping onto 60 mm busbar systems		
width         90 mm           depth         155 mm           required spacing           ● for grounded parts         32 mm           — forwards         0 mm           — backwards         0 mm           — at the side         10 mm           — downwards         10 mm           ● for live parts         32 mm           — backwards         0 mm           — upwards         50 mm           — downwards         10 mm           — at the side         10 mm	•			
depth         155 mm           required spacing         • for grounded parts           ● for grounded parts         32 mm           ─ backwards         0 mm           ─ upwards         50 mm           ─ at the side         10 mm           ─ downwards         10 mm           ● for live parts         32 mm           ─ backwards         0 mm           ─ upwards         50 mm           ─ downwards         10 mm           ─ at the side         10 mm		90 mm		
required spacing				
<ul> <li>for grounded parts</li> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>backwards</li> <li>mm</li> <li>backwards</li> <li>upwards</li> <li>upwards</li> <li>downwards</li> <li>mm</li> <li>at the side</li> <li>10 mm</li> <li>mm</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>10 mm</li> <li>mm</li> <li>at the side</li> <li>10 mm</li> </ul>	·			
— forwards       32 mm         — backwards       0 mm         — upwards       50 mm         — at the side       10 mm         — downwards       10 mm         • for live parts       32 mm         — forwards       32 mm         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm				
— backwards       0 mm         — upwards       50 mm         — at the side       10 mm         — downwards       10 mm         • for live parts       32 mm         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm		32 mm		
— upwards       50 mm         — at the side       10 mm         — downwards       10 mm         • for live parts       32 mm         — forwards       32 mm         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm				
— at the side       10 mm         — downwards       10 mm         ● for live parts       - forwards         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm				
— downwards       10 mm         ● for live parts       32 mm         — forwards       32 mm         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm	·			
● for live parts  — forwards  — backwards  — upwards  — downwards  — at the side  32 mm  0 mm  10 mm  10 mm				
— forwards       32 mm         — backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm		TO THIN		
— backwards       0 mm         — upwards       50 mm         — downwards       10 mm         — at the side       10 mm	•	20		
— upwards       50 mm         — downwards       10 mm         — at the side       10 mm				
— downwards 10 mm — at the side 10 mm				
— at the side 10 mm	·			
Connections/ Terminals		10 mm		
	Connections/ Terminals			

type of electrical connection						
for main current circuit	spring	spring-loaded terminals				
for auxiliary and control circuit	spring	spring-loaded terminals				
Safety related data						
B10 value with high demand rate according to SN 31920	1 000	1 000 000				
proportion of dangerous failures						
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %	73 %				
touch protection on the front according to IEC 60529	finger	finger-safe, for vertical contact from the front				
Communication/ Protocol						
protocol is supported						
<ul> <li>PROFINET IO protocol</li> </ul>	No	No				
PROFIsafe protocol	No	No				
protocol is supported AS-Interface protocol	No	No				
Certificates/ approvals						
General Product Approval		For use in hazard-	Declaration of Conformity			

Confirmation











**Test Certificates** 

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping





Confirmation

other

Vibration and Shock

Railway

**Transport Information** 

**Dangerous Good** 

## Further information

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

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

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

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

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2210-1CH15-2BB44220-1CH15-2BB44220-1CH15-2BB44220-1CH15-2BB44220-1CH15-2BB44220-1CH15-2BB4400-1CH15-2BB4400-1CH15-2BB4400-1CH15-2BB4400-1CH15-2BB4400-1CH15-2BB$ 

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2210-1CH15-2BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1CH15-2BB4

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

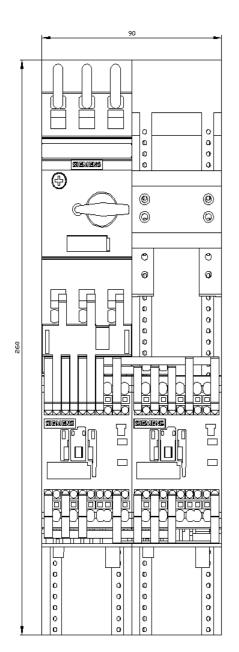
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2210-1CH15-2BB4&lang=en

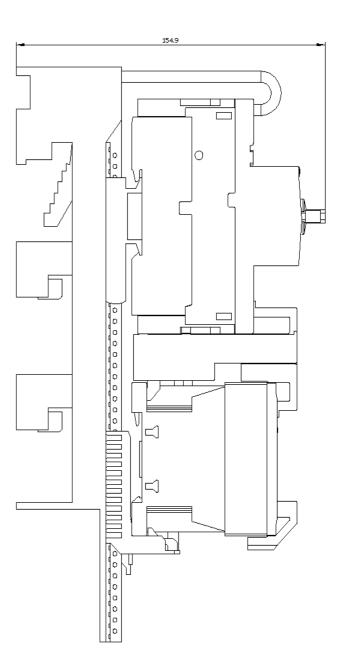
Characteristic: Tripping characteristics, I2t, Let-through current

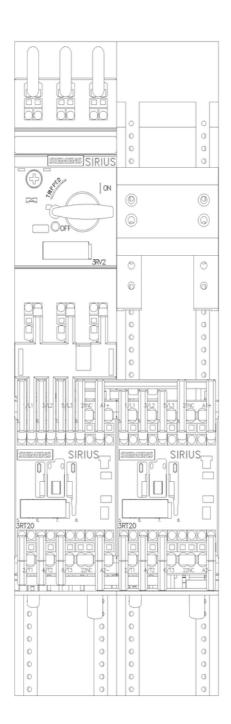
https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-1CH15-2BB4/char

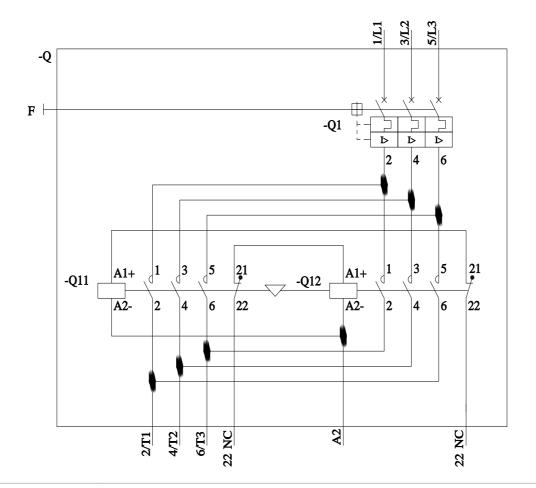
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2210-1CH15-2BB4&objecttype=14&gridview=view1









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