## **SIEMENS**

## **Data sheet**

3RA2215-1CA15-2BB4



Fuseless motor starter Reversing operation 600VAC Size S00 1.8-2.5A 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 (MSP) 1NC (per contactor)

| design of the product   reversing starter  | product brand name  | SIRIUS                       |
|--|---|------------------------------|
| manufacturer's article number  • of the supplied contactor • of the supplied contactor • of the supplied contactor • of the supplied link module 3RA1921-1DA00  General technical data  size of the circuit-breaker  size of the circuit-breaker  size of load 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 6 kV shock resistance according to IEC 60068-2-27 6g / 11 ms mechanical service life (switching cycles) of contactor lypical type of assignment 2 Ambient conditions ambient temperature • during operation • during storage • during transport  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 operational current at AC-3 • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 550 W rated value • at 550 V rated value   | product designation   | non-fused motor starter 3RA2 |
| of the supplied circuit-breakers     of the supplied link module     of the supplied link module     size of the circuit-breaker     size of the circuit-breaker     size of load feeder     product extension auxiliary switch     residence of pollution survives and survives                 | design of the product   | reversing starter            |
| of the supplied circuit-breakers     of the supplied link module     3RA1921-1DA00  General technical data  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     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 Ambient conditions  amient temperature     ouring operation     during storage     during storage     during storage     during transport  Main circuit number of poles for main current circuit     design of the switching contact     system of the                 | manufacturer's article number   |                              |
| of the supplied link module     Size of the circuit-breaker     size of the circuit-breaker     size of toad feeder     product extension auxillary 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     during operation     during operation     during storage     during storage     during transport     design of the switching contact     adjustable current response value current of the current-dependent overload release     operating voltage   | <ul> <li>of the supplied contactor</li> </ul>                                       | 3RT2015-1BB42                |
| size of the circuit-breaker S00  size of load feeder S00  product extension auxiliary switch Yes insulation voltage with degree of pollution 3 at AC rated value  degree of pollution 3  surge voltage resistance rated value 6k / Shock resistance according to IEC 60068-2-27 6g / I ms mechanical service life (switching cycles) of contactor typical type of assignment 2  Ambient conditions  ambient temperature  • during operation -20 +60 °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  • at AC-3 rated value maximum 690 V  operation grower at AC-3  • at 400 V rated value 750 W  • at 500 V rated value 1100 W  control circuit/ Control  control supply voltage at DC   | <ul> <li>of the supplied circuit-breakers</li> </ul>                                | 3RV2011-1CA15                |
| size of the circuit-breaker S00  size of load feeder S00  product extension auxiliary switch Yes insulation voltage with degree of pollution 3 at AC rated value  degree of pollution  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 vippo of assignment 2  Ambient conditions  ambient temperature  olduring operation -20 +60 °C olduring storage -50 +80 °C olduring 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  operating voltage -690 V operating frequency rated value 50 60 Hz operating power at AC-3 operating power at AC-3  • at 400 V rated value 750 W • at 500 V V rated value 750 W • at 500 V rated value 1100 W  Control circuit/ Control control supply voltage at DC   | <ul> <li>of the supplied link module</li> </ul>                                     | 3RA1921-1DA00                |
| 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 56 kV shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment 2 Ambient conditions ambient temperature • during operation • during storage • during transport  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 operating frequency rated value • at 500 V rated value • at 400 V rated value • at 400 V rated value • at 500 V rated value  | 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 6g / 11 ms mechanical service life (switching cycles) of contactor typical type of assignment 2 Ambient conditions ambient temperature during operation during storage during fransport -55 +80 °C  Amin 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 at 50 69 V operating frequency rated value operational current at AC-3 at 400 V rated value at 500 V rated value   | 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  Ambient conditions  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 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 at 400 V rated value at 500 V rated value   | size of load feeder   | S00                          |
| degree of pollution surge voltage resistance rated value shock resistance according to IEC 60068-2-27 five assignment surge voltage resistance according to IEC 60068-2-27 five assignment  2  Ambient conditions ambient temperature during operation during storage during transport  -20 +60 °C during transport -55 +80 °C  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 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 1 100 W  Control circuit/ Control control supply voltage at DC   | product extension auxiliary switch  | Yes                          |
| 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  Ambient conditions  ambient temperature   |   | 690 V                        |
| shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of contactor typical type of assignment  2  Ambient conditions amblent temperature   | degree of pollution   | 3                            |
| mechanical service life (switching cycles) of contactor typical  type of assignment  2  Ambient conditions  ambient temperature  e during operation Ouring storage during transport  -20 +60 °C -50 +80 °C  -50 +80 °C  Main circuit  number of poles for main current circuit design of the switching contact electromechanical adjustable current response value current of the current-dependent overload release operating voltage e rated value operating frequency rated value operating power at AC-3 e at 400 V rated value at 400 V rated value e at 500 V rated value 1 100 W  Control circuit/ Control control supply voltage at DC   | surge voltage resistance rated value  | 6 kV                         |
| type of assignment  2 Ambient conditions  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  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 690 V  operating frequency rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value  | shock resistance according to IEC 60068-2-27  | 6g / 11 ms                   |
| Ambient conditions  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  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   | ` , ,   | 30 000 000                   |
| 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  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 lurrent at AC-3 at 400 V 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  100 W  Control circuit/ Control  control supply voltage at DC   | type of assignment  | 2                            |
| <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 at 400 V rated value</li> <li>at 400 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul>   | Ambient conditions  |                              |
| during storage     during transport      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         erated value             eat AC-3 rated value maximum             operating frequency rated value             operating power at AC-3             eat 400 V rated value             eat 500 V rated value             eat 500 V rated value             eat 500 V rated value             control circuit/ Control  control supply voltage at DC  | ambient temperature   |                              |
| <ul> <li>during transport</li> <li>-55 +80 °C</li> <li>Main circuit</li> <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>e rated value</li> <li>e 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>e at 400 V rated value</li> <li>e at 500 V rated value</li> <li>100 W</li> </ul> Control circuit/ Control Control supply voltage at DC  | <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 nower at AC-3 at 400 V rated value  • at 400 V rated value  • at 500 V rated value  • at 500 V rated value  To W  Control circuit/ Control  control supply voltage at DC   | 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  operating frequency rated value  operating power at AC-3  • at 400 V rated value  • at 500 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating power at AC-3  • at 400 V rated value  operating frequency rated value  operating frequency rated value  1.9 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  other than 1.8 2.5 A  1.8 2.5 A  1.8 2.5 A  1.8 2.5 A  1.9 V  690 V  1.9 V  1.9 A                             | Main circuit  |                              |
| adjustable current response value current of the 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  1 100 W  Control circuit/ Control  control supply voltage at DC   | 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  operational current of the control circuit/ Control  control supply voltage at DC  | 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>at</li></ul> | adjustable current response value current of the current-dependent overload release | 1.8 2.5 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>100 W</li> </ul> Control circuit/ Control control supply voltage at DC  | 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  Control circuit/ Control  control supply voltage at DC   | 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  Control circuit/ Control  control supply voltage at DC  | <ul> <li>at AC-3 rated value maximum</li> </ul>                                     | 690 V                        |
| operating power at AC-3  • at 400 V rated value  • at 500 V rated value  Control circuit/ Control  control supply voltage at DC  | operating frequency rated value   | 50 60 Hz                     |
| at 400 V rated value     at 500 V rated value     1 100 W  Control circuit/ Control  control supply voltage at DC  | operational current at AC-3 at 400 V rated value                                    | 1.9 A                        |
| at 500 V rated value     1 100 W  Control circuit/ Control  control supply voltage at DC   | operating power at AC-3   |                              |
| Control circuit/ Control control supply voltage at DC  | • at 400 V rated value  | 750 W                        |
| control supply voltage at DC   | • at 500 V rated value  | 1 100 W                      |
|  | Control circuit/ Control  |                              |
| • rated value 24 V   | control supply voltage at DC  |                              |
|  | rated value   | 24 V                         |

| holding power of magnet coil at DC  | 4 W  |
|---|--|
| Auxiliary circuit   |  |
| number of NC contacts for auxiliary contacts                                    | 2  |
| number of NO contacts for auxiliary contacts                                    | 1  |
| Protective and monitoring functions   |  |
| trip class  | CLASS 10   |
| design of the overload release  | thermal (bimetallic)   |
| response value current of instantaneous short-circuit trip                      | 32.5 A   |
| unit  |  |
| UL/CSA ratings  |  |
| full-load current (FLA) for 3-phase AC motor                                    |  |
| • at 480 V rated value  | 2.15 A   |
| at 600 V rated value  | 2.24 A   |
| yielded mechanical performance [hp]   |  |
| • for single-phase AC motor   | 0.47 hp  |
| — at 230 V rated value  | 0.17 hp  |
| • for 3-phase AC motor  | 0.5 hp   |
| — at 200/208 V rated value  | 0.5 hp   |
| — at 220/230 V rated value  | 0.5 hp   |
| <ul><li>— at 460/480 V rated value</li><li>— at 575/600 V rated value</li></ul> | 1 hp   |
| Short-circuit protection  | 1.5 hp   |
| product function short circuit protection                                       | Yes  |
| design of the short-circuit trip  | magnetic   |
| conditional short-circuit current (Iq)  | magnetic   |
| • at 400 V according to IEC 60947-4-1 rated value                               | 153 000 A  |
| • at 500 V according to IEC 60947-4-1 rated value                               | 100 000 A  |
| Installation/ mounting/ dimensions  |  |
| mounting position   | vertical   |
| fastening method  | Snap-mounted to DIN rail or screw-mounted with additional push-in lug                                      |
| height  | 170 mm   |
| width   | 90 mm  |
| depth   | 97.1 mm  |
| required spacing  |  |
| <ul> <li>for grounded parts</li> </ul>  |  |
| — forwards  | 0 mm   |
| — backwards   | 0 mm   |
| — upwards   | 20 mm  |
| — at the side   | 9 mm   |
| — downwards   | 10 mm  |
| • for live parts  |  |
| — forwards  | 0 mm   |
| — backwards   | 0 mm   |
| — upwards   | 20 mm<br>10 mm   |
| <ul><li>— downwards</li><li>— at the side</li></ul>                             | 9 mm   |
| — at the side  Connections/ Terminals   | 3 IIIII  |
|   | corou tuno terminale   |
| type of electrical connection for main current circuit                          | screw-type terminals   |
| type of connectable conductor cross-sections  • for main contacts stranded      | 0.5 4 mm <sup>2</sup> 2y (0.75 2.5 mm <sup>2</sup> )   |
| at AWG cables for main contacts   | 0.5 4 mm <sup>2</sup> , 2x (0.75 2.5 mm <sup>2</sup> )<br>2x (20 16), only for contactor 2x (18 14), 2x 12 |
| connectable conductor cross-section for main contacts                           | 2x (20 16), only for contactor 2x (18 14), 2x 12<br>0.5 2.5 mm <sup>2</sup>                                |
| finely stranded with core end processing  | 0.0 2.0 Hilli  |
| Safety related data   |  |
| B10 value with high demand rate according to SN 31920                           | 1 000 000  |
| proportion of dangerous failures with high demand rate                          | 73 %   |
| according to SN 31920   |  |
| protection class IP on the front according to IEC 60529                         | IP20   |
| touch protection on the front according to IEC 60529                            | finger-safe, for vertical contact from the front   |
| to a on protocation on the front according to inco 00029                        | inger sale, for vertical contact from the front  |

## Certificates/ approvals

**General Product Approval** 

For use in hazardous locations Declaration of Conformity



Confirmation



EAC





Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other











Confirmation

Vibration and Shock

**Dangerous Good** 

<u>Transport Information</u>

## **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=3RA2215-1CA15-2BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2215-1CA15-2BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2215-1CA15-2BB4

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

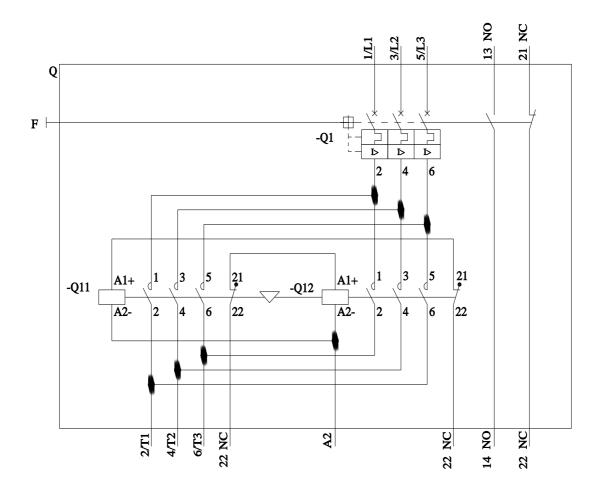
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA2215-1CA15-2BB4&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2215-1CA15-2BB4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2215-1CA15-2BB4&objecttype=14&gridview=view1



last modified: 12/15/2020 ☑