

LOAD FEEDER FUSELESS DIRECT START,  
AC 400V, SZ S0, 3.5. . . 5A,  
AC 230V SCREW CONNECTION FOR RAIL-MOUNTING,  
TYPE OF COORDINATION 2,  
IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)  
1NO+1NC (CONTACTOR)

### Allgemeine technische Daten:

|                                                               |    |                             |
|---------------------------------------------------------------|----|-----------------------------|
| product brand name                                            |    | SIRIUS                      |
| Product designation                                           |    | non-fused load feeders 3RA2 |
| Size of the load feeder                                       |    | S0                          |
| Number of poles / for main current circuit                    |    | 3                           |
| Installation altitude / at a height over sea level / maximum  | m  | 2,000                       |
| Product function                                              |    |                             |
| • short circuit protection                                    |    | Yes                         |
| • overload protection                                         |    | Yes                         |
| • phase disturbance recognition                               |    | Yes                         |
| Product component                                             |    |                             |
| • trip indicator                                              |    | No                          |
| • auxiliary switch                                            |    | No                          |
| Product extension / auxiliary switch                          |    | Yes                         |
| Design of display / for switching status                      |    | Switch setting              |
| Insulation voltage / with degree of pollution 3 / rated value | V  | 690                         |
| Impulse voltage resistance / rated value                      | kV | 6                           |
| Protection class IP                                           |    |                             |
| • on the front                                                |    | IP20                        |
| Protection against electrical shock                           |    | finger-safe                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------|
| <b>Shock resistance / according to IEC 60068-2-27</b>                                                                                                                                                                                                                                                                                                                                                             |    | 6g / 11 ms                                                                                          |
| <b>maximum permissible voltage for safe isolation in networks with non-grounded star point</b>                                                                                                                                                                                                                                                                                                                    |    |                                                                                                     |
| <b>Ambient temperature</b> <ul style="list-style-type: none"> <li>during transport</li> <li>during storage</li> <li>during operating</li> </ul>                                                                                                                                                                                                                                                                   | °C | -50 ... +80<br>-50 ... 80<br>-20 ... 60                                                             |
| <b>Manufacturer article number</b> <ul style="list-style-type: none"> <li>of the circuit-breakers included in the scope of supply</li> <li>of the contactor included in the scope of supply</li> <li>of the RS applied assembly kit</li> <li>of the link module included in the scope of supply</li> <li>of the busbar adapter included in the scope of supply</li> <li>of the RH applied assembly kit</li> </ul> |    | <a href="#">3RV2021-1FA10</a><br><a href="#">3RT2024-1AP00</a><br><br><a href="#">3RA2921-1AA00</a> |

| Hauptstromkreis:                                                                                                                                                    |   |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------|
| <b>Operating current / rated value</b>                                                                                                                              | A | 32                      |
| <b>Mechanical operating cycles as operating time / of the auxiliary contacts / typical</b>                                                                          |   | 10,000,000              |
| <b>Derating factor for rated value of the operational current</b>                                                                                                   |   |                         |
| <b>Operating voltage / rated value</b>                                                                                                                              | V | 690                     |
| <b>Voltage type / for main circuit</b>                                                                                                                              |   | AC                      |
| <b>Frequency</b>                                                                                                                                                    |   | -                       |
| <b>Service power / at AC-3</b> <ul style="list-style-type: none"> <li>at 400 V / rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> | W | 1,500<br>2,200<br>3,000 |
| <b>Operating current / at AC-3 / at 400 V / rated value</b>                                                                                                         | A | 3.6                     |
| <b>Type of assignment</b>                                                                                                                                           |   | 2                       |

| Steuerstromkreis/ Ansteuerung:                           |     |     |
|----------------------------------------------------------|-----|-----|
| <b>Voltage type / for auxiliary and control circuit</b>  |     | AC  |
| <b>Apparent holding power / of the solenoid / for AC</b> | V·A | 8.5 |

| Hilfsstromkreis:                                              |  |   |
|---------------------------------------------------------------|--|---|
| <b>Number of NC contacts / for auxiliary contacts</b>         |  | 1 |
| <b>Number of NO contacts / for auxiliary contacts</b>         |  | 1 |
| <b>Number of changeover contacts / for auxiliary contacts</b> |  | 0 |

| Schutz-/Überwachungsfunktion:                 |  |                      |
|-----------------------------------------------|--|----------------------|
| <b>Design of the overload circuit breaker</b> |  | thermal (bimetallic) |
| <b>Trip class</b>                             |  | CLASS 10             |

|                                                                                |   |           |
|--------------------------------------------------------------------------------|---|-----------|
| <b>Adjustable response current / of the current-dependent overload release</b> | A | 3.5 ... 5 |
| <b>Design of the short-circuit trip</b>                                        |   | magnetic  |
| <b>Conditional short-circuit current (I<sub>q</sub>)</b>                       |   |           |
| • at 400 V / according to IEC 60947-4-1 / rated value                          | A | 153,000   |
| • at 500 V / according to IEC 60947-4-1 / rated value                          | A | 100,000   |
| • at 690 V according to IEC 60947-4-1 rated value                              |   | 4,000     |
| <b>Varification of suitability / ATEX</b>                                      |   | Yes       |

#### Sicherheitsrelevante Kenngrößen:

|                                                                  |   |           |
|------------------------------------------------------------------|---|-----------|
| <b>Proportion of dangerous failures</b>                          |   |           |
| • with high demand rate / according to SN 31920                  | % | 73        |
| <b>B10 value / with high demand rate / according to SN 31920</b> |   | 1,000,000 |

#### Einbau/ Befestigung/ Abmessungen:

|                                                          |    |                                                              |
|----------------------------------------------------------|----|--------------------------------------------------------------|
| <b>Mounting type</b>                                     |    | screw and snap-on mounting onto 35 mm standard mounting rail |
| <b>mounting position</b>                                 |    | vertical                                                     |
| <b>Depth</b>                                             | mm | 97.1                                                         |
| <b>Height</b>                                            | mm | 193.1                                                        |
| <b>Width</b>                                             | mm | 45                                                           |
| <b>Distance, to be maintained, to the ranks assembly</b> |    |                                                              |
| • upwards                                                | mm | 30                                                           |
| • forwards                                               | mm | 10                                                           |
| • sideways                                               |    | 0                                                            |
| • backwards                                              |    | 0                                                            |
| • downwards                                              |    | 30                                                           |

#### Anschlüsse/ Klemmen:

|                                                                               |  |                                                   |
|-------------------------------------------------------------------------------|--|---------------------------------------------------|
| <b>Arrangement of electrical connectors / for main current circuit</b>        |  | from the top                                      |
| <b>Design of the electrical connection</b>                                    |  |                                                   |
| • for main current circuit                                                    |  | screw-type terminals                              |
| • for auxiliary and control current circuit                                   |  | screw-type terminals                              |
| <b>Type of the connectable conductor cross-section for main contacts</b>      |  |                                                   |
| • solid or multi-stranded                                                     |  | 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²)           |
| • finely stranded                                                             |  |                                                   |
| • with conductor end processing                                               |  | 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² |
| <b>Type of the connectable conductor cross-section for auxiliary contacts</b> |  |                                                   |
| • solid or multi-stranded                                                     |  | 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²)       |
| • finely stranded                                                             |  |                                                   |

|                                                                                       |     |                                                                       |
|---------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------|
| • with conductor end processing                                                       |     | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| <b>Type of the connectable conductor cross-section / for AWG conductors</b>           |     |                                                                       |
| • for main contacts                                                                   |     | 2x (16 ... 12), 2x (14 ... 8)                                         |
| • for auxiliary contacts                                                              |     | 2x (20 ... 16), 2x (18 ... 14)                                        |
| <b>Tightening torque / for main contacts</b>                                          |     |                                                                       |
| • with screw-type terminals                                                           | N·m | 2 ... 2.5                                                             |
| <b>Design of the thread of the connection screw for main contacts</b>                 |     |                                                                       |
| M4                                                                                    | M4  |                                                                       |
| <b>Tightening torque / for auxiliary contacts</b>                                     |     |                                                                       |
| • with screw-type terminals                                                           | N·m | 0.8 ... 1.2                                                           |
| <b>Design of the thread of the connection screw of the auxiliary and control pins</b> |     |                                                                       |
| M3                                                                                    | M3  |                                                                       |
| <b>Dimension de la tête de tournevis</b>                                              |     | Pozidriv 2                                                            |

#### UL/CSA Bemessungsdaten:

##### yielded mechanical performance [hp] / for three-phase squirrel cage motors

- at 200/208 V / rated value
- at 220/230 V / rated value
- at 460/480 V rated value
- at 575/600 V rated value

|    |   |
|----|---|
| hp | 1 |
| hp | 1 |
|    | 3 |
|    | 3 |

##### Full-load current (FLA) / for 3-phase motor

- at 480 V / rated value

|   |     |
|---|-----|
| A | 4.8 |
|---|-----|

#### Approbationen/ Zertifikate:

##### General Product Approval



[Type Test Certificates/Test Report](#)

##### For use in hazardous locations

##### Declaration of Conformity

##### Test Certificates

##### Shipping Approval



##### other

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

#### Weitere Informationen:

---

**Information- and Downloadcenter (Kataloge, Broschüren,...)**

<http://www.siemens.de/industrial-controls/catalogs>

---

**Industry Mall (Online-Bestellsystem)**

<http://www.siemens.de/industrial-controls/mall>

---

**CAX-Online-Generator**

<http://www.siemens.com/cax>

---

**Service&Support (Handbücher, Betriebsanleitungen, Zertifikate, Kennlinien, FAQs,...)**

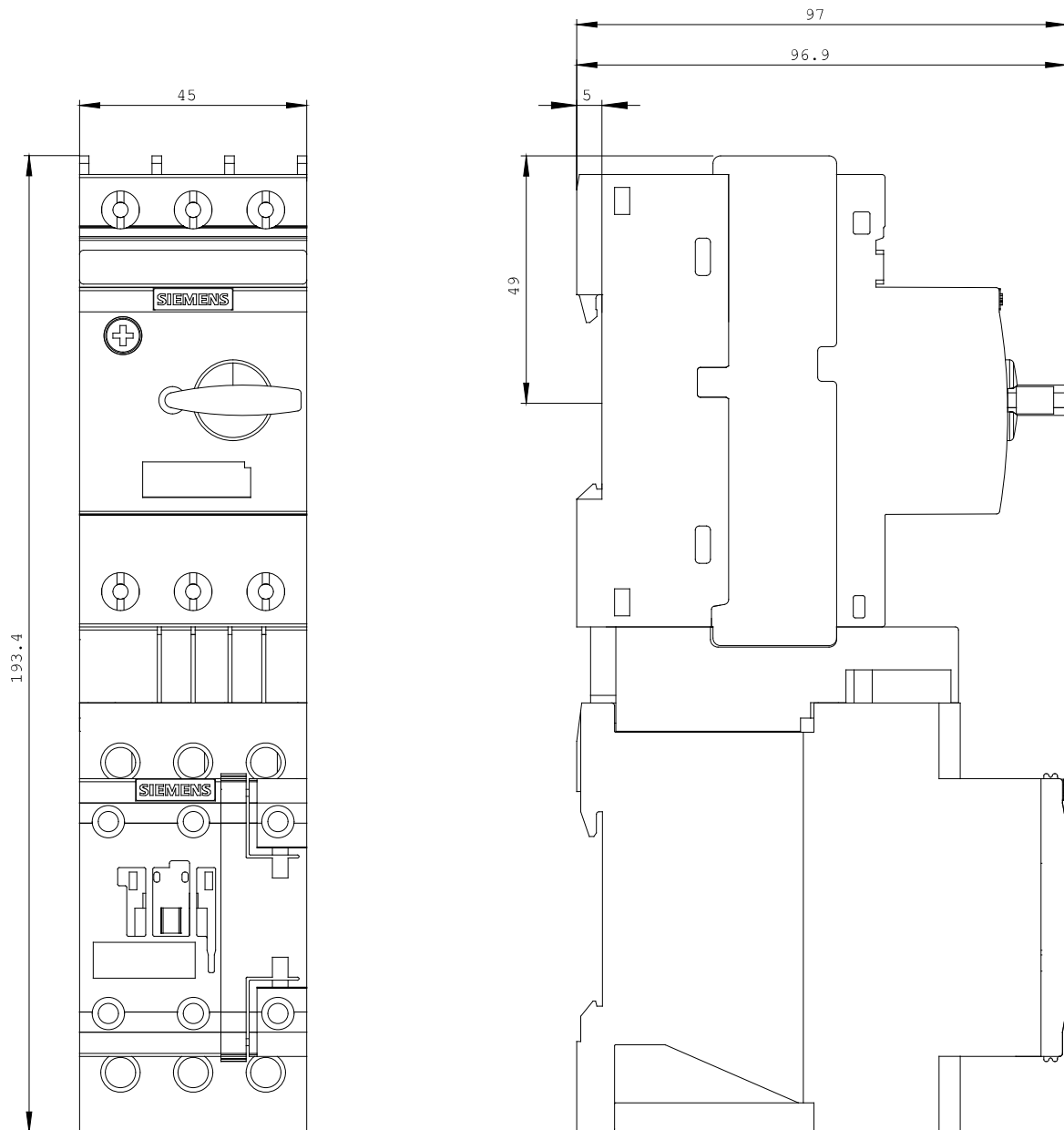
<http://support.automation.siemens.com/WW/view/de/3RA2120-1FA24-0AP0/all>

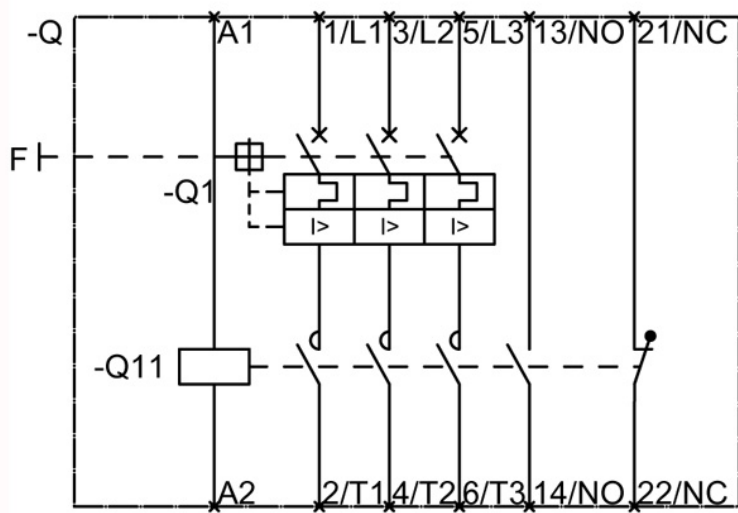
---

**Bilddatenbank (Produktfotos, 2D-Maßzeichnungen, 3D-Modelle, Geräteschaltpläne, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2120-1FA24-0AP0](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1FA24-0AP0)

---





letzte Änderung:

Aug 4, 2014