



Load feeder fuseless, Reversing duty 400 V AC, Size S0 18...25 A  
24 V DC Spring-type terminal for 60 mm busbar systems (also fulfills  
type of coordination 1) Type of coordination 2, I<sub>q</sub> = 150 kA 1 NO+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 style="list-style-type: none"> <li>• of the supplied contactor</li> <li>• of the supplied circuit-breakers</li> <li>• of the supplied RS assembly kit</li> <li>• of the supplied busbar adapter</li> <li>• of the supplied link module</li> </ul> | <a href="#">3RT2027-2BB40</a><br><a href="#">3RV2021-4DA20</a><br><a href="#">8US1250-5AT10</a><br><a href="#">8US1251-5NT11</a><br><a href="#">3RA2921-2AA00</a> |

| General technical data                                                                           |              |
|--------------------------------------------------------------------------------------------------|--------------|
| Size of the circuit-breaker                                                                      | S0           |
| Size of load feeder                                                                              | S0           |
| Insulation voltage                                                                               |              |
| <ul style="list-style-type: none"> <li>• with degree of pollution 3 at AC rated value</li> </ul> | 690 V        |
| Surge voltage resistance rated value                                                             | 6 kV         |
| Protection class IP                                                                              |              |
| <ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>      | IP20<br>IP20 |

|                                                                   |                   |
|-------------------------------------------------------------------|-------------------|
| <b>Shock resistance</b>                                           |                   |
| • acc. to IEC 60068-2-27                                          | 6g / 11 ms        |
| <b>Mechanical service life (switching cycles)</b>                 |                   |
| • of contactor typical                                            | 10 000 000        |
| <b>Type of assignment</b>                                         | 2                 |
| <b>Type of protection according to ATEX directive 2014/34/EU</b>  | Ex II (2) GD      |
| Certificate of suitability according to ATEX directive 2014/34/EU | DMT 02 ATEX F 001 |

|                                    |                |
|------------------------------------|----------------|
| <b>Ambient conditions</b>          |                |
| <b>Temperature compensation</b>    | -20 ... +60 °C |
| Relative humidity during operation | 10 ... 95 %    |

|                                                                                   |                   |
|-----------------------------------------------------------------------------------|-------------------|
| <b>Main circuit</b>                                                               |                   |
| <b>Number of poles for main current circuit</b>                                   | 3                 |
| <b>Design of the switching contact</b>                                            | electromechanical |
| <b>Adjustable pick-up value current of the current-dependent overload release</b> | 18 ... 25 A       |
| <b>Operating voltage</b>                                                          |                   |
| • rated value                                                                     | 690 V             |
| • at AC-3 rated value maximum                                                     | 690 V             |
| <b>Operating frequency rated value</b>                                            | 50 ... 60 Hz      |
| <b>Operating current</b>                                                          |                   |
| • at AC-3                                                                         |                   |
| — at 400 V rated value                                                            | 22 A              |
| <b>Operating power</b>                                                            |                   |
| • at AC-3                                                                         |                   |
| — at 400 V rated value                                                            | 11 000 W          |

|                                                      |       |
|------------------------------------------------------|-------|
| <b>Control circuit/ Control</b>                      |       |
| <b>Type of voltage of the control supply voltage</b> | DC    |
| <b>Control supply voltage at DC</b>                  |       |
| • rated value                                        | 24 V  |
| <b>Holding power of magnet coil at DC</b>            | 5.9 W |

|                                           |     |
|-------------------------------------------|-----|
| <b>Auxiliary circuit</b>                  |     |
| <b>Product extension Auxiliary switch</b> | Yes |

|                                            |                      |
|--------------------------------------------|----------------------|
| <b>Protective and monitoring functions</b> |                      |
| <b>Trip class</b>                          | CLASS 10             |
| <b>Design of the overload release</b>      | thermal (bimetallic) |

|                                                          |          |
|----------------------------------------------------------|----------|
| <b>Short-circuit protection</b>                          |          |
| <b>Product function Short circuit protection</b>         | Yes      |
| <b>Design of the short-circuit trip</b>                  | magnetic |
| <b>Conditional short-circuit current (I<sub>q</sub>)</b> |          |

- at 400 V acc. to IEC 60947-4-1 rated value

150 000 A

#### Installation/ mounting/ dimensions

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                       | vertical                               |
| <b>Mounting type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | for snapping onto 60 mm busbar systems |
| <b>Height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 260 mm                                 |
| <b>Width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 90 mm                                  |
| <b>Depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 165 mm                                 |
| <b>Required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                        |
| <ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 32 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 50 mm</li> <li>— at the side 10 mm</li> <li>— downwards 10 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 32 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 50 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> </ul> |                                        |

#### Connections/ Terminals

|                                                                              |                         |
|------------------------------------------------------------------------------|-------------------------|
| <b>Type of electrical connection</b>                                         |                         |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul> | spring-loaded terminals |

#### Safety related data

|                                                                                            |           |
|--------------------------------------------------------------------------------------------|-----------|
| <b>B10 value</b>                                                                           |           |
| <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul> | 1 000 000 |
| <b>Proportion of dangerous failures</b>                                                    |           |
| <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul> | 73 %      |

#### Certificates/ approvals

| General Product Approval | For use in hazardous locations | Declaration of Conformity |
|--------------------------|--------------------------------|---------------------------|
|--------------------------|--------------------------------|---------------------------|



CSA



UL



ATEX



EG-Konf.

[Miscellaneous](#)

| Test Certificates | Marine / Shipping |
|-------------------|-------------------|
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU  
VERITAS



LRS



PRS

| Marine / Shipping | other | Railway |
|-------------------|-------|---------|
|-------------------|-------|---------|



RINA



RMRS



DNVGL.COM/AF

[Confirmation](#)

[Vibration and Shock](#)

## 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=3RA2220-4DH27-0BB4>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-4DH27-0BB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-4DH27-0BB4>

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

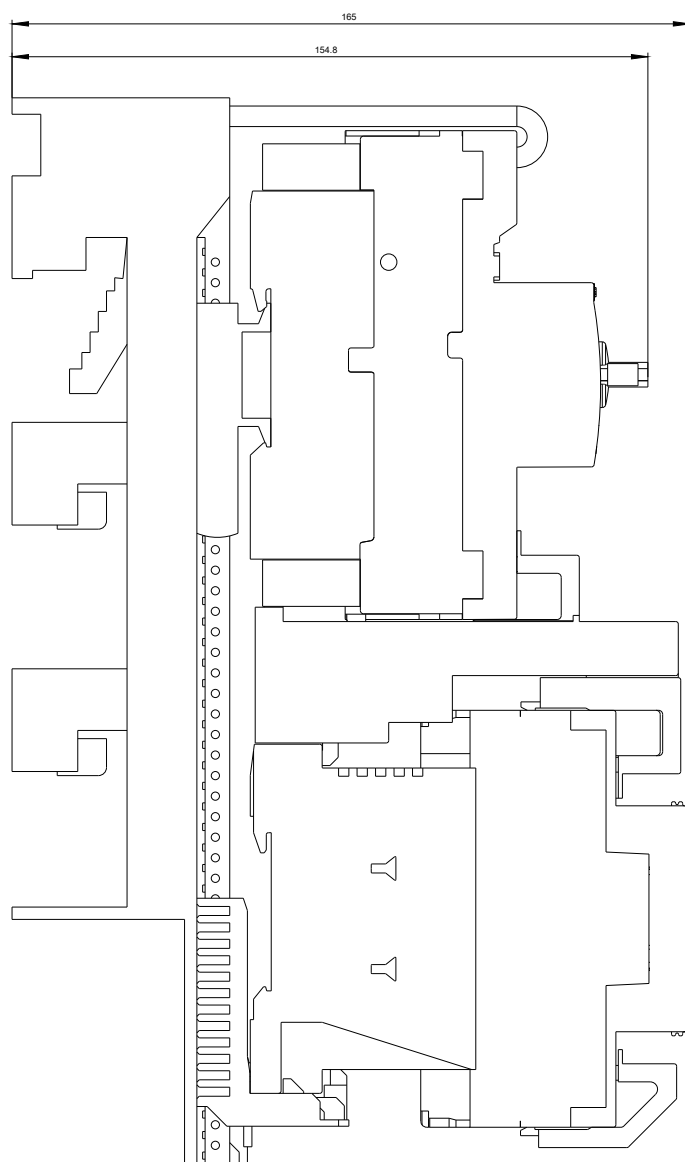
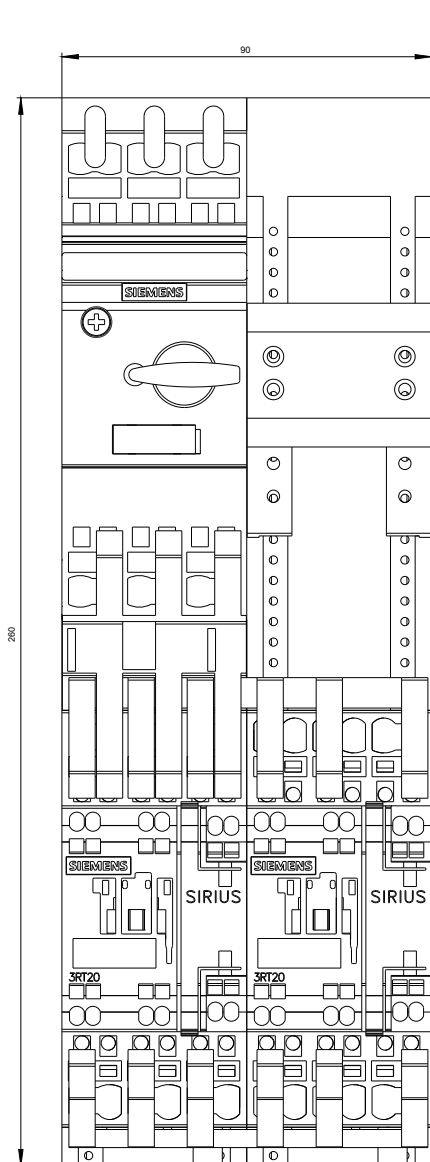
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2220-4DH27-0BB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-4DH27-0BB4&lang=en)

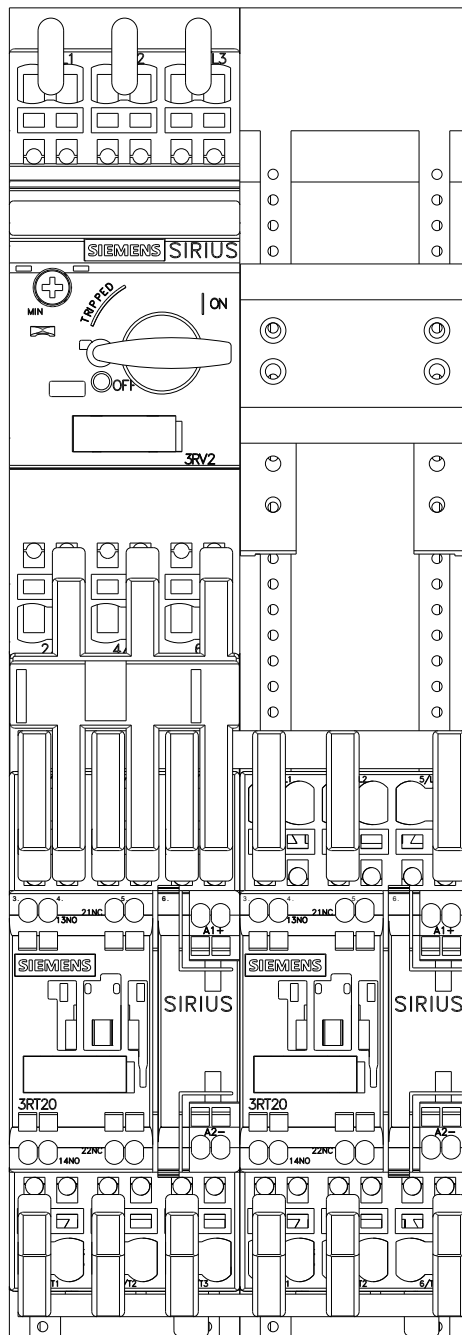
**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**

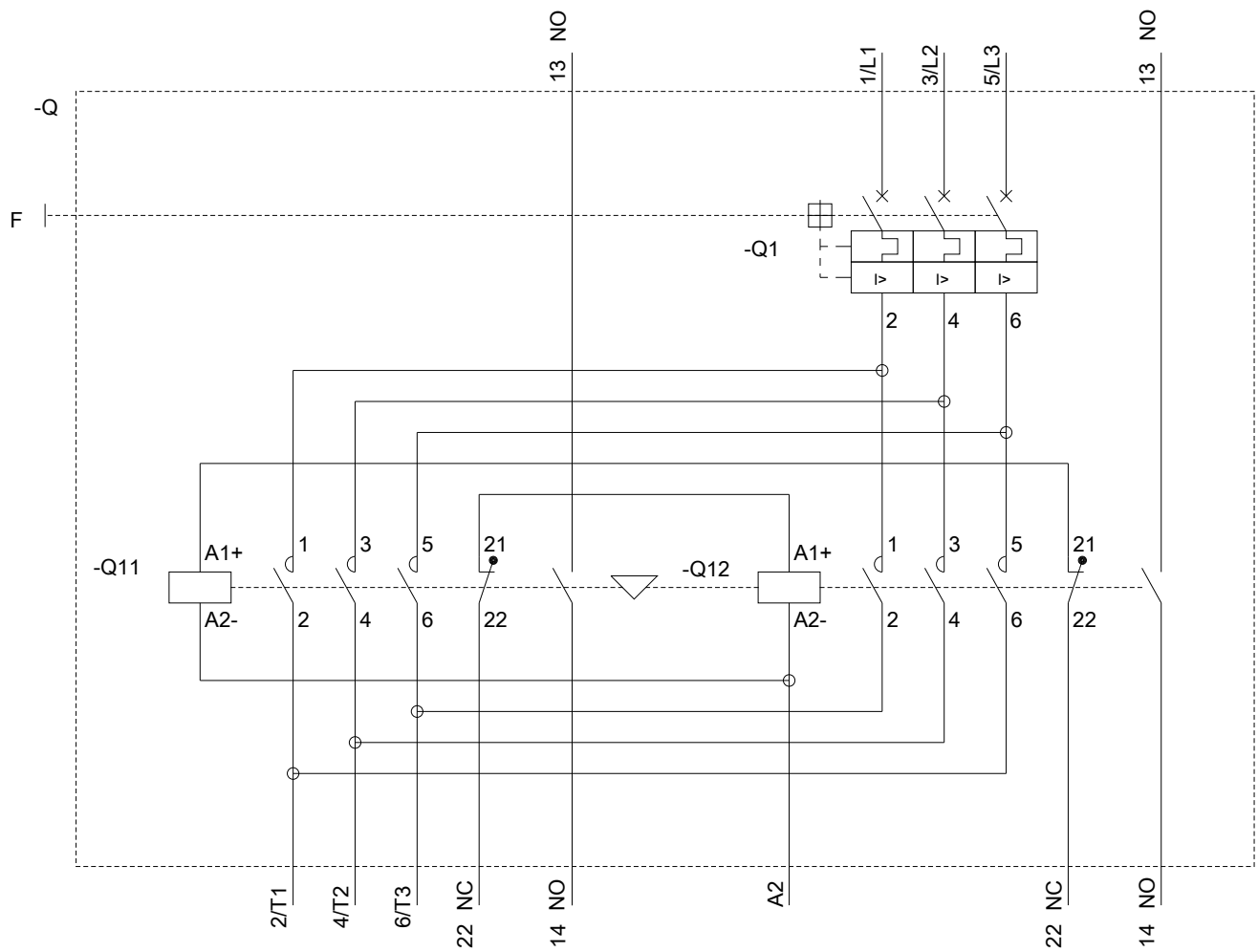
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-4DH27-0BB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-4DH27-0BB4&objecttype=14&gridview=view1>







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