



contactor relay, 6 NO + 2 NC, 110 V AC, 50/60 Hz, with integrated full-wave rectifier, spring-loaded terminal, frame size S00, removable auxiliary switch

|                                                                                  |                            |
|----------------------------------------------------------------------------------|----------------------------|
| product brand name                                                               | SIRIUS                     |
| product designation                                                              | Auxiliary contactor        |
| product type designation                                                         | 3RH2                       |
| <b>General technical data</b>                                                    |                            |
| size of contactor                                                                | S00                        |
| product extension auxiliary switch                                               | No                         |
| power loss [W] for rated value of the current without load current share typical | 1.43 W                     |
| insulation voltage with degree of pollution 3 at AC rated value                  | 690 V                      |
| degree of pollution                                                              | 3                          |
| surge voltage resistance rated value                                             | 6 kV                       |
| shock resistance at rectangular impulse                                          |                            |
| • at AC                                                                          | 7,3g / 5 ms, 4,7g / 10 ms  |
| shock resistance with sine pulse                                                 |                            |
| • at AC                                                                          | 11,4g / 5 ms, 7,3g / 10 ms |
| mechanical service life (operating cycles)                                       |                            |
| • of contactor typical                                                           | 10 000 000                 |
| reference code according to IEC 81346-2                                          | K                          |
| Substance Prohibitance (Date)                                                    | 10/01/2009                 |
| SVHC substance name                                                              | Lead - 7439-92-1           |
| Weight                                                                           | 0.382 kg                   |
| <b>Ambient conditions</b>                                                        |                            |
| installation altitude at height above sea level maximum                          | 2 000 m                    |
| ambient temperature                                                              |                            |
| • during operation                                                               | -25 ... +60 °C             |
| • during storage                                                                 | -55 ... +80 °C             |
| relative humidity minimum                                                        | 10 %                       |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum                   | 95 %                       |
| <b>Environmental footprint</b>                                                   |                            |
| Environmental Product Declaration (EPD)                                          | Yes                        |
| global warming potential [CO2 eq] total                                          | 95.5 kg                    |
| global warming potential [CO2 eq] during manufacturing                           | 1.43 kg                    |
| global warming potential [CO2 eq] during operation                               | 94.1 kg                    |
| global warming potential [CO2 eq] after end of life                              | -0.016 kg                  |
| <b>Main circuit</b>                                                              |                            |
| no-load switching frequency                                                      |                            |
| • at AC                                                                          | 10 000 1/h                 |
| • at DC                                                                          | 10 000 1/h                 |
| <b>Control circuit/ Control</b>                                                  |                            |
| type of voltage of the control supply voltage                                    | AC                         |

|                                                                                       |                     |
|---------------------------------------------------------------------------------------|---------------------|
| <b>control supply voltage at AC</b>                                                   |                     |
| • at 50 Hz rated value                                                                | 110 V               |
| • at 60 Hz rated value                                                                | 110 V               |
| <b>control supply voltage frequency</b>                                               |                     |
| • 1 rated value                                                                       | 50 Hz               |
| • 2 rated value                                                                       | 60 Hz               |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> |                     |
| • at 50 Hz                                                                            | 0.8 ... 1.1         |
| • at 60 Hz                                                                            | 0.85 ... 1.1        |
| <b>design of the surge suppressor</b>                                                 | full-wave rectifier |
| <b>apparent pick-up power of magnet coil at AC</b>                                    | 37 VA               |
| <b>inductive power factor with closing power of the coil</b>                          | 0.9                 |
| <b>apparent holding power of magnet coil at AC</b>                                    | 4.4 VA              |
| <b>inductive power factor with the holding power of the coil</b>                      | 0.9                 |
| <b>closing delay</b>                                                                  |                     |
| • at AC                                                                               | 30 ... 100 ms       |
| <b>opening delay</b>                                                                  |                     |
| • at AC                                                                               | 38 ... 65 ms        |
| <b>arcing time</b>                                                                    | 10 ... 15 ms        |
| <b>Auxiliary circuit</b>                                                              |                     |
| <b>number of NC contacts for auxiliary contacts</b>                                   | 2                   |
| • instantaneous contact                                                               | 2                   |
| <b>number of NO contacts for auxiliary contacts</b>                                   | 6                   |
| • instantaneous contact                                                               | 6                   |
| <b>identification number and letter for switching elements</b>                        | 62 E                |
| <b>operational current at AC-12 maximum</b>                                           | 10 A                |
| <b>operational current at AC-15</b>                                                   |                     |
| • at 230 V rated value                                                                | 6 A                 |
| • at 400 V rated value                                                                | 3 A                 |
| • at 500 V rated value                                                                | 2 A                 |
| • at 690 V rated value                                                                | 1 A                 |
| <b>operational current at 1 current path at DC-12</b>                                 |                     |
| • at 24 V rated value                                                                 | 10 A                |
| • at 110 V rated value                                                                | 3 A                 |
| • at 220 V rated value                                                                | 1 A                 |
| • at 440 V rated value                                                                | 0.3 A               |
| • at 600 V rated value                                                                | 0.15 A              |
| <b>operational current with 2 current paths in series at DC-12</b>                    |                     |
| • at 24 V rated value                                                                 | 10 A                |
| • at 60 V rated value                                                                 | 10 A                |
| • at 110 V rated value                                                                | 4 A                 |
| • at 220 V rated value                                                                | 2 A                 |
| • at 440 V rated value                                                                | 1.3 A               |
| • at 600 V rated value                                                                | 0.65 A              |
| <b>operational current with 3 current paths in series at DC-12</b>                    |                     |
| • at 24 V rated value                                                                 | 10 A                |
| • at 60 V rated value                                                                 | 10 A                |
| • at 110 V rated value                                                                | 10 A                |
| • at 220 V rated value                                                                | 3.6 A               |
| • at 440 V rated value                                                                | 2.5 A               |
| • at 600 V rated value                                                                | 1.8 A               |
| <b>operating frequency at DC-12 maximum</b>                                           | 1 000 1/h           |
| <b>operational current at 1 current path at DC-13</b>                                 |                     |
| • at 24 V rated value                                                                 | 6 A                 |
| • at 110 V rated value                                                                | 1 A                 |
| • at 220 V rated value                                                                | 0.3 A               |
| • at 440 V rated value                                                                | 0.14 A              |
| • at 600 V rated value                                                                | 0.1 A               |
| <b>operational current with 2 current paths in series at DC-13</b>                    |                     |
| • at 24 V rated value                                                                 | 10 A                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 220 V rated value</li> <li>• at 440 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                       | 3.5 A<br>1.3 A<br>0.9 A<br>0.2 A<br>0.1 A                                                                                            |
| <b>operational current with 3 current paths in series at DC-13</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 220 V rated value</li> <li>• at 440 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                                                                        | 10 A<br>4.7 A<br>3 A<br>1.2 A<br>0.5 A<br>0.26 A                                                                                     |
| <b>operating frequency at DC-13 maximum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 000 1/h                                                                                                                            |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 faulty switching per 100 million (17 V, 1 mA)                                                                                      |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                      |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A600 / Q600                                                                                                                          |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                      |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                                                                                                                                                                                                                                     | C characteristic: 10 A; 0.4 kA                                                                                                       |
| design of the fuse link for short-circuit protection of the auxiliary switch required                                                                                                                                                                                                                                                                                                                                                                                                                                         | fuse gL/gG: 10 A                                                                                                                     |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                      |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | screw and snap-on mounting onto 35 mm DIN rail                                                                                       |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 70 mm                                                                                                                                |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 45 mm                                                                                                                                |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 121 mm                                                                                                                               |
| <b>required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 10 mm<br>10 mm<br>10 mm<br>0 mm<br><br>10 mm<br>10 mm<br>6 mm<br>10 mm<br><br>10 mm<br>10 mm<br>10 mm<br>6 mm                        |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                      |
| type of electrical connection for auxiliary and control circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                               | spring-loaded terminals                                                                                                              |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                 | 2x (0,5 ... 4 mm²)<br>2x (0.5 ... 2.5 mm²)<br>2x (0.5 ... 2.5 mm²)<br>2x (20 ... 12)                                                 |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                      |
| <b>product function</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• positively driven operation according to IEC 60947-5-1</li> <li>• suitable for safety function</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            | Yes<br>Yes                                                                                                                           |
| suitability for use safety-related switching OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Yes                                                                                                                                  |
| <b>service life maximum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 20 a                                                                                                                                 |
| <b>proportion of dangerous failures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• with low demand rate according to SN 31920</li> <li>• with high demand rate according to SN 31920</li> </ul>                                                                                                                                                                                                                                                                                                                                                                         | 40 %<br>73 %                                                                                                                         |

|                                                               |                                                  |
|---------------------------------------------------------------|--------------------------------------------------|
| B10 value with high demand rate according to SN 31920         | 1 000 000; With 0.3 x I <sub>e</sub>             |
| failure rate [FIT] with low demand rate according to SN 31920 | 100 FIT                                          |
| ISO 13849                                                     |                                                  |
| device type according to ISO 13849-1                          | 3                                                |
| overdimensioning according to ISO 13849-2 necessary           | Yes                                              |
| IEC 61508                                                     |                                                  |
| safety device type according to IEC 61508-2                   | Type A                                           |
| Electrical Safety                                             |                                                  |
| 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 |
| Approvals Certificates                                        |                                                  |
| General Product Approval                                      |                                                  |



[Confirmation](#)



[KC](#)

|                          |     |                   |                   |
|--------------------------|-----|-------------------|-------------------|
| General Product Approval | EMV | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



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



[Miscellaneous](#)

|       |         |                 |             |
|-------|---------|-----------------|-------------|
| other | Railway | Dangerous goods | Environment |
|-------|---------|-----------------|-------------|

[Confirmation](#)

[Special Test Certificate](#)

[Transport Information](#)



[Environmental Confirmations](#)

#### Further information

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)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2362-2GG20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2362-2GG20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RH2362-2GG20>

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

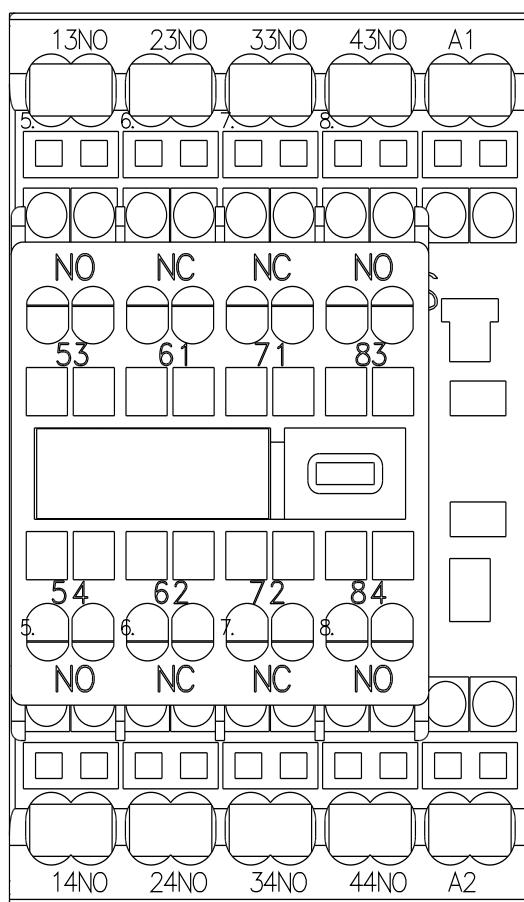
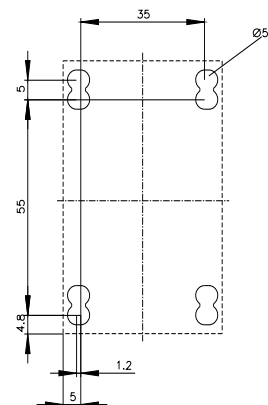
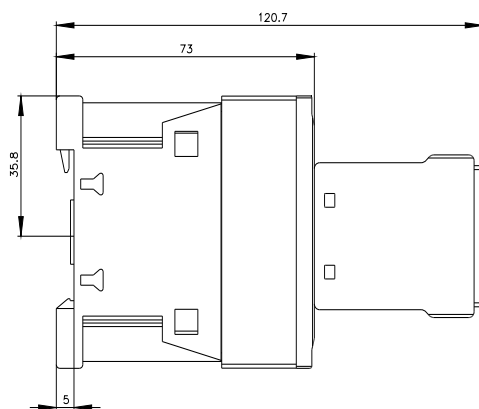
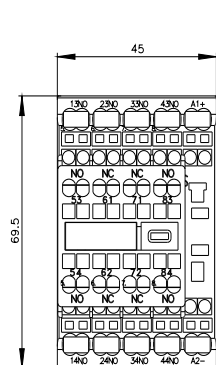
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RH2362-2GG20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2362-2GG20&lang=en)

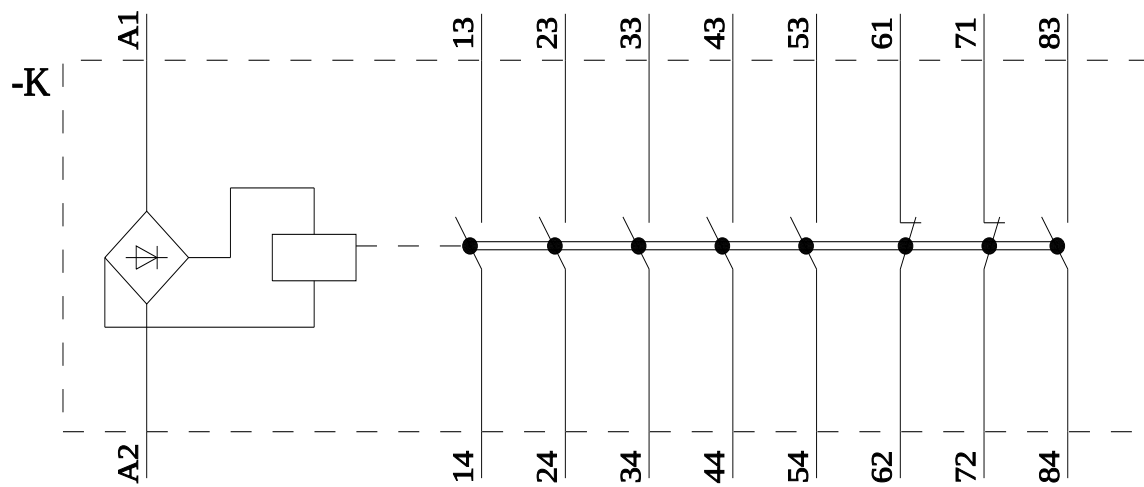
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RH2362-2GG20/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2362-2GG20&objecttype=14&gridview=view1>





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