



Contactor relay, 6 NO + 2 NC, 110 V AC, 50 Hz / 120 V, 60 Hz, Size S00, screw terminal, Captive 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                         |
| 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 (switching cycles)                                     |                            |
| • of contactor typical                                                         | 10 000 000                 |
| reference code according to IEC 81346-2                                        | K                          |
| Substance Prohibitance (Date)                                                  | 10/01/2009                 |
| <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>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                         |
| control supply voltage at AC                                                   |                            |
| • at 50 Hz rated value                                                         | 110 V                      |
| • at 60 Hz rated value                                                         | 120 V                      |
| control supply voltage frequency                                               |                            |
| • 1 rated value                                                                | 50 Hz                      |
| • 2 rated value                                                                | 60 Hz                      |
| operating range factor control supply voltage rated value of magnet coil at AC |                            |

|                                                                                                                                                                                                                                        |                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                       | 0.8 ... 1.1<br>0.85 ... 1.1                     |
| <b>apparent pick-up power of magnet coil at AC</b>                                                                                                                                                                                     | 37 VA                                           |
| <b>inductive power factor with closing power of the coil</b>                                                                                                                                                                           | 0.8                                             |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                                                                                                     | 5.7 VA                                          |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                                                                                       | 0.25                                            |
| <b>closing delay</b>                                                                                                                                                                                                                   |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                              | 8 ... 33 ms                                     |
| <b>opening delay</b>                                                                                                                                                                                                                   |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                              | 4 ... 15 ms                                     |
| <b>arcing time</b>                                                                                                                                                                                                                     | 10 ... 15 ms                                    |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                               |                                                 |
| <b>number of NC contacts for auxiliary contacts</b>                                                                                                                                                                                    | 2                                               |
| <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                              | 2                                               |
| <b>number of NO contacts for auxiliary contacts</b>                                                                                                                                                                                    | 6                                               |
| <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                              | 6                                               |
| <b>identification number and letter for switching elements</b>                                                                                                                                                                         | 62 E                                            |
| operational current at AC-12 maximum                                                                                                                                                                                                   | 10 A                                            |
| <b>operational current at AC-15</b>                                                                                                                                                                                                    |                                                 |
| <ul style="list-style-type: none"> <li>• at 230 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                               | 6 A<br>3 A<br>2 A<br>1 A                        |
| <b>operational current at 1 current path at DC-12</b>                                                                                                                                                                                  |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 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>3 A<br>1 A<br>0.3 A<br>0.15 A           |
| <b>operational current with 2 current paths in series at DC-12</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>10 A<br>4 A<br>2 A<br>1.3 A<br>0.65 A   |
| <b>operational current with 3 current paths in series at DC-12</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>10 A<br>10 A<br>3.6 A<br>2.5 A<br>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>                                                                                                                                                                                  |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 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>                                | 6 A<br>1 A<br>0.3 A<br>0.14 A<br>0.1 A          |
| <b>operational current with 2 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> </ul>                                 | 10 A<br>3.5 A<br>1.3 A<br>0.9 A<br>0.2 A        |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 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                                                                                                                                     |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                                                                                                                                                                                                                                                                               | C characteristic: 6 A; 0.4 kA                                                                                                                 |
| <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 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 standard mounting rail                                                                                  |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 57.5 mm                                                                                                                                       |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 45 mm                                                                                                                                         |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 117 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | screw-type 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> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                                                                     | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                               |
| B10 value with high demand rate according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 000 000; With 0.3 x Ie                                                                                                                      |
| <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 %                                                                                                                                  |
| failure rate [FIT] with low demand rate according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100 FIT                                                                                                                                       |
| T1 value for proof test interval or service life according to IEC 61508                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20 y                                                                                                                                          |
| <b>protection class IP on the front according to IEC 60529</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | IP20                                                                                                                                          |
| <b>touch protection on the front according to IEC 60529</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | finger-safe, for vertical contact from the front                                                                                              |
| <b>Certificates/ approvals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                               |

## General Product Approval



[Confirmation](#)



[KC](#)



EMC

Functional  
Safety/Safety of  
Machinery

Declaration of Conformity

Test Certificates



[Type Examination  
Certificate](#)



EG-Konf.



[Type Test Certi-  
ficates/Test Report](#)

[Special Test Certifi-  
cate](#)

## Marine / Shipping



ABS



DNV



LRS



PRS



RINA

## Marine / Shipping

other



RMRS

[Confirmation](#)



VDE

## 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=3RH2262-1AK60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2262-1AK60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RH2262-1AK60>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RH2262-1AK60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2262-1AK60&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RH2262-1AK60/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2262-1AK60&objecttype=14&gridview=view1>

last modified:

12/1/2021