

COUPLING RELAY, AC-3, 3KW/400V, 1NC, DC 24V, 0.7...1.25\*US, W. INTEGRATED DIODE 3-POLE SZ S00, SPRING-LOADED TERMINAL

|                     |  |                |
|---------------------|--|----------------|
| product brand name  |  | SIRIUS         |
| Product designation |  | Coupling relay |

### General technical data:

|  |    |            |
|--|----|------------|
| <b>Insulation voltage</b>                            |    |            |
| • Rated value  | V  | 690        |
| <b>Degree of pollution</b>                           |    | 3          |
| <b>Surge voltage resistance Rated value</b>          | kV | 6          |
| <b>Mechanical service life (switching cycles)</b>    |    |            |
| • of the contactor typical                           |    | 30 000 000 |
| <b>Thermal short-time current restricted to 10 s</b> | A  | 56         |
| <b>Protection class IP</b>                           |    |            |
| • on the front                                       |    | IP20       |
| • of the terminal                                    |    | IP20       |
| <b>Equipment marking</b>                             |    |            |
| • acc. to DIN EN 61346-2                             |    | Q          |
| • acc. to DIN EN 81346-2                             |    | Q          |

### Main circuit:

|   |   |     |
|---|---|-----|
| <b>Number of poles for main current circuit</b> |   | 3   |
| <b>Number of NC contacts for main contacts</b>  |   | 0   |
| <b>Number of NO contacts for main contacts</b>  |   | 3   |
| <b>Operating voltage</b>                        |   |     |
| • at AC-3 Rated value maximum                   | V | 690 |
| <b>Operating current</b>                        |   |     |
| • at AC-1                                       |   |     |

|   |   |      |
|---|---|------|
| — at 400 V at ambient temperature 40 °C<br>Rated value    | A | 18   |
| — up to 690 V at ambient temperature 40 °C<br>Rated value | A | 18   |
| — up to 690 V at ambient temperature 60 °C<br>Rated value | A | 16   |
| • at AC-2 at 400 V Rated value                            | A | 7    |
| • at AC-3   |   |      |
| — at 400 V Rated value                                    | A | 7    |
| — at 500 V Rated value                                    | A | 6    |
| — at 690 V Rated value                                    | A | 4.9  |
| • at AC-4 at 400 V Rated value                            | A | 6.5  |
| <b>Operating current with 1 current path</b>              |   |      |
| • at DC-1   |   |      |
| — at 24 V Rated value                                     | A | 15   |
| — at 110 V Rated value                                    | A | 1.5  |
| — at 220 V Rated value                                    | A | 0.6  |
| — at 440 V Rated value                                    | A | 0.42 |
| — at 600 V Rated value                                    | A | 0.42 |
| • at DC-3 at DC-5   |   |      |
| — at 24 V Rated value                                     | A | 15   |
| — at 110 V Rated value                                    | A | 0.1  |
| <b>Operating current with 2 current paths in series</b>   |   |      |
| • at DC-1   |   |      |
| — at 24 V Rated value                                     | A | 15   |
| — at 110 V Rated value                                    | A | 8.4  |
| — at 220 V Rated value                                    | A | 1.2  |
| — at 440 V Rated value                                    | A | 0.6  |
| — at 600 V Rated value                                    | A | 0.5  |
| • at DC-3 at DC-5   |   |      |
| — at 110 V Rated value                                    | A | 0.25 |
| — at 24 V Rated value                                     | A | 15   |
| <b>Operating current with 3 current paths in series</b>   |   |      |
| • at DC-1   |   |      |
| — at 24 V Rated value                                     | A | 15   |
| — at 110 V Rated value                                    | A | 15   |
| — at 220 V Rated value                                    | A | 15   |
| — at 440 V Rated value                                    | A | 0.9  |
| — at 600 V Rated value                                    | A | 0.7  |
| • at DC-3 at DC-5   |   |      |
| — at 110 V Rated value                                    | A | 15   |
| — at 220 V Rated value                                    | A | 1.2  |

|  |     |      |
|--|-----|------|
| — at 24 V Rated value  | A   | 15   |
| — at 440 V Rated value                                       | A   | 0.14 |
| — at 600 V Rated value                                       | A   | 0.14 |
| <b>Operating power</b>                                       |     |      |
| • at AC-1 at 400 V Rated value                               | kW  | 11   |
| • at AC-2 at 400 V Rated value                               | kW  | 3    |
| • at AC-4 at 400 V Rated value                               | kW  | 3    |
| <b>Operating power</b>                                       |     |      |
| • at AC-1  |     |      |
| — at 230 V at 60 °C Rated value                              | kW  | 6    |
| — at 230 V Rated value                                       | kW  | 6.3  |
| — at 400 V at 60 °C Rated value                              | kW  | 10.5 |
| — at 690 V at 60 °C Rated value                              | kW  | 18   |
| — at 690 V Rated value                                       | kW  | 19   |
| • at AC-3  |     |      |
| — at 230 V Rated value                                       | kW  | 1.5  |
| — at 400 V Rated value                                       | kW  | 3    |
| — at 690 V Rated value                                       | kW  | 4    |
| <b>Operating power for ≥ 200000 operating cycles at AC-4</b> |     |      |
| • at 400 V Rated value                                       | kW  | 1.15 |
| • at 690 V Rated value                                       | kW  | 1.15 |
| <b>Operating frequency</b>                                   |     |      |
| • at AC-3 maximum  | 1/h | 750  |

#### Control circuit/ Control:

|  |   |              |
|--|---|--------------|
| <b>Type of voltage of the control supply voltage</b>                                       |   | DC           |
| <b>Control supply voltage for DC</b>   |   |              |
| • Rated value  | V | 24           |
| <b>Operating range factor control supply voltage rated value of the magnet coil for DC</b> |   | 0.7 ... 1.25 |
| <b>Design of the surge suppressor</b>  |   | with diode   |
| <b>Closing power of the magnet coil for DC</b>   | W | 2.8          |
| <b>Holding power of the magnet coil for DC</b>   | W | 2.8          |

#### Auxiliary circuit:

|   |  |    |
|---|--|----|
| <b>Number of NC contacts</b>              |  |    |
| • for auxiliary contacts                  |  |    |
| — instantaneous contact                   |  | 1  |
| <b>Number of NO contacts</b>              |  |    |
| • for auxiliary contacts                  |  |    |
| — instantaneous contact                   |  | 0  |
| <b>Product expansion Auxiliary switch</b> |  | No |

|  |   |   |
|--|---|---|
| <b>Operating current at AC-15</b>                    |   |   |
| • at 230 V Rated value                               | A | 10  |
| • at 400 V Rated value                               | A | 3   |
| • at 690 V Rated value                               | A | 1   |
| <b>Operating current</b>                             |   |   |
| • at DC-12 at 125 V Rated value                      | A | 2   |
| • at DC-12 at 220 V Rated value                      | A | 1   |
| • at DC-12 at 600 V Rated value                      | A | 0.15  |
| • at DC-13 at 125 V Rated value                      | A | 0.9   |
| • at DC-13 at 220 V Rated value                      | A | 0.3   |
| • at DC-13 at 600 V Rated value                      | A | 0.1   |
| <b>Operating current</b>                             |   |   |
| • at DC-12   |   |   |
| — at 60 V Rated value                                | A | 6   |
| — at 110 V Rated value                               | A | 3   |
| • at DC-13   |   |   |
| — at 24 V Rated value                                | A | 10  |
| — at 60 V Rated value                                | A | 2   |
| — at 110 V Rated value                               | A | 1   |
| <b>Contact reliability of the auxiliary contacts</b> |   | 1 faulty switching per 100 million (17 V, 1 mA) |

#### UL/CSA ratings:

|  |              |             |
|--|--------------|-------------|
| <b>Full-load current (FLA) for three-phase AC motor</b>    |              |             |
| • at 480 V Rated value                                     | A            | 4.8         |
| • at 600 V Rated value                                     | A            | 6.1         |
| <b>yielded mechanical performance [hp]</b>                 |              |             |
| • for single-phase AC motor at 110/120 V Rated value       | metric<br>hp | 0.25        |
| • for single-phase AC motor at 230 V Rated value           | metric<br>hp | 0.75        |
| • for three-phase AC motor at 200/208 V Rated value        | metric<br>hp | 1.5         |
| • for three-phase AC motor at 220/230 V Rated value        | metric<br>hp | 2           |
| • for three-phase AC motor at 460/480 V Rated value        | metric<br>hp | 3           |
| • for three-phase AC motor at 575/600 V Rated value        | metric<br>hp | 5           |
| <b>Contact rating of the auxiliary contacts acc. to UL</b> |              | A600 / Q600 |

#### Short-circuit:

|  |  |  |
|--|--|--|
| <b>Design of the fuse link</b>                     |  |  |
| • for short-circuit protection of the main circuit |  |  |

- with type of assignment 1 required
- with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:  
35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:  
20 A

fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

|                              |    |  |
|------------------------------|----|--|
| <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>Mounting type</b>         |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022   |
| • Side-by-side mounting      |    | Yes  |
| <b>Height</b>                | mm | 69.5   |
| <b>Width</b>                 | mm | 45   |
| <b>Depth</b>                 | mm | 73   |
| <b>Required spacing</b>      |    |  |
| • with side-by-side mounting |    |  |
| — forwards                   | mm | 0  |
| — Backwards                  | mm | 0  |
| — upwards                    | mm | 0  |
| — downwards                  | mm | 0  |
| — at the side                | mm | 0  |
| • for grounded parts         |    |  |
| — forwards                   | mm | 0  |
| — Backwards                  | mm | 0  |
| — upwards                    | mm | 0  |
| — at the side                | mm | 6  |
| — downwards                  | mm | 0  |
| • for live parts             |    |  |
| — forwards                   | mm | 0  |
| — Backwards                  | mm | 0  |
| — upwards                    | mm | 0  |
| — downwards                  | mm | 0  |
| — at the side                | mm | 6  |

#### Connections/ Terminals:

|  |  |                                 |
|--|--|---------------------------------|
| <b>Type of electrical connection</b>               |  |                                 |
| • for main current circuit                         |  | spring-loaded terminals         |
| • for auxiliary and control current circuit        |  | spring-loaded terminals         |
| <b>Type of connectable conductor cross-section</b> |  |                                 |
| • for main contacts                                |  |                                 |
| — single or multi-stranded                         |  | 2x (0,5 ... 4 mm <sup>2</sup> ) |

|   |                                   |
|---|-----------------------------------|
| — finely stranded with core end processing    | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| — finely stranded without core end processing | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • for AWG conductors for main contacts        | 2x (20 ... 12)                    |
| • for auxiliary contacts                      |                                   |
| — single or multi-stranded                    | 2x (0,5 ... 4 mm <sup>2</sup> )   |
| — finely stranded with core end processing    | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| — finely stranded without core end processing | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • for AWG conductors for auxiliary contacts   | 2x (20 ... 12)                    |

#### Safety related data:

|   |     |             |
|---|-----|-------------|
| <b>B10 value with high demand rate acc. to SN 31920</b>                   |     | 1 000 000   |
| <b>Proportion of dangerous failures</b>                                   |     |             |
| • with low demand rate acc. to SN 31920                                   | %   | 40          |
| • with high demand rate acc. to SN 31920                                  | %   | 73          |
| <b>Failure rate [FIT] with low demand rate acc. to SN 31920</b>           | FIT | 100         |
| <b>Product function Mirror contact acc. to IEC 60947-4-1</b>              |     | Yes         |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b> | y   | 20          |
| <b>Protection against electrical shock</b>                                |     | finger-safe |

#### Mechanical data:

|                          |  |     |
|--------------------------|--|-----|
| <b>Size of contactor</b> |  | S00 |
|--------------------------|--|-----|

#### Ambient conditions:

|  |    |             |
|--|----|-------------|
| <b>Installation altitude at height above sea level maximum</b> | m  | 2 000       |
| <b>Ambient temperature</b>                                     |    |             |
| • during operation   | °C | -25 ... +60 |
| • during storage   | °C | -55 ... +80 |

#### Certificates/ approvals:

|                          |                                       |                           |
|--------------------------|---------------------------------------|---------------------------|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|--------------------------|---------------------------------------|---------------------------|



[Type Examination](#)



|                   |                   |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



|                   |       |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Confirmation](#)

[Environmental Confirmations](#)

|       |
|-------|
| other |
|-------|



Further information

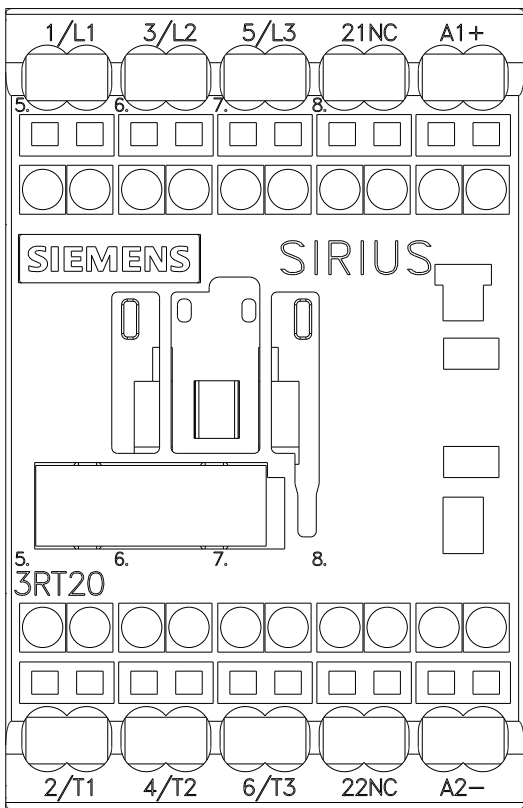
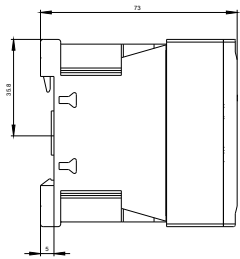
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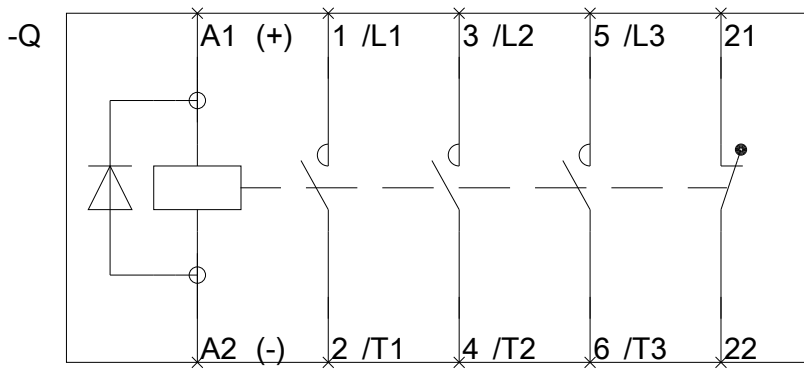
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
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