








Contactore AC 220 V 50 HZ AC3 15 kW 400 V 3-pole, size S2 screw terminal

|  |                          |
|--|--------------------------|
| product brand name   | SIRIUS                   |
| product designation  | Power contactor          |
| product type designation   | 3RT5                     |
| <b>General technical data</b>  |                          |
| size of contactor  | S2                       |
| product extension auxiliary switch   | Yes                      |
| power loss [W] for rated value of the current  |                          |
| • at AC in hot operating state per pole  | 1.8 W                    |
| • without load current share typical   | 4.07 W                   |
| type of calculation of power loss current-dependent  | quadratic                |
| insulation voltage rated value   | 690 V                    |
| degree of pollution  | 3                        |
| surge voltage resistance rated value   | 6 kV                     |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 400 V                    |
| shock resistance at rectangular impulse  |                          |
| • at AC  | 10 g / 5 ms, 5 g / 10 ms |
| shock resistance with sine pulse   |                          |
| • at AC  | 15 g / 5 ms, 8 g / 10 ms |
| mechanical service life (operating cycles)   |                          |
| • of contactor typical   | 10 000 000               |
| • of the contactor with added auxiliary switch block typical   | 10 000 000               |
| Substance Prohibition (day/month/year)   | 03/01/2017               |
| SVHC substance name  | Lead CAS-No. 7439-92-1   |
| Net Weight   | 0.85 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           |
| <b>Main circuit</b>  |                          |
| number of poles for main current circuit   | 3                        |
| number of NO contacts for main contacts  | 3                        |
| number of NC contacts for main contacts  | 0                        |
| operating voltage  |                          |
| • at AC-3 rated value maximum  | 690 V                    |
| • at AC-3e rated value maximum   | 690 V                    |
| operational current  |                          |
| • at AC-1 up to 690 V  |                          |

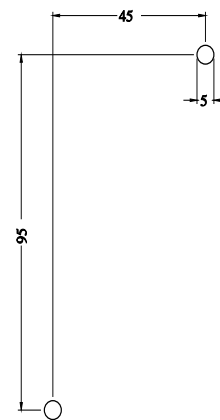
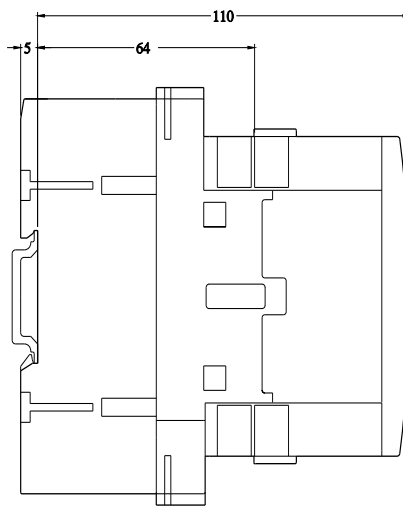
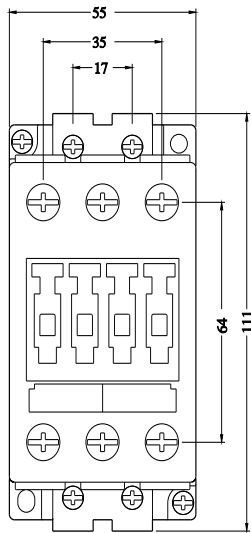
|   |                    |
|---|--------------------|
| — at ambient temperature 40 °C rated value  | 50 A               |
| — at ambient temperature 60 °C rated value  | 45 A               |
| ● at AC-3   |                    |
| — at 400 V rated value  | 32 A               |
| — at 690 V rated value  | 20 A               |
| ● at AC-3e  |                    |
| — at 400 V rated value  | 32 A               |
| — at 690 V rated value  | 20 A               |
| <b>connectable conductor cross-section in main circuit at AC-1</b>                    |                    |
| ● at 60 °C minimum permissible  | 10 mm <sup>2</sup> |
| ● at 40 °C minimum permissible  | 16 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b>                |                    |
| ● at 400 V rated value  | 15.6 A             |
| ● at 690 V rated value  | 11 A               |
| <b>operating power</b>  |                    |
| ● at AC-1   |                    |
| — at 230 V at 60 °C rated value   | 18 kW              |
| — at 400 V at 60 °C rated value   | 31 kW              |
| — at 690 V at 60 °C rated value   | 54 kW              |
| ● at AC-3   |                    |
| — at 230 V rated value  | 7.5 kW             |
| — at 400 V rated value  | 15 kW              |
| — at 500 V rated value  | 18.5 kW            |
| — at 690 V rated value  | 18.5 kW            |
| ● at AC-3e  |                    |
| — at 230 V rated value  | 7.5 kW             |
| — at 400 V rated value  | 15 kW              |
| — at 500 V rated value  | 18.5 kW            |
| — at 690 V rated value  | 18.5 kW            |
| <b>operating power for approx. 200000 operating cycles at AC-4</b>                    |                    |
| ● at 400 V rated value  | 8.2 kW             |
| ● at 690 V rated value  | 10 kW              |
| <b>no-load switching frequency</b>  |                    |
| ● at AC   | 5 000 1/h          |
| <b>operating frequency</b>  |                    |
| ● at AC-1 maximum   | 1 200 1/h          |
| ● at AC-3 maximum   | 1 000 1/h          |
| ● at AC-3e maximum  | 1 000 1/h          |
| ● at AC-4 maximum   | 250 1/h            |
| <b>Control circuit/ Control</b>   |                    |
| <b>type of voltage of the control supply voltage</b>                                  | AC                 |
| <b>control supply voltage at AC</b>   |                    |
| ● at 50 Hz rated value  | 220 V              |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> |                    |
| ● at 50 Hz  | 0.8 ... 1.1        |
| <b>apparent pick-up power of magnet coil at AC</b>                                    |                    |
| ● at 50 Hz  | 104 VA             |
| <b>inductive power factor with closing power of the coil</b>                          |                    |
| ● at 50 Hz  | 0.73               |
| <b>apparent holding power of magnet coil at AC</b>                                    |                    |
| ● at 50 Hz  | 9.7 VA             |
| <b>inductive power factor with the holding power of the coil</b>                      |                    |
| ● at 50 Hz  | 0.42               |
| <b>Auxiliary circuit</b>  |                    |
| number of NC contacts for auxiliary contacts instantaneous contact                    | 0                  |

|  |  |                    |
|--|--|--------------------|
| number of NO contacts for auxiliary contacts instantaneous contact   | 0  |                    |
| operational current at AC-12 maximum   | 10 A   |                    |
| <b>operational current at AC-15</b>  |  |                    |
| • at 230 V rated value   | 6 A  |                    |
| • at 400 V rated value   | 3 A  |                    |
| <b>operational current at DC-12</b>  |  |                    |
| • at 110 V rated value   | 3 A  |                    |
| • at 220 V rated value   | 1 A  |                    |
| <b>operational current 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  |                    |
| <b>contact reliability of auxiliary contacts</b>   | 1 faulty switching per 100 million (17 V, 1 mA)  |                    |
| <b>UL/CSA ratings</b>  |  |                    |
| yielded mechanical performance [hp] for 3-phase AC motor at 460/480 V rated value  | 25 hp  |                    |
| <b>Short-circuit protection</b>  |  |                    |
| <b>design of the fuse link</b>   |  |                    |
| • for short-circuit protection of the main circuit   |  |                    |
| — with type of coordination 1 required   | fuse gL/gG: 125 A  |                    |
| — with type of coordination 2 required   | fuse gL/gG: 63 A   |                    |
| • 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 |                    |
| fastening method side-by-side mounting   | Yes  |                    |
| <b>fastening method</b>  | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022   |                    |
| <b>height</b>  | 112 mm   |                    |
| <b>width</b>   | 55 mm  |                    |
| <b>depth</b>   | 115 mm   |                    |
| <b>Connections/ Terminals</b>  |  |                    |
| <b>type of electrical connection</b>   |  |                    |
| • for main current circuit   | screw-type terminals   |                    |
| • for auxiliary and control circuit  | screw-type terminals   |                    |
| type of connectable conductor cross-sections for main contacts   |  |                    |
| • solid or stranded  | 2x (0.75 ... 16 mm <sup>2</sup> )  |                    |
| • finely stranded with core end processing   | 2x (0.75 ... 16 mm <sup>2</sup> )  |                    |
| • finely stranded without core end processing  | 2x (0.75 ... 16 mm <sup>2</sup> )  |                    |
| <b>type of connectable conductor cross-sections</b>  |  |                    |
| • for auxiliary contacts   |  |                    |
| — finely stranded with core end processing   | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )  |                    |
| • for AWG cables for auxiliary contacts  | 2x (20 ... 16), 2x (18 ... 14), 1x 12  |                    |
| <b>Safety related data</b>   |  |                    |
| product function mirror contact according to IEC 60947-4-1   | Yes  |                    |
| <b>Electrical Safety</b>   |  |                    |
| <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>Approvals Certificates</b>  |  |                    |
| <b>General Product Approval</b>  | EMV  |                    |
|  <a href="#">Confirmation</a>     |  |                    |
| <b>Maritime application</b>  | <b>other</b>   | <b>Environment</b> |



Further information

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/products?pnid=16027&lc=en-CN>





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