## SIEMENS

## Data sheet

## 3RT2627-1NB35



Capacitor contactor, AC-6b 25 kVAr, / 400 V 1 NO + 2 NC, 50-60 Hz AC 21-28 V DC 3-pole, Size S0 screw terminal

| product brand name  | SIRIUS                     |  |  |
|---|----------------------------|--|--|
| product brand name<br>product designation   | capacitor contactors       |  |  |
| product type designation  | 3RT26                      |  |  |
| General technical data  | 51(120                     |  |  |
|   | S0                         |  |  |
| size of contactor   | No                         |  |  |
| product extension auxiliary switch  | NO                         |  |  |
| insulation voltage  | 690 V                      |  |  |
| <ul> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated</li> </ul> | 690 V                      |  |  |
| value   | 030 V                      |  |  |
| surge voltage resistance  |                            |  |  |
| <ul> <li>of main circuit rated value</li> </ul>   | 6 kV                       |  |  |
| <ul> <li>of auxiliary circuit rated value</li> </ul>  | 6 kV                       |  |  |
| maximum permissible voltage for safe isolation between<br>coil and main contacts according to EN 60947-1                                  | 400 V                      |  |  |
| shock resistance at rectangular impulse   |                            |  |  |
| • at AC   | 8,3g / 5 ms, 5,3g / 10 ms  |  |  |
| • at DC   | 10g / 5 ms, 7,5g / 10 ms   |  |  |
| shock resistance with sine pulse  |                            |  |  |
| • at AC   | 13,5g / 5 ms, 8,3g / 10 ms |  |  |
| • at DC   | 15g / 5 ms, 10g / 10 ms    |  |  |
| mechanical service life (switching cycles)  |                            |  |  |
| <ul> <li>of the contactor with added auxiliary switch block<br/>typical</li> </ul>  | 3 000 000                  |  |  |
| electrical endurance (switching cycles)   | 200 000                    |  |  |
| reference code according to IEC 81346-2   | Q                          |  |  |
| Substance Prohibitance (Date)   | 05/01/2014                 |  |  |
| Ambient conditions  |                            |  |  |
| installation altitude at height above sea level maximum   | 2 000 m                    |  |  |
| ambient temperature   |                            |  |  |
| <ul> <li>during operation</li> </ul>  | -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 %                       |  |  |
| Main circuit  |                            |  |  |
| number of NO contacts for main contacts   | 3                          |  |  |
| number of NC contacts for main contacts   | 0                          |  |  |
| operational current at AC-6b at 690 V at ambient temperature 60 °C rated value  | 36 A                       |  |  |

| operating reactive power at AC-6b   |                  |
|---|------------------|
| • at 230 V at 50/60 Hz at ambient temperature 60 °C rated value                       | 5 14 kvar        |
| • at 400 V at 50/60 Hz at ambient temperature 60 °C rated value                       | 8 25 kvar        |
| • at 500 V at 50/60 Hz at ambient temperature 60 °C rated value                       | 10 31 kvar       |
| <ul> <li>at 690 V at 50/60 Hz at ambient temperature 60 °C<br/>rated value</li> </ul> | 14 43 kvar       |
| no-load switching frequency   |                  |
| • at AC   | 500 1/h          |
| • at DC   | 500 1/h          |
| operating frequency at AC-6b  |                  |
| at 230 V maximum  | 100 1/h          |
| • at 240 V maximum  | 100 1/h          |
| • at 400 V maximum  | 100 1/h          |
| • at 480 V maximum  | 100 1/h          |
| • at 500 V maximum  | 100 1/h          |
| • at 600 V maximum  | 100 1/h          |
| • at 690 V maximum  | 72 1/h           |
| Control circuit/ Control  |                  |
| type of voltage   | AC/DC            |
| type of voltage of the control supply voltage   | AC/DC            |
| control supply voltage at AC  |                  |
| <ul> <li>at 50 Hz rated value</li> </ul>  | 21 28 V          |
| at 60 Hz rated value  | 21 28 V          |
| control supply voltage frequency  |                  |
| <ul> <li>1 rated value</li> </ul>   | 50 Hz            |
| • 2 rated value   | 60 Hz            |
| control supply voltage at DC  |                  |
| rated value   | 21 28 V          |
| operating range factor control supply voltage rated                                   |                  |
| value of magnet coil at DC  | 0.7              |
| • initial value   | 0.7              |
| • full-scale value     operating range factor control supply voltage rated            | 1.3              |
| value of magnet coil at AC  |                  |
| • at 50 Hz  | 0.7 1.3          |
| • at 60 Hz  | 0.7 1.3          |
| inrush current peak   | 3 A              |
| duration of inrush current peak   | 30 µs            |
| locked-rotor current mean value   | 0.3 A            |
| locked-rotor current peak   | 0.52 A           |
| duration of locked-rotor current  | 180 ms           |
| holding current mean value  | 45 mA            |
| apparent pick-up power of magnet coil at AC   | 6.7 VA           |
| inductive power factor with closing power of the coil                                 | 0.98             |
| apparent holding power of magnet coil at AC   | 2 VA             |
| inductive power factor with the holding power of the coil                             | 0.86             |
| closing power of magnet coil at DC  | 5.9 W            |
| holding power of magnet coil at DC  | 1.4 W            |
| closing delay   |                  |
| • at AC   | 50 70 ms         |
| • at DC   | 50 70 ms         |
| opening delay   |                  |
| • at AC   | 30 50 ms         |
| • at DC   | 30 50 ms         |
| arcing time   | 10 10 ms         |
| control version of the switch operating mechanism                                     | Standard A1 - A2 |
| residual current of the electronics for control with signal <0>                       |                  |
|   |                  |

| • at AC at 220 V maximum parmissible   | 7 mA   |  |  |  |
|--|--|--|--|--|
| at AC at 230 V maximum permissible   | 7 mA<br>16 mA  |  |  |  |
| at DC at 24 V maximum permissible     Auxiliary circuit  | 10 IIIA  |  |  |  |
|  | 2  |  |  |  |
| number of NC contacts for auxiliary contacts <ul> <li>attachable</li> </ul>  | 2<br>0   |  |  |  |
| instantaneous contact  | 2  |  |  |  |
| number of NO contacts for auxiliary contacts   |  |  |  |  |
| attachable   | 1  |  |  |  |
| instantaneous contact  | 0  |  |  |  |
| operational current of auxiliary contacts at AC-12<br>maximum  | 1<br>10 A  |  |  |  |
| operational current of auxiliary contacts at AC-15   |  |  |  |  |
| • at 230 V   | 6 A  |  |  |  |
| • at 400 V   | 3 A  |  |  |  |
| operational current of auxiliary contacts at DC-13   |  |  |  |  |
| • at 24 V  | 6 A  |  |  |  |
| • at 60 V  | 2 A  |  |  |  |
| • at 110 V   | 1A   |  |  |  |
| • at 125 V   | 0.9 A  |  |  |  |
| • at 220 V   | 0.3 A  |  |  |  |
| contact reliability of auxiliary contacts  | 0.0000001  |  |  |  |
| UL/CSA ratings   |  |  |  |  |
| contact rating of auxiliary contacts according to UL   | A600 / Q600  |  |  |  |
| Short-circuit protection   |  |  |  |  |
| design of the fuse link  |  |  |  |  |
| <ul> <li>for short-circuit protection of the main circuit with<br/>type of coordination 1 required</li> </ul>                                | gG: 80 A (690 V, 50 kA)  |  |  |  |
| <ul> <li>for short-circuit protection of the auxiliary switch<br/>required</li> </ul>  | gG: 10 A (500 V, 1 kA)   |  |  |  |
| Installation/ mounting/ dimensions   |  |  |  |  |
|  | 1/ 190° rotation passible on vertical mounting surfaces can be tilted  |  |  |  |
| mounting position  | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface                 |  |  |  |
| fastening method   | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022   |  |  |  |
| height   | 135 mm   |  |  |  |
| width  | 45 mm  |  |  |  |
| depth  | 165 mm   |  |  |  |
| required spacing   | 10 mm  |  |  |  |
| <ul> <li>with side-by-side mounting at the side</li> </ul>   | 10 mm  |  |  |  |
| for grounded parts at the side   | 10 mm  |  |  |  |
| Connections/ Terminals   |  |  |  |  |
| type of electrical connection  |  |  |  |  |
| for main current circuit   | screw-type terminals   |  |  |  |
| for auxiliary and control circuit  | screw-type terminals   |  |  |  |
| at contactor for auxiliary contacts  | Screw-type terminals   |  |  |  |
| of magnet coil     type of connectable conductor cross sections  | Screw-type terminals   |  |  |  |
| type of connectable conductor cross-sections   |  |  |  |  |
| for main contacts  | $2x(4 - 2Emm^2) - 2x(2E - 40mm^2)$   |  |  |  |
| — solid  | $2x (1 \dots 2.5 \text{ mm}^2), 2x (2.5 \dots 10 \text{ mm}^2)$  |  |  |  |
| — stranded   | 2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )  |  |  |  |
| — solid or stranded  | 2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )  |  |  |  |
| — finely stranded with core end processing   | 2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>  |  |  |  |
| <ul> <li>at AWG cables for main contacts</li> </ul>  | 2x (16 12), 2x (14 8)  |  |  |  |
| turns of a superstable second statements of the  |  |  |  |  |
| type of connectable conductor cross-sections   |  |  |  |  |
| for auxiliary contacts   |  |  |  |  |
| <ul> <li>for auxiliary contacts</li> <li>— solid</li> </ul>  | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  |  |  |  |
| <ul> <li>for auxiliary contacts</li> <li>— solid</li> <li>— solid or stranded</li> </ul>   | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  |  |  |  |
| <ul> <li>for auxiliary contacts</li> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> | 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) |  |  |  |
| <ul> <li>for auxiliary contacts</li> <li>— solid</li> <li>— solid or stranded</li> </ul>   | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²  |  |  |  |

| e at 40 °C  |   |                              | 1 1 10     | ) mm²                       |                  |                     |  |
|---|---|------------------------------|------------|-----------------------------|------------------|---------------------|--|
|   | ● at 40 °C<br>● at 60 °C                                      |                              | 2x 10      |                             |                  |                     |  |
|   | • at 60 °C<br>AWG number as coded connectable conductor cross |                              | 16         |                             |                  |                     |  |
| section for main contacts   |   | 10                           | 0          |                             |                  |                     |  |
| Safety related data   |   |                              |            |                             |                  |                     |  |
| product function  |   |                              |            |                             |                  |                     |  |
| <ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>   |   | No                           |            |                             |                  |                     |  |
| <ul> <li>positively driven operation according to IEC 60947-<br/>5-1</li> </ul>   |   | No                           |            |                             |                  |                     |  |
| protection class II<br>60529  | protection class IP on the front according to IEC 60529       |                              | IP20       | IP20                        |                  |                     |  |
| touch protection of   | on the front according to                                     | IEC 60529                    | finge      | r-safe, for vertical contac | t from the front |                     |  |
| Certificates/ approv  | vals  |                              |            |                             |                  |                     |  |
| General Product   | Approval  |                              |            |                             |                  | EMC                 |  |
|   |   |                              |            |                             |                  |                     |  |
|   | <b>Confirmation</b>   |                              |            |                             |                  | <b>A</b>            |  |
| (SP   |   | ( <b>CC</b> )                | )          | (ŲL)                        | FHI              |                     |  |
|   |   | $\sim$                       |            | <u> </u>                    | LIIL             |                     |  |
| C2A   |   | ccc                          |            | UL                          |                  | RG M                |  |
|   |   |                              |            |                             |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
| Declaration of Co   | onformity   | Test Certifica               | ates       | Marine / Shipping           |                  | other               |  |
|   |   |                              |            | (TT)                        |                  |                     |  |
| UK  | "   | Type Test Ce<br>ates/Test Re |            | a Casa                      |                  | <b>Confirmation</b> |  |
| ZÔ  | עכ  | ales/restric                 | <u>pon</u> | (「夏雪」)                      | (12)             |                     |  |
| СН  | EG-Konf.  |                              |            | BUREAU                      | RINA             |                     |  |
|   |   |                              |            | VERITAS                     |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
| other   | Dangerous Good  |                              |            |                             |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
| $\sim$  | Transport Informa-  |                              |            |                             |                  |                     |  |
| (D'E)   | tion  |                              |            |                             |                  |                     |  |
| VDE   |   |                              |            |                             |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
|   |   |                              |            |                             |                  |                     |  |
| Further information   |   |                              |            |                             |                  |                     |  |
|   | Information- and Downloadcenter (Catalogs, Brochures,)        |                              |            |                             |                  |                     |  |
| https://www.siemens.com/ic10  |   |                              |            |                             |                  |                     |  |
| Industry Mall (Online ordering system)<br>https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2627-1NB35 |   |                              |            |                             |                  |                     |  |
| Cax online generator  |   |                              |            |                             |                  |                     |  |
|   | mation.siemens.com/WW/  | CAXorder/defau               | ult.aspx?  | lang=en&mlfb=3RT2627        | <u>'-1NB35</u>   |                     |  |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,)   |   |                              |            |                             |                  |                     |  |

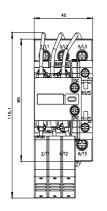
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2627-1NB35

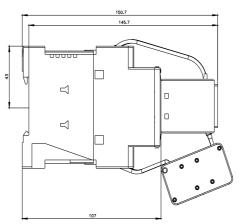
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

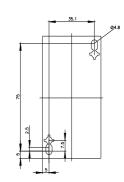
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2627-1NB35&lang=en

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2627-1NB35/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2627-1NB35&objecttype=14&gridview=view1







last modified:

12/8/2021 🖸