



Contactor, Size 4, 2-pole, DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) 24 V DC DC operation

|  |                        |
|--|------------------------|
| <b>product designation</b>   | Contactor              |
| <b>product type designation</b>  | 3TC                    |
| <b>General technical data</b>  |                        |
| <b>size of contactor</b>   | 4                      |
| <b>product extension</b>   |                        |
| • function module for communication  | No                     |
| • auxiliary switch   | Yes                    |
| <b>insulation voltage rated value</b>  | 800 V                  |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 300 V                  |
| <b>shock resistance at rectangular impulse</b>   |                        |
| • at DC  | 10g / 5 ms, 5g / 10 ms |
| <b>mechanical service life (operating cycles)</b>  |                        |
| • of contactor typical   | 10 000 000             |
| • of the contactor with added auxiliary switch block typical   | 10 000 000             |
| <b>reference code according to IEC 81346-2</b>   | Q                      |
| <b>Substance Prohibition (Date)</b>  | 03/01/2017             |
| <b>SVHC substance name</b>   | Lead - 7439-92-1       |
| <b>Weight</b>  | 4.5 kg                 |
| <b>Ambient conditions</b>  |                        |
| <b>ambient temperature</b>   |                        |
| • during operation   | -25 ... +55 °C         |
| • during storage   | -50 ... +80 °C         |
| <b>relative humidity minimum</b>   | 10 %                   |
| <b>relative humidity at 55 °C according to IEC 60068-2-30 maximum</b>  | 95 %                   |
| <b>Main circuit</b>  |                        |
| <b>number of poles</b>   | 2                      |
| <b>number of poles for main current circuit</b>  | 2                      |
| <b>number of NO contacts for main contacts</b>   | 2                      |
| <b>number of NC contacts for main contacts</b>   | 0                      |
| <b>type of voltage</b>   | DC                     |
| <b>operational current</b>   |                        |
| • <b>at 1 current path at DC-1</b>   |                        |
| — at 24 V rated value  | 75 A                   |
| — at 110 V rated value   | 75 A                   |
| — at 220 V rated value   | 75 A                   |
| • <b>with 2 current paths in series at DC-1</b>  |                        |
| — at 24 V rated value  | 75 A                   |
| — at 110 V rated value   | 75 A                   |
| — at 220 V rated value   | 75 A                   |

|  |               |
|--|---------------|
| — at 440 V rated value   | 75 A          |
| — at 600 V rated value   | 75 A          |
| — at 750 V rated value   | 75 A          |
| ● <b>at DC-3 at DC-5</b>                                       |               |
| — at 220 V rated value   | 75 A          |
| — at 600 V rated value   | 75 A          |
| — at 750 V rated value   | 75 A          |
| ● <b>at 1 current path at DC-3 at DC-5</b>                     |               |
| — at 24 V rated value  | 75 A          |
| — at 110 V rated value   | 75 A          |
| — at 220 V rated value   | 75 A          |
| ● <b>with 2 current paths in series at DC-3 at DC-5</b>        |               |
| — at 24 V rated value  | 75 A          |
| — at 110 V rated value   | 75 A          |
| — at 220 V rated value   | 75 A          |
| — at 440 V rated value   | 75 A          |
| — at 600 V rated value   | 75 A          |
| — at 750 V rated value   | 75 A          |
| <b>operating power</b>   |               |
| ● <b>at DC-1</b>   |               |
| — at 110 V rated value   | 8.2 kW        |
| — at 220 V rated value   | 16.5 kW       |
| — at 440 V rated value   | 33 kW         |
| — at 750 V rated value   | 56 kW         |
| ● <b>at DC-3 at DC-5</b>                                       |               |
| — at 110 V rated value   | 6.5 kW        |
| — at 220 V rated value   | 13 kW         |
| — at 440 V rated value   | 27 kW         |
| — at 600 V rated value   | 38 kW         |
| — at 750 V rated value   | 45 kW         |
| <b>operating frequency</b>                                     |               |
| ● <b>at DC-1 maximum</b>                                       | 1 000 1/h     |
| ● <b>at DC-3 maximum</b>                                       | 600 1/h       |
| ● <b>at DC-5 maximum</b>                                       | 600 1/h       |
| <b>Control circuit/ Control</b>                                |               |
| <b>type of voltage of the control supply voltage</b>           | DC            |
| <b>control supply voltage at DC rated value</b>                | 24 V          |
| <b>closing power of magnet coil at DC</b>                      | 19 W          |
| <b>holding power of magnet coil at DC</b>                      | 19 W          |
| closing delay at DC  | 90 ... 380 ms |
| opening delay at DC  | 17 ... 28 ms  |
| <b>arcing time</b>   | 20 ... 30 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>            | 2             |
| ● instantaneous contact  | 2             |
| number of CO contacts for auxiliary contacts                   | 0             |
| <b>identification number and letter for switching elements</b> | 22            |
| operational current at AC-12 maximum                           | 10 A          |
| <b>operational current at AC-15</b>                            |               |
| ● at 230 V rated value   | 5.6 A         |
| ● at 400 V rated value   | 3.6 A         |
| ● at 500 V rated value   | 2.5 A         |
| <b>operational current at DC-12</b>                            |               |
| ● at 24 V rated value  | 10 A          |
| ● at 48 V rated value  | 10 A          |
| ● at 60 V rated value  | 10 A          |
| ● at 110 V rated value   | 3.2 A         |
| ● at 125 V rated value   | 2.5 A         |
| ● at 220 V rated value   | 0.9 A         |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>   | 0.22 A  |
| <b>operational current at DC-13</b>  |   |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>  | 10 A<br>5 A<br>5 A<br>1.14 A<br>0.98 A<br>0.48 A<br>0.07 A  |
| <b>UL/CSA ratings</b>  |   |
| <b>contact rating of auxiliary contacts according to UL</b>  | A600 / P600   |
| <b>Short-circuit protection</b>  |   |
| <b>design of the fuse link</b>   |   |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit               <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>  | 2 x 3NA31 (160 A) in series (750 V, 5 kA)<br>2 x 3NA31 (63 A) in series (750 V, 5 kA)<br>gG: 16 A (500 V, 1 kA)                       |
| <b>Installation/ mounting/ dimensions</b>  |   |
| <b>mounting position</b>   | +/-22,5° 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 fixing  |
| <b>height</b>  | 177.5 mm  |
| <b>width</b>   | 100 mm  |
| <b>depth</b>   | 184 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>— backwards</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>— backwards</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>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 20 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm<br>55 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm<br>55 mm<br>0 mm<br>10 mm<br>10 mm<br>10 mm      |
| <b>Connections/ Terminals</b>  |   |
| <b>type of electrical connection</b>   | screw terminal  |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> </ul>  | screw-type terminals<br>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> </ul>  | 2x (1 ... 2.5 mm <sup>2</sup> )<br>2x (0.75 ... 1.5 mm <sup>2</sup> )   |
| <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>   | IP00; IP20 with box terminal/cover  |
| <b>touch protection on the front according to IEC 60529</b>  | finger-safe, for vertical contact from the front with cover   |
| <b>Approvals Certificates</b>  |   |
| <b>General Product Approval</b>  |   |



[Confirmation](#)



|                          |                   |                   |  |  |  |
|--------------------------|-------------------|-------------------|--|--|--|
| General Product Approval | Functional Safety | Test Certificates |  |  |  |
|--------------------------|-------------------|-------------------|--|--|--|



[Type Examination Certificate](#)

[Type Examination Certificate](#)

[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

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

[Confirmation](#)

[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=3TC4817-0AB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0AB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AB4>

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

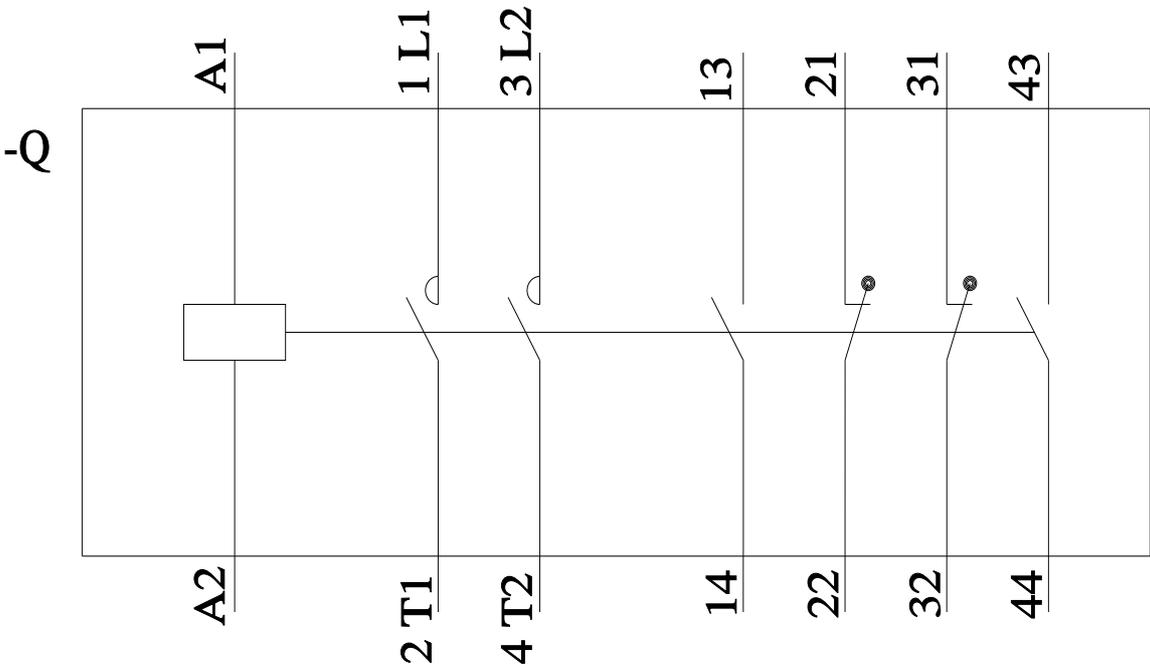
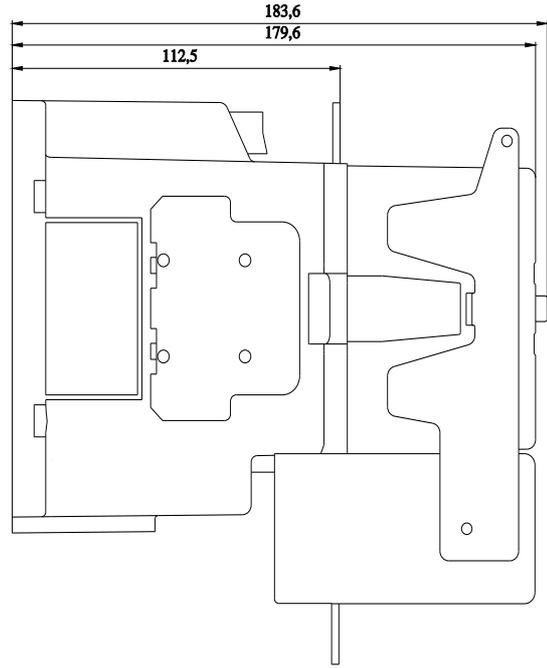
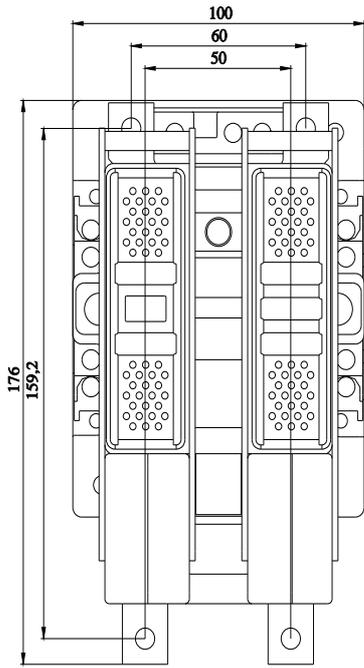
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3TC4817-0AB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0AB4&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0AB4&objecttype=14&gridview=view1>



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