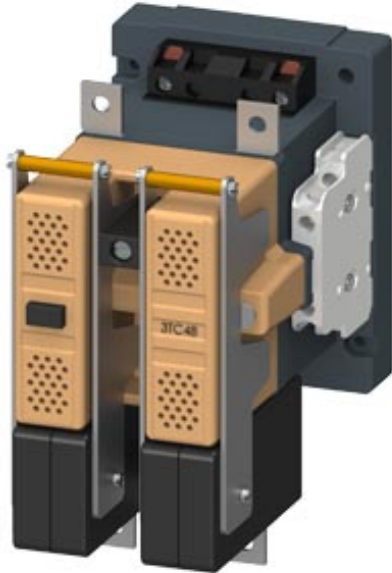


Contactor size 4, 2-pole DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) Alternating current operation 42 V AC 50 Hz/50 V AC 60 Hz



| | |
|---|------------------------|
| Product designation | Contactor |
| Product type designation | 3TC |
| General technical data | |
| Size of contactor | 4 |
| Product extension | |
| • function module for communication | No |
| • Auxiliary switch | Yes |
| Insulation voltage rated value | 800 V |
| maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 | 300 V |
| Protection class IP | IP00 |
| • protection class IP on the front | IP00 |
| • Protection class IP of the terminal | IP00 |
| Shock resistance at rectangular impulse | |
| • at AC | 10g / 5 ms, 5g / 10 ms |
| Mechanical service life (switching cycles) | |
| • of contactor typical | 10 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |

| | |
|--|---|
| Reference code acc. to DIN EN 81346-2 | Q |
| Ambient conditions | |
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage | <p>-25 ... +55 °C</p> <p>-50 ... +80 °C</p> |
| Main circuit | |
| number of poles | 2 |
| Number of poles for main current circuit | 2 |
| Number of NO contacts for main contacts | 2 |
| Number of NC contacts for main contacts | 0 |
| type of voltage | DC |
| Operating current | |
| <ul style="list-style-type: none"> • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value | <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> |
| Operating current | |
| <ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 750 V rated value • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value | <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> <p>75 A</p> |
| Operating power | |
| <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 750 V rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value | <p>8.2 kW</p> <p>16.5 kW</p> <p>33 kW</p> <p>56 kW</p> <p>6.5 kW</p> <p>13 kW</p> <p>27 kW</p> <p>38 kW</p> |

| | |
|---|--------------|
| — at 750 V rated value | 45 kW |
| Operating frequency | |
| • at DC-1 maximum | 1 000 1/h |
| • at DC-3 maximum | 600 1/h |
| • at DC-5 maximum | 600 1/h |
| Control circuit/ Control | |
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| • at 50 Hz rated value | 42 V |
| • at 60 Hz rated value | 50 V |
| Operating range factor control supply voltage rated value of magnet coil at AC | |
| • at 50 Hz | 0.8 ... 1.1 |
| Apparent pick-up power of magnet coil at AC | 300 V·A |
| • at 50 Hz | 300 V·A |
| • at 60 Hz | 365 V·A |
| Inductive power factor with closing power of the coil | 0.5 |
| • at 50 Hz | 0.5 |
| • at 60 Hz | 0.45 |
| Apparent holding power of magnet coil at AC | 26 V·A |
| • at 50 Hz | 26 V·A |
| • at 60 Hz | 35 V·A |
| Inductive power factor with the holding power of the coil | 0.24 |
| • at 50 Hz | 0.24 |
| • at 60 Hz | 0.26 |
| Arcing time | 20 ... 30 ms |
| Auxiliary circuit | |
| Number of NC contacts for auxiliary contacts | 2 |
| • instantaneous contact | 2 |
| Number of NO contacts for auxiliary contacts | 2 |
| • instantaneous contact | 2 |
| Number of CO contacts | |
| • for auxiliary contacts | 0 |
| Identification number and letter for switching elements | 22 |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| • at 230 V rated value | 5.6 A |
| • at 400 V rated value | 3.6 A |
| • at 500 V rated value | 2.5 A |
| Operating current at DC-12 | |

| | |
|---|---|
| <ul style="list-style-type: none"> • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value | <p>10 A</p> <p>10 A</p> <p>10 A</p> <p>3.2 A</p> <p>2.5 A</p> <p>0.9 A</p> <p>0.22 A</p> |
| Operating current at DC-13 <ul style="list-style-type: none"> • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value | <p>10 A</p> <p>5 A</p> <p>5 A</p> <p>1.14 A</p> <p>0.98 A</p> <p>0.48 A</p> <p>0.07 A</p> |
| contact reliability of auxiliary contacts | one incorrect switching operation of 100 million switching operations (17 V, 5 mA) |

UL/CSA ratings

| | |
|---|-------------|
| Contact rating of auxiliary contacts according to UL | A600 / P600 |
|---|-------------|

Short-circuit protection

| | |
|--|--|
| Design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required | <p>gG: 160 A (690 V, 100 kA)</p> <p>gG: 63 A (690 V, 100 kA)</p> <p>gG: 16 A (500 V, 1 kA)</p> |
|--|--|

Installation/ mounting/ dimensions

| | |
|---|---|
| mounting position | +/-22,5° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; standing, on horizontal mounting surface |
| Mounting type <ul style="list-style-type: none"> • Side-by-side mounting | <p>screw fixing</p> <p>Yes</p> |
| Height | 177.5 mm |
| Width | 100 mm |
| Depth | 156 mm |
| Required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards | <p>20 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> |

| | |
|----------------------|-------|
| — at the side | 10 mm |
| • for grounded parts | |
| — forwards | 55 mm |
| — Backwards | 0 mm |
| — upwards | 10 mm |
| — at the side | 10 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 55 mm |
| — Backwards | 0 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 10 mm |

Connections/ Terminals

| | |
|---|----------------------|
| • type of electrical connection | screw-type terminals |
| • Type of electrical connection for main current circuit | screw-type terminals |
| • Type of electrical connection for auxiliary and control current circuit | screw-type terminals |

Type of connectable conductor cross-sections

| | |
|--|------------------------------------|
| • for auxiliary contacts | |
| — single or multi-stranded | 2x (1 ... 2,5 mm ²) |
| — finely stranded with core end processing | 2x (0.75 ... 2.5 mm ²) |

Safety related data

| | |
|--|--------------------------------------|
| Protection against electrical shock | finger-safe only with terminal cover |
|--|--------------------------------------|

Certificates/ approvals

General Product Approval



CCC



CSA



UR



[Type Examination Certificate](#)



EG-Konf.

Functional Safety/Safety of Machinery

Declaration of Conformity

Declaration of Conformity

[Miscellaneous](#)

Test Certificates

[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

Marine / Shipping



RMRS

other

[Confirmation](#)

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=3TC4817-0BD0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0BD0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BD0>

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

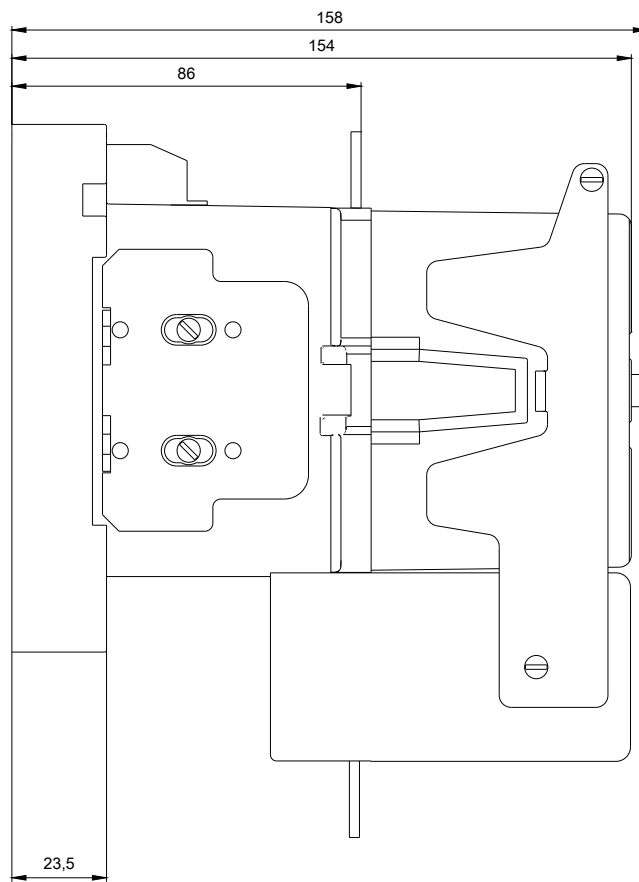
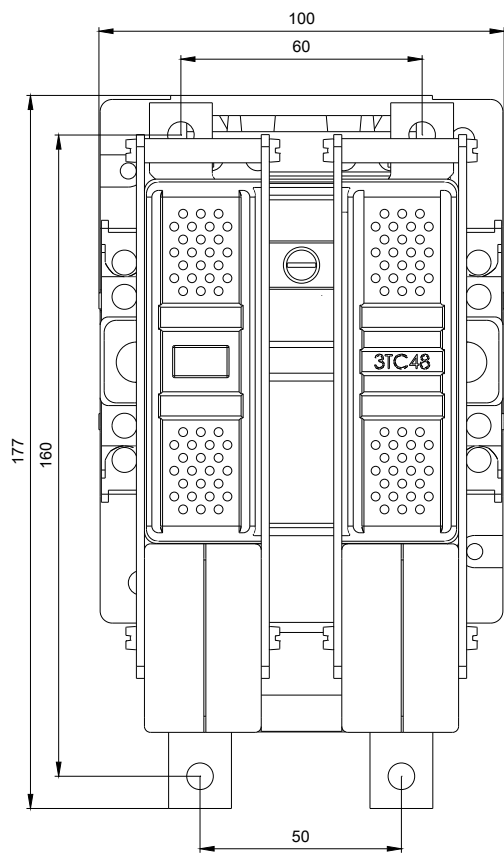
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0BD0&lang=en

Characteristic: Tripping characteristics, I^2t , Let-through current

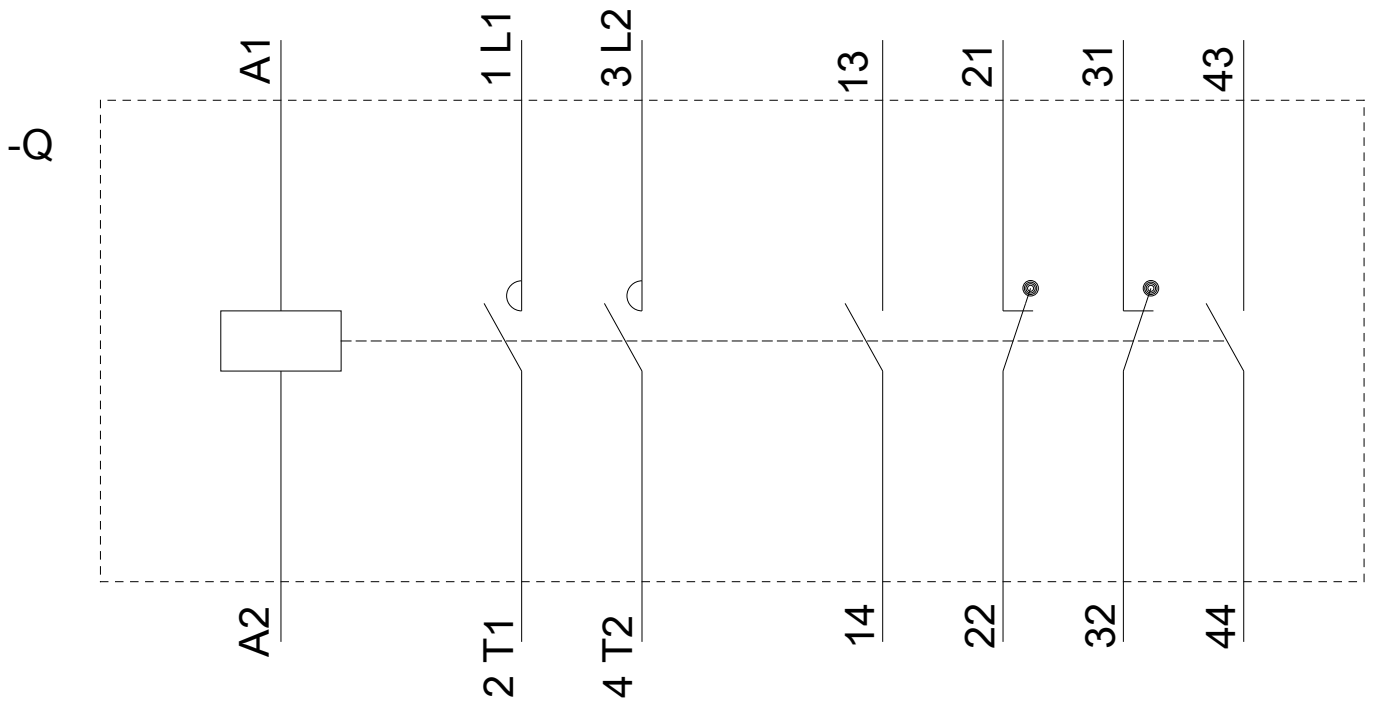
<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BD0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0BD0&objecttype=14&gridview=view1>



W6.994; 3TC4817-0B..



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08/13/2020