

Contactor, Size 4, 2-pole, DC-3 and 5, 75 A at 750 V Auxiliary contacts 21 (2NO + 1NC) 24V DC DC operation with varistor and series resistor Operating range 0.7 to 1.25 x US



<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	No
<b>Insulation voltage rated value</b>	800 V
<b>maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1</b>	300 V
<b>Protection class IP</b>	IP00
• on the front	IP00
• of the terminal	IP00
<b>Shock resistance at rectangular impulse</b>	
• at DC	10g / 5 ms, 5g / 10 ms
<b>Mechanical service life (switching cycles)</b>	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000

Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	Q
Reference code acc. to DIN EN 61346-2	Q
<b>Main circuit</b>	
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
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>	75 A 75 A 75 A 75 A 75 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> <li>— at 750 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>	75 A 75 A 75 A 75 A 75 A 75 A 75 A 75 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at DC-1 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 750 V rated value</li> </ul> </li> <li>• at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> <li>— at 750 V rated value</li> </ul> </li> </ul>	8.2 kW 16.5 kW 33 kW 56 kW 6.5 kW 13 kW 27 kW 38 kW 45 kW
<b>Operating frequency</b>	

- at DC-1 maximum 1 000 1/s
- at DC-3 maximum 600 1/s
- at DC-5 maximum 600 1/s

#### Control circuit/ Control

<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	
• rated value	24 V
<b>Design of the surge suppressor</b>	with varistor
<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

#### Auxiliary circuit

<b>Number of NC contacts for auxiliary contacts</b>	1
• instantaneous contact	1
<b>Number of NO contacts for auxiliary contacts</b>	2
• instantaneous contact	2
<b>Number of CO contacts</b>	
• for auxiliary contacts	0
<b>Identification number and letter for switching elements</b>	21
Operating current at AC-12 maximum	10 A
<b>Operating 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>Operating 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
• at 600 V rated value	0.22 A
<b>Operating current at DC-13</b>	
• at 24 V rated value	10 A
• at 48 V rated value	5 A
• at 60 V rated value	5 A
• at 110 V rated value	1.14 A
• at 125 V rated value	0.98 A

<ul style="list-style-type: none"> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>	<p>0.48 A</p> <p>0.07 A</p>
<b>Contact reliability of auxiliary contacts</b>	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)

### UL/CSA ratings

<b>Contact rating of auxiliary contacts according to UL</b>	A600 / P600
---	-------------

### Short-circuit protection

<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>	<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

<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; standing, on horizontal mounting surface
<b>Mounting type</b> <ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>	<p>screw fixing</p> <p>Yes</p>
<b>Height</b>	177.5 mm
<b>Width</b>	143 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>	<p>20 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>55 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>55 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p>

## Connections/ Terminals


<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	screw-type terminals screw-type terminals 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>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> </ul>	2x (1 ... 2,5 mm <sup>2</sup> ) 2x (0,75 ... 2,5 mm <sup>2</sup> )

## Safety related data

<b>Protection against electrical shock</b>	finger-safe only with terminal cover
--	--------------------------------------

## Certificates/ approvals

<b>General Product Approval</b>	<b>Functional Safety/Safety of Machinery</b>	<b>Declaration of Conformity</b>
 CCC	 CSA	 UR
 EAC	<a href="#">Type Examination Certificate</a>	 EG-Konf.

<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Ship- ping</b>	<b>other</b>
<a href="#">Miscellaneous</a>	<a href="#">Special Test Certificate</a>	<a href="#">Miscellaneous</a>	<a href="#">Confirmation</a>
	<a href="#">Type Test Certificates/Test Report</a>	 RMRS	

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**  
[www.siemens.com/ic10](http://www.siemens.com/ic10)

**Industry Mall (Online ordering system)**  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3TC4817-0LB4>

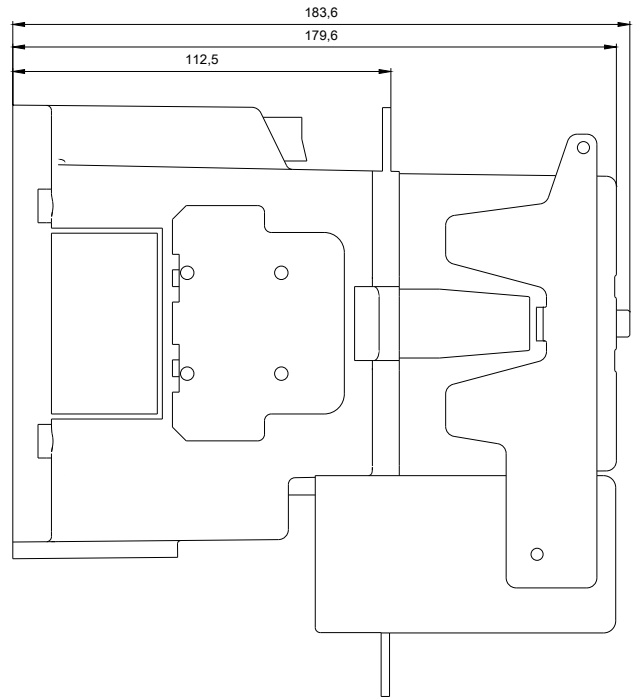
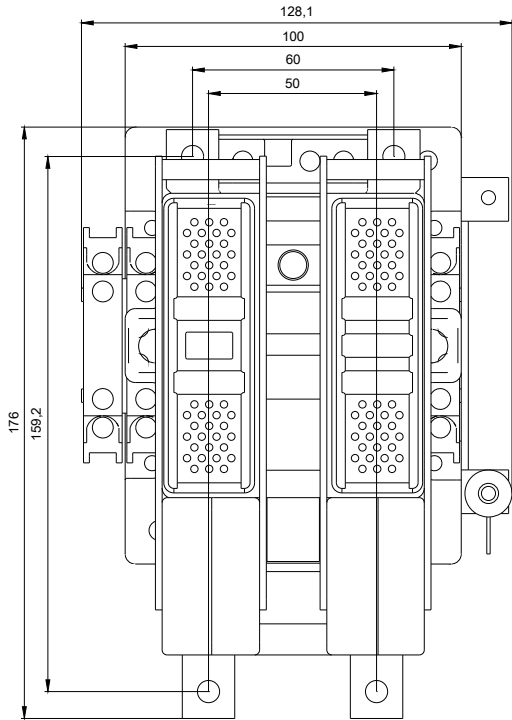
**Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0LB4>

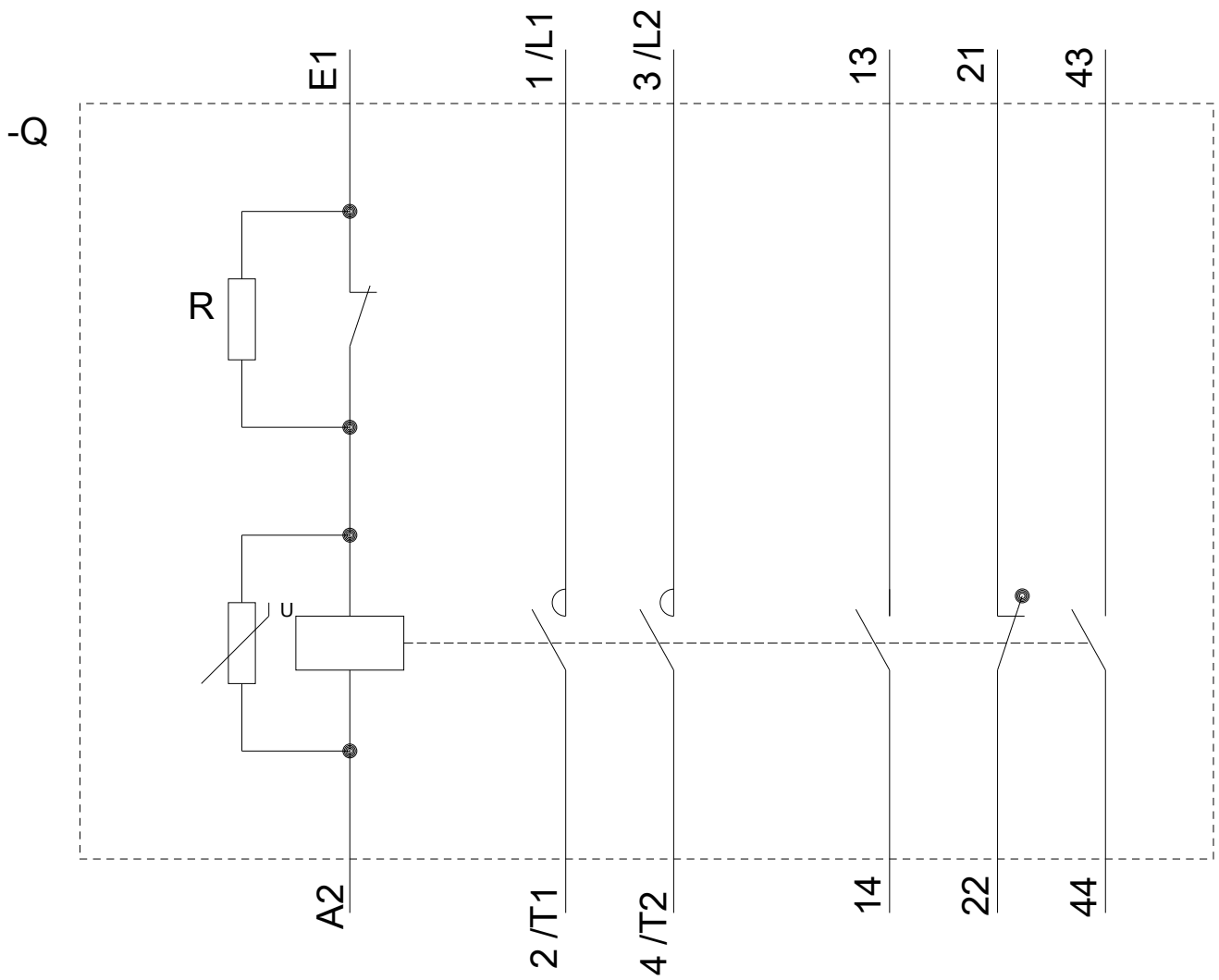
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0LB4>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3TC4817-0LB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0LB4&lang=en)

**Characteristic: Tripping characteristics, I<sup>t</sup>, Let-through current**  
<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0LB4/char>

**Further characteristics (e.g. electrical endurance, switching frequency)**  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0LB4&objecttype=14&gridview=view1>





last modified:

01/21/2020