



Contactor, Size 4, 2-pole, DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) 240 V AC 50 Hz/288 V AC 60 Hz AC operation

product designation	Contactor
product type designation	3TC
<b>General technical data</b>	
size of contactor	4
product extension	
• function module for communication	No
• auxiliary switch	Yes
insulation voltage rated value	800 V
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	300 V
shock resistance at rectangular impulse	
• at AC	10g / 5 ms, 5g / 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
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
<b>Ambient conditions</b>	
ambient temperature	
• during operation	-25 ... +55 °C
• during storage	-50 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
<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
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	75 A
— at 110 V rated value	75 A
— at 220 V rated value	75 A
• with 2 current paths in series at DC-1	
— 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 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>	
● at DC-1	
— 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
● at DC-3 at DC-5	
— 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>	
● at DC-1 maximum	1 000 1/h
● at DC-3 maximum	600 1/h
● at DC-5 maximum	600 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	240 V
● at 60 Hz rated value	288 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>	300 VA
● at 50 Hz	300 VA
● at 60 Hz	365 VA
<b>inductive power factor with closing power of the coil</b>	0.5
● at 50 Hz	0.5
● at 60 Hz	0.45
<b>apparent holding power of magnet coil at AC</b>	26 VA
● at 50 Hz	26 VA
● at 60 Hz	35 VA
<b>inductive power factor with the holding power of the coil</b>	0.24
● at 50 Hz	0.24
● at 60 Hz	0.26
<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

<ul style="list-style-type: none"> <li>• at 500 V rated value</li> </ul>	2.5 A
<b>operational current at DC-12</b>	
<ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>	3.2 A
<ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>	2.5 A
<ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>	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> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>	5 A
<ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>	5 A
<ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>	1.14 A
<ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>	0.98 A
<ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>	0.48 A
<ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>	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) 2 x 3NA31 (63 A) in series (750 V, 5 kA) 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; standing, on horizontal mounting surface
<b>fastening method</b>	screw fixing
<b>height</b>	177.5 mm
<b>width</b>	100 mm
<b>depth</b>	156 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 0 mm 10 mm 10 mm 10 mm 55 mm 0 mm 10 mm 10 mm 10 mm 55 mm 0 mm 10 mm 10 mm 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> </ul>	screw-type terminals
<ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> </ul>	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 mm²) 2x (0.75 ... 1.5 mm²)
<b>Safety related data</b>	

product function mirror contact according to IEC 60947-4-1	Yes
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
Approvals Certificates	
General Product Approval	



[Confirmation](#)



General Product Approval	Functional Safety	Test Certificates			
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[Type Examination Certificate](#)

[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

other	Dangerous Good	Environment
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[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=3TC4817-0BU0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0BU0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BU0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3TC4817-0BU0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0BU0&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BU0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0BU0&objecttype=14&gridview=view1>



