



Contactor, Size 8, 2-pole, DC-3 and 5, 220 A Auxiliary switch 22 (2 NO + 2 NC) 24 V DC DC operation

product designation	Contactor
product type designation	3TC
<b>General technical data</b>	
size of contactor	8
product extension	<ul style="list-style-type: none"> <li>• function module for communication</li> <li>• auxiliary switch</li> </ul>
insulation voltage rated value	1 000 V
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	660 V
shock resistance at rectangular impulse	<ul style="list-style-type: none"> <li>• at DC</li> </ul>
mechanical service life (operating cycles)	<ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	9.9 kg
<b>Ambient conditions</b>	
ambient temperature	<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>
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	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A

— at 440 V rated value	220 A
— at 600 V rated value	220 A
— at 750 V rated value	220 A
• at DC-3 at DC-5	
— at 220 V rated value	220 A
— at 600 V rated value	220 A
— at 750 V rated value	170 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A
— at 440 V rated value	220 A
— at 600 V rated value	220 A
— at 750 V rated value	170 A
<b>operating power</b>	
• at DC-1	
— at 110 V rated value	24 kW
— at 220 V rated value	48 kW
— at 440 V rated value	97 kW
— at 750 V rated value	165 kW
• at DC-3 at DC-5	
— at 110 V rated value	20 kW
— at 220 V rated value	41 kW
— at 440 V rated value	82 kW
— at 600 V rated value	110 kW
— at 750 V rated value	110 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>	DC
<b>control supply voltage at DC rated value</b>	24 V
<b>closing power of magnet coil at DC</b>	30 W
<b>holding power of magnet coil at DC</b>	30 W
closing delay at DC	120 ... 400 ms
opening delay at DC	22 ... 35 ms
<b>arcng 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	8 A
• at 125 V rated value	6 A
• at 220 V rated value	2 A

• at 600 V rated value	0.4 A
<b>operational 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	2.4 A
• at 125 V rated value	2.1 A
• at 220 V rated value	1.1 A
• at 600 V rated value	0.21 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>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	3NE1332-4D (400 A) (750 V, 6 kA)
— with type of assignment 2 required	3NE1332-4D (400 A) (750 V, 6 kA)
• for short-circuit protection of the auxiliary switch required	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>	240 mm
<b>width</b>	135 mm
<b>depth</b>	236 mm
<b>required spacing</b>	
• with side-by-side mounting	
— forwards	20 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
• for grounded parts	
— forwards	70 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	70 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
• for main current circuit	screw terminal
• for auxiliary and control circuit	screw-type terminals
• for auxiliary contacts	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
• for auxiliary contacts	
— solid or stranded	2x (1 ... 2.5 mm <sup>2</sup> )
— finely stranded with core end processing	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
Electrical Safety	
<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>	
General Product Approval	



[Confirmation](#)



Functional Safety	Test Certificates	other
<a href="#">Type Examination Certificate</a>	<a href="#">Type Examination Certificate</a>	<a href="#">Miscellaneous</a>
		<a href="#">Type Test Certificates/Test Report</a>
		<a href="#">Special Test Certificate</a>

Railway	Dangerous goods	Environment
<a href="#">Confirmation</a>	<a href="#">Transport Information</a>	<a href="#">Environmental Confirmations</a>

#### 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=3TC5217-0AB4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-0AB4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AB4>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3TC5217-0AB4&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AB4&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AB4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-0AB4&objecttype=14&gridview=view1>



