

Contactor, Size 8, 2-pole, DC-3 and 5, 220 A Auxiliary switch 22 (2 NO + 2 NC) 250 V DC DC operation

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	8
product extension	
• function module for communication	No
• auxiliary switch	Yes
insulation voltage rated value	1 000 V
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	660 V
shock resistance at rectangular impulse	
• at DC	12g / 5 ms, 5,5g / 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 IEC 81346-2	Q
Substance Prohibitation (Date)	01.03.2017
Ambient conditions	
ambient temperature	
• during operation	-25 ... +55 °C
• during storage	-50 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C acc. to IEC 60068-2-30 maximum	95 %
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
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 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
operating power	
● 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
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	DC
control supply voltage at DC	
● rated value	250 V
closing power of magnet coil at DC	30 W
holding power of magnet coil at DC	30 W
closing delay at DC	120 ... 400 ms
opening delay at DC	22 ... 35 ms
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
operational current at AC-12 maximum	10 A
operational 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
operational current at DC-12	
● 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

operational current at DC-13	
• 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
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
• 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)
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
fastening method	screw fixing
• side-by-side mounting	Yes
height	240 mm
width	135 mm
depth	236 mm
required spacing	
• 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
Connections/ Terminals	
type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid or stranded	2x (1 ... 2,5 mm²)
— finely stranded with core end processing	2x (0.75 ... 1.5 mm²)
Safety related data	
product function mirror contact acc. to IEC 60947-4-1	Yes
protection class IP on the front acc. to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front with cover
Certificates/ approvals	
General Product Approval	Functional Safety/Safety of Machinery



[Type Examination Certificate](#)

[Type Examination Certificate](#)

Declaration of Conformity

Test Certificates

Marine / Shipping

[UK Declaration of Conformity](#)



[Miscellaneous](#)

[Special Test Certificate](#)

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other

Dangerous Good

[Confirmation](#)

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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=3TC5217-0AN4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-0AN4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AN4>

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

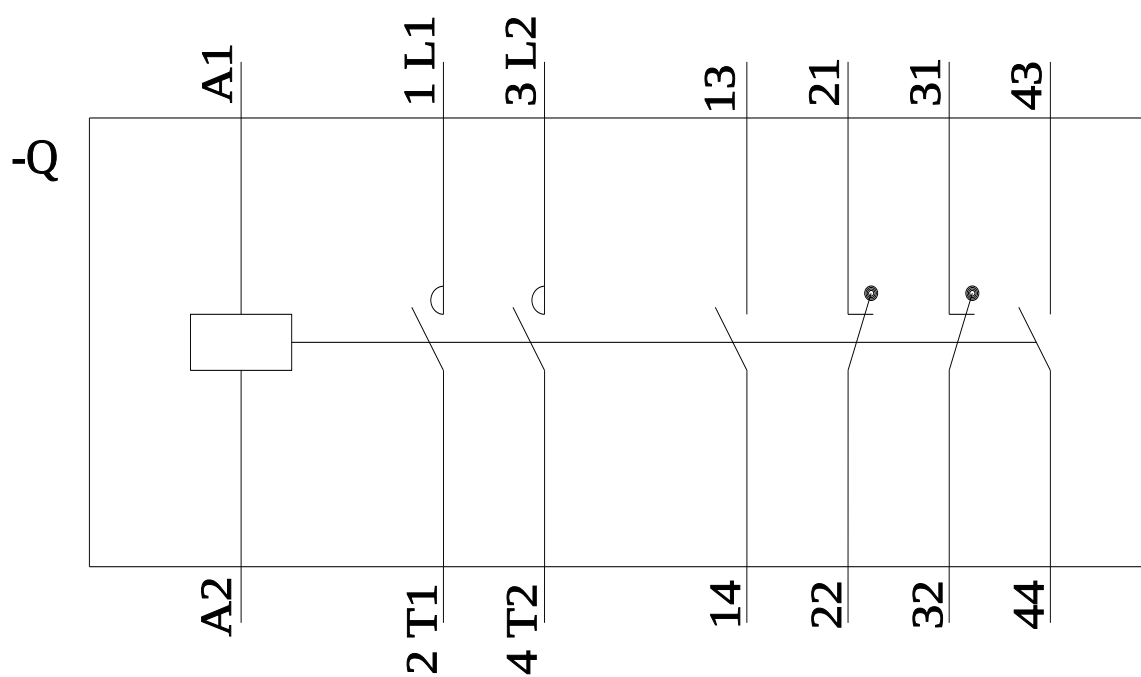
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AN4&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AN4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-0AN4&objecttype=14&gridview=view1>



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