

Contactor size 8, 2-pole DC-4, Rated operating current 220 A Auxiliary switch 22 (2 NO + 2 NC) Direct current operation G drive with integrated varistor 24 V DC vertical mounting position

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	8
product extension	
• function module for communication	No
• auxiliary switch	No
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	
• at DC	12g / 5 ms, 5,5g / 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 Prohibition (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	10.032 kg
Ambient conditions	
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 %
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 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
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	24 V
design of the surge suppressor	with varistor
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

<ul style="list-style-type: none"> • at 220 V rated value • at 600 V rated value 	<p>2 A</p> <p>0.4 A</p>
operational 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>2.4 A</p> <p>2.1 A</p> <p>1.1 A</p> <p>0.21 A</p>
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>3NE1332-4D (400 A) (750 V, 6 kA)</p> <p>3NE1332-4D (400 A) (750 V, 6 kA)</p> <p>gG: 16 A (500 V, 1 kA)</p>
Installation/ mounting/ dimensions	
mounting position	standing, on horizontal mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw fixing
height	240 mm
width	180 mm
depth	236 mm
required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	<p>20 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>70 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>70 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p>
Connections/ Terminals	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit 	<p>screw-type terminals</p> <p>screw-type terminals</p>
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing 	<p>2x (1 ... 2.5 mm²)</p> <p>2x (0.75 ... 1.5 mm²)</p>
Safety related data	
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](#)



EG-Konf.



UL



Functional Safety	Test Certificates			other	
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Type Examination Certificate	Type Examination Certificate	Special Test Certificate	Type Test Certificates/Test Report	Miscellaneous	Confirmation
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Railway	Dangerous goods	Environment
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Confirmation	Transport Information	Environmental Confirmations
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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=3TC5217-5KB4-Z B01>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-5KB4-Z B01>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-5KB4-Z B01>

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

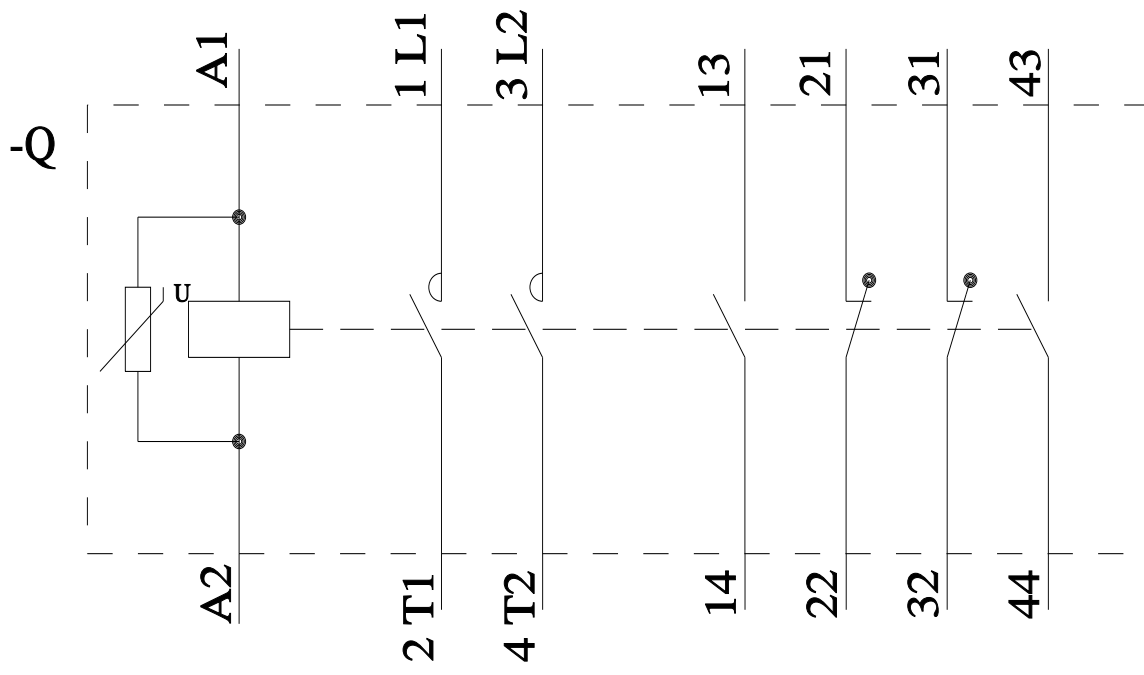
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-5KB4-Z B01&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-5KB4-Z B01/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-5KB4-Z B01&objecttype=14&gridview=view1>



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