SIEMENS

Data sheet

3TC5217-0AB4



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
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 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 Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	9.9 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 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	
Control circuit/ Control	DC
type of voltage of the control supply voltage	DC 24 V
type of voltage of the control supply voltage control supply voltage at DC rated value	24 V
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC	24 V 30 W
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC	24 V 30 W 30 W
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC	24 V 30 W 30 W 120 400 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC	24 V 30 W 30 W 120 400 ms 22 35 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time	24 V 30 W 30 W 120 400 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • instantaneous contact	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 0
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts identification number and letter for switching elements	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 2 2 2
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • operational current at AC-12 maximum	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 0
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 10 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 500 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 200 V rated value • at 500 V rated value • at 500 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 2 2 3 5 6 A 3.6 A 2.5 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts identification number and letter for switching elements operational current at AC-12 maximum operational current at AC-15 • at 200 V rated value • at 400 V rated value • at 500 V rated value • at 24 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A
type of voltage of the control supply voltage control supply voltage at DC rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact number of NO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts • instantaneous contact number of CO contacts for auxiliary contacts identification number and letter for switching elements operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 500 V rated value • at 500 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A
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type of voltage of the control supply voltagecontrol supply voltage at DC rated valueclosing power of magnet coil at DCholding power of magnet coil at DCclosing delay at DCopening delay at DCarcing timeAuxiliary circuitnumber of NC contacts for auxiliary contacts• instantaneous contactnumber of NO contacts for auxiliary contacts• instantaneous contactnumber of CO contacts for auxiliary contacts• instantaneous contactnumber of VO contacts for auxiliary contacts• instantaneous contact• at 200 V rated value• at 400 V rated value• at 24 V rated value• at 24 V rated value• at 48 V rated value• at 40 V rated value </td <td>24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 10 A 10 A</td>	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 10 A 10 A
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type of voltage of the control supply voltagecontrol supply voltage at DC rated valueclosing power of magnet coil at DCholding power of magnet coil at DCclosing delay at DCopening delay at DCarcing timeAuxiliary circuitnumber of NC contacts for auxiliary contacts• instantaneous contactnumber of NO contacts for auxiliary contacts• instantaneous contactnumber of CO contacts for auxiliary contacts• identification number and letter for switching elementsoperational current at AC-12• at 230 V rated value• at 400 V rated value• at 220 V rated value• at 220 V rated value• at 110 V rated value• at 220 V rated value• at 220 V rated value• at 220 V rated value• at 600 V rated value• at 600 V rated value• at 600 V rated val	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 10 A 10 A 10 A 10 A
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type of voltage of the control supply voltagecontrol supply voltage at DC rated valueclosing power of magnet coil at DCholding power of magnet coil at DCclosing delay at DCopening delay at DCarcing timeAuxiliary circuitnumber of NC contacts for auxiliary contacts• instantaneous contactnumber of NO contacts for auxiliary contacts• instantaneous contactnumber of CO contacts for auxiliary contacts• identification number and letter for switching elementsoperational current at AC-12• at 230 V rated value• at 400 V rated value• at 220 V rated value• at 220 V rated value• at 110 V rated value• at 220 V rated value• at 220 V rated value• at 220 V rated value• at 600 V rated value• at 600 V rated value• at 600 V rated val	24 V 30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A

 at 110 V rated value at 125 V rated value 	2.4 A 2.1 A
at 220 V rated value	1.1 A
at 600 V rated value	0.21 A
/CSA ratings	0.217
contact rating of auxiliary contacts according to UL	A600 / P600
ort-circuit protection	100011000
lesign 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)
stallation/ mounting/ dimensions	
nounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
astening method	screw fixing
neight	240 mm
vidth	135 mm
lepth	236 mm
equired 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	70
— forwards	70 mm 0 mm
— backwards — upwards	10 mm
— downwards	10 mm
— at the side	10 mm
onnections/ Terminals	
ype of electrical connection	screw terminal
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 mm ²)
fety 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
ouch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
oprovals Certificates	
General Product Approval	





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General Product Approval	Functional Saftey		Test Certificates		
EHC	Type Examination Cer- tificate	Type Examination Cer- tificate	<u>Miscellaneous</u>	Type Test Certific- ates/Test Report	Special Test Certific- ate
other	Railway	Dangerous goods	Environment		
<u>Confirmation</u>	Confirmation	Transport Information	Environmental Con- firmations		

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/3TC5217-0AB

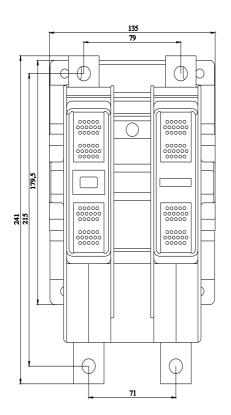
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

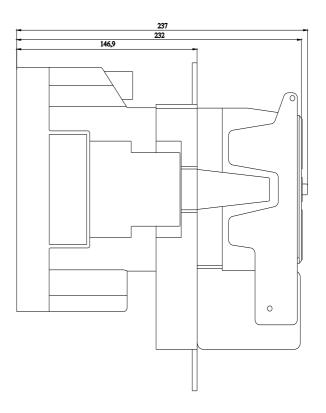
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AB4&lang=en

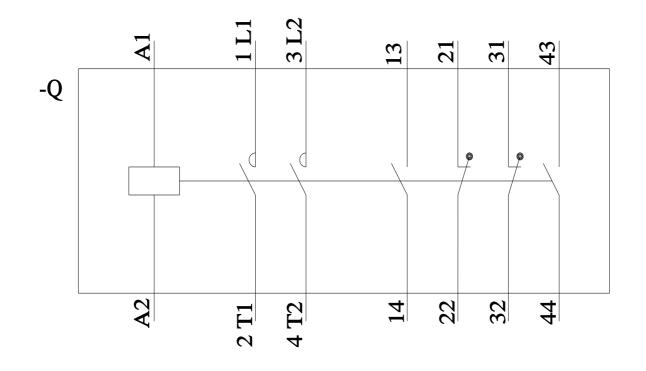
Characteristic: Tripping characteristics, I2t, Let-through current

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







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