SIEMENS

Data sheet 3TC5217-0AP4



Contactor, Size 8, 2-pole, DC-3 and 5, 220 A Auxiliary switch 22 (2 NO + 2 NC) 230 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	
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	20 MW
— 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	
control supply voltage at DC • rated value	230 V
	230 V 30 W
• rated value	
rated value closing power of magnet coil at DC	30 W
rated value closing power of magnet coil at DC holding power of magnet coil at DC	30 W 30 W
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	30 W 30 W 120 400 ms
rated value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC	30 W 30 W 120 400 ms 22 35 ms
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	30 W 30 W 120 400 ms 22 35 ms
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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms
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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms
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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms
● 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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms
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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms
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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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 2 2 2 2 2 2 2 2
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 operational current at AC-12 maximum operational current at AC-15	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 2 10 A
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 operational current at AC-12 maximum operational current at AC-15 at 230 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 10 A
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 operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A
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 operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 500 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A
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 operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 500 V rated value operational current at DC-12	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A
	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A
	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A
	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 8 A
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orated 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 o 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 operational current at AC-12 maximum operational current at AC-15 o at 230 V rated value o at 400 V rated value o at 500 V rated value o at 24 V rated value o at 48 V rated value o at 48 V rated value o at 60 V rated value o at 110 V rated value o at 125 V rated value o at 125 V rated value o at 220 V rated value o at 220 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 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 8 A 6 A 2 A
• 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 operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value operational current at DC-12 • 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 220 V rated value • at 600 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 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 8 A 6 A
orated 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 o 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 operational current at AC-12 maximum operational current at AC-15 o at 230 V rated value at 400 V rated value o at 500 V rated value at 48 V rated value at 48 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 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 40 A 4
	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 2 2 2 2 2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 8 A 6 A 2 A 0.4 A
orated 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 o 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 operational current at AC-12 maximum operational current at AC-15 o at 230 V rated value at 400 V rated value o at 500 V rated value at 48 V rated value at 48 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value	30 W 30 W 120 400 ms 22 35 ms 20 30 ms 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 40 A 4

• 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; of and backward by +/- 22.5° on vertical mounting surface; 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	screw-type terminals			
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 according to IEC 60947-4-1	Yes			
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			
Certificates/ approvals				
General Product Approval		Functional Safety/Safety of Ma- chinery		



Confirmation







Type Examination Certificate Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Type Examination Certificate

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Type Test Certificates/Test Report

Special Test Certificate

Miscellaneous

other Railway Dangerous Good

<u>Confirmation</u> <u>Confirmation</u> <u>Transport Information</u>

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3TC5217-0AP4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-0AP4

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AP4

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

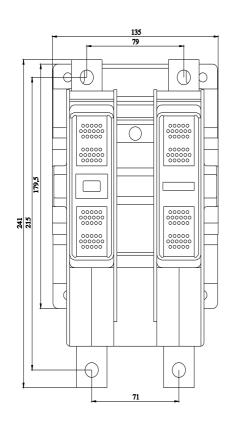
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AP4\&lang=en.pdf} \\$

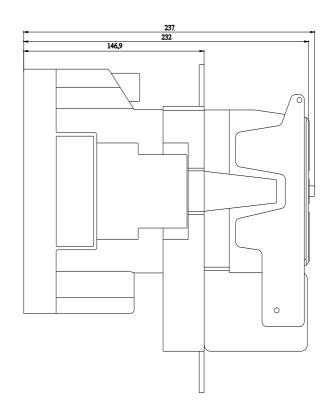
Characteristic: Tripping characteristics, I²t, Let-through current

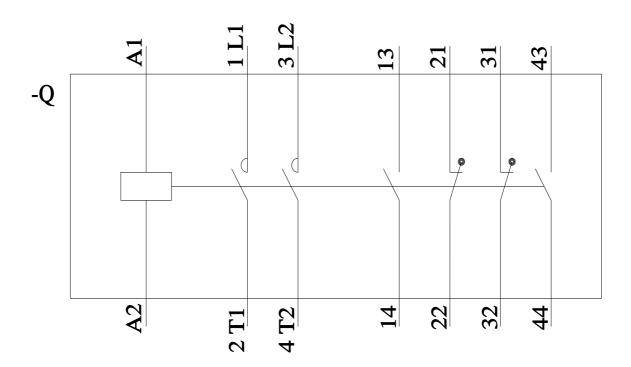
https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AP4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-0AP4&objecttype=14&gridview=view1







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