SIEMENS

Data sheet 3TC4417-0AB4-Z B01



Contactor size 2, 2-pole DC-3 and 5, 32 A Auxiliary switch 22 (2 NO + 2 NC) Direct current operation 24 V DC upright mounting position

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	2
product extension	
 function module for communication 	No
auxiliary switch	Yes
insulation voltage rated value	800 V
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	300 V
shock resistance at rectangular impulse	
• at DC	7,5g / 5 ms, 3,4g / 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)	02/01/2012
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	32 A
— at 110 V rated value	32 A
— at 220 V rated value	32 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	32 A
— at 110 V rated value	32 A
— at 220 V rated value	32 A
— at 440 V rated value	32 A
— at 600 V rated value	32 A

— at 750 V rated value	32 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	32 A
— at 110 V rated value	32 A
— at 220 V rated value	32 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	32 A
— at 110 V rated value	32 A
— at 220 V rated value	32 A
— at 440 V rated value	29 A
— at 600 V rated value	21 A
— at 750 V rated value	7.5 A
operating power	
• at DC-1	
— at 110 V rated value	3.5 kW
— at 220 V rated value	7 kW
— at 440 V rated value	14 kW
— at 750 V rated value	24 kW
• at DC-3 at DC-5	
— at 110 V rated value	2.5 kW
— at 220 V rated value	5 kW
— at 440 V rated value	9 kW
— at 600 V rated value	9 kW
— at 750 V rated value	4 kW
operating frequency	
• at DC-1 maximum	1 500 1/h
 at DC-3 maximum 	750 1/h
 at DC-5 maximum 	750 1/h
Control circuit/ Control	
	5.0
type of voltage of the control supply voltage	DC
type of voltage of the control supply voltage control supply voltage at DC	DC
	DC 24 V
control supply voltage at DC	
control supply voltage at DC • rated value	24 V
control supply voltage at DC • rated value closing power of magnet coil at DC	24 V 10 W
control supply voltage at DC • rated value closing power of magnet coil at DC holding power of magnet coil at DC	24 V 10 W 10 W
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 10 W 10 W 35 190 ms
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 10 W 10 W 35 190 ms 10 25 ms
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 10 W 10 W 35 190 ms 10 25 ms
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 10 W 10 W 35 190 ms 10 25 ms 20 30 ms
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 10 W 10 W 35 190 ms 10 25 ms 20 30 ms
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 10 W 10 W 35 190 ms 10 25 ms 20 30 ms
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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms
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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 0 22
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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms
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 operational current at AC-12 maximum operational current at AC-15	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 0 22 10 A
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 operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 10 A 5.6 A
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 operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 0 22 10 A 5.6 A 3.6 A
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 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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 10 A 5.6 A
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 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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A
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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 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 48 V rated value	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A
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 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 60 V rated value	24 V 10 W 10 W 35 190 ms 10 25 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
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 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 60 V rated value • at 110 V rated value	24 V 10 W 10 W 35 190 ms 10 25 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 3.2 A
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 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 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	24 V 10 W 10 W 35 190 ms 10 25 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 3.2 A 2.5 A
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 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 • 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	24 V 10 W 10 W 35 190 ms 10 25 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 10 A 3.2 A 2.5 A 0.9 A
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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 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 • at 24 V rated value • at 48 V rated value • at 48 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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A
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 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 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 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 value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A
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 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 • at 24 V rated value • at 48 V rated value • at 48 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	24 V 10 W 10 W 35 190 ms 10 25 ms 20 30 ms 2 2 2 2 10 A 5.6 A 3.6 A 2.5 A 10 A

• at 110 V rated value	1.14 A
• at 125 V rated value	0.98 A
at 220 V rated value	0.48 A
at 600 V rated value	0.07 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 	2 x 3NA3020 (50 A) in series (750 V, 3 kA)
— with type of assignment 2 required	2 x 3NA3020 (50 A) in series (750 V, 3 kA)
• for short-circuit protection of the auxiliary switch required	gG: 16 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	standing, on horizontal mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
• side-by-side mounting	Yes
height	85 mm
width	70 mm
depth	145 mm
required spacing	
with side-by-side mounting	
— forwards	15 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
for grounded parts	
— forwards	30 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	30 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 main contacts	
solid or stranded	2x (2,5 10 mm²)
finely stranded with core end processing	2x (1.5 4 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	0/4 0.52\
— solid or stranded	2x (1 2.5 mm²)
— finely stranded with core end processing	2x (0.75 1.5 mm²)
Safety related data	Very One NO contest scales (1)
1 (5 () 1 () 1 () 1 () 1 () 1 () 1 () 1	Yes; One NC contact each must be connected in series for the right and left
product function mirror contact according to IEC 60947-4-1	auxiliary switch block respectively
product function mirror contact according to IEC 60947-4-1 protection class IP on the front according to IEC 60529	auxiliary switch block respectively IP00
<u> </u>	

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=3TC4417-0AB4-Z B01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4417-0AB4-Z B01

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0AB4-Z B01

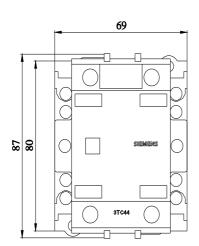
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

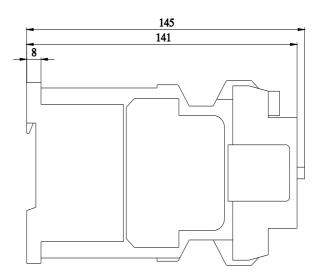
Interprise and interpretation an

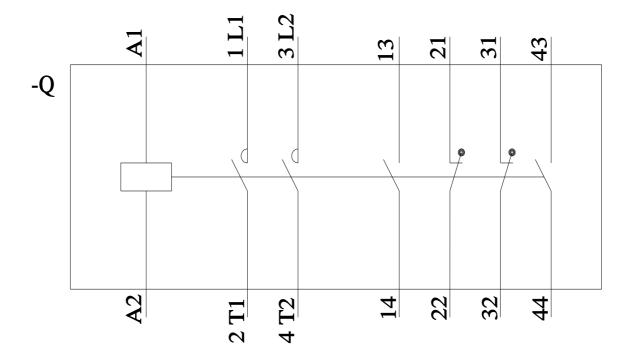
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0AB4-Z B01/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4417-0AB4-Z B01&objecttype=14&gridview=view1







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