SIEMENS

Data sheet 3TC4417-0BF0



Contactor, Size 2, 2-pole, DC-3 and 5, 32 A Auxiliary contacts 22 (2 NO + 2 NC) 110V AC 50Hz/132V AC 60Hz AC operation

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 safe isolation between coil and main contacts according to EN 60947-1	300 V
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 3,4g / 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 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	TIVV
• at DC-1 maximum	1 500 1/h
• at DC-3 maximum	750 1/h
■ at DC-5 maximum	
at DC-5 maximum Control sireuit/ Control	750 1/h
Control circuit/ Control	
Control circuit/ Control type of voltage of the control supply voltage	AC AC
type of voltage of the control supply voltage control supply voltage at AC	AC
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value	AC 110 V
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value	AC
control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated	AC 110 V
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V
control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz	AC 110 V 132 V
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V 132 V 0.8 1.1 68 VA
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz	AC 110 V 132 V 0.8 1.1 68 VA 68 VA
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V 132 V 0.8 1.1 68 VA
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz at 60 Hz inductive power factor with closing power of the coil	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with closing power of the coil • at 50 Hz	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz at 60 Hz at 60 Hz apparent holding power of magnet coil at AC	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA 10 VA 12 VA
type of voltage of the control supply voltage control supply voltage at AC	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA 10 VA
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with the holding power of the	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA 10 VA 12 VA
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with the holding power of the coil	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA 10 VA 12 VA 0.29
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 50 Hz	AC 110 V 132 V 0.8 1.1 68 VA 68 VA 95 VA 0.86 0.86 0.79 10 VA 10 VA 12 VA 0.29 0.29
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10 A		
3.2 A		
2.5 A		
0.9 A		
0.22 A		
2 x 3NA3020 (50 A) in series (750 V, 3 kA)		
2 x 3NA3020 (50 A) in series (750 V, 3 kA)		
) V, 1 kA)		
on possible on vertical mounting surface; can be tilted		
ackward by +/- 22.5° on vertical mounting surface; norizontal mounting surface		
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ackward by +/- 22.5° on vertical mounting surface; norizontal mounting surface ap-on mounting onto 35 mm standard mounting rail		
d b n h sna		

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 			
— 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; One NC contact each must be connected in series for the right and left auxiliary switch block respectively		
protection class IP on the front according to IEC 60529	IP00		
Certificates/ approvals			
	Functional		



General Product Approval

Confirmation







Type Examination Certificate

Safety/Safety of Machinery

Functional Safety/Safety of Machinery	Declaration of Conformity		Test Certificates		
Type Examination Certificate	C €	UK CA	Special Test Certificate	Type Test Certificates/Test Report	Miscellaneous

Marine / Shipping

other

Dangerous Good



Confirmation

<u>Transport Information</u>

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=3TC4417-0BF0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4417-0BF0

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0BF0

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

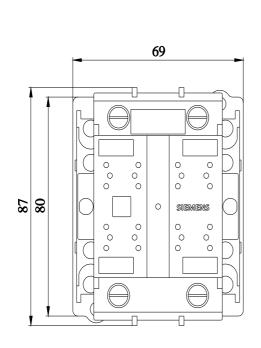
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4417-0BF0&lang=en

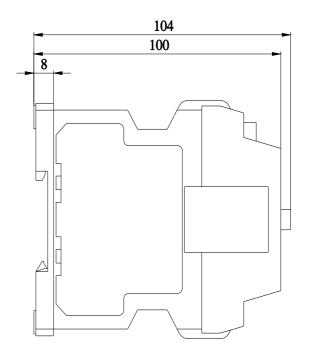
Characteristic: Tripping characteristics, I²t, Let-through current

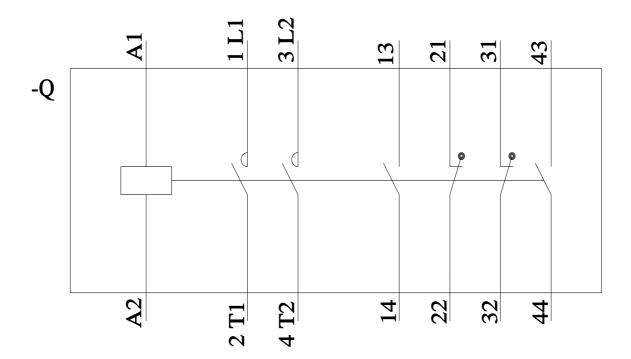
https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0BF0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4417-0BF0&objecttype=14&gridview=view1







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