

Contactor size 4, 2-pole DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) Alternating current operation 24 V AC 60 Hz/20 V AC 50 Hz

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	4
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 acc. to EN 60947-1	300 V
shock resistance at rectangular impulse	
• at AC	10g / 5 ms, 5g / 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 acc. to IEC 81346-2	Q
Substance Prohibittance (Date)	01.03.2017 00:00:00
Ambient conditions	
• ambient temperature during operation	-25 ... +55 °C
• ambient temperature during storage	-50 ... +80 °C
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 with 2 current paths in series at DC-1	
• at 24 V rated value	75 A
• at 110 V rated value	75 A
• at 220 V rated value	75 A
• at 440 V rated value	75 A
• at 600 V rated value	75 A
operational current	
• at DC-3 at DC-5	
— at 220 V rated value	75 A
— at 440 V rated value	75 A
— at 600 V rated value	75 A

— at 750 V rated value	75 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	75 A
— at 110 V rated value	75 A
— at 220 V rated value	75 A
— at 440 V rated value	75 A
— at 600 V rated value	75 A
operating power	
• at DC-1	
— at 110 V rated value	8.2 kW
— at 220 V rated value	16.5 kW
— at 440 V rated value	33 kW
— at 750 V rated value	56 kW
• at DC-3 at DC-5	
— at 110 V rated value	6.5 kW
— at 220 V rated value	13 kW
— at 440 V rated value	27 kW
— at 600 V rated value	38 kW
— at 750 V rated value	45 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	AC
control supply voltage at AC	
• at 50 Hz rated value	20 V
• at 60 Hz rated value	24 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 60 Hz	0.8 ... 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	300 V·A
• at 60 Hz	300 V·A
	365 V·A
inductive power factor with closing power of the coil	
• at 50 Hz	0.5
• at 60 Hz	0.45
apparent holding power of magnet coil at AC	
• at 50 Hz	26 V·A
• at 60 Hz	26 V·A
	35 V·A
inductive power factor with the holding power of the coil	
• at 50 Hz	0.24
• at 60 Hz	0.24
	0.26
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	

<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 	10 A 10 A 10 A 3.2 A 2.5 A 0.9 A 0.22 A
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 	10 A 5 A 5 A 1.14 A 0.98 A 0.48 A 0.07 A
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
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 	gG: 160 A (690 V, 100 kA) gG: 63 A (690 V, 100 kA) gG: 16 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; standing, on horizontal mounting surface
fastening method <ul style="list-style-type: none"> • side-by-side mounting 	screw fixing Yes
height	177.5 mm
width	100 mm
depth	156 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 	20 mm 0 mm 10 mm 10 mm 10 mm 55 mm 0 mm 10 mm 10 mm 10 mm 55 mm 0 mm 10 mm 10 mm 10 mm
Connections/ Terminals	
type of electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit 	screw-type terminals screw-type terminals screw-type terminals
type of connectable conductor cross-sections	

- for auxiliary contacts
 - solid or stranded
 - finely stranded with core end processing

2x (1 ... 2,5 mm²)
2x (0.75 ... 2.5 mm²)

Safety related data

product function mirror contact acc. to IEC 60947-4-1	Yes
protection class IP on the front acc. to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front with cover

Certificates/ approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Type Examination Certificate](#)

[Miscellaneous](#)

Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



[Confirmation](#)

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=3TC4817-0BC1>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0BC1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BC1>

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

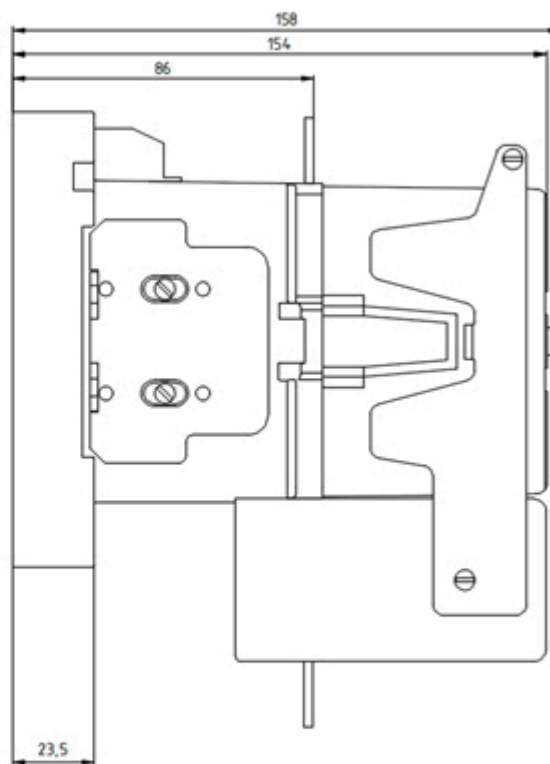
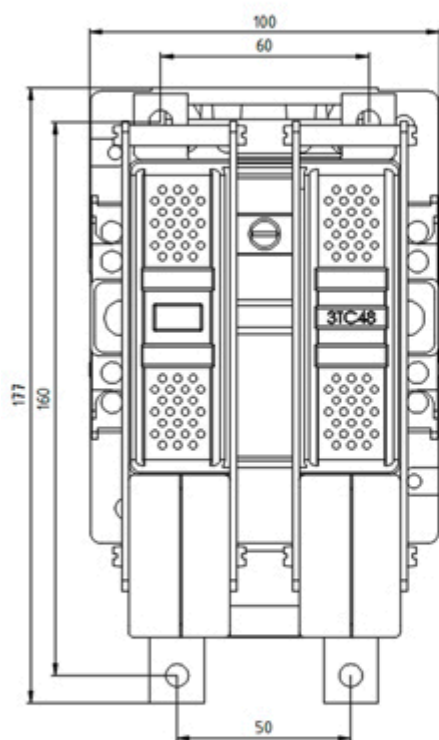
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0BC1&lang=en

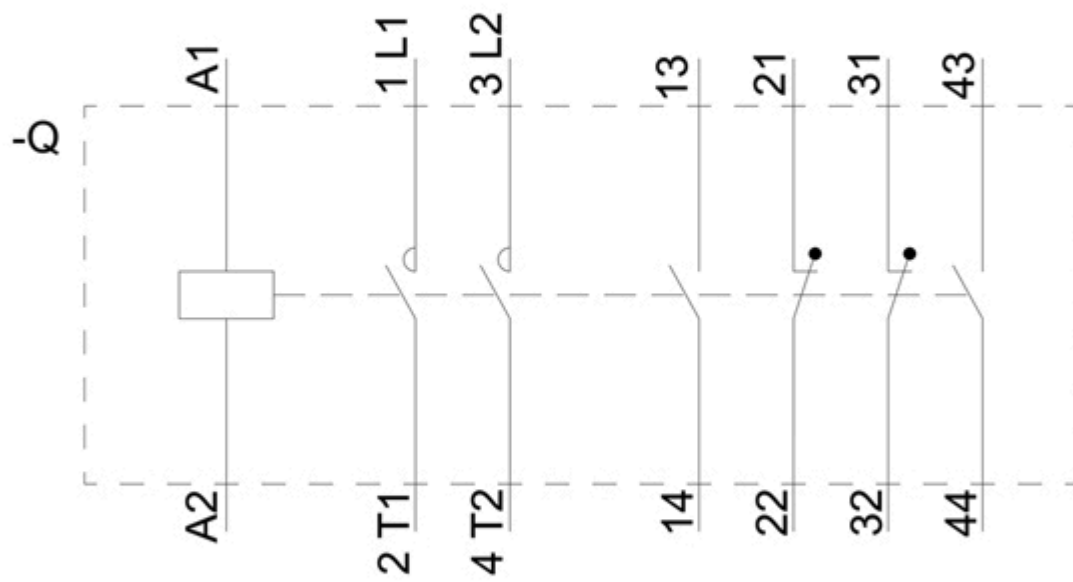
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0BC1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0BC1&objecttype=14&gridview=view1>





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