## **SIEMENS**

**Data sheet** 3TC4817-0AF4



Contactor, Size 4, 2-pole, DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) 110V DC DC operation

product type designation	0.770
	3TC
eneral technical data	
size of contactor	4
product extension	
<ul> <li>function module for communication</li> </ul>	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 DC	10g / 5 ms, 5g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
mbient 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 %
ain 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	75 A
— at 110 V rated value	75 A
— at 220 V rated value	75 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— 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

— at 750 V rated value	75 A
• at 1 current path at DC-3 at DC-5	75.4
— at 24 V rated value	75 A
— at 110 V rated value	75 A
— at 220 V rated value	75 A
with 2 current paths in series at DC-3 at DC-5	7.5 A
— 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 75 A
— at 600 V rated value	75 A
— at 750 V rated value	75 A
operating power	
— 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	30 KW
— 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	DC
control supply voltage at DC	
rated value	110 V
closing power of magnet coil at DC	19 W
holding power of magnet coil at DC	19 W
closing delay at DC	90 380 ms
opening delay at DC	17 28 ms
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
<ul> <li>instantaneous contact</li> </ul>	2
number of CO contacts for auxiliary contacts	0
identification number and letter for switching	22
elements	40.4
operational current at AC-12 maximum	10 A
operational current at AC-15	5 G A
at 230 V rated value     at 400 V rated value	5.6 A
<ul><li>at 400 V rated value</li><li>at 500 V rated value</li></ul>	3.6 A 2.5 A
operational current at DC-12	2.0 A
• at 24 V rated value	10 A
at 48 V rated value	
	10 A
• at 60 V rated value	10 A 10 A
<ul><li>at 60 V rated value</li><li>at 110 V rated value</li></ul>	10 A 10 A 3.2 A
<ul><li>at 60 V rated value</li><li>at 110 V rated value</li><li>at 125 V rated value</li></ul>	10 A 10 A 3.2 A 2.5 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> </ul>	10 A 10 A 3.2 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul>	10 A 10 A 3.2 A 2.5 A 0.9 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> </ul>	10 A 10 A 3.2 A 2.5 A 0.9 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> operational current at DC-13	10 A 10 A 3.2 A 2.5 A 0.9 A 0.22 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> operational current at DC-13 <ul> <li>at 24 V rated value</li> </ul>	10 A 10 A 3.2 A 2.5 A 0.9 A 0.22 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> operational current at DC-13 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> </ul>	10 A 10 A 3.2 A 2.5 A 0.9 A 0.22 A 10 A 5 A

at 220 V rated value	0.48 A	
at 600 V rated value	0.46 A 0.07 A	
UL/CSA ratings	0.07 A	
contact rating of auxiliary contacts according to UL	A600 / P600	
Short-circuit protection	7,000 7 1 000	
design of the fuse link		
for short-circuit protection of the main circuit		
with type of coordination 1 required	2 x 3NA31 (160 A) in series (750 V, 5 kA)	
with type of coordination is required  — with type of assignment 2 required	2 x 3NA31 (160 A) in series (750 V, 5 kA) 2 x 3NA31 (63 A) in series (750 V, 5 kA)	
for short-circuit protection of the auxiliary switch	gG: 16 A (500 V, 1 kA)	
required	gg. 10 A (300 V, 1 KA)	
Installation/ mounting/ dimensions		
mounting position	+/-22,5° rotation possible on vertical mounting surfa	
	forward and backward by +/- 22.5° on vertical moun	ting surface;
	standing, on horizontal mounting surface	
fastening method	screw fixing	
<ul> <li>side-by-side mounting</li> </ul>	Yes	
height	177.5 mm	
width	100 mm	
depth	184 mm	
required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— forwards	20 mm	
— backwards	0 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	10 mm	
<ul> <li>for grounded parts</li> </ul>		
— forwards	55 mm	
— backwards	0 mm	
— upwards	10 mm	
— at the side	10 mm	
— downwards	10 mm	
• for live parts		
— forwards	55 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	71	
• for auxiliary contacts		
— solid or stranded	2x (1 2.5 mm²)	
— finely stranded with core end processing	2x (1 2.5 min <sup>-</sup> ) 2x (0.75 1.5 mm <sup>2</sup> )	
Safety related data		
product function mirror contact according to IEC 60947-4-	Yes	
1		
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 co	over
Certificates/ approvals		
General Product Approval		Functional Safety/Safety of Machinery





Confirmation





Type Examination Certificate Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 

Type Examination Certificate





**Miscellaneous** 

Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping

other

**Dangerous Good** 



Confirmation

<u>Transport Information</u>

## 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=3TC4817-0AF4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0AF4

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AF4

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

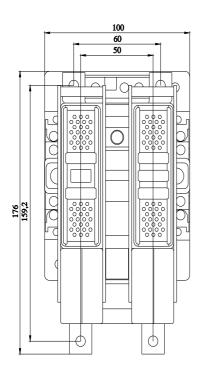
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3TC4817-0AF4&lang=en

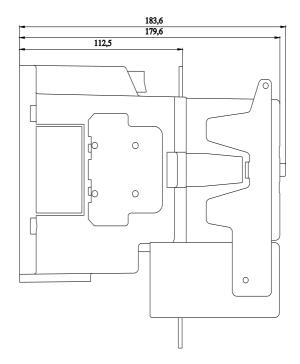
Characteristic: Tripping characteristics, I2t, Let-through current

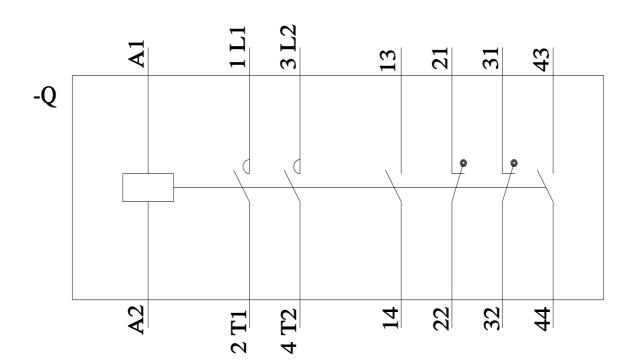
https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AF4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0AF4&objecttype=14&gridview=view1







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