SIEMENS

Data sheet

3TC4817-0AW4



Contactor, Size 4, 2-pole, DC-3 and 5, 75 A Auxiliary switch 22 (2 NO + 2 NC) 48V DC DC operation

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 protective separation 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	
 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	75 A	
— at 110 V rated value	75 A	
— at 220 V rated value	75 A	
 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	

— at 750 V rated value	
	75 A
 at 1 current path 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
 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
— at 750 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	DC
control supply voltage at DC	
 rated value 	48 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
numper of NU contacts for auxiliary contacts	2
number of NO contacts for auxiliary contacts instantaneous contact 	2 2
instantaneous contact	2
instantaneous contact number of CO contacts for auxiliary contacts	2 0
instantaneous contact number of CO contacts for auxiliary contacts identification number and letter for switching elements	2 0 22
instantaneous contact number of CO contacts for auxiliary contacts identification number and letter for switching elements operational current at AC-12 maximum	2 0
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	2 0 22 10 A
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	2 0 22 10 A 5.6 A
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 e at 230 V rated value e at 400 V rated value	2 0 22 10 A 5.6 A 3.6 A
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	2 0 22 10 A 5.6 A
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 500 V rated value	2 0 22 10 A 5.6 A 3.6 A 2.5 A
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 500 V rated value • at 24 V rated value	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A
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 500 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A
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 500 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A
 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 	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
 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 460 V rated value 	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 10 A 2.5 A
 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 	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 3.2 A 2.5 A 0.9 A
 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 	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 10 A 10 A 2.5 A
 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 	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 3.2 A 2.5 A 0.9 A
 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 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value 	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 3.2 A 2.5 A 0.9 A
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 500 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 400 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 24 V rated value • at 24 V rated value • at 400 V rated value • at 600 V rated value • at 6	2 0 22 10 A 5.6 A 3.6 A 2.5 A 10 A 10 A 10 A 3.2 A 2.5 A 0.9 A 0.22 A
 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 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 at 24 V rated value 	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 2.5 A 0.9 A 0.22 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				
L/CSA ratings					
contact rating of auxiliary contacts according to UL	A600 / P600				
hort-circuit protection					
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 assignment 2 required	2 x 3NA31 (63 A) in series (750 V, 5 kA)				
• for short-circuit protection of the auxiliary switch required	gG: 16 A (500 V, 1 kA)				
stallation/ 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 horizont mounting surface				
fastening method	screw fixing				
 side-by-side mounting 	Yes				
height	177.5 mm				
width	100 mm				
depth	184 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	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					
for auxiliary contacts	$212(4-2.5 \text{ mm}^2)$				
— solid or stranded	2x (1 2.5 mm ²)				
 finely stranded with core end processing 	2x (0.75 1.5 mm²)				
afety related data	Var				
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				
ertificates/ approvals General Product Approval	Functional Safety/Safety of M chinery				
	Type Examination C ur EAR				

8/13/2023

Subject to change without notice © Copyright Siemens

Functional Safety/Safety of Ma- chinery	Declaration of Conformity		Test Certificates		
Type Examination Cer- tificate	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	<u>Miscellaneous</u>
other	Dangerous Good				
Confirmation	Transport Information				

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=3TC4817-0AW4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0AW4

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AW4

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

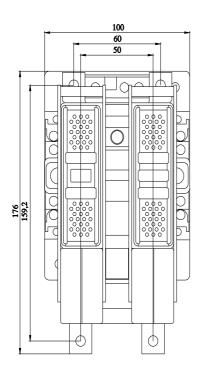
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0AW4&lang=en

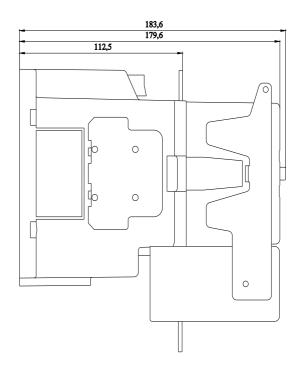
Characteristic: Tripping characteristics, I²t, Let-through current

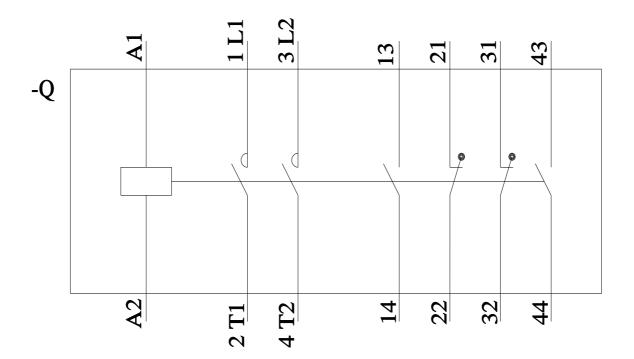
https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0AW4/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0AW4&objecttype=14&gridview=view1







2/13/2023 🖸

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3TC48170AW4