SIEMENS

Data sheet 3TC4817-0LB4-Z B01



Contactor size 4, 2-pole DC-3 and 5, 75 A at 750 V Auxiliary contacts 21 (2 NO + 1 NC) Operating range 0.7 to 1.25 x US connected to varistor Direct current operation DC magnet system 24 V DC Mounting position vertical

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	4
product extension	
 function module for communication 	No
auxiliary switch	No
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
SVHC substance name	Lead - 7439-92-1
Weight	4.762 kg
Ambient conditions	
ambient temperature	
during operation	-40 +70 °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 DC-3 at DC-5	
— at 220 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	-TO NY
operating inequality	
at DC-1 maximum	1 000 1/h
at DC-1 maximum at DC-3 maximum	1 000 1/h 600 1/h
• at DC-3 maximum	600 1/h
at DC-3 maximumat DC-5 maximum	
at DC-3 maximum at DC-5 maximum Control circuit/ Control	600 1/h 600 1/h
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage	600 1/h 600 1/h DC
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value	600 1/h 600 1/h DC 24 V
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor	600 1/h 600 1/h DC 24 V with varistor
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor closing power of magnet coil at DC	600 1/h 600 1/h DC 24 V with varistor 19 W
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 90 380 ms 17 28 ms 20 30 ms
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 0
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 0 21
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 0
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 1 10 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 1 2 2 1 10 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 1 2 2 2 1 10 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 1 2 2 1 10 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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 500 V rated value operational current at DC-12	000 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 1 10 A 5.6 A 3.6 A 2.5 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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 operational current at DC-12 at 24 V rated value	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 2 2 2 1 10 A 5.6 A 3.6 A 2.5 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 2 2 2 1 10 A 5.6 A 3.6 A 2.5 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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 operational current at DC-12 at 24 V rated value operational current at DC-12 at 48 V rated value at 60 V rated value operational current value at 60 V rated value operational value operational current value	600 1/h 600 1/h DC 24 V with varistor 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 2 2 2 1 10 A 5.6 A 3.6 A 2.5 A
at DC-3 maximum at DC-5 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value design of the surge suppressor 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	600 1/h 600 1/h DC 24 V with varistor 19 W 19 W 90 380 ms 17 28 ms 20 30 ms 1 1 1 2 2 2 1 10 A 5.6 A 3.6 A 2.5 A

• at 220 V rated value	0.9 A
at 600 V rated value	0.22 A
operational current at DC-13	
at 24 V rated value	10 A
at 48 V rated value	5 A
at 60 V rated value	5 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 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)
Installation/ mounting/ dimensions	32(000 1, 1.00)
mounting position	standing, on horizontal mounting surface
	Yes
fastening method side-by-side mounting	screw fixing
fastening method	
height	177.5 mm
width	143 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 terminal
• for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
for auxiliary contacts	
solid or stranded	2x (1 2.5 mm²)
Solid of stranded finely stranded with core end processing	2x (0.75 1.5 mm²)
Safety related data	ΔΛ (0.10 1.0 IIIIII)
	Vee
product function mirror contact according to IEC 60947-4-1	Yes
Electrical Safety	IDOO IDOO 'II I I/
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
Approvals Certificates	
General Product Approval	













Functional Saftey	Test Certificates	other
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Dangerous goods Environment

<u>Transport Information</u> <u>Environmental Confirmations</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=3TC4817-0LB4-Z B01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4817-0LB4-Z B01

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0LB4-Z B01

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

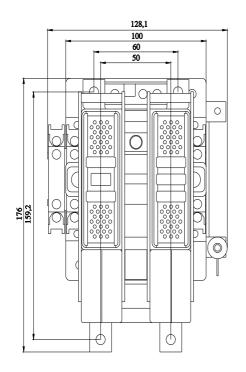
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4817-0LB4-Z B01&lang=en

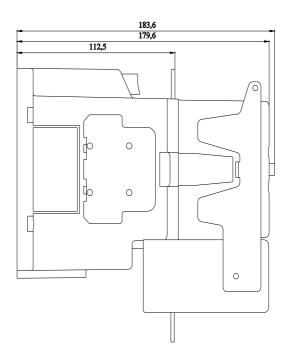
Characteristic: Tripping characteristics, I2t, Let-through current

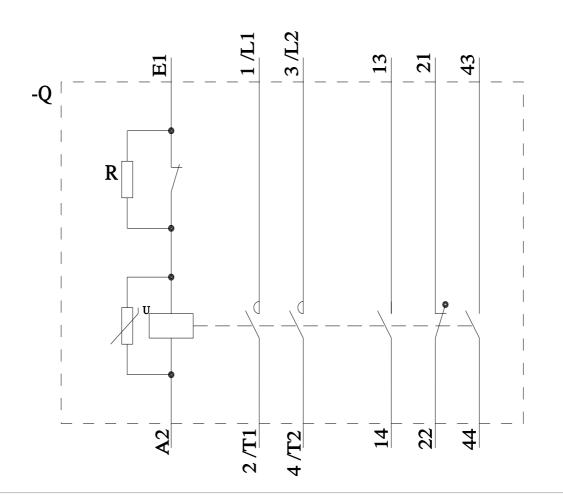
https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0LB4-Z B01/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4817-0LB4-Z B01&objecttype=14&gridview=view1







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