3TC4417-0LY80-0AH0

Data sheet



Contactor size 2, 2-pole for railway applications DC-3 and 5, 7.5 A at 750 V Auxiliary contacts 21 (2NO + 1NC) Operating range 0.7 to 1.25 x US with varistor and series resistor DC magnet system 52 V DC, 70°

product designation	Contactor
product type designation	3TC
General technical data	
size of contactor	2
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	7,5g / 5 ms, 3,4g / 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)	02/01/2012
SVHC substance name	Lead - 7439-92-1 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1
Weight	1.31 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	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 DC-3 at DC-5	
— at 220 V rated value	32 A
— at 600 V rated value	21 A
— at 750 V rated value	7.5 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	4.500.4//
• at DC-1 maximum	1 500 1/h
• at DC-3 maximum	750 1/h
at DC-5 maximum Control circuit/ Control	750 1/h
	DC .
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	96 V
design of the surge suppressor closing power of magnet coil at DC	with varistor 48 W
holding power of magnet coil at DC	13 W
closing delay at DC	35 190 ms
opening delay at DC	10 25 ms
arcing time	20 30 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
instantaneous contact	1
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	21
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	
• at 24 V rated value	10 A
• at 48 V rated value	10 A
• at 60 V rated value	10 A
at 110 V rated value	3.2 A

• at 125 V rated value	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 3NA3020 (50 A) in series (750 V, 3 kA)
with type of assignment 2 required	2 x 3NA3020 (50 A) in series (750 V, 3 kA)
for short-circuit protection of the auxiliary switch required	gG: 16 A (500 V, 1 kA)
Installation/ mounting/ dimensions	3 - · · · · · · (4000 · ·) · · · · · · · ·
mounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward
mounting position	and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
height	115 mm
width	82 mm
depth	145 mm
required spacing	
with side-by-side mounting	
— forwards	15 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
	10 111111
• for grounded parts	20
— forwards	30 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
for live parts	
— forwards	30 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 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
Electrical Safety	administry officer proof toop controly
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Approvals Certificates

General Product Approval







Confirmation





Functional Saftey Test Certificates of	onal Saftey	Test Certificates	other
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Type Examination Cer- Type Examination Cer- Special Test Certific- Type Test Certific- Miscellaneous Confirmation tificate ate ates/Test Report

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=3TC4417-0LY80-0AH0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC4417-0LY80-0AH0

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

https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0LY80-0AH0

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

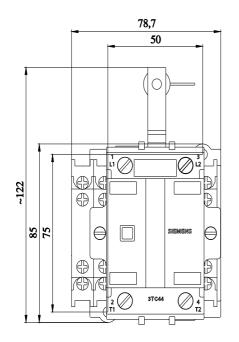
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC4417-0LY80-0AH0&lang=en

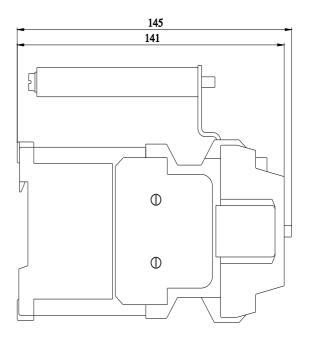
Characteristic: Tripping characteristics, I2t, Let-through current

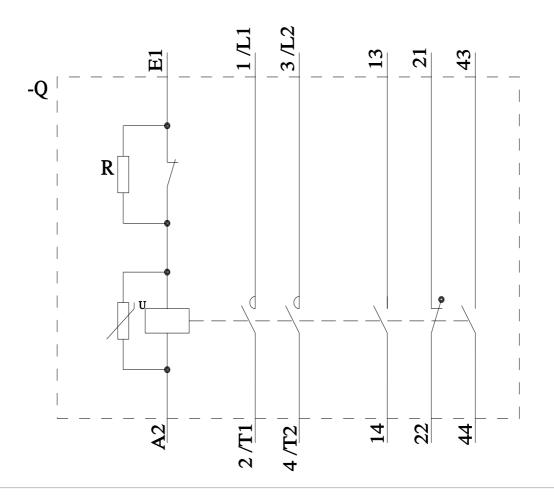
https://support.industry.siemens.com/cs/ww/en/ps/3TC4417-0LY80-0AH0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC4417-0LY80-0AH0&objecttype=14&gridview=view1







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