



contactor, DC-3/DC-5, 75 A, 2-pole, 36 V DC, 0.7-1.25* U_c, with varistor and series resistor, auxiliary contacts: 2 NO + 1 NC, connecting bar, frame size 4, for railway applications

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	10 g / 5 ms, 5 g / 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 (day/month/year)	03/01/2017
SVHC substance name	Lead CAS-No. 7439-92-1
Net Weight	4.77 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	
● 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	36 V
design of the surge suppressor	with varistor
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	1
● 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 • 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 3.2 A 2.5 A 0.9 A 0.22 A
operational current at DC-13 • 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
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 — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required	2 x 3NA31 (160 A) in series (750 V, 5 kA) 2 x 3NA31 (63 A) in series (750 V, 5 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
fastening method side-by-side mounting	Yes
fastening method	screw fixing
height	177.5 mm
width	143 mm
depth	184 mm
required spacing • with side-by-side mounting — forwards — backwards — upwards — downwards — at the side • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — 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 • for main current circuit • for auxiliary and control circuit	screw terminal 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 ... 1.5 mm²)
Safety related data	
product function mirror contact according to IEC 60947-4-1	Yes

Electrical Safety	
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	

Environment	General Product Approval
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[Environmental Con-
firmations](#)



General Product Ap- proval	Functional Safety	Test Certificates	other
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[Type Examination Cer-
tificate](#)

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ate](#)

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[Confirmation](#)

other	Dangerous goods
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Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3TC4817-0LV4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC4817-0LV4>

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

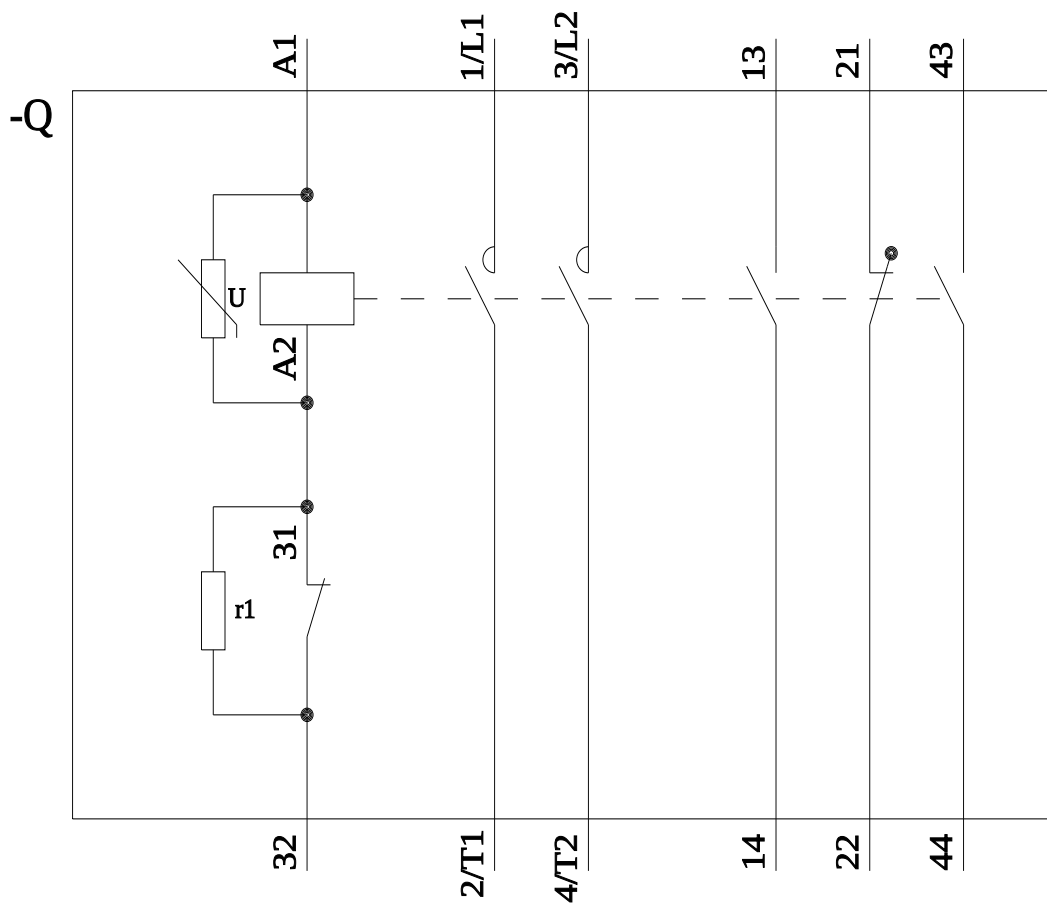
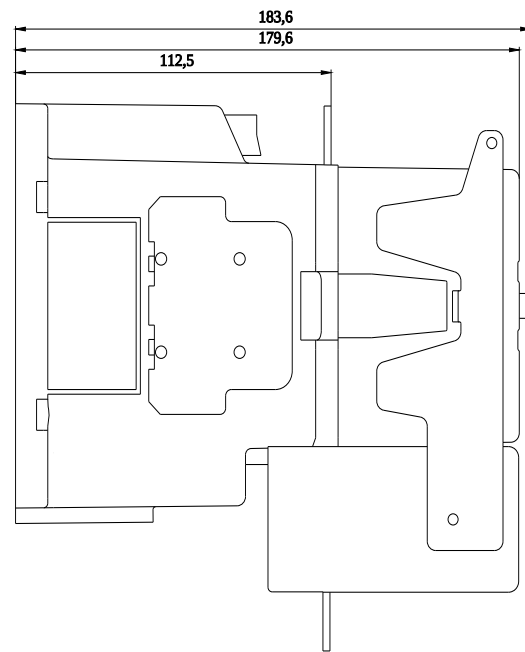
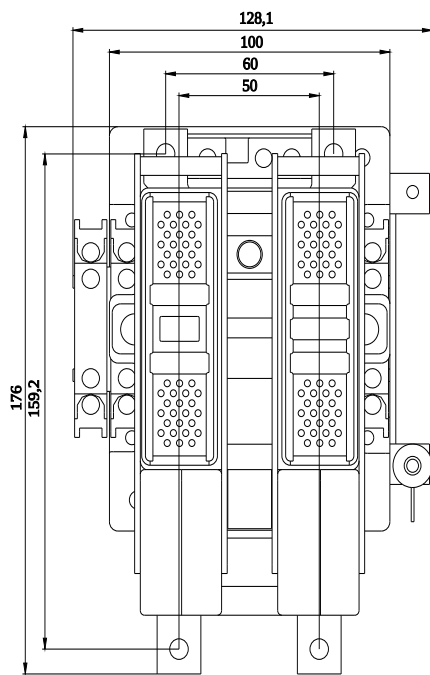
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Cax online generator

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Characteristic curves

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