



DC contactor, 2-pole DC-3 and 5, 220 A Auxiliary contacts 21 (2NO + 1NC)
DC operation 104 V DC

product designation
product type designation

Contactor
3TC

General technical data

size of contactor

8

product extension

- function module for communication
- auxiliary switch

No
Yes

insulation voltage rated value

1 000 V

maximum permissible voltage for safe isolation between
coil and main contacts according to EN 60947-1

660 V

shock resistance at rectangular impulse

- at DC

12g / 5 ms, 5,5g / 10 ms

mechanical service life (operating cycles)

- of contactor typical
- of the contactor with added auxiliary switch block typical

10 000 000
10 000 000

reference code according to IEC 81346-2

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Substance Prohibitance (Date)

03/01/2017

Ambient conditions

ambient temperature

- during operation
- during storage

-25 ... +55 °C
-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
- at 110 V rated value
- at 220 V rated value

220 A
220 A
220 A

- with 2 current paths in series at DC-1

- at 24 V rated value
- at 110 V rated value
- at 220 V rated value
- at 440 V rated value
- at 600 V rated value

220 A
220 A
220 A
220 A
220 A

— at 750 V rated value	220 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	220 A
— at 110 V rated value	220 A
— at 220 V rated value	220 A
— at 440 V rated value	220 A
— at 600 V rated value	220 A
— at 750 V rated value	170 A
operating power	
• at DC-1	
— at 110 V rated value	24 kW
— at 220 V rated value	48 kW
— at 440 V rated value	97 kW
— at 750 V rated value	165 kW
• at DC-3 at DC-5	
— at 110 V rated value	20 kW
— at 220 V rated value	41 kW
— at 440 V rated value	82 kW
— at 600 V rated value	110 kW
— at 750 V rated value	110 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	104 V
closing power of magnet coil at DC	30 W
holding power of magnet coil at DC	30 W
closing delay at DC	120 ... 400 ms
opening delay at DC	22 ... 35 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
• instantaneous contact	2
number of CO contacts for auxiliary contacts	0
identification number and letter for switching elements	22
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	8 A
• at 125 V rated value	6 A
• at 220 V rated value	2 A
• at 600 V rated value	0.4 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	2.4 A
• at 125 V rated value	2.1 A

• at 220 V rated value • at 600 V rated value	1.1 A 0.21 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 assignment 2 required • for short-circuit protection of the auxiliary switch required	3NE1332-4D (400 A) (750 V, 6 kA) 3NE1332-4D (400 A) (750 V, 6 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; standing, on horizontal mounting surface
fastening method	screw fixing
• side-by-side mounting	Yes
height	240 mm
width	135 mm
depth	236 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 70 mm 0 mm 10 mm 10 mm 10 mm 70 mm 0 mm 10 mm 10 mm 10 mm
Connections/ Terminals	
type of electrical connection	screw-type terminals
• for main current circuit • for auxiliary and control circuit	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
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
Certificates/ approvals	
General Product Approval	Functional Safety/Safety of Machinery



[Confirmation](#)



[Type Examination Certificate](#)

Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates		
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[Type Examination Certificate](#)



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

Marine / Shipping	other	Railway	Dangerous Good
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[Confirmation](#)

[Confirmation](#)

[Transport Information](#)

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=3TC5217-0AY80-0AG8>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-0AY80-0AG8>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AY80-0AG8>

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

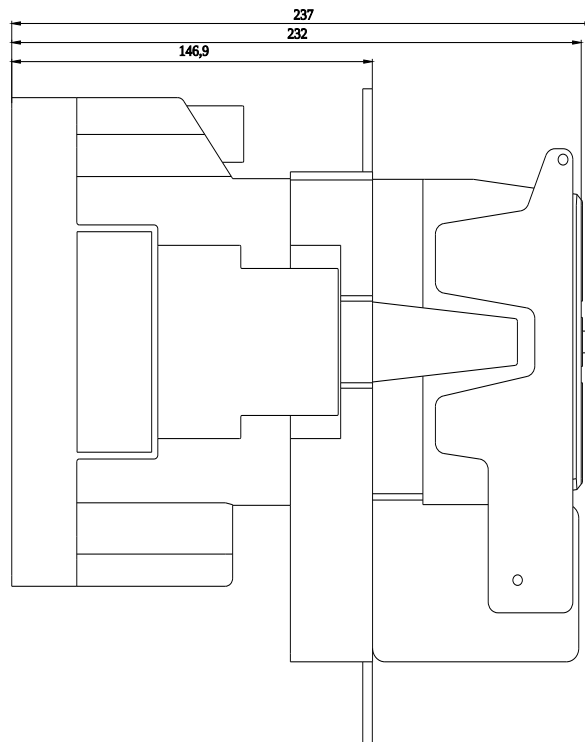
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AY80-0AG8&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AY80-0AG8/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-0AY80-0AG8&objecttype=14&gridview=view1>

2/13/2023

