

Contactor, Size 8, 2-pole, DC-3 and 5, 220 A Auxiliary switch 22 (2 NO + 2 NC) 110V DC DC operation



Product designation	Contactor
Product type designation	3TC
General technical data	
Size of contactor	8
Product extension	
• function module for communication	No
• Auxiliary switch	Yes
Insulation voltage rated value	1 000 V
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	660 V
Protection class IP	IP00
• protection class IP on the front	IP00
• Protection class IP of the terminal	IP00
Shock resistance at rectangular impulse	
• at DC	12g / 5 ms, 5,5g / 10 ms
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000

Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	<p>-25 ... +55 °C</p> <p>-50 ... +80 °C</p>
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
Operating current	
<ul style="list-style-type: none"> • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — 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 	<p>220 A</p> <p>220 A</p> <p>220 A</p> <p>220 A</p> <p>220 A</p>
Operating current	
<ul style="list-style-type: none"> • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 750 V rated value • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — 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 	<p>220 A</p> <p>220 A</p> <p>220 A</p> <p>170 A</p> <p>220 A</p> <p>220 A</p> <p>220 A</p> <p>220 A</p> <p>220 A</p>
Operating power	
<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 750 V rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value 	<p>24 kW</p> <p>48 kW</p> <p>97 kW</p> <p>165 kW</p> <p>20 kW</p> <p>41 kW</p> <p>82 kW</p> <p>110 kW</p>

— 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	110 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
Operating current at AC-12 maximum	10 A
Operating 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
Operating 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
Operating 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

<ul style="list-style-type: none"> • at 125 V rated value • at 220 V rated value • at 600 V rated value 	<p>2.1 A</p> <p>1.1 A</p> <p>0.21 A</p>
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)

UL/CSA ratings

Contact rating of auxiliary contacts according to UL	A600 / P600
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Short-circuit protection

Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 	<p>gG: 250 A (690 V, 100 kA)</p> <p>gG: 80 A (690 V, 100 kA)</p> <p>gG: 16 A (500 V, 1 kA)</p>

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
Mounting type	screw fixing
<ul style="list-style-type: none"> • Side-by-side mounting 	Yes
Height	240 mm
Width	135 mm
Depth	236 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards 	<p>20 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>70 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>70 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p>

— at the side

10 mm

Connections/ Terminals

- | | |
|---|----------------------|
| • type of electrical connection | screw-type terminals |
| • Type of electrical connection for main current circuit | screw-type terminals |
| • Type of electrical connection for auxiliary and control current circuit | screw-type terminals |

Type of connectable conductor cross-sections

- | | |
|--|------------------------------------|
| • for auxiliary contacts | |
| — single or multi-stranded | 2x (1 ... 2,5 mm ²) |
| — finely stranded with core end processing | 2x (0.75 ... 2.5 mm ²) |

Safety related data

Protection against electrical shock finger-safe only with terminal cover

Certificates/ approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Type Examination Certificate](#)



Declaration of Conformity	Test Certificates	Marine / Ship-ping	other
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Miscellaneous](#)



[Confirmation](#)

Further information

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=3TC5217-0AF4>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TC5217-0AF4>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AF4>

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

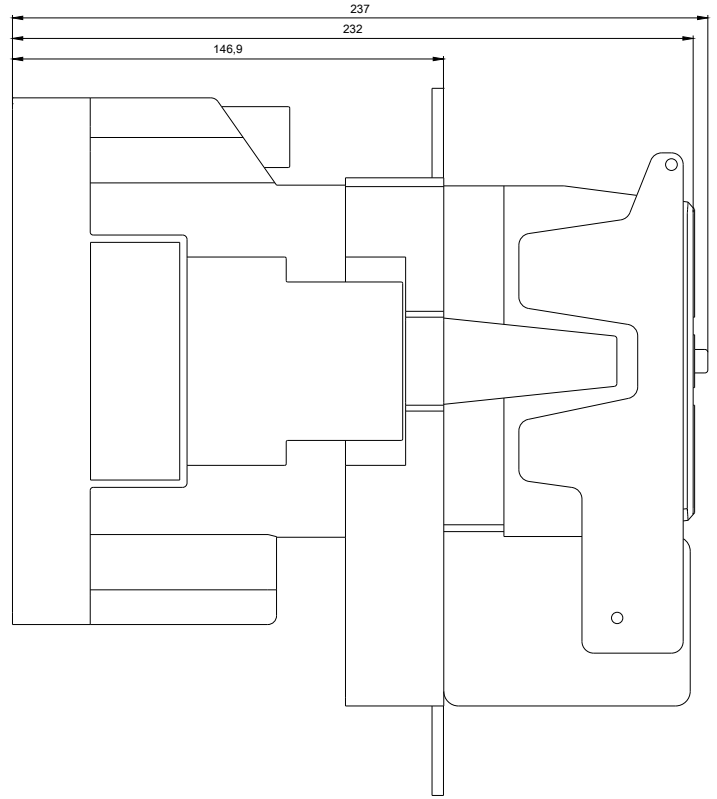
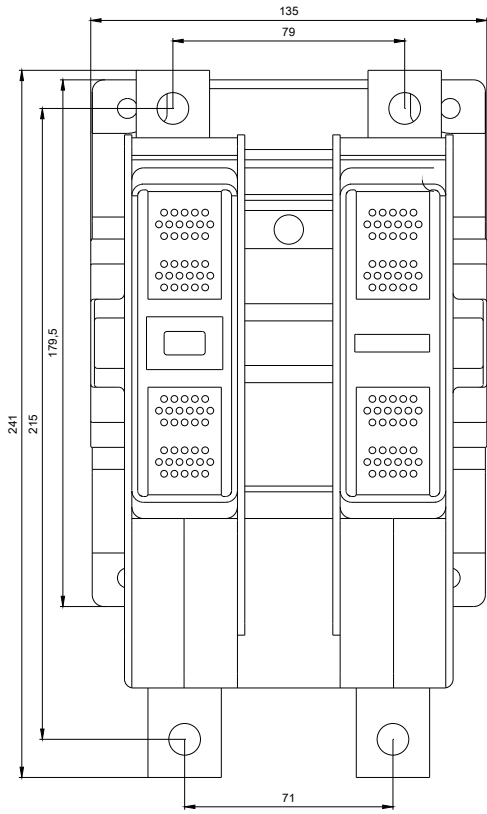
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TC5217-0AF4&lang=en

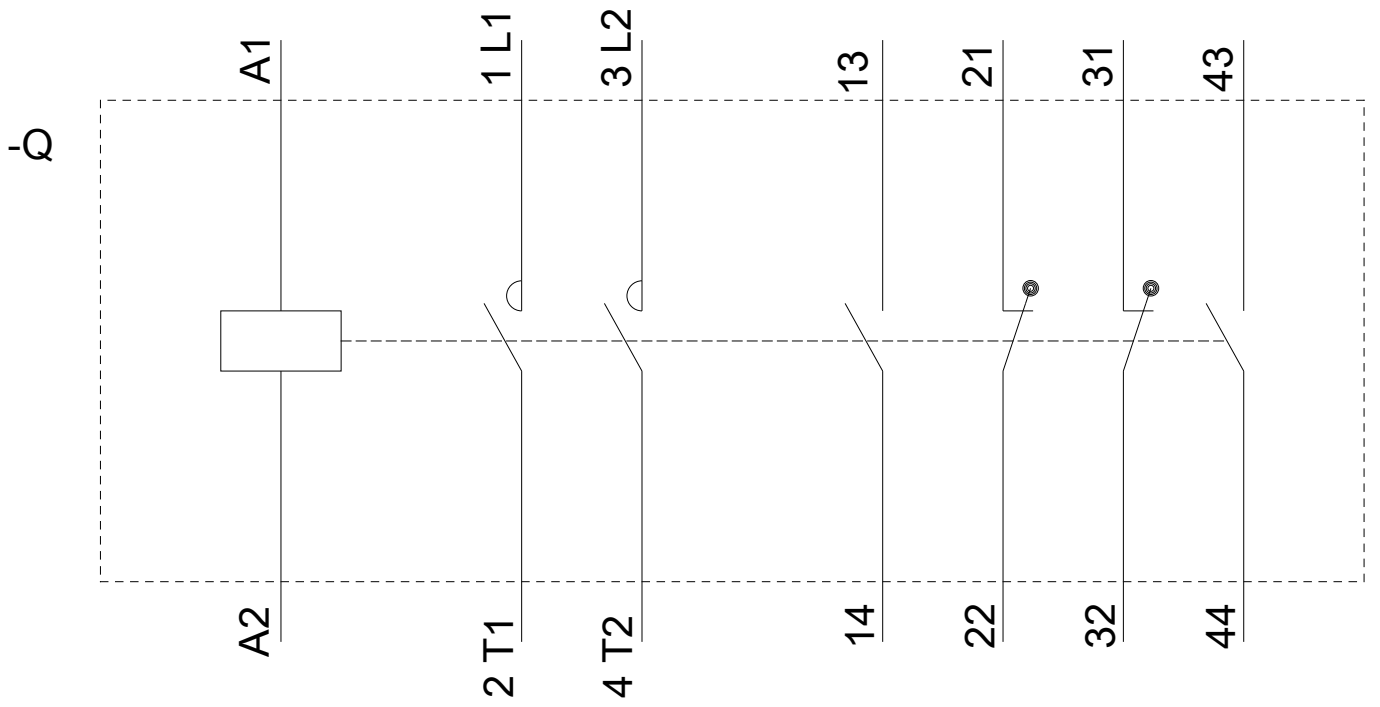
Characteristic: Tripping characteristics, I^t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3TC5217-0AF4/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TC5217-0AF4&objecttype=14&gridview=view1>





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