

Contacteur, AC-1, 35 A/400 V/40 °C, S0, 4-pole, 230 V AC/50 Hz, 1 NO+1 NC, Spring-type terminal



Product brand name	SIRIUS
Product designation	Contacteur
Product type designation	3RT23
General technical data	
Size of contactor	S0
Product extension	
• function module for communication	No
• Auxiliary switch	Yes
Surge voltage resistance	
• of main circuit rated value	6 kV
• of auxiliary circuit rated value	6 kV
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
Shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
Mechanical service life (switching cycles)	

<ul style="list-style-type: none"> • of contactor typical 	10 000 000
<ul style="list-style-type: none"> • of the contactor with added auxiliary switch block typical 	100 000 000
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Relative humidity	
<ul style="list-style-type: none"> • during operation 	95 %

Main circuit

Number of poles for main current circuit	4
Number of NO contacts for main contacts	4
Operating voltage	
<ul style="list-style-type: none"> • at AC <ul style="list-style-type: none"> — at 50 Hz rated value — at 60 Hz rated value 	690 V 690 V
Operating current	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value • at AC-4 at 400 V rated value 	35 A 35 A 30 A 15.5 A 15.5 A
Minimum cross-section in main circuit	
<ul style="list-style-type: none"> • at maximum AC-1 rated value 	10 mm ²
Operating power	
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value • at AC-4 at 400 V rated value 	7.5 kW 7.5 kW
Short-time withstand current in cold operating state up to 40 °C	
<ul style="list-style-type: none"> • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value Use minimum cross-section acc. to AC-1 rated value Use minimum cross-section acc. to AC-1 rated value

<ul style="list-style-type: none"> • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
No-load switching frequency	
<ul style="list-style-type: none"> • at AC 	5 000 1/h
Operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum 	1 000 1/h

Control circuit/ Control

Type of voltage	AC
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value 	230 V
Operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> • at 50 Hz 	0.8 ... 1.1
Apparent pick-up power of magnet coil at AC	
<ul style="list-style-type: none"> • at 50 Hz 	77 V·A
Inductive power factor with closing power of the coil	
<ul style="list-style-type: none"> • at 50 Hz 	0.82
Apparent holding power of magnet coil at AC	
<ul style="list-style-type: none"> • at 50 Hz 	9.8 V·A
Inductive power factor with the holding power of the coil	
<ul style="list-style-type: none"> • at 50 Hz 	0.25
Closing delay	
<ul style="list-style-type: none"> • at AC 	9 ... 38 ms
Opening delay	
<ul style="list-style-type: none"> • at AC 	4 ... 16 ms
Arcing time	10 ... 10 ms
Control version of the switch operating mechanism	Standard A1 - A2

Auxiliary circuit

Number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> • attachable • instantaneous contact 	2 1
Number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> • attachable • instantaneous contact 	2 1
Operating current at AC-12	
<ul style="list-style-type: none"> • maximum 	10 A
Operating current at AC-15	
<ul style="list-style-type: none"> • at 230 V rated value 	10 A

<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 690 V rated value 	<p>3 A</p> <p>2 A</p> <p>1 A</p>
Operating current at DC-12 <ul style="list-style-type: none"> • 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 	<p>10 A</p> <p>6 A</p> <p>6 A</p> <p>3 A</p> <p>2 A</p> <p>1 A</p> <p>0.15 A</p>
Operating current at DC-13 <ul style="list-style-type: none"> • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value 	<p>10 A</p> <p>2 A</p> <p>1 A</p> <p>0.9 A</p> <p>0.3 A</p> <p>0.1 A</p>
Design of the miniature circuit breaker <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	<p>gG: 10 A (230 V, 400 A)</p>
Contact reliability of auxiliary contacts	<p>1 faulty switching per 100 million (17 V, 1 mA)</p>

UL/CSA ratings

Contact rating of auxiliary contacts according to UL	<p>A600 / Q600</p>
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Short-circuit protection

Product function Short circuit protection	<p>No</p>
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: 63 A (690 V, 100 kA)</p> <p>gG: 20 A (690 V, 100 kA)</p> <p>gG: 10 A (690 V, 1 kA)</p>

Installation/ mounting/ dimensions

Mounting position	<p>+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface</p>
Mounting type <ul style="list-style-type: none"> • Side-by-side mounting 	<p>screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715</p> <p>Yes</p>
Height	<p>102 mm</p>
Width	<p>60 mm</p>
Depth	<p>97 mm</p>

Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side 	<p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>0 mm</p> <p>10 mm</p> <p>10 mm</p> <p>6 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>10 mm</p> <p>6 mm</p>

Connections/ Terminals

Type of electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	<p>spring-loaded terminals</p> <p>spring-loaded terminals</p>
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for main contacts 	<p>2x (1 ... 10 mm²)</p> <p>2x (1 ... 10 mm²)</p> <p>2x (1 ... 6 mm²)</p> <p>2x (1 ... 6 mm²)</p> <p>2x (18 ... 8)</p>
Connectable conductor cross-section for main contacts <ul style="list-style-type: none"> • solid • single or multi-stranded • stranded • finely stranded with core end processing • finely stranded without core end processing 	<p>1 ... 10 mm²</p> <p>1 ... 10 mm²</p> <p>1 ... 10 mm²</p> <p>1 ... 6 mm²</p> <p>1 ... 6 mm²</p>
Connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> • single or multi-stranded • finely stranded with core end processing • finely stranded without core end processing 	<p>0.5 ... 2.5 mm²</p> <p>0.5 ... 1.5 mm²</p> <p>0.5 ... 2.5 mm²</p>
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary contacts 	

— solid	2x (0.5 ... 2.5 mm ²)
— single or multi-stranded	2x (0,5 ... 2,5 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²)
— finely stranded without core end processing	2x (0.5 ... 2.5 mm ²)
• at AWG conductors for auxiliary contacts	2x (20 ... 14)
AWG number as coded connectable conductor cross section	
• for main contacts	18 ... 8
• for auxiliary contacts	20 ... 14

Safety related data

Product function	
• Mirror contact acc. to IEC 60947-4-1	Yes
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

Communication/ Protocol

Product function Bus communication	No
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Certificates/ approvals

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

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Confirmation](#)

other



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=3RT2325-2AP00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2325-2AP00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-2AP00>

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

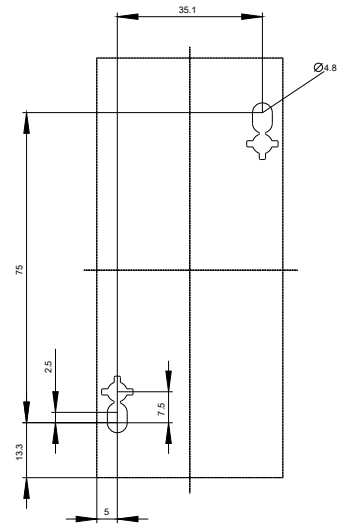
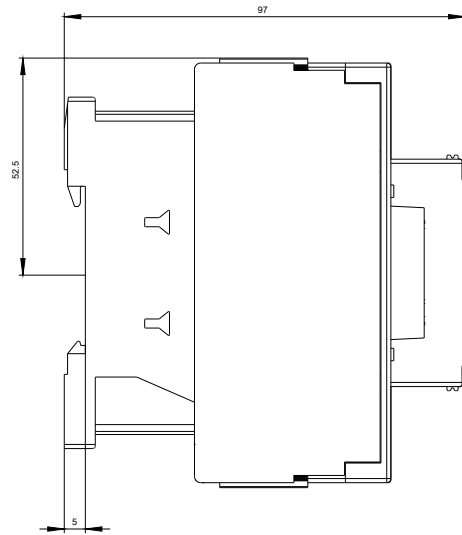
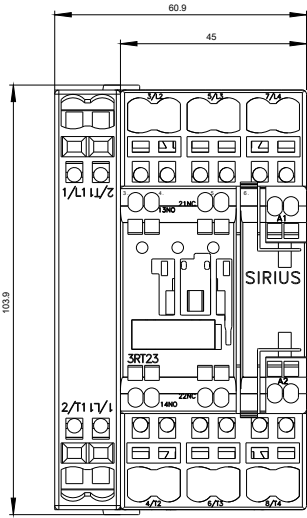
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-2AP00&lang=en

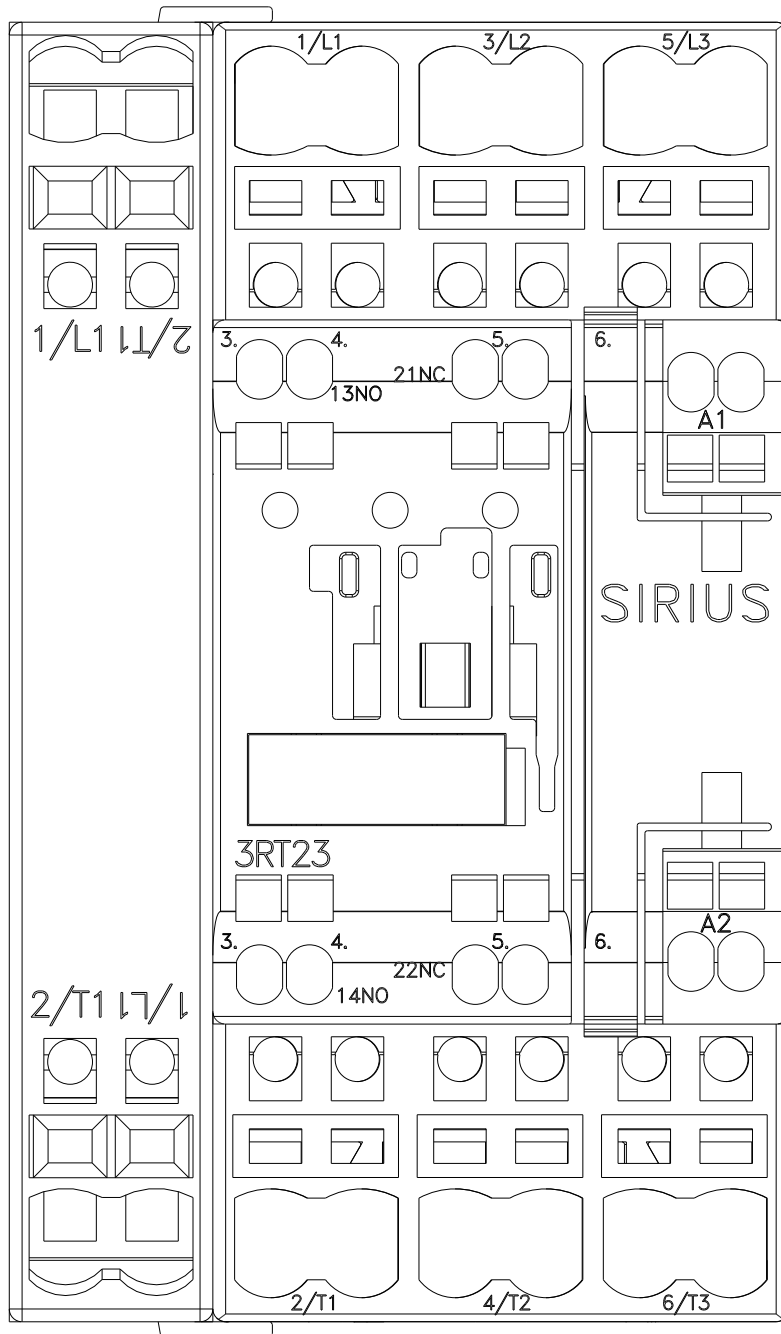
Characteristic: Tripping characteristics, I^t, Let-through current

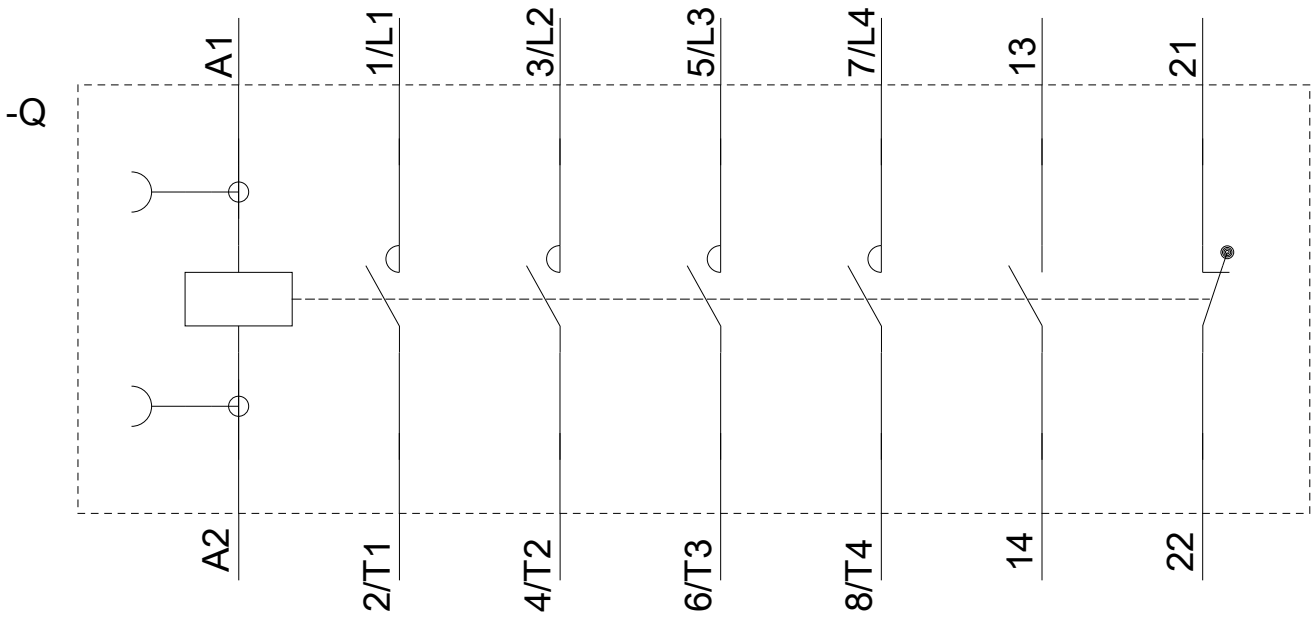
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-2AP00/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-2AP00&objecttype=14&gridview=view1>







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05/20/2020