

Contactor, AC-1, 35 A/400 V/40 °C, S0, 4-pole, 220 V DC, 1 NO+1 NC, screw terminal



Product brand name	SIRIUS
Product designation	Contactor
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 DC	10g / 5 ms, 7,5g / 10 ms
Shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	

• of contactor typical	10 000 000
• 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	
• maximum	2 000 m
Relative humidity	
• during operation	95 %

Main circuit

Number of poles for main current circuit	4
Number of NO contacts for main contacts	4
Operating voltage	
• at AC	
— at 50 Hz rated value	690 V
— at 60 Hz rated value	690 V
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	35 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	35 A
— up to 690 V at ambient temperature 60 °C rated value	30 A
• at AC-3	
— at 400 V rated value	15.5 A
• at AC-4 at 400 V rated value	15.5 A
Minimum cross-section in main circuit	
• at maximum AC-1 rated value	10 mm ²
Operating power	
• at AC-3	
— at 400 V rated value	7.5 kW
• at AC-4 at 400 V rated value	7.5 kW
Short-time withstand current in cold operating state up to 40 °C	
• limited to 5 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
No-load switching frequency	
• at DC	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h

Control circuit/ Control

Type of voltage	DC
Type of voltage of the control supply voltage	DC
Control supply voltage • at DC rated value	220 V
Operating range factor control supply voltage rated value of magnet coil at DC • initial value • Full-scale value	0.8 1.1
Closing power of magnet coil at DC	5.9 W
Holding power of magnet coil at DC	5.9 W
Closing delay • at DC	50 ... 170 ms
Opening delay • at DC	15 ... 17.5 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 • attachable • instantaneous contact	1 2 1
Number of NO contacts for auxiliary contacts • attachable • instantaneous contact	1 2 1
Operating current at AC-12 • maximum	10 A
Operating current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	10 A 3 A 2 A 1 A
Operating current at DC-12 • 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 6 A 6 A 3 A 2 A 1 A 0.15 A
Operating current at DC-13 • at 24 V rated value • at 48 V rated value • at 110 V rated value	10 A 2 A 1 A

• at 125 V rated value • at 220 V rated value • at 600 V rated value	0.9 A 0.3 A 0.1 A
Design of the miniature circuit breaker • for short-circuit protection of the auxiliary switch required	gG: 10 A (230 V, 400 A)
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings

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

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

Installation/ mounting/ dimensions

Mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type • Side-by-side mounting	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes
Height	85 mm
Width	60 mm
Depth	107 mm
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards	10 mm 10 mm 10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm

- downwards
- at the side

10 mm

6 mm

Connections/ Terminals

Type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts	2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² 2x (16 ... 12), 2x (14 ... 8)
Connectable conductor cross-section for main contacts	
• solid • single or multi-stranded • stranded • finely stranded with core end processing	1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm²
Connectable conductor cross-section for auxiliary contacts	
• single or multi-stranded • finely stranded with core end processing	0.5 ... 2.5 mm² 0.5 ... 2.5 mm²
Type of connectable conductor cross-sections	
• for auxiliary contacts — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for auxiliary contacts	2x (0.5 ... 1,5mm²), 2x (0.75 ... 2.5 mm²) 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)
AWG number as coded connectable conductor cross section	
• for main contacts • for auxiliary contacts	16 ... 8 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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CCC



CSA



UL



RCM

[Type Examination Certificate](#)

Declaration of Conformity	Test Certificates	Marine / Shipping
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EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Marine / Shipping	other
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LRS



RINA



RMRS



DNVGL.COM/AF

[Confirmation](#)



VDE

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2325-1BM40>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2325-1BM40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BM40>

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

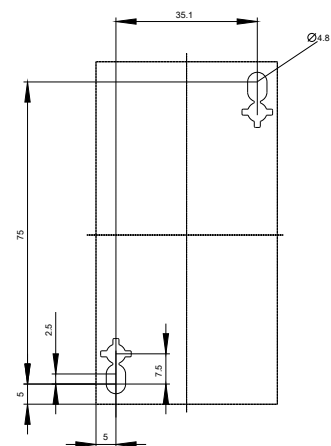
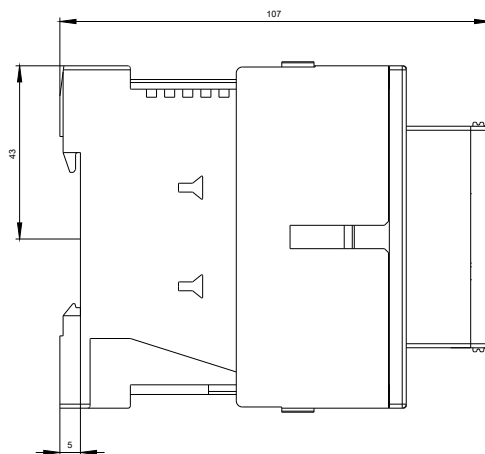
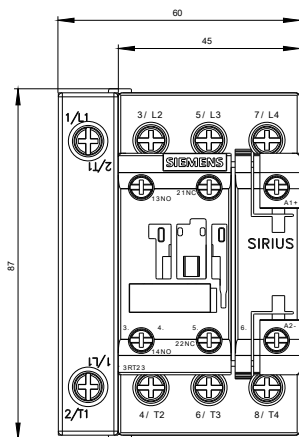
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-1BM40&lang=en

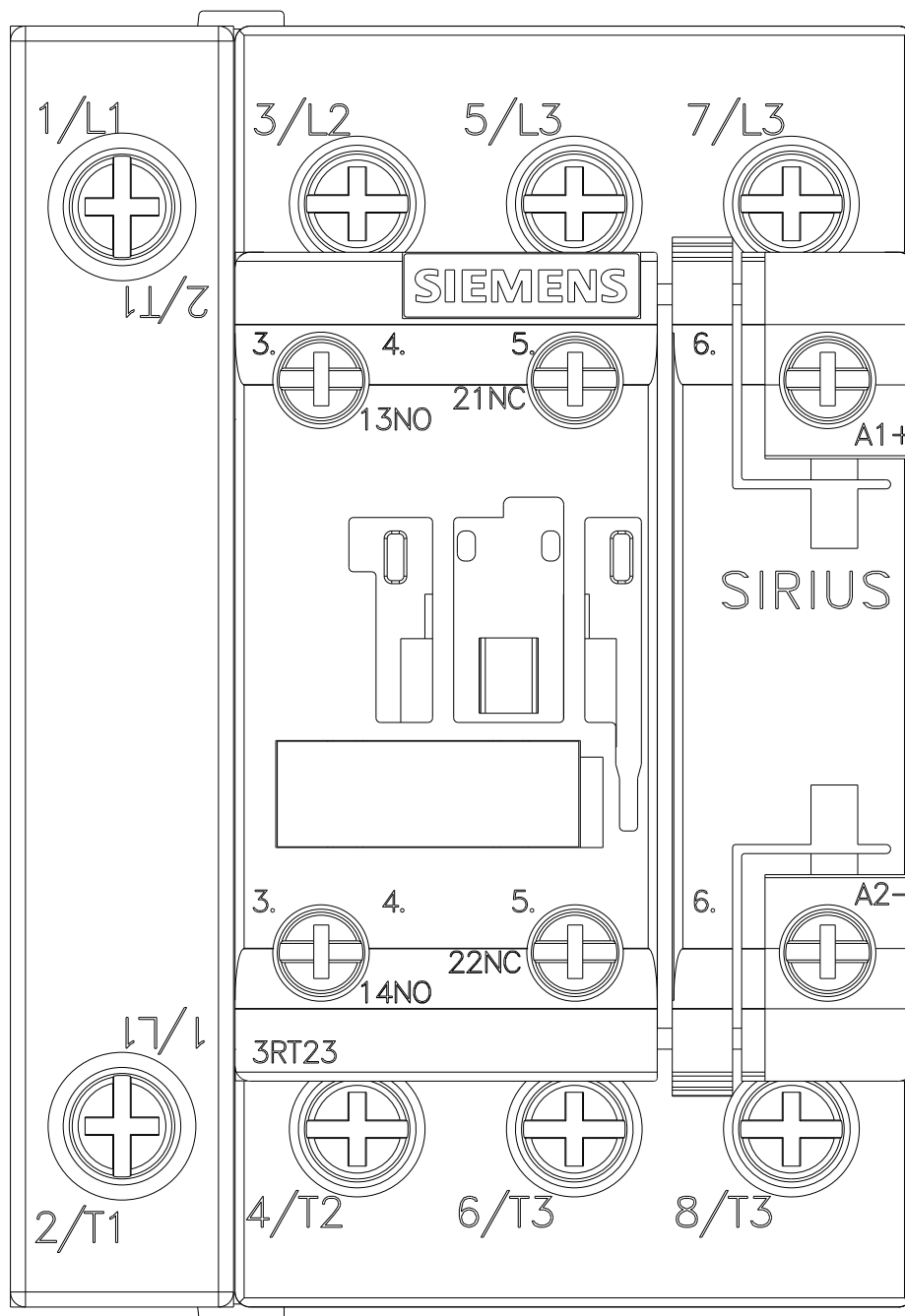
Characteristic: Tripping characteristics, I_t, Let-through current

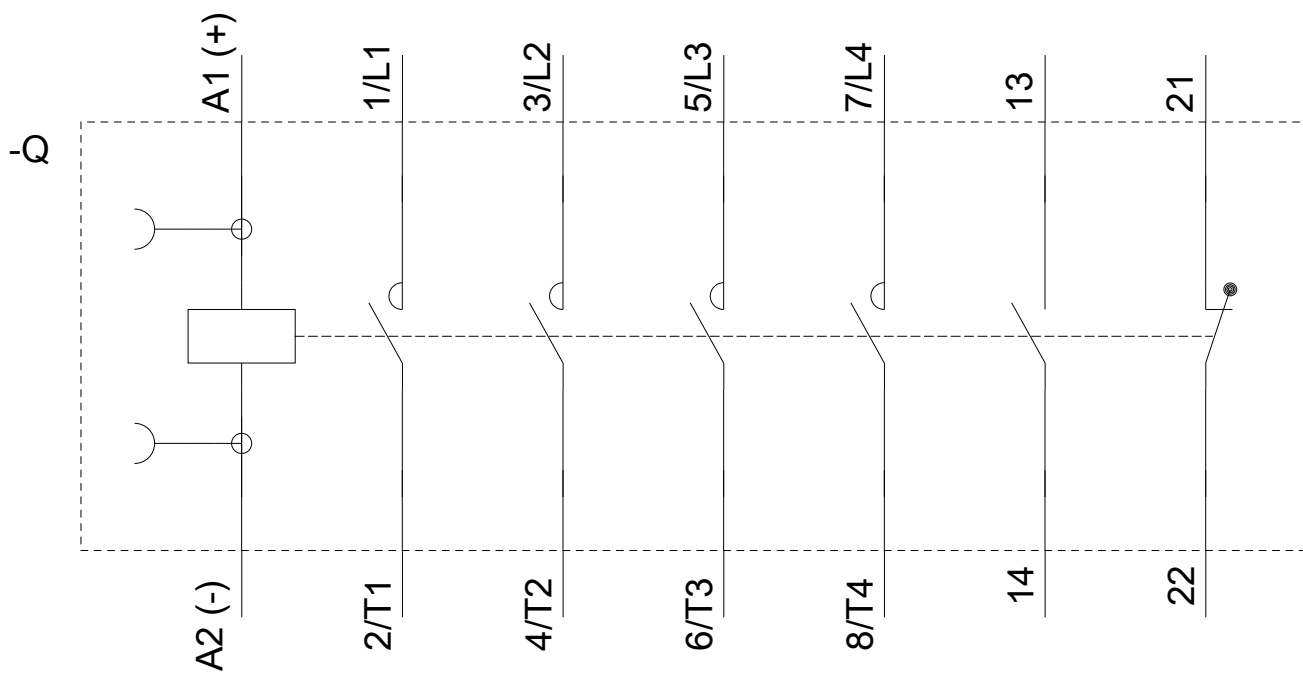
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BM40/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-1BM40&objecttype=14&gridview=view1>







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12/18/2019