



contactor AC-1, 35 A, 400 V / 40 °C, 4-pole, 48 V DC, auxiliary contacts: 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
power loss [W] for rated value of the current	
• at AC in hot operating state	7.6 W
• at AC in hot operating state per pole	1.9 W
• without load current share typical	5.9 W
insulation voltage	
• of main circuit with degree of pollution 3 rated value	690 V
• of the auxiliary and control circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
• of main circuit rated value	6 kV
• of auxiliary circuit rated value	6 kV
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 (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 (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	4
number of NO contacts for main contacts	4
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C	35 A

rated value	
<ul style="list-style-type: none"> 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 30 A 15.5 A 15.5 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
operating power	
<ul style="list-style-type: none"> at AC-3 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 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 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 Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> rated value 	48 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> at DC 	50 ... 170 ms
opening delay	
<ul style="list-style-type: none"> at DC 	15 ... 18 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
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> 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
operational 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 	10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
operational current at DC-13	
<ul style="list-style-type: none"> at 24 V rated value 	10 A

<ul style="list-style-type: none"> • 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>2 A 1 A 0.9 A 0.3 A 0.1 A</p>
<p>design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required</p>	<p>gG: 10 A (230 V, 400 A)</p>
<p>contact reliability of auxiliary contacts</p>	<p>1 faulty switching per 100 million (17 V, 1 mA)</p>
<p>UL/CSA ratings</p>	
<p>contact rating of auxiliary contacts according to UL</p>	<p>A600 / Q600</p>
<p>Short-circuit protection</p>	
<p>product function short circuit protection design of the fuse link</p> <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>No</p> <p>gG: 63 A (690 V, 100 kA) gG: 20 A (690 V, 100 kA) gG: 10 A (690 V, 1 kA)</p>
<p>Installation/ mounting/ dimensions</p>	
<p>mounting position</p>	<p>+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface</p>
<p>fastening method</p> <ul style="list-style-type: none"> • side-by-side mounting 	<p>screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715</p> <p>Yes</p>
<p>height</p>	<p>85 mm</p>
<p>width</p>	<p>60 mm</p>
<p>depth</p>	<p>107 mm</p>
<p>required spacing</p> <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 10 mm 10 mm 0 mm</p> <p>10 mm 10 mm 6 mm 10 mm</p> <p>10 mm 10 mm 10 mm 6 mm</p>
<p>Connections/ Terminals</p>	
<p>type of electrical connection</p> <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil 	<p>screw-type terminals screw-type terminals Screw-type terminals Screw-type terminals</p>
<p>type of connectable conductor cross-sections for main contacts</p> <ul style="list-style-type: none"> • solid • solid or stranded • finely stranded with core end processing 	<p>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</p>
<p>connectable conductor cross-section for main contacts</p> <ul style="list-style-type: none"> • solid • solid or stranded • stranded • finely stranded with core end processing 	<p>1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm²</p>
<p>connectable conductor cross-section for auxiliary contacts</p> <ul style="list-style-type: none"> • solid or stranded • finely stranded with core end processing 	<p>0.5 ... 2.5 mm² 0.5 ... 2.5 mm²</p>

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid
 - solid or stranded
 - finely stranded with core end processing
- at AWG cables for auxiliary contacts

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 (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 according to IEC 60947-4-1

Yes

T1 value for proof test interval or service life according to IEC 61508

20 a

protection class IP on the front according to IEC 60529

IP20

touch protection on the front according to IEC 60529

finger-safe, for vertical contact from the front

Communication/ Protocol

product function bus communication

No

Certificates/ approvals

General Product Approval

EMC



[Confirmation](#)



Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

[Type Examination Certificate](#)



EG-Konf.

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other



LRS



RINA



RMRS

[Confirmation](#)

other

Railway

Dangerous Good



[Vibration and Shock](#)

[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=3RT2325-1BW40>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2325-1BW40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BW40>

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

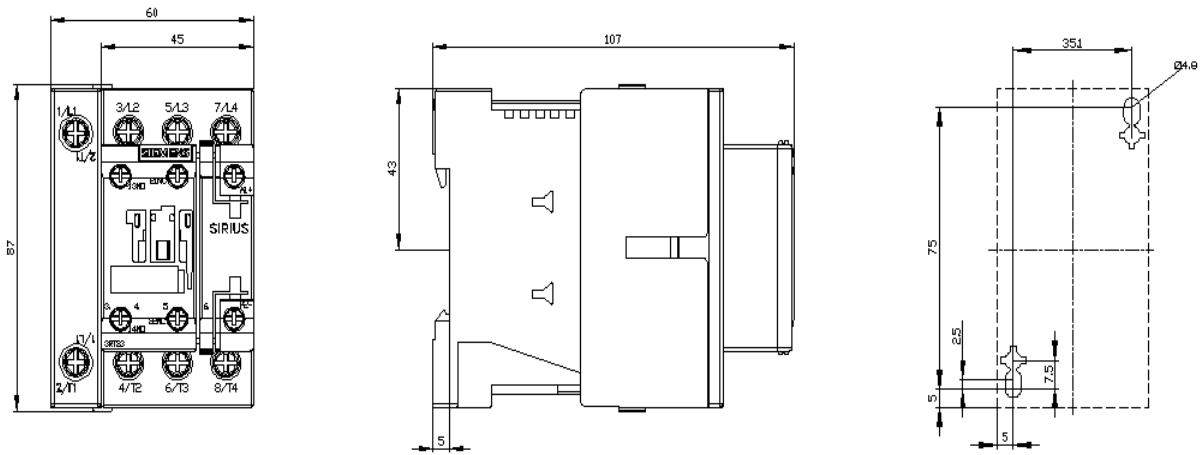
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-1BW40&lang=en

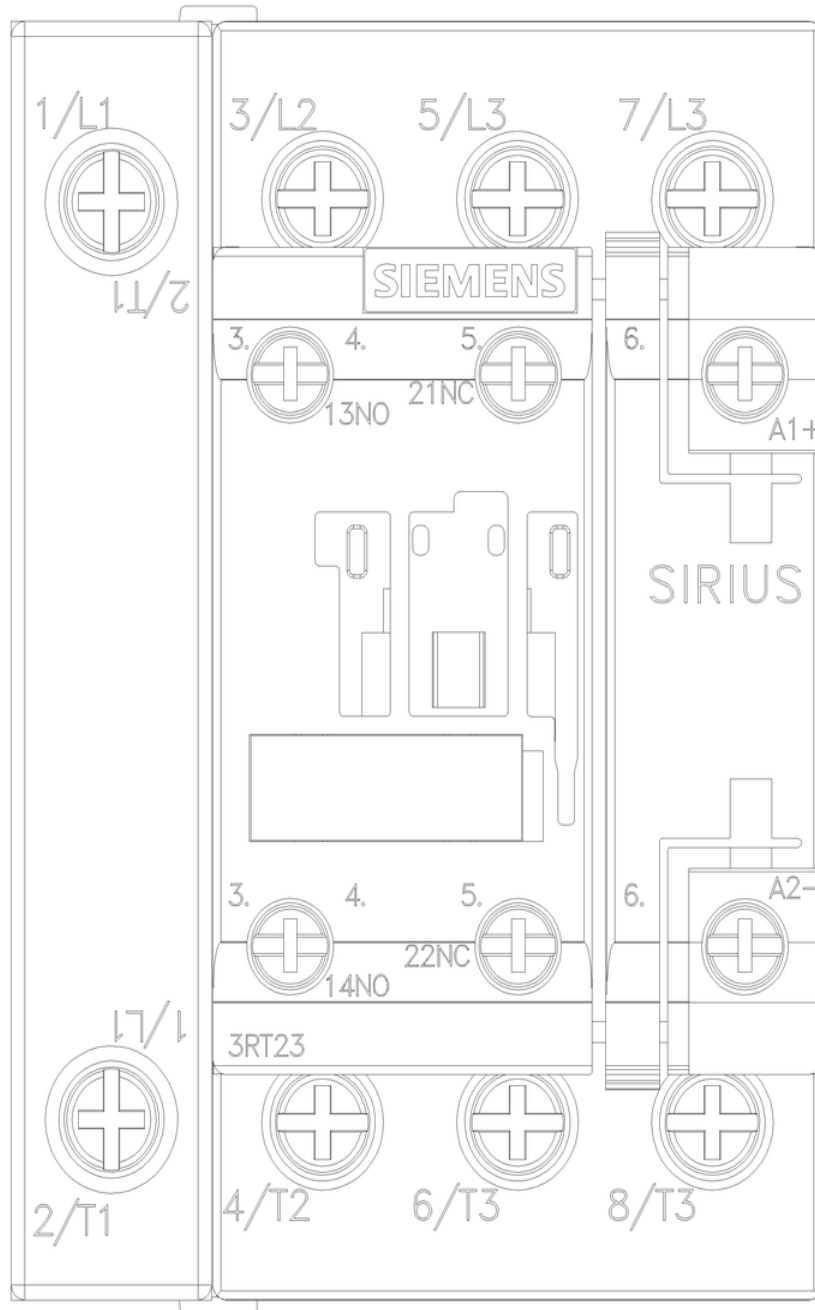
Characteristic: Tripping characteristics, I²t, Let-through current

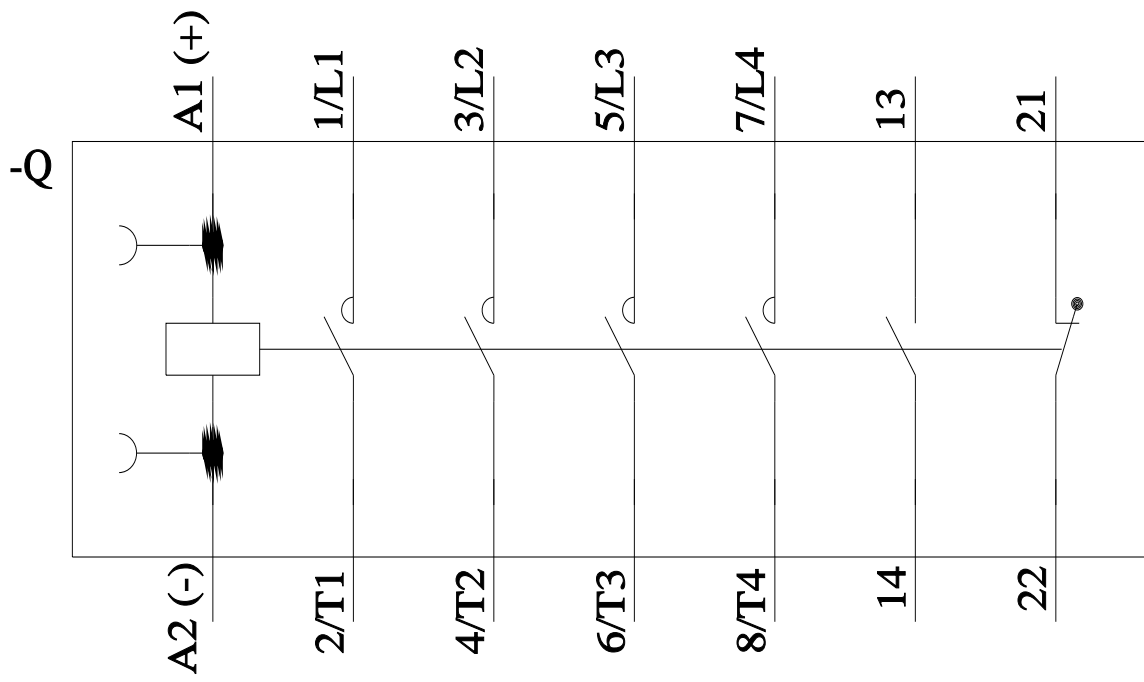
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BW40/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-1BW40&objecttype=14&gridview=view1>







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