



Contactor, AC-1, 22 A/400 V/40 °C, S00, 4-pole, 220 V DC, Spring-type terminal

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT23
General technical data	
size of contactor	S00
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	6.4 W
• at AC in hot operating state per pole	1.6 W
• without load current share typical	4 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	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at DC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (switching cycles)	
• of contactor typical	30 000 000
• 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	22 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 	22 A
<ul style="list-style-type: none"> at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 60 °C 	20 A
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	12 A
<ul style="list-style-type: none"> at AC-4 at 400 V rated value 	8.5 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm ²
operating power	
<ul style="list-style-type: none"> at AC-3 at 400 V rated value 	5.5 kW
<ul style="list-style-type: none"> at AC-4 at 400 V rated value 	4 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 	Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> limited to 5 s switching at zero current maximum 	Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> limited to 10 s switching at zero current maximum 	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 	Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> 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 DC 	10 000 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 	220 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> initial value 	0.8
<ul style="list-style-type: none"> full-scale value 	1.1
closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
closing delay	
<ul style="list-style-type: none"> at DC 	30 ... 100 ms
opening delay	
<ul style="list-style-type: none"> at DC 	7 ... 13 ms
arcing time	10 ... 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
<ul style="list-style-type: none"> attachable 	2
number of NO contacts for auxiliary contacts	
<ul style="list-style-type: none"> attachable 	2
Short-circuit protection	
product function short circuit protection	No
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 for short-circuit protection of the auxiliary switch required 	gG: 35 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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<ul style="list-style-type: none"> side-by-side mounting 	Yes
height	70 mm
width	45 mm
depth	73 mm
required spacing	

- with side-by-side mounting
 - forwards 10 mm
 - upwards 10 mm
 - downwards 10 mm
 - at the side 0 mm
- for grounded parts
 - forwards 10 mm
 - upwards 10 mm
 - at the side 6 mm
 - downwards 10 mm
- for live parts
 - forwards 10 mm
 - upwards 10 mm
 - downwards 10 mm
 - at the side 6 mm

Connections/ Terminals

type of electrical connection

- for main current circuit spring-loaded terminals
- for auxiliary and control circuit spring-loaded terminals
- at contactor for auxiliary contacts Spring-type terminals
- of magnet coil Spring-type terminals

type of connectable conductor cross-sections

- for main contacts
 - solid 2x (0.5 ... 4 mm²)
 - solid or stranded 2x (0,5 ... 4 mm²)
 - finely stranded with core end processing 2x (0.5 ... 2.5 mm²)
 - finely stranded without core end processing 2x (0.5 ... 2.5 mm²)
- at AWG cables for main contacts 2x (20 ... 12)

connectable conductor cross-section for main contacts

- solid 0.5 ... 4 mm²
- solid or stranded 0.5 ... 4 mm²
- stranded 0.5 ... 4 mm²
- finely stranded with core end processing 0.5 ... 2.5 mm²
- finely stranded without core end processing 0.5 ... 2.5 mm²

connectable conductor cross-section for auxiliary contacts

- solid or stranded 0.5 ... 4 mm²
- finely stranded with core end processing 0.5 ... 2.5 mm²
- finely stranded without core end processing 0.5 ... 2.5 mm²

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid 2x (0.5 ... 2.5 mm²)
 - solid or stranded 2x (0,5 ... 4 mm²)
 - finely stranded with core end processing 2x (0.5 ... 2.5 mm²)
 - finely stranded without core end processing 2x (0.5 ... 2.5 mm²)
- at AWG cables for auxiliary contacts 2x (20 ... 12)

AWG number as coded connectable conductor cross section

- for main contacts 20 ... 12
- for auxiliary contacts 20 ... 12

Safety related data

product function

- mirror contact according to IEC 60947-4-1 Yes; with 3RH29

T1 value for proof test interval or service life according to IEC 61508 20 y

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
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[Type Examination Certificate](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping



other	Railway	Dangerous Good
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[Environmental Conformations](#)

[Confirmation](#)



[Vibration and Shock](#)

[Transport Information](#)

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=3RT2317-2BM40>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2317-2BM40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-2BM40>

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

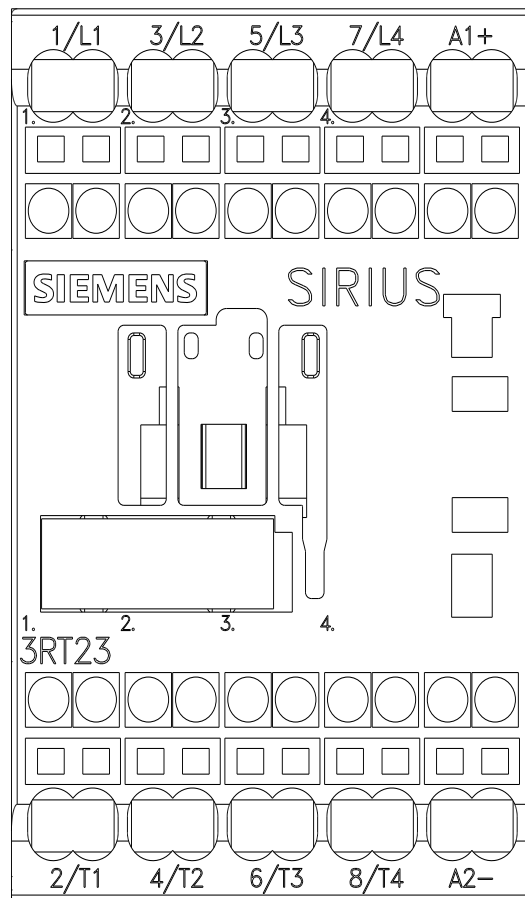
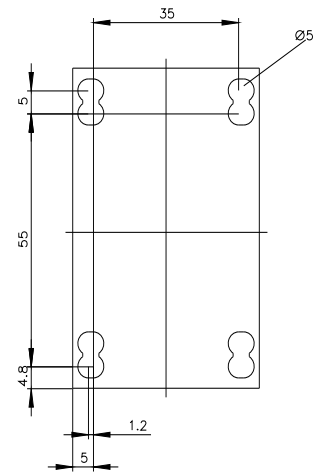
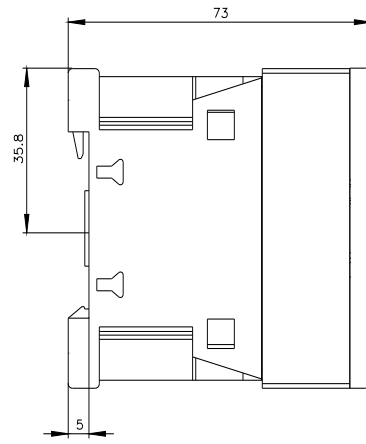
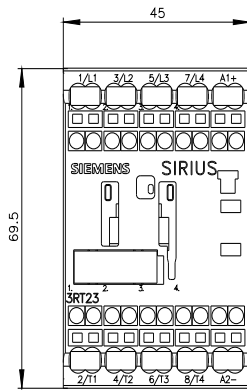
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2317-2BM40&lang=en

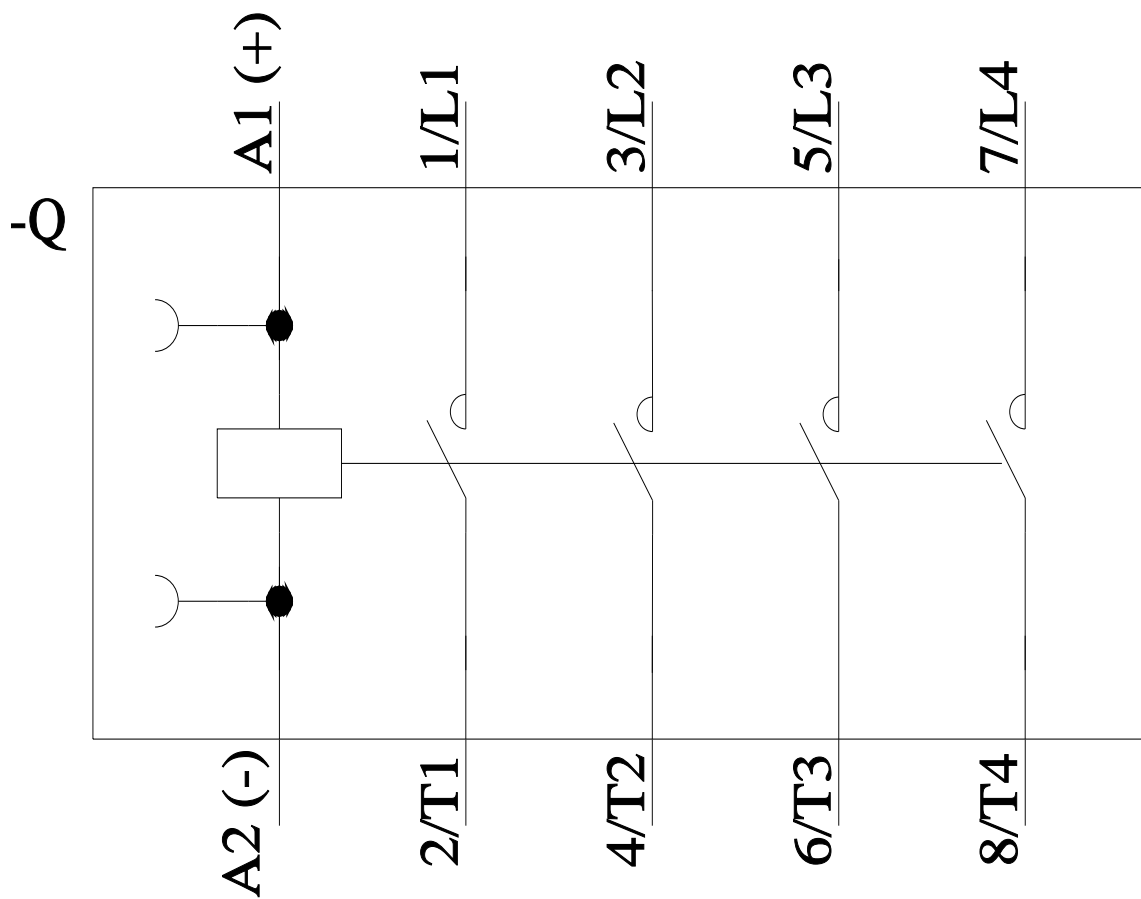
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-2BM40/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2317-2BM40&objecttype=14&gridview=view1>





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