



CONTACTOR, AC-3 37 KW/400 V, DC 24 V, 3-POLE, SIZE S3, SCREW CONNECTION

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:

Insulation voltage	
• Rated value	1 000 V
Degree of pollution	3
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
• of the contactor typical	10 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Thermal short-time current restricted to 10 s	760 A
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

Main circuit:

Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Operating current	

<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 400 V at ambient temperature 40 °C Rated value — 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 690 V Rated value • at AC-4 at 400 V Rated value 	<p>120 A</p> <p>120 A</p> <p>100 A</p> <p>80 A</p> <p>58 A</p> <p>66 A</p>
<p>Operating current with 1 current path</p> <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value 	<p>100 A</p> <p>9 A</p> <p>40 A</p> <p>2.5 A</p>
<p>Operating current with 2 current paths in series</p> <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	<p>100 A</p> <p>100 A</p> <p>100 A</p> <p>100 A</p>
<p>Operating current with 3 current paths in series</p> <ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value 	<p>100 A</p> <p>100 A</p> <p>100 A</p> <p>100 A</p>
<p>Operating power</p> <ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value 	<p>38 kW</p> <p>114 kW</p>
<p>Operating power for ≥ 200000 operating cycles at AC-4</p> <ul style="list-style-type: none"> • at 400 V Rated value • at 690 V Rated value 	<p>17.9 kW</p> <p>21.1 kW</p>
<p>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</p>	<p>7.7 W</p>

Operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum 	900 1/h 400 1/h 1 000 1/h 300 1/h
No-load switching frequency	
<ul style="list-style-type: none"> • for DC 	1 000 1/h

Control circuit/ Control:

Type of voltage of the control supply voltage	DC
Control supply voltage for DC	
<ul style="list-style-type: none"> • Rated value 	24 V
Operating range factor control supply voltage rated value of the magnet coil for DC	0.8 ... 1.1
Closing power of the magnet coil for DC	15 W
Holding power of the magnet coil for DC	15 W

Auxiliary circuit:

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 	0
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 	0
Operating current at AC-15	
<ul style="list-style-type: none"> • at 230 V Rated value • at 400 V Rated value 	6 A 3 A
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
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Short-circuit:

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 assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 250 A fuse gL/gG: 160 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions:

Mounting type	screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail
<ul style="list-style-type: none"> • Side-by-side mounting 	Yes
Height	146 mm
Width	70 mm

Depth	152 mm
Required spacing	
<ul style="list-style-type: none"> • for grounded parts <li style="padding-left: 20px;">— at the side 	6 mm

Connections/ Terminals:

Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	<p>screw-type terminals</p> <p>screw-type terminals</p>
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing • for AWG conductors for auxiliary contacts 	<p>2x (2.5 ... 16 mm²)</p> <p>2x (10 ... 50 mm²)</p> <p>2x (2,5 ... 16 mm²)</p> <p>2x (2.5 ... 35 mm²)</p> <p>2x (10 ... 35 mm²)</p> <p>2x (10 ... 1/0)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p>

Mechanical data:

Size of contactor	S3
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Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	<p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p>

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

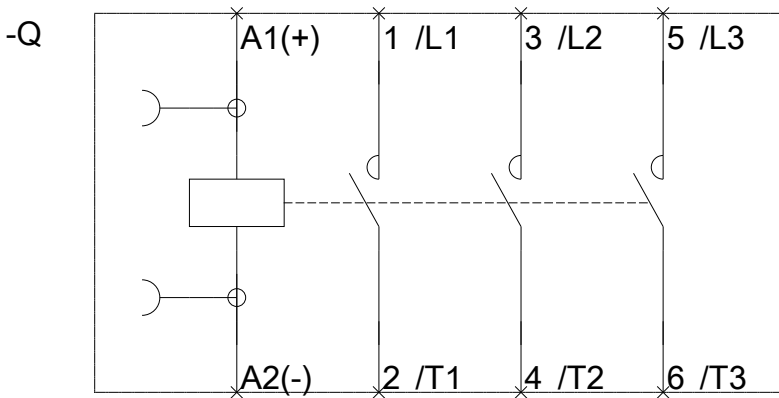
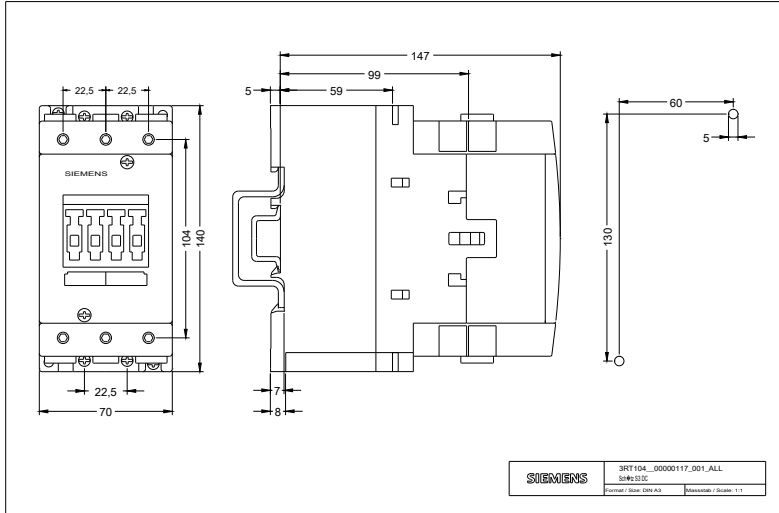
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT10451BB40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10451BB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT10451BB40&lang=en



last modified:

27.04.2015