

CONTACTOR, AC-3 45 KW/400 V, AC 230 V, 50 HZ, 3-POLE, SIZE S3, SCREW CONNECTION



Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:

Size of contactor	S3
Insulation voltage	
• Rated value	1 000 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Degree of pollution	3
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

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
Main circuit:	
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	120 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	120 A
— at ambient temperature 60 °C Rated value	100 A
• at AC-3	
— at 400 V Rated value	95 A
— at 690 V Rated value	58 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	35 mm ²
• at 40 °C minimum permissible	50 mm ²
Operating current for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	42 A
• at 690 V Rated value	27 A
Operating current	
• at 1 current path at DC-1	
— at 24 V Rated value	100 A
— at 110 V Rated value	9 A
• with 2 current paths in series at DC-1	
— at 24 V Rated value	100 A
— at 110 V Rated value	100 A
• with 3 current paths in series at DC-1	
— at 24 V Rated value	100 A
— at 110 V Rated value	100 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V Rated value	40 A
— at 110 V Rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V Rated value	100 A
— at 24 V Rated value	100 A

<ul style="list-style-type: none"> • with 3 current paths in series 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>
Operating power	
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C Rated value — at 400 V Rated value — at 690 V Rated value — at 690 V at 60 °C Rated value • at AC-2 at 400 V Rated value • at AC-3 <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 	<p>38 kW</p> <p>66 kW</p> <p>114 kW</p> <p>114 kW</p> <p>45 kW</p> <p>22 kW</p> <p>45 kW</p> <p>55 kW</p> <p>55 kW</p>
Operating power for ≥ 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> • at 400 V Rated value • at 690 V Rated value 	<p>22 kW</p> <p>25.4 kW</p>
Thermal short-time current limited to 10 s	760 A
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	10.8 W
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 • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum 	<p>900 1/h</p> <p>350 1/h</p> <p>850 1/h</p> <p>250 1/h</p>
Control circuit/ Control:	
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 • Rated value 	<p>230 V</p> <p>50 Hz</p>
Operating range factor control supply voltage rated value of the magnet coil at AC	
<ul style="list-style-type: none"> • at 50 Hz 	0.8 ... 1.1
Apparent pick-up power of the magnet coil at AC	270 V·A
Inductive power factor with closing power of the coil	0.68
Apparent holding power of the magnet coil at AC	22 V·A
Inductive power factor with the holding power of the coil	0.27

Closing delay	
<ul style="list-style-type: none"> • at AC 	17 ... 90 ms
Arcing time	10 ... 15 ms

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-12 maximum	10 A
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
Operating current at DC-12	
<ul style="list-style-type: none"> • at 60 V Rated value • at 110 V Rated value • at 220 V Rated value 	6 A 3 A 1 A
Operating current at DC-13	
<ul style="list-style-type: none"> • at 24 V Rated value • at 60 V Rated value • at 110 V Rated value • at 220 V Rated value 	10 A 2 A 1 A 0.3 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	139 mm
Required spacing	

- for grounded parts
- at the side

6 mm

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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Test Certificates	Shipping Approval
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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

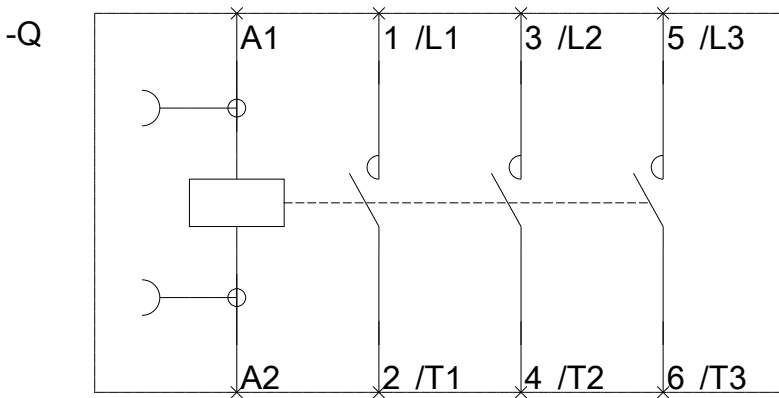
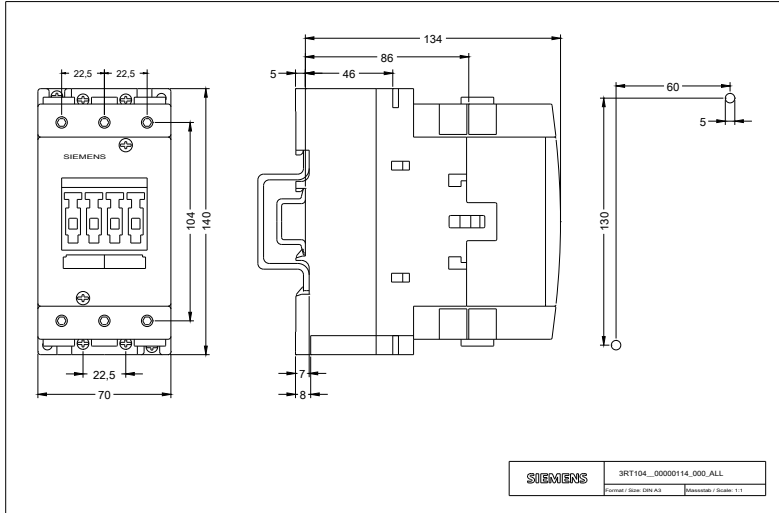
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10461AP00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10461AP00>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10461AP00&lang=en



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