## **SIEMENS**

Data sheet 3RT1034-1AP60

CONTACTOR, AC-3 15 KW/400 V, AC 220V 50HZ/240V 60HZ 3-POLE, SIZE S2, SCREW CONNECTION  $\,$ 



Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Size of contactor	S2
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	400 V
60947-1	
Protection class IP	
• on the front	IP00
<ul> <li>of the terminal</li> </ul>	IP00
Shock resistance	
<ul> <li>at rectangular impulse</li> </ul>	
— at AC	10g / 5 ms, 5g / 10 ms
• with sine pulse	
— at AC	15g / 5 ms, 8g / 10 ms

Mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-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	50 A
● at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	50 A
— at ambient temperature 60 °C rated value	45 A
• at AC-3	
— at 400 V rated value	32 A
— at 690 V rated value	20 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	16 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	15.6 A
• at 690 V rated value	11 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	45 A
— at 110 V rated value	4.5 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	45 A
— at 110 V rated value	25 A
<ul><li>with 3 current paths in series at DC-1</li></ul>	
— at 24 V rated value	45 A
— at 110 V rated value	45 A

Operating current	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V rated value	25 A
— at 24 V rated value	45 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	45 A
— at 24 V rated value	45 A
Operating power	
• at AC-1	
— at 230 V at 60 °C rated value	18 kW
— at 400 V rated value	31 kW
— at 690 V rated value	54 kW
— at 690 V at 60 °C rated value	54 kW
• at AC-2 at 400 V rated value	15 kW
● at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	8.2 kW
• at 690 V rated value	10 kW
Thermal short-time current limited to 10 s	320 A
Power loss [W] at AC-3 at 400 V for rated value of	1.8 W
the operating current per conductor	
No-load switching frequency	5.000 4/1
• at AC	5 000 1/h
Operating frequency	4 200 4/5
• at AC-1 maximum	1 200 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	1 000 1/h
at AC-4 maximum	250 1/h
Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	220 V
• at 60 Hz rated value	240 V
rated value	50 Hz

Control supply voltage frequency 2 rated value	60 Hz
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Apparent pick-up power of magnet coil at AC	120 V·A
Inductive power factor with closing power of the coil	0.7
Apparent holding power of magnet coil at AC	10.1 V·A
Inductive power factor with the holding power of the	0.42
coil	
Closing delay	11 30 ms
• at AC	11 50 1115
Opening delay	7 20 ms
• at AC	
Arcing time	10 15 ms
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	
<ul> <li>instantaneous contact</li> </ul>	0
Number of NO contacts	
<ul><li>for auxiliary contacts</li></ul>	
<ul> <li>instantaneous contact</li> </ul>	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
Operating current at DC-12	
• at 60 V rated value	6 A
● at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 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
Short-circuit protection	
Design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	

<ul> <li>— with type of coordination 1 required</li> </ul>	fuse gL/gG: 125 A
<ul> <li>— with type of assignment 2 required</li> </ul>	fuse gL/gG: 63 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	

Installation/ mounting/ dimensions:	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul> <li>Side-by-side mounting</li> </ul>	Yes
Height	112 mm
Width	55 mm
Depth	115 mm
Required spacing	
<ul> <li>for grounded parts</li> </ul>	
— at the side	6 mm

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (0.75 16 mm²)
— stranded	2x (0.75 25 mm²)
<ul><li>— single or multi-stranded</li></ul>	2x (0,75 16 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.75 16 mm²)
<ul> <li>finely stranded without core end</li> </ul>	2x (0.75 16 mm²)
processing	
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (18 2)
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12

## Certificates/approvals

## **General Product Approval**

Declaration of Conformity

Test Certificates











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Test Certificates Shipping Approval

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT10341AP60

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10341AP60

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