SIEMENS

Data sheet 3RT1044-1AG20



CONTACTOR, AC-3 30 KW/400 V, AC 110V 50/60HZ, 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	600 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	

• at AC-1	
— at 400 V at ambient temperature 40 °C	100 A
Rated value	
— up to 690 V at ambient temperature 40 °C	100 A
Rated value	
— up to 690 V at ambient temperature 60 °C	90 A
Rated value	
• at AC-3	
— at 400 V Rated value	65 A
— at 690 V Rated value	47 A
• at AC-4 at 400 V Rated value	55 A
Operating current with 1 current path	
● at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	4.5 A
• at DC-3 at DC-5	
— at 24 V Rated value	40 A
— at 110 V Rated value	2.5 A
Operating current with 2 current paths in series	
• at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	90 A
• at DC-3 at DC-5	
— at 110 V Rated value	90 A
— at 24 V Rated value	90 A
Operating current with 3 current paths in series	
• at DC-1	
— at 24 V Rated value	90 A
— at 110 V Rated value	90 A
• at DC-3 at DC-5	
— at 110 V Rated value	90 A
— at 24 V Rated value	90 A
Operating power	3071
• at AC-1	
— at 230 V at 60 °C Rated value	34 kW
	102 kW
— at 690 V at 60 °C Rated value Operating power for ≥ 200000 operating cycles at	IOE MAA
AC-4	
• at 400 V Rated value	15.1 kW
● at 690 V Rated value	18.6 kW
Active power loss at AC-3 at 400 V for rated value of	4.6 W
the operating current per conductor	

Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
No-load switching frequency	
• with AC	5 000 1/h

Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage with AC	
• at 50 Hz Rated value	110 V
• at 60 Hz Rated value	110 V
Rated value	50 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1

Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	
 instantaneous contact 	0
Number of NO contacts	
• for auxiliary contacts	
 instantaneous contact 	0
Operating current at AC-15	
• at 230 V Rated value	6 A
• at 400 V Rated value	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

Short-circuit:	
Design of the fuse link	
• for short-circuit protection of the main circuit	
 — with type of assignment 1 required 	fuse gL/gG: 250 A
— with type of assignment 2 required	fuse gL/gG: 125 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A

 — with type of assignment 2 required for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 125 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	
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Side-by-side mounting	Yes
Height	146 mm
Width	70 mm
Depth	139 mm
Required spacing	
• for grounded parts	
— at the side	6 mm
Connections/ Terminals:	
Type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-section	
• for main contacts	
— solid	2x (2.5 16 mm²)
— stranded	2x (10 50 mm²)
— single or multi-stranded	2x (2,5 16 mm²)
 finely stranded with core end processing 	2x (2.5 35 mm²)
 finely stranded without core end processing 	2x (10 35 mm²)
 for AWG conductors for main contacts 	2x (10 1/0)
 for auxiliary contacts 	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 1x 12
Mechanical data:	
Size of contactor	S3
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	05
during operation	-25 +60 °C
during storage	-55 +80 °C
Certificates/ approvals:	

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



rest	
Certificates	3

Shipping Approval

Special Test Certificate





 GL







other

Confirmation

Environmental Confirmations

other

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

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10441AG20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10441AG20&lang=en



