SIEMENS

Data sheet 3RT1034-1AD04



CONTACTOR, AC-3 15 KW/400 V, AC 42 V, 50 HZ, 2 NO + 2 NC, 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
Mechanical service life (switching cycles)	
 of the contactor typical 	10 000 000
 of the contactor with added electronics- 	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch 	10 000 000
block typical	
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

Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C

•	during storage	-55 +80 °C

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
Connectable conductor cross-section in main circuit	
at AC-1	402
• at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	16 mm²
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
• at AC-4 at 400 V Rated value	29 A
Operating current for ≥ 200000 operating cycles at AC-4	
• at 400 V Rated value	15.6 A
• at 690 V Rated value	11 A
Operating current	
with 1 current path at DC-1	
— at 24 V Rated value	45 A
— at 110 V Rated value	4.5 A
 with 2 current paths in series at DC-1 	
— at 24 V Rated value	45 A
— at 110 V Rated value	25 A
 with 3 current paths in series at DC-1 	
— at 24 V Rated value	45 A
— at 110 V Rated value	45 A
Operating current	
 with 1 current path at DC-3 at DC-5 	
— at 24 V Rated value	35 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	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 690 V at 60 °C Rated value	54 kW
Operating power for ≥ 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 restricted to 10 s	320 A
Active power loss at AC-3 at 400 V for rated value of	1.8 W
the operating current per conductor	
No-load switching frequency	
• with AC	5 000 1/h
Operating frequency	
• 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 with AC	
Control supply voltage with AC • at 50 Hz Rated value	42 V
Control supply voltage with AC • at 50 Hz Rated value • Rated value	
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated	42 V
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC	42 V 50 Hz
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz	42 V 50 Hz 0.8 1.1
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC	42 V 50 Hz 0.8 1.1 104 V·A
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil	42 V 50 Hz 0.8 1.1 104 V·A 0.78
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil	42 V 50 Hz 0.8 1.1 104 V·A 0.78
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Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay • with AC Arcing time	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay • with AC Arcing time Auxiliary circuit:	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay • with AC Arcing time Auxiliary circuit: Number of NC contacts	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay • with AC Arcing time Auxiliary circuit: Number of NC contacts • for auxiliary contacts	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms 10 15 ms
Control supply voltage with AC • at 50 Hz Rated value • Rated value Operating range factor control supply voltage rated value of the magnet coil with AC • at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay • with AC Arcing time Auxiliary circuit: Number of NC contacts • for auxiliary contacts — instantaneous contact	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms
Control supply voltage with AC at 50 Hz Rated value Rated value Operating range factor control supply voltage rated value of the magnet coil with AC at 50 Hz Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil Apparent holding power of the magnet coil with AC Inductive power factor with the holding power of the coil Closing delay with AC Arcing time Auxiliary circuit: Number of NC contacts for auxiliary contacts	42 V 50 Hz 0.8 1.1 104 V·A 0.78 9.7 V·A 0.42 11 30 ms 10 15 ms

 instantaneous contact 	2
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 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: 125 A
— with type of assignment 2 required	fuse gL/gG: 63 A
 for short-circuit protection of the auxiliary switch required 	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
 Side-by-side mounting 	Yes
Height	112 mm
Width	55 mm
Depth	164 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 (0.75 16 mm²)

— stranded	2x (0.75 25 mm²)
— single or multi-stranded	2x (0,75 16 mm²)
— finely stranded with core end processing	2x (0.75 16 mm²)
 finely stranded without core end 	2x (0.75 16 mm²)
processing	
 for AWG conductors for main contacts 	2x (18 2)
Type of connectable conductor cross-section	
 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

Certificates/	approvals.
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Certificates/ appr	Ovais.				
General Prod	uct Approval		Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
(SA)	(UL	EAC	Type Examination	C E	Special Test Certificate

Test	Shipping Approval
Certificates	

Type Test
Certificates/Test
Report







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	other	Environmental	Confirmation	



other

Environmental Confirmations

Confirmation

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

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Industry Mall (Online ordering system)

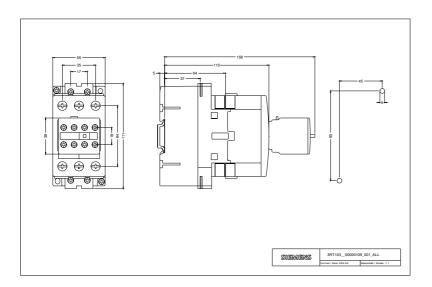
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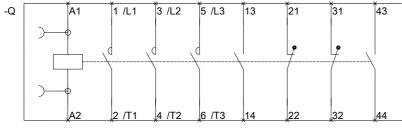
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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