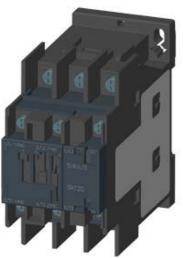
SIEMENS

Data sheet

3RT2024-4AG60



CONTACTOR, AC-3, 5.5KW/400V, 1NO+1NC, AC 100V 50HZ, 100...110V 60HZ, 3-POLE, SZ S0 RING CABLE LUG CONNECTION

product brand name		SIRIUS
Product designation		3RT2 contactor
General technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution	_	3
Surge voltage resistance Rated value	kV	6
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		
Thermal short-time current restricted to 10 s	А	110
Protection class IP	_	
• on the front		IP20
• of the terminal		IP20
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 voltage		

• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 $^\circ \mathrm{C}$	А	40
Rated value		
— up to 690 V at ambient temperature 40 °C	А	40
Rated value		25
— up to 690 V at ambient temperature 60 °C Rated value	A	35
• at AC-2 at 400 V Rated value	А	12
● at AC-3		
— at 400 V Rated value	А	12
— at 500 V Rated value	А	12
— at 690 V Rated value	А	9
 at AC-4 at 400 V Rated value 	А	12.5
Operating current with 1 current path		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	4.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.4
— at 600 V Rated value	А	0.25
● at DC-3 at DC-5		
— at 24 V Rated value	А	20
— at 110 V Rated value	А	2.5
— at 220 V Rated value	А	1
— at 440 V Rated value	А	0.09
— at 600 V Rated value	А	0.06
Operating current with 2 current paths in series		
● at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	5
— at 440 V Rated value	А	1
— at 600 V Rated value	А	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	А	15
— at 220 V Rated value	А	3
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.27
— at 600 V Rated value	А	0.16
Operating current with 3 current paths in series		

• at DC-1		
— at 24 V Rated value	А	35
— at 110 V Rated value	А	35
— at 220 V Rated value	А	35
— at 440 V Rated value	А	2.9
— at 600 V Rated value	А	1.4
• at DC-3 at DC-5		
— at 110 V Rated value	А	35
— at 220 V Rated value	А	10
— at 24 V Rated value	А	35
— at 440 V Rated value	А	0.6
— at 600 V Rated value	А	0.6
Operating power	_	
 at AC-1 at 400 V Rated value 	kW	23
 at AC-2 at 400 V Rated value 	kW	5.5
• at AC-4 at 400 V Rated value	kW	5.5
Operating power	-	
● at AC-1		
— at 230 V at 60 °C Rated value	kW	13.3
— at 230 V Rated value	kW	13.3
— at 400 V at 60 °C Rated value	kW	23
— at 690 V at 60 °C Rated value	kW	40
— at 690 V Rated value	kW	40
• at AC-3		
— at 230 V Rated value	kW	3
— at 400 V Rated value	kW	5.5
— at 690 V Rated value	kW	7.5
Operating power for \geq 200000 operating cycles at		
AC-4	1.1.47	
• at 400 V Rated value	kW	2.6
at 690 V Rated value	kW	4.6
Operating frequency	1 /b	1 000
• at AC-3 maximum	1/h	1 000
Control circuit/ Control:	_	
Type of voltage of the control supply voltage		AC
Control supply voltage with AC	N/	100
• at 50 Hz Rated value	V	100
at 60 Hz Rated value	V	110
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		1
Number of NO contacts		
 for auxiliary contacts 		
— instantaneous contact		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15		
• at 230 V Rated value	А	10
• at 400 V Rated value	А	3
• at 690 V Rated value	А	1
Operating current		
• at DC-12 at 125 V Rated value	А	2
• at DC-12 at 220 V Rated value	А	1
• at DC-12 at 600 V Rated value	А	0.15
• at DC-13 at 125 V Rated value	А	0.9
• at DC-13 at 220 V Rated value	А	0.3
• at DC-13 at 600 V Rated value	А	0.1
Operating current		
• at DC-12		
— at 60 V Rated value	А	6
— at 110 V Rated value	А	3
• at DC-13		
— at 24 V Rated value	A	10
— at 60 V Rated value	А	2
— at 110 V Rated value	А	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
 at 480 V Rated value 	А	11

• at 480 V Rated value	А	11
• at 600 V Rated value	А	11
yielded mechanical performance [hp]	-	
 for single-phase AC motor at 110/120 V Rated value 	metric hp	1
 for single-phase AC motor at 230 V Rated value 	metric hp	2
 for three-phase AC motor at 200/208 V Rated value 	metric hp	3
 for three-phase AC motor at 220/230 V Rated value 	metric hp	3

 for three-phase AC motor at 573/600 V Rated value for three-phase AC motor at 573/600 V Rated hp for three-phase AC motor at 573/600 V Rated hp for short-circuit protection of the main circuit for short-circuit protection of the main circuit with type of assignment 1 required for short-circuit protection of the main circuit with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection on the auxiliary switch required for short-circuit protecti	 for three-phase AC motor at 460/480 V Rated value 	metric hp	7.5	
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 a with type of assignment 2 required for short-circuit protection of the auxiliary switch required for wards for short-circuit pr	• for three-phase AC motor at 575/600 V Rated	metric	10	
Short-circuit: Design of the fuse link - with type of assignment 1 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position +/-180* rotation possible on vertical mounting surface: can be titled forward and backward by +/- 22.5* on vertical mounting surface; can be titled forward and backward by +/- 22.5* on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rain according to DIN EN 50022 • Side-by-side mounting Yes Height mm 45 Depth mm 97 Required spacing • with side-by-side mounting • for grounded parts mm 0 - downwards mm 0 - at the side mm 0 - at the side mm 6 - downwards mm 0 - at the side mm 0 <td></td> <td>np</td> <td colspan="2">A600 / 0600</td>		np	A600 / 0600	
Design of the fuse link for short-circuit protection of the main circuit with type of assignment 1 required for short-circuit protection of the auxiliary switch required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gL/gG: 10 A for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 A Installation/ mounting/ dimensions: mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting on the sold backward by +/-22.5° on vertical mounting mounting on the sold backward by +/-22.5° on vertical mounting mounting on the sold backward by +/-22.5° on vertical mounting mounting on the sold backward by +/-22.5° on vertical mounting mounting mounting mounting mounting mounting mounting mounting mounting	Contact rating of the auxiliary contacts acc. to OL		A6007 Q600	
• for short-circuit protection of the main circuit gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 83 A - with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A • for short-circuit protection of the auxiliary switch required fuse gL/gG IV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A Installation/ mounting/ dimensions: fuse gL/gG IV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A Mounting position +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting offse Mounting type				
	-			
Amount of the second	 for short-circuit protection of the main circuit 			
• for short-circuit protection of the auxiliary switch required 25 Å Installation/ mounting/ dimensions: fuse gL/gG: 10 Å mounting position +/-180° rotation possible on vertical mounting surface; contain possible on vertical mounting surface;	 — with type of assignment 1 required 			
required Installation/ mounting/ dimensions: mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting onto 35 mm standard mounting rail according to DIN EN 50022 Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting Yes Height mm 85 Width mm 45 Depth mm 97 Required spacing - - • with side-by-side mounting mm 0 - forwards mm 0 - grounds mm 0 - downwards mm 0 - at the side mm 6 - downwards mm 0 - at the side mm 0 - at the side mm 0 - at the side mm 0 - downwards mm 0	— with type of assignment 2 required			
Installation/ mounting/ dimensions: mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting mm Height mm Width mm 0 - forwards - forwards mm - downwards mm - at the side mm - backwards mm - forwards mm - at the side mm - backwards mm - forwards mm - downwards mm - forwards mm - forwards mm - forwards mm - at the side mm - downwards mm - forwards mm - fo	 for short-circuit protection of the auxiliary switch 		fuse gL/gG: 10 A	
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting Yes Height mm 85 Width mm 45 Depth mm 97 Required spacing • with side-by-side mounting mm 0 — forwards mm 0 — ackwards mm 0 — at the side mm 0 — forwards mm 0 — at the side mm 0 — upwards mm 0 — forwards mm 0 — at the side mm 0 — downwards mm 0 — at the side mm 6 — downwards mm 0 — at the side mm 6 — at the side mm 6 — at the side mm 0 — at the side mm				
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting Yes Height mm 85 Width mm 45 Depth mm 97 Required spacing • with side-by-side mounting mm 0 — forwards mm 0 — ackwards mm 0 — at the side mm 0 — forwards mm 0 — at the side mm 0 — upwards mm 0 — forwards mm 0 — at the side mm 0 — downwards mm 0 — at the side mm 6 — downwards mm 0 — at the side mm 6 — at the side mm 6 — at the side mm 0 — at the side mm	Installation/ mounting/ dimensions:			
Mounting type surface: can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting mm Height mm Midth mm Depth mm • with side-by-side mounting mm - forwards mm - forwards mm - forwards mm - downwards mm - downwards mm - forwards mm - forwards mm - downwards mm - forwards mm - at the side mm - downwards mm - forwards mm - forwards mm - forwards mm - Backwards mm - forwards mm		_	+/-180° rotation possible on vertical mounting	
Side-by-side mountingmounting rail according to DIN EN 50022Heightmm85Widthmm45Depthmm97Required spacing			surface; can be tilted forward and backward by +/-	
Heightmm85Widthmm45Depthmm97Required spacingmm0- forwardsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- at the sidemm0- odownwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- marksmm0- marks	Mounting type			
Widthmm45Depthmm97Required spacingmm97• with side-by-side mountingmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- downwardsmm0- at the sidemm0- for grounded parts forwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- at the sidemm0- backwardsmm0- at the sidemm0- backwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- backwardsmm0- b	 Side-by-side mounting 		Yes	
Depthmm97Required spacing• with side-by-side mountingmm- forwardsmm- forwardsmm- Backwardsmm- upwardsmm- downwardsmm- downwardsmm- at the sidemm- for grounded parts forwardsmm- forwardsmm- forwardsmm- forwardsmm- forwardsmm- honwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- norwardsmm- forwardsmm- forwardsmm- forwardsmm- norwardsmm- norwardsmm <td< td=""><td>Height</td><td>mm</td><td>85</td></td<>	Height	mm	85	
Required spacingImage: Spacing (Second Second S	Width	mm	45	
with side-by-side mountingImm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- for grounded partsImm0- forwardsmm0- Backwardsmm0- forwardsmm0- forwardsmm0- at the sidemm0- upwardsmm0- upwardsmm0- at the sidemm0- at the sidemm0- for live partsImm0- forwardsmm0- forwardsmm0- Backwardsmm0- forwardsmm0- forwardsmm0- marksmm0- marksmm0 </td <td>Depth</td> <td>mm</td> <td>97</td>	Depth	mm	97	
- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- for grounded parts forwardsmm0- Backwardsmm0- Backwardsmm0- at the sidemm0- backwardsmm0- at the sidemm0- at the sidemm6- downwardsmm0- for live parts forwardsmm0- Backwardsmm0- marksmm0- forwardsmm0- marksmm0- marksmm <td>Required spacing</td> <td></td> <td></td>	Required spacing			
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- upwardsmm0- downwardsmm0- at the sidemm0- at the sidemm0- for grounded parts forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm0- at the sidemm6- downwardsmm0- for live parts forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- hackwardsmm0- hackwardsmm0- upwardsmm0- upwardsmm0	— forwards	mm	0	
- downwardsmm0- at the sidemm0• for grounded partsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0- for live partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- nupwardsmm0- nupwardsmm0- nupwardsmm0- nupwardsmm0- nupwardsmm0	— Backwards	mm	0	
- at the sidemm0• for grounded partsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0- for live partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- hackwardsmm0- hackwardsmm0- hackwardsmm0- upwardsmm0	— upwards	mm	0	
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Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0• for live parts forwardsmm0- Backwardsmm0- upwardsmm0	 for grounded parts 			
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- at the sidemm6- downwardsmm0• for live parts forwardsmm0- Backwardsmm0- upwardsmm0	— Backwards	mm	0	
- downwardsmm0• for live partsmm0- forwardsmm0- Backwardsmm0- upwardsmm0	— upwards	mm	0	
 for live parts forwards mm Backwards mm mm 0 mm 0 0 	— at the side	mm	6	
- forwardsmm0- Backwardsmm0- upwardsmm0	— downwards	mm	0	
— Backwards mm 0 — upwards mm 0	• for live parts			
— upwards mm 0	— forwards	mm	0	
	— Backwards	mm	0	
— downwards mm 0	— upwards	mm	0	
	— downwards	mm	0	

— at the side	mm	6			
Connections/ Terminals:					
Type of electrical connection					
 for main current circuit 		ring cable connection			
 for auxiliary and control current circuit 		ring cable connection			
Apparent pick-up power of the magnet coil with AC					
• at 50 Hz	V·A	68			
• at 60 Hz	V·A	67			
Safety related data:					
B10 value with high demand rate acc. to SN 31920		1 000 000			
Proportion of dangerous failures					
 with low demand rate acc. to SN 31920 	%	40			
 with high demand rate acc. to SN 31920 	%	73			
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100			
Product function Mirror contact acc. to IEC 60947-4-1		Yes			
T1 value for proof test interval or service life acc. to IEC 61508	У	20			
Protection against electrical shock		finger-safe			
Mechanical data:					
Size of contactor		S0			
Ambient conditions:					
Installation altitude at height above sea level maximum	m	2 000			
Ambient temperature					
• during operation	°C	-25 +60			
 during storage 	°C	-55 +80			
Certificates/ approvals:					

General Produc	t Approval			EMC	Functional Safety/Safety of Machinery
	(SA) CSA	EHC		С-тіск	Type Examination
Declaration of Conformity	Test Certificate	S	Shipping App	proval	
EG-Konf.	Special Test Certificate	<u>Type Test</u> Certificates/Test <u>Report</u>	ABS	BUREAU VERITAS	ĴÅ DNV DNV
Shipping Approv	/al				other
GL	Llovd's Register Lrs	PRS	RINA	RMRS	Confirmation
other	-				

urther information

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http://www.siemens.com/industrymall

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http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT20244AG60

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