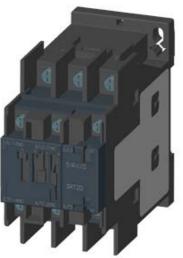
SIEMENS

Data sheet

3RT2027-4AP60



CONTACTOR, AC-3, 15KW/400V, 1NO+1NC, AC 220V 50HZ, 240V 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	260
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 °C	А	50
Rated value		
— up to 690 V at ambient temperature 40 $^\circ C$	А	50
Rated value		
— up to 690 V at ambient temperature 60 °C Rated value	A	42
• at AC-2 at 400 V Rated value	А	32
● at AC-3		
— at 400 V Rated value	А	32
— at 500 V Rated value	А	32
— at 690 V Rated value	А	21
• at AC-4 at 400 V Rated value	А	22
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	28
• at AC-2 at 400 V Rated value	kW	15
• at AC-4 at 400 V Rated value	kW	11
Operating power	_	
● at AC-1		
— at 230 V at 60 °C Rated value	kW	15.5
— at 230 V Rated value	kW	16
— at 400 V at 60 °C Rated value	kW	27.5
— at 690 V at 60 °C Rated value	kW	47.5
— at 690 V Rated value	kW	48
• at AC-3		
— at 230 V Rated value	kW	7.5
— at 400 V Rated value	kW	15
— at 690 V Rated value	kW	18.5
Operating power for \geq 200000 operating cycles at	_	
AC-4		
• at 400 V Rated value	kW	6
• at 690 V Rated value	kW	10.3
Operating frequency	4.11-	750
• at AC-3 maximum	1/h	750
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
• at 50 Hz Rated value	V	220
• at 60 Hz Rated value	V	240
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	А	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	27

· · ·		
• at 480 V Rated value	А	27
• at 600 V Rated value	А	27
yielded mechanical performance [hp]		
 for single-phase AC motor at 110/120 V Rated value 	metric hp	2
 for single-phase AC motor at 230 V Rated value 	metric hp	5
 for three-phase AC motor at 200/208 V Rated value 	metric hp	10
 for three-phase AC motor at 220/230 V Rated value 	metric hp	10

Note Number of three-phase AC motor at 575/600 V Rated Method 25 Context rating of the auxiliary contacts acc. to UL A800 / 0600 A800 / 0600 Short-circuit Design of the fuse link. Image: Contact acc. Image: Contact acc. - with type of assignment 1 required	 for three-phase AC motor at 460/480 V Rated value 	metric hp	20
value hp Contact rating of the auxiliary contacts acc. to UL A600 / C600 Short-circuit Event of a short-circuit protection of the main circuit gLigG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A - with type of assignment 2 required gLigG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A tor short-circuit protection of the auxiliary switch required gLigG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A • for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 A thus gL/gG: 10 A Installator/ mounting / dimensions: #/180° rotation possible on vertical mounting surface: can be tilted forward and backward by +/-22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting mm 45 Optifit mm 45 Pepth mm 97 Required spacing mm 0 • with side-by-side mounting mm 0 - at the side mm 0 - gackwards mm 0 - at the side mm 0 - forwards mm 0 - forwards mm 0 <t< td=""><td></td><td></td><td>25</td></t<>			25
Short-circuit: Design of the fuse link - with type of assignment 1 required - with type of assignment 2 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 • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position Vistallation mounting Mounting type • Side-by-side mounting + fully the distribution of the auxiliary switch required Nouting type • Side-by-side mounting +/180* rotation possible on vertical mounting surface: can be titled forward and backward by +/- 22.5* on vertical mounting surface • Side-by-side mounting • forwards mm Peipth mm • onwards - downwards mm - forwards mm - forwards mm - downwards mm - forwards mm - forwards mm	-		20
Design of the fuse link for short-circuit protection of the main circuit with type of assignment 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A • for short-circuit protection of the auxiliary switch required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A • for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 A Installation/ mounting/ dimensions: fuse gL/gG: 10 A guirace; 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; 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; 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; 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; 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; 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; 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; can be titled forward and backward by +/-22.5° on vertical mounting sur	Contact rating of the auxiliary contacts acc. to UL	-	A600 / Q600
• for short-circuit protection of the main circuit JL/G LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A • with type of assignment 2 required JL/G LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A • for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 A Installator/ mounting/ dimensions: */180" rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5" on vertical mounting surface; can be tilted forward and backward by +/-22.5" on vertical mounting stratedee Mounting type */180" rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5" on vertical mounting stratedee Mounting type screw and snap-on mounting onto 35 mm standard mounting ratia according to DIN EN 50022 • Side-by-side mounting Yes Height mm 85 Width mm 97 Required spacing mm 0 • with side-by-side mounting mm 0 - forwards mm 0 - gravinds graving mm 0 - forwards mm 0 - downwards mm 0 - downwards mm 0 - forwards mm 0	Short-circuit:		
- with type of assignment 1 requiredgL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A- with type of assignment 2 requiredgL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 3S A• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensions:+/-180° rotation possible on vertical mounting 	Design of the fuse link		
Amount of the sector of the auxiliary switch required100 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensions:100 k gurface; can be titted forward and backward by +/- 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting outfaceMounting typescrew and snap-on mounting out as 5 mm standard mounting rail according to DIN EN 50022• Side-by-side mountingmm85Widthmm45Depthmm97Required spacingImage: Standard mounting surface• with side-by-side mountingmm0- forwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- at the sidemm <th< td=""><td> for short-circuit protection of the main circuit </td><td></td><td></td></th<>	 for short-circuit protection of the main circuit 		
• for short-circuit protection of the auxiliary switch required 35 Å • for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 Å Installation/ mounting / dimensions: +/-180° rotation possible on vertical mounting surface; can be not entited 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 - forwards mm - forwards mm - forwards mm - at the side mm - obwnwards mm - downwards mm - at the side mm	— with type of assignment 1 required		
required Image: constraint of the state	— 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 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 — upwards mm 0 — of owards mm 0 — at the side mm 0 <t< td=""><td></td><td></td><td>fuse gL/gG: 10 A</td></t<>			fuse gL/gG: 10 A
mounting position +/-180° rotation possible on vertical mounting surface; can be tilled 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 — dawmads mm 0 — dawmads mm 0 — at the side mm 0 — forwards mm 0 — at the side mm 6 — downwards mm 0 — at the side mm 6 — at the side mm 6 — downwards mm 0 — at the side mm <td></td> <td></td> <td></td>			
Mounting type surface; can be tilled 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 - gackwards mm 0 - upwards mm 0 - at the side mm 0 - forwards mm 0 - at the side mm 0 - at the side mm 0 - upwards mm 0 - at the side mm 0 - upwards mm 0 - at the side mm 0 -			
Side-by-side mountingmounting rail according to DIN EN 50022Heightmm85Widthmm45Depthmm97Required spacing-• with side-by-side mounting forwardsmm0- gackwardsmm0- gackwardsmm0- downwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- at the sidemm0- at the sidemm0- downwardsmm0- at the sidemm6- downwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- gackwardsmm0- gackwardsmm0- gackwardsmm0- gackwardsmm0- gackwa	mounting position		surface; can be tilted forward and backward by +/-
Heightmm85Widthmm45Depthmm97Required spacing-• with side-by-side mounting forwardsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- at the sidemm0- a	Mounting type	-	
Widthmm45Depthmm97Required spacingmm97• with side-by-side mountingmm0- forwardsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- for grounded partsmm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- borwardsmm0- at the sidemm0- borwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- borwardsmm0- borward	 Side-by-side mounting 		Yes
Depthmm97Required spacing• with side-by-side mounting- forwardsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- downwardsmm0- at the sidemm0- for grounded parts forwardsmm0- gackwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- marksmm0- marksmm0 <t< td=""><td>Height</td><td>mm</td><td>85</td></t<>	Height	mm	85
Required spacingImage: Second sec	Width	mm	45
with side-by-side mountingImm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- for grounded parts forwardsmm0- Backwardsmm0- Backwardsmm0- forwardsmm0- at the sidemm0- backwardsmm0- upwardsmm6- at the sidemm0- at the sidemm0- for live partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- marksmm0- marksmm0<	Depth	mm	97
forwardsmm0 Backwardsmm0 upwardsmm0 downwardsmm0 at the sidemm0• for grounded parts forwardsmm0 Backwardsmm0 at the sidemm0 backwardsmm0 at the sidemm0 at the sidemm6 downwardsmm0 for live parts	Required spacing		
- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm0- odownwardsmm0- backwardsmm0- odownwardsmm6- downwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- backwardsmm0- marketmm0- m	 with side-by-side mounting 		
Sedematesmm0- upwardsmm0- downwardsmm0- at the sidemm0• for grounded parts forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm0- at the sidemm6- downwardsmm0- for live parts forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- gackwardsmm0- marksmm0- marksmm0- marksmm0- upwardsmm0	— forwards	mm	0
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- at the sidenm0• for grounded partsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0- for live partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- hackwardsmm0- hackwardsmm0- upwardsmm0	— upwards	mm	0
• for grounded partsmm0- forwardsmm0- Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0- for live partsmm0- forwardsmm0- forwardsmm0- hackwardsmm0- forwardsmm0- hackwardsmm0- hackwardsmm0- upwardsmm0- upwardsmm0	— downwards	mm	0
forwardsmm0 Backwardsmm0 upwardsmm0 at the sidemm6 downwardsmm0 forwardsmm0 forwardsmm0 Backwardsmm0 Backwardsmm0 upwardsmm0	— at the side	mm	0
Backwardsmm0- upwardsmm0- at the sidemm6- downwardsmm0- for live parts forwardsmm0- Backwardsmm0- upwardsmm0	 for grounded parts 		
upwardsmm0 at the sidemm6 downwardsmm0• for live parts forwardsmm0 Backwardsmm0 upwardsmm0	— forwards	mm	0
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 	— 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
	— upwards	mm	0
		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	81
• at 60 Hz	V·A	79
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 Product	: Approval			EMC	Functional Safety/Safety of Machinery
	CSA	EHC		С-тіск	Type Examination
Declaration of Conformity	Test Certificate	S	Shipping App	proval	
EG-Konf.	Special Test Certificate	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>	ABS	BUREAU VERITAS	ŮŇ DNV
Shipping Approv	/al				other
GL	Lloyd's Register Lrs	PRS	RINA	RMRS	Confirmation
GL GL Other Environmental		PRS	RINA	RMRS	Confirmation

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http://www.siemens.com/industrymall

Cax online generator

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