SIEMENS

Data sheet

3RT2026-1AK64-3MA0



CONTACTOR, AC-3, 11KW/400V, 2NO+2NC AC110V 50HZ/120V 60HZ 3-POLE, SZ S0 SCREW TERMINAL PERMANENT AUX. SWITCH FOR SUVA APPLICATIONS

Figure similar	_	SIRIUS
product brand name		
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	200
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	40
Rated value		
— up to 690 V at ambient temperature 40 °C Rated value	A	40
— up to 690 V at ambient temperature 60 °C	A	35
Rated value	~	
• at AC-2 at 400 V Rated value	А	25
• at AC-3		
— at 400 V Rated value	А	25
— at 500 V Rated value	А	18
— at 690 V Rated value	А	13
• at AC-4 at 400 V Rated value	А	15.5
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
	А	0.16

• 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	11
• at AC-4 at 400 V Rated value	kW	7.5
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	5.5
— at 400 V Rated value	kW	11
— at 690 V Rated value	kW	11
Operating power for \geq 200000 operating cycles at	_	
AC-4		
• at 400 V Rated value	kW	4.4
• at 690 V Rated value	kW	7.7
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	110
• at 60 Hz Rated value	V	120
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		2	
Number of NO contacts	_		
 for auxiliary contacts 			
— instantaneous contact		2	
Product expansion Auxiliary switch	_	No	
Operating current at AC-15	_		
• at 230 V Rated value	А	6	
• 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	6	
— 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			

Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	21
• at 600 V Rated value	А	22
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	3
 for three-phase AC motor at 200/208 V Rated value 	metric hp	5
 for three-phase AC motor at 220/230 V Rated value 	metric hp	7.5

value hp metric 20 • for three-phase AC motor at 575/600 V Rated value metric 20 • Contact rating of the auxiliary contacts ace. to UL A600 / Q600 Short-circuit A600 / Q600 Short-circuit protection of the main circuit - - with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A - with type of assignment 2 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 * for short-circuit protection of the auxiliary switch required surface; can be titled forward and backward by +/- 22.5° on vertical mounting out 035 mm standard mounting type Mounting type screw and snap-on mounting out 035 mm standard mounting rail according to DIN EN 50022 • Side-by-side mounting Yes Height mm Width mm 0 - • with side-by-side mounting mm • with side-by-side mounting mm • with side-by-side mounting mm • height mm Mounting type screw and snap-on mounting onto 35 mm standard mounting into according to DIN EN	 for three-phase AC motor at 460/480 V Rated 	metric	15	
value hp Contact rating of the auxiliary contacts acc. to UL A600 / Q600 Struct_circuit Design of the fuse link. • • for short-circuit protection of the main circuit gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A - with type of assignment 2 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A • for short-circuit protection of the auxiliary switch required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 G Installation/ mounting/ dimensions: fuse gL/gG: 10 A mounting position +/-180° rotation possible on vertical mounting surface; can be litted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on nouting on 03 S mm standard mounting rul according to DIN EN 50022 • Side-by-side mounting mm Width mm Hoight mm • with side-by-side mounting mm - forwards mm - upwards mm - downwards mm - forwards mm				
Contact rating of the auxiliary contacts acc. to UL A600 / 0600 Short-circuit Design of the fuse link for short-circuit protection of the main circuit with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required statiliation/ mounting/ dimensions: mounting position stide-by-side mounting Side-by-side mounting Side-by-side mounting with side-by-side mounting with side-by-side mounting forwards mm act the side mm act the side mm for grounded parts for live parts for wards mm for live parts<	 for three-phase AC motor at 575/600 V Rated 	metric	etric 20	
Short-circuit: 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 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 screw and snep-on mounting on 035 mm standard mounting type Nothing mm 45 Poph Doph mm • for grounded pacing mm • with side-by-side mounting mm - forwards mm - grounded pacing mm • for grounded paths mm - downwards mm - downwards mm - downwards mm - at the side mm - downwards mm - at the side mm - downwards mm - at the side mm - backwards mm - backwards mm - at the side mm - at the side m		hp		
Design of the fuse link for short-circuit protection of the main circuit with type of assignment 1 required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A for short-circuit protection of the auxiliary switch required gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A installation/mounting/dimensions: for short-circuit protection of the auxiliary switch required stallation/mounting/dimensions: Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 Yes Height mm 85 Width mm 45 Depth mm 141 Required spacing with side-by-side mounting for grounded parts at the side mm at the side mm at the side at the side	Contact rating of the auxiliary contacts acc. to UL		A600 / Q600	
• for short-circuit protection of the main circuit gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A - with type of assignment 2 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: */-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting onto 35 mm standard mounting rotation possible on vertical mounting onto 35 mm standard mounting relataccording to DIN EN 50022 • Side-by-side mounting Yes Height mm 45 Depth mm 1411 Required spacing mm 0 • with side-by-side mounting mm 0 - upwards mm 0 - upwards mm 0 - for grounded parts mm 0 - forwards mm 0 - upwards mm 0 - backwards mm 0 - forwards mm 0 - downwards mm 0 - forwards mm 0 - at the side mm	Short-circuit:			
	Design of the fuse link			
100 A with type of assignment 2 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: */180° rotation possible on vertical mounting surface can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type */180° rotation possible on vertical mounting surface Side-by-side mounting Yes Height mm Height mm Required spacing Yes • with side-by-side mounting mm - forwards mm - upwards mm - downwards mm - forwards mm - of orwards mm	 for short-circuit protection of the main circuit 			
• for short-circuit protection of the auxiliary switch required 35 Å Installation/ mounting/ dimensions: fuse gL/gG: 10 Å 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 Width mm 0 - forwards - forwards mm - downwards mm - of orwards mm - forwards mm - of orwards mm - at the side mm - odwnwards mm - odwnwards mm - odwnwards mm - at the side mm - at the side mm - at the side mm - downwards mm - at the side mm - at the	— with type of assignment 1 required			
required Installation/ mounting/ dimensions: 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 141 Required spacing - - • with side-by-side mounting mm 0 - forwards mm 0 - upwards mm 0 - at the side mm 0 - forwards mm 0 - upwards mm 0 - at the side mm 0 - upwards mm 0 - upwards mm 0 - at the side mm 0 - at the side mm 0 - downwards mm 0 - at the side mm 0 - at the side mm 0 - forwards m	— with type of assignment 2 required			
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Image: series of the series				
Side-by-side mountingmounting rail according to DIN EN 50022Heightmm85Widthmm45Depthmm141Required spacing forwardsmm0- forwardsmm0- gackwardsmm0- upwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- at the sidemm0- at the sidemm0- at the sidemm0- forwardsmm0- at the sidemm0- at the sidemm0- forwardsmm0- forwardsm				
Heightmm85Widthmm45Depthmm141Required 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 <t< td=""><td>Mounting type</td><td></td><td></td></t<>	Mounting type			
Widthmm45Depthmm141Required spacing- with side-by-side mounting- forwardsmm- forwardsmm- Backwardsmm- upwardsmm- downwardsmm- downwardsmm- at the sidemm- for grounded parts- forwardsmm- forwardsmm- forwardsmm- forwardsmm- forwardsmm- forwardsmm- at the sidemm- backwardsmm- backwardsmm- at the sidemm- downwardsmm- forwardsmm- forwardsmm- forwardsmm- forwardsmm- forwardsmm- packwardsmm- packwardsmm- upwardsmm- nupwardsmm- nupwardsmm	Side-by-side mounting		Yes	
Depthmm141Required spacingr• with side-by-side mounting forwardsmm0- backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- at the sidemm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- upwardsmm0- at the sidemm6- at the sidemm0- at the sidemm0- at the sidemm0- forwardsmm0- fo	Height	mm	85	
Required spacingImage: constraint of the system mounting• with side-by-side mountingmm0- forwardsmm0- Backwardsmm0- upwardsmm0- downwardsmm0- at the sidemm0• for grounded partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- at the sidemm0- at the sidemm0- at the sidemm6- upwardsmm0- at the sidemm0- at the sidemm0- for live partsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- forwardsmm0- marketsmm0-	Width	mm	45	
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	— 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	
— Backwardsmm0— upwardsmm0	• for live parts			
— upwards mm 0	— forwards	mm	0	
	— Backwards	mm	0	
		mm	0	
— downwards mm 0	– downwards	mm	0	

— at the side	mm	6
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		
— single or multi-stranded		2x (1 2,5 mm²), 2x (2,5 10 mm²)
 — finely stranded with core end processing 		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 for AWG conductors for main contacts 		2x (16 12), 2x (14 8)
 for auxiliary contacts 		
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 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)
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	t Approval			EMC	Functional Safety/Safety of Machinery	
CCC	CSA		EHC	C-TICK	Type Examination	
Declaration of	Test	Shipping App	Shipping Approval			
Conformity	Certificates					
EG-Konf.	Special Test Certificate	ABS	B U R E A U V E R I T A S	DNV DNV	GL	
Shipping Approv	/al			other		
Llovd's Register LRS	PRS	RINA	RMRS	Environmental Confirmations	VDE	

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