SIEMENS

Product data sheet

3RT2016-1AK61



CONTACTOR, AC-3, 4KW/400V, 1NO, AC110V 50HZ, 120V 60HZ 3-POLE, SZ S00 SCREW TERMINAL

General technical data:				
product brand name		SIRIUS		
Size of the contactor		S00		
Product extension / auxiliary switch		Yes		
Product extension / function module for communication		No		
Protection class IP / on the front		IP20		
Protection against electrical shock		finger-safe		
Degree of pollution		3		
Installation altitude / at a height over sea level / maximum	m	2,000		
Ambient temperature				
during storage	°C	-55 +80		
during operating	°C	-25 +60		
Shock resistance				
• at rectangular impulse				
• at AC		6,7g / 5 ms, 4,2g / 10 ms		
• at sine pulse				
• at AC		10,5g / 5 ms, 6,6g / 10 ms		
Impulse voltage resistance / rated value	kV	6		
Insulation voltage / rated value	V	690		

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
• of the contactor / typical		30,000,000
of the contactor with added auxiliary switch block / typical		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000
Main circuit:		
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 40 °C ambient temperature / rated value	А	22
• at 60 °C ambient temperature / rated value	А	20
Connectable conductor cross-section / in main circuit	-	
• at AC-1		
• at 40 °C / minimum permissible	m²	4
• at 60 °C / minimum permissible	m²	2.5
Operational current		
• at AC-2 / at 400 V / rated value	А	9
• at AC-3		
• at 400 V / rated value	А	9
• at 500 V / rated value	А	7.7
• at 690 V / rated value	А	6.7
• at AC-4 / at 400 V / rated value	А	8.5
Operational current		
with 1 current path / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	2.1
• at 220 V / rated value	А	0.8
• at 440 V / rated value	А	0.6
• at 600 V / rated value	А	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	12
• at 220 V / rated value	А	1.6
• at 440 V / rated value	А	0.8
• at 600 V / rated value	А	0.7
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	20
• at 110 V / rated value	А	20

• al 220 V/ rated value A 20 • al 400 V/ rated value A 1.3 • at 600 V/ rated value A 1 • with 1 current path / at DC-3 / at DC-5 A 20 • at 110 V/ rated value A 0.1 • with 2 current paths in series / at DC-3 / at DC-5 A 20 • at 110 V/ rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 A 20 • at 110 V/ rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 F F • at 24 V/ rated value A 20 • at 110 V/ rated value A 20 • at 24 V/ rated value A 20 • at 24 V/ rated value A 20 • at 40 V/ rated value A 20 • at 400 V/ rated value KW 75 • at 400 V/ rated value KW 10 • at 400 V/ rated value KW			
• at 600 V / rated valueA1Operational currentA0• with 1 current path / at DC-3 / at DC-5A0• at 14 V / rated valueA0• with 2 current paths in series / at DC-3 / at DC-5A0• at 24 V / rated valueA0• with 3 current paths in series / at DC-3 / at DC-5-• with 3 current paths in series / at DC-3 / at DC-5-• with 3 current paths in series / at DC-3 / at DC-5A20• with 3 current paths in series / at DC-3 / at DC-5• at 240 V / rated valueA20• with 3 current paths in series / at DC-3 / at DC-5• at 220 V / rated valueA20• at 220 V / rated valueA20• at 220 V / rated valueA20• at 230 V / rated valueA20• at 320 V / rated valueKW7.5• at AC-1• at 320 V / rated valueKW13• at 320 V / rated valueKW22• at AC-2 / at 400 V / rated valueKW22• at AC-3KW4• at 320 V / rated valueKW4• at 320 V / rated valueKW5• at 320 V / rated valueKW5• at AC-1KW5• at AC-1KW4• at AC-1KW4• at AC-3 / at 400 V / rated valueKW4• at AC-3 / at 400 V / rated valueKW5• at AC-4 / at at 200 V / rated v	• at 220 V / rated value	А	20
Operational current • with 1 current path / at DC-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value • at 110 V / rated value • ut at 24 v / rated value • at at 20 • at 110 V / rated value • at at 20 • at 110 V / rated value • at at 20 • at 110 V / rated value • at 24 V / rated value • at 20 • at 24 V / rated value • at 25 V / rated value • at 20 V / rated value • at 300 V / rated value	• at 440 V / rated value	А	1.3
• with 1 current path / at DC-3 / at DC-5 A 20 • at 24 V / rated value A 0.1 • with 2 current paths in series / at DC-3 / at DC-5 - - • at 24 V / rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 - - • with 3 current paths in series / at DC-3 / at DC-5 - - • at 24 V / rated value A 20 • at 10 V / rated value A 20 • at 20 V / rated value A 20 • at 20 V / rated value A 20 • at 200 V / rated value A 20 • at 400 V / rated value A 20 • at 200 V / rated value A 20 • at 200 V / rated value A 20 • at 200 V / rated value KW 13 • at 200 V / rated value KW 13 • at 200 V / rated value KW 22 • at AC-3 KW 14 • at 200 V / rated value KW 2 • at AC-3 / at 400 V / rated value	• at 600 V / rated value	А	1
+ at 24 V / rated value A 0 • at 110 V / rated value A 0.1 • with 2 current paths in series / at DC-3 / at DC-5 - - • at 24 V / rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 - - • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 20 V / rated value A 20 • at 20 V / rated value A 0.2 • at 20 V / rated value A 0.2 • at 20 V / rated value A 0.2 • at 20 V / rated value A 0.2 • at 20 V / rated value A 0.2 • at 20 V / rated value KW 1.5 • at 20 V / rated value KW 1.5 • at 20 V / rated value KW 1.5 • at 20 V / rated value KW 1.5 • at 20 V / rated value KW 2.2 • at 20 V / rated value KW 2.2 • at 20 V / rated value KW 5.5	Operational current		
• at 110 V/ rated value A 0.1 • with 2 current paths in series / at DC-3 / at DC-5 - • at 24 V/ rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 - • at 24 V/ rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 - - • at 24 V/ rated value A 0.2 • at 24 V/ rated value A 0.2 • at 230 V/ rated value A 0.2 • at 230 V/ rated value A 0.2 • at A00 V/ rated value A 0.2 • at A00 V/ rated value KW 7.5 • at A00 V/ rated value KW 13 • at A00 V/ rated value KW 14 • at A00 V/ rated value KW 12 • at A00 V/ rated value KW 22 • at A00 V/ rated value KW 4 • at A00 V/ rated value KW 4 <	• with 1 current path / at DC-3 / at DC-5		
• with 2 current paths in series / at DC-3 / at DC-5 A 20 • at 110 V / rated value A 0.35 • with 3 current paths in series / at DC-3 / at DC-5 - - • at 24 V / rated value A 20 • at 110 V / rated value A 20 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 240 V / rated value A 0.2 • at 230 V / rated value A 0.2 • at 230 V / rated value KW 7.5 • at 230 V / rated value KW 17 • at 230 V / rated value KW 17 • at 690 V / rated value KW 12 • at 400 V / rated value KW 22 • at AC-2 / at 400 V / rated value KW 22 • at AC-3 / at 400 V / rated value KW 4 • at AC-1 / at 400 V / rated value KW 4 • at AC-1 / at 400 V / rated val	• at 24 V / rated value	А	20
• at 24 V / rated value A 20 • at 110 V / rated value A 0.35 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 220 V / rated value A 20 • at 220 V / rated value A 20 • at 400 V / rated value A 0.2 • at 400 V / rated value KW 7.5 • at 230 V / rated value KW 13 • at 230 V / rated value KW 13 • at 320 V / rated value KW 13 • at 320 V / rated value KW 12 • at 320 V / rated value KW 12 • at 320 V / rated value KW 13 • at 320 V / rated value KW 12 • at 320 V / rated value KW 12 • at 320 V / rated value KW 12 • at 320 V / rated value KW 12 • at 320 V / rated value KW 22 • at 400 V / rated value KW 5.5 • at 400 V / rated value KW 4 • at 690 V / rated value </td <td>• at 110 V / rated value</td> <td>А</td> <td>0.1</td>	• at 110 V / rated value	А	0.1
• at 110 V / rated value A 0.35 • at 24 V / rated value A 20 • at 24 V / rated value A 20 • at 20 V / rated value A 20 • at 20 V / rated value A 20 • at 20 V / rated value A 20 • at 200 V / rated value A 20 • at 800 V / rated value A 20 • at 200 V / rated value A 20 • at 200 V / rated value A 20 • at 200 V / rated value A 20 • at 200 V / rated value KW 7.5 • at 200 V / rated value KW 13 • at 200 V / rated value KW 22 • at 600 V / rated value KW 22 • at 600 V / rated value KW 22 • at 600 V / rated value KW 4 • at 800 V / rated value KW 4 • at 800 V / rated value KW 4 • at 800 V / rated value KW 4 • at 800 V / rated value KW 4 • at 800 V / rated value <t< td=""><td>• with 2 current paths in series / at DC-3 / at DC-5</td><td></td><td></td></t<>	• with 2 current paths in series / at DC-3 / at DC-5		
with 3 current paths in series / at DC-3 / at DC-5 A 20 • at 24 V / rated value A 20 • at 110 V / rated value A 20 • at 220 V / rated value A 0.2 • at 400 V / rated value A 0.2 • at 600 V / rated value A 0.2 • at 600 V / rated value KW 7.5 • at 230 V / rated value KW 7.5 • at 230 V / rated value KW 13 • at 230 V / rated value KW 13 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14 • at 200 V / rated value KW 14	• at 24 V / rated value	А	20
• at 24 V / rated value A 20 • at 110 V / rated value A 20 • at 220 V / rated value A 0.2 • at 400 V / rated value A 0.2 • at 600 V / rated value A 0.2 • at AC-1 - - • at AC-1 - - • at 230 V / rated value KW 7.5 • at 400 V / rated value KW 13 • at 600 V / rated value KW 17 • at 600 V / rated value KW 22 • at 600 V / rated value KW 22 • at 600 V / rated value KW 22 • at 230 V / rated value KW 22 • at 600 V / rated value KW 22 • at AC-3 - - • at 320 V / rated value KW 4 • at 600 V / rated value KW 4 • at 600 V / rated value KW 4 • at 600 V / rated value KW 4 • at 600 V / rated value KW 4 • at AC-4 / at 400 V / with rated operation V 4<	• at 110 V / rated value	А	0.35
+ at 110 V/ rated valueA20• at 220 V/ rated valueA1.5• at 440 V/ rated valueA0.2• at 600 V/ rated valueA0.2• at AC-1• at 230 V/ rated valueKW7.5• at 400 V/ rated valueKW13• at 500 V/ rated valueKW13• at 600 V/ rated valueKW22• at 230 V/ rated valueKW22• at 230 V/ rated valueKW4• at 230 V / rated valueKW5.5• at 400 V/ rated valueKW5.5• at 400 V/ rated valueKW4• at 600 V/ rated valueKW4• at 600 V/ rated valueKW4• at 600 V/ rated valueKW5.5• at 600 V/ rated valueKW4• at 600 V/ rated valueKW6.5• at 600 V/ rated valueKW4• at 600 V/ rated valueKW6.5• at 62-1 according to EC 60947-6-21.1h10.000• at 62-1 according to EC 60947-6-21.1h1.000• at 62-1 according to EC 60947-6-21.1h750 <trr>• at 62-3 according to EC 60947-6-2<td>• with 3 current paths in series / at DC-3 / at DC-5</td><td></td><td></td></trr>	• with 3 current paths in series / at DC-3 / at DC-5		
+ at 220 V/ rated value A 1.5 + at 440 V/ rated value A 0.2 • at 600 V/ rated value A 0.2 service power - - • at 230 V/ rated value KW 7.5 • at 400 V/ rated value KW 13 • at 500 V/ rated value KW 17 • at 600 V/ rated value KW 22 • at 600 V/ rated value KW 4 • at 230 V/ rated value KW 2.2 • at 230 V/ rated value KW 2.2 • at 230 V/ rated value KW 4 • at 200 V/ rated value KW 4 • at 400 V/ rated value KW 5.5 • at 400 V/ rated value KW 4 • at 600 V/ rated value W 0.7 • at 600 V/ rated value W 0.7 • at 600 V/ rated value W 0.000 • at 62 / according to IEC 60947-6-2 1/h 1,000 • at 62 / according to IEC 60947-6-2 1/h 760 • at 62 / according to IEC 60947-6-2 1/h 760 • at	• at 24 V / rated value	А	20
• at 440 V/rated value A 0.2 • at 600 V/rated value A 0.2 • at AC-1 - - • at 230 V/rated value KW 7.5 • at 400 V/rated value KW 13 • at 400 V/rated value KW 17 • at 600 V/rated value KW 22 • at 600 V/rated value KW 22 • at AC-2 / at 400 V/rated value KW 4 • at 230 V/rated value KW 2.2 • at AC-3 - - • at 230 V/rated value KW 4 • at 230 V/rated value KW 2.2 • at AC-3 / at 400 V/rated value KW 4 • at 400 V/rated value KW 4 • at 400 V/rated value KW 5.5 • at AC-4 / at 400 V/rated value KW 6.5 • at AC-4 / at 400 V/rated value KW 6.5 • at AC-4 / at 400 V/rated value KW 6.5 • at AC-4 / at 400 V/rated value KW 6.5 • at AC-4 / at 400 V/rated value KW 6.5 • at AC-4 / at 60	• at 110 V / rated value	А	20
A 600 V/ rated valueA0.2Service power	• at 220 V / rated value	А	1.5
Service power Image: service power • at AC-1 KW 7.5 • at 230 V / rated value KW 13 • at 400 V / rated value KW 13 • at 600 V / rated value KW 12 • at 600 V / rated value KW 22 • at 600 V / rated value KW 22 • at 600 V / rated value KW 4 • at 230 V / rated value KW 22 • at AC-3 KW 4 • at 230 V / rated value KW 2.2 • at 230 V / rated value KW 4 • at 230 V / rated value KW 4 • at 230 V / rated value KW 4 • at 600 V / rated value KW 4 • at 600 V / rated value KW 4 • at 600 V / rated value KW 4 • at 62-4 / at 400 V / rated value KW 4 • at 62-4 / at 400 V / with rated operational M 0.7 • at AC 1/A 10,000 • at AC 1/A	• at 440 V / rated value	А	0.2
• at 230 V/ rated value kW 7.5 • at 230 V/ rated value kW 13 • at 400 V/ rated value kW 17 • at 690 V/ rated value kW 22 • at 690 V/ rated value kW 4 • at 230 V/ rated value kW 4 • at 400 V/ rated value kW 4 • at 690 V/ rated value kW 4 • at 690 V/ rated value kW 4 • at 600 V/ rated value kW 4 • at 600 V/ rated value kW 4 • at 600 V/ rated value kW 10,000 • at AC 1/h 10,000 1 • at AC 1/h 10,000 1 • at AC-1 / according to IEC 60947-6-2 1/h 1,000 • at AC-2 / accord	• at 600 V / rated value	А	0.2
• at 230 V/ rated value KW 7.5 • at 400 V/ rated value KW 13 • at 500 V/ rated value KW 17 • at 690 V/ rated value KW 22 • at AC-2 / at 400 V/ rated value KW 4 • at 230 V/ rated value KW 4 • at 230 V/ rated value KW 4 • at 230 V/ rated value KW 22 • at 400 V/ rated value KW 4 • at 230 V/ rated value KW 4 • at 230 V/ rated value KW 4 • at 400 V/ rated value KW 4 • at 400 V/ rated value KW 4 • at 690 V/ rated value KW 4 • at 690 V/ rated value KW 4 • at AC-4 / at 400 V/ rated value KW 4 • at AC-4 / at 400 V/ rated value KW 4 • at AC-4 / at 400 V/ rated value KW 4 • at AC-4 / at 400 V/ rated value KW 10,000 • at AC 1/h 10,000 1 • at AC-1 / according to IEC 60947-6-2 1/h 1,000	Service power		
• at 400 V / rated valuekW13• at 500 V / rated valuekW17• at 690 V / rated valuekW22• at AC-2 / at 400 V / rated valuekW4• at AC-3• at 230 V / rated valuekW2.2• at 400 V / rated valuekW4• at 690 V / rated valuekW4• at 690 V / rated valuekW5.5• at 690 V / rated valuekW4• at 690 V / rated valuekW6.7• at 690 V / rated valuekW6.7• at AC-4 / at 400 V / rated valuekW6.7• at AC-4 / at 400 V / rated valuekW6.7• at AC-4 / at 400 V / rated valuekW6.7• at AC-4 / at 400 V / rated valuekW6.7• at AC-4 / at 400 V / rated valuekW6.7• at AC-4 / at 00 V / rated valuekW6.7• at AC1/h10,000• at AC1/h10,000• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-21/h250	• at AC-1		
• at 500 V / rated valuekW17• at 690 V / rated valuekW22• at AC-2 / at 400 V / rated valuekW4• at AC-3kW2.2• at 230 V / rated valuekW2.2• at 400 V / rated valuekW4• at 690 V / rated valuekW5.5• at AC-4 / at 400 V / rated valuekW6• at AC-4 / at 400 V / rated valuekW0.7• at AC-4 / at 400 V / rated valuef0.000• at AC-4 / at 400 V / rated value1/h10,000• at AC1/h10,000• at AC1/h10,000• at AC1/h10,000• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-21/h750• at	• at 230 V / rated value	kW	7.5
• at 690 V/ rated valuekW22• at AC-2 / at 400 V/ rated valuekW4• at AC-3kW2.2• at 230 V/ rated valuekW2.2• at 600 V/ rated valuekW4• at 600 V/ rated valuekW5.5• at 600 V/ rated valuekW4• at 600 V/ rated valuekW6.5• at 600 V/ rated valuekW0.7• at AC-4 / at 400 V/ rated valueW0.7• at AC-4 / at 400 V/ rated value1/h10,000• at AC1/h10,000• at AC1/h10,000• at AC1/h1,000• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-1 / according to IEC 60947-6-21/h750• at AC-2 / according to IEC 60947-6-21/h50• at AC-4 / according to IEC 60947-6-21/h50	• at 400 V / rated value	kW	13
+ at AC-2 / at 400 V / rated valueRW4+ at AC-3RW2.2- at 230 V / rated valueRW4- at 400 V / rated valueRW4- at 600 V / rated valueRW5.5- at AC-4 / at 400 V / rated valueRW4- at AC-4 / at 400 V / rated valueRW6.7- at AC-4 / at 400 V / rated valueRW6.7- at AC-4 / at 400 V / rated valueRW6.7- at AC-4 / at 400 V / with rated operational current value / per conductorW6.7Off-load operating frequency at AC1/h10,000- at AC1/h10,000- at AC-1 / according to IEC 60947-6-21/h1,000- at AC-2 / according to IEC 60947-6-21/h750- at AC-3 / according to IEC 60947-6-21/h550- at AC-4 / according to IEC 60947-6-21/h750- at AC-4 / according to IEC 60947-6-21/h750	• at 500 V / rated value	kW	17
• at AC-3Image: constraint of the second	• at 690 V / rated value	kW	22
• at 230 V / rated valuekW2.2• at 400 V / rated valuekW4• at 690 V / rated valuekW5.5• at AC-4 / at 400 V / rated valuekW4Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductorW0.7Off-load operating frequency• at AC1/h10,000• at AC1/h10,000• at AC1/h10,000• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-2 <t< td=""><td>• at AC-2 / at 400 V / rated value</td><td>kW</td><td>4</td></t<>	• at AC-2 / at 400 V / rated value	kW	4
• at 400 V / rated valuekW4• at 690 V / rated valuekW5.5• at AC-4 / at 400 V / rated valuekW4Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductorW0.7Off-load operating frequency	• at AC-3		
• at 690 V / rated valueKW5.5• at AC-4 / at 400 V / rated valueKW4Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductorW0.7Off-load operating frequencyV1/h10,000• at AC1/h10,0001/h10,000• at AC1/h10,0001/h10,000• at AC-1 / according to IEC 60947-6-21/h1,0001/h• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-21/h250	• at 230 V / rated value	kW	2.2
• at AC-4 / at 400 V / rated valueKW4Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductorW0.7Off-load operating frequency• at AC1 /h10,000• at DC1 /h10,000Frequency of operation1/h10,000• at AC-1 / according to IEC 60947-6-21 /h1,000• at AC-2 / according to IEC 60947-6-21 /h750• at AC-3 / according to IEC 60947-6-21 /h250	• at 400 V / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductorW0.7Off-load operating frequencyV• at AC1/h10,000• at DC1/h10,000Frequency of operationV• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-21/h250	• at 690 V / rated value	kW	5.5
current value / per conductorImage: conductorOff-load operating frequencyImage: conductor• at AC1/h10,000• at DC1/h10,000Frequency of operationImage: conductor• at AC-1 / according to IEC 60947-6-21/h1,000• at AC-2 / according to IEC 60947-6-21/h750• at AC-3 / according to IEC 60947-6-21/h750• at AC-4 / according to IEC 60947-6-21/h250	• at AC-4 / at 400 V / rated value	kW	4
• at AC 1/h 10,000 • at DC 1/h 10,000 Frequency of operation 1/h 10,000 • at AC-1 / according to IEC 60947-6-2 1/h 1000 • at AC-2 / according to IEC 60947-6-2 1/h 750 • at AC-3 / according to IEC 60947-6-2 1/h 250		W	0.7
• at DC 1/h 10,000 Frequency of operation - - • at AC-1 / according to IEC 60947-6-2 1/h 1,000 • at AC-2 / according to IEC 60947-6-2 1/h 750 • at AC-3 / according to IEC 60947-6-2 1/h 750 • at AC-4 / according to IEC 60947-6-2 1/h 250	Off-load operating frequency		
Frequency of operation Image: mail of the second seco	• at AC	1/h	10,000
• at AC-1 / according to IEC 60947-6-2 1/h 1,000 • at AC-2 / according to IEC 60947-6-2 1/h 750 • at AC-3 / according to IEC 60947-6-2 1/h 750 • at AC-4 / according to IEC 60947-6-2 1/h 250	• at DC	1/h	10,000
• at AC-2 / according to IEC 60947-6-2 1/h 750 • at AC-3 / according to IEC 60947-6-2 1/h 750 • at AC-4 / according to IEC 60947-6-2 1/h 250	Frequency of operation		
• at AC-3 / according to IEC 60947-6-2 1/h 750 • at AC-4 / according to IEC 60947-6-2 1/h 250	• at AC-1 / according to IEC 60947-6-2	1/h	1,000
• at AC-4 / according to IEC 60947-6-2 1/h 250	• at AC-2 / according to IEC 60947-6-2	1/h	750
	• at AC-3 / according to IEC 60947-6-2	1/h	750
Control circuit:	• at AC-4 / according to IEC 60947-6-2	1/h	250
	Control circuit:		

Type of voltage / of the controlled supply voltage		AC
Control supply voltage	_	
• at 50 Hz / at AC / rated value	V	110
• at 60 Hz / at AC / rated value	V	120
operating range factor control supply voltage rated value / of the magnet coil	_	
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	32
Apparent holding power / of the solenoid / for AC	V·A	4.8
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay	_	
• at AC	ms	9 35
Opening delay		
• at AC	ms	3.5 14
Arcing time	ms	10 15
Residual current / of electronics / for control with signal <0>	_	
• at 230 V / with AC / maximum permissible	mA	3
• at 24 V / with DC / maximum permissible	mA	10
Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V. 1 mA)

Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)		
Number of NC contacts / for auxiliary contacts / instantaneous switching	-	0		
Number of NO contacts / for auxiliary contacts / instantaneous switching		1		
Operating current / of the auxiliary contacts				
 [nicht versorgt: PMD_ABP551_001_000] 				
•	А	2		
• at 690 V	А	1		
UL/CSA ratings:				
yielded mechanical performance (hp)				
 for single-phase squirrel cage motors 				

• at 110/120 V / rated value	hp	0.33
• at 230 V / rated value	hp	1
 for three-phase squirrel cage motors 		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3

• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	А	7.6
• at 600 V / rated value	А	9
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
 for short-circuit protection of the auxiliary switch / required 		fuse gL/gG: 10 A
 for short-circuit protection of the main circuit 		
 with type of assignment 1 / required 		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
at type of coordination 2 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A
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
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Type of fixing/fixation / series installation		Yes
Width	mm	45
Height	mm	57.5
Depth	mm	73
Distance, to be maintained, to the ranks assembly / sidewards	mm	0
Connections:		
Design of the electrical connection		
for main current circuit		screw-type terminals
for auxiliary and control current circuit	_	screw-type terminals
Type of the connectable conductor cross-section		
for main contacts		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
finely stranded		
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG conductors / for main contacts		2x (20 16), 2x (18 14), 2x 12
for auxiliary contacts		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
finely stranded		
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

for AWG conduct rs / for

 for AWG conductor 	ors / for auxiliary cont	acts		2x (20 16), 2x (18 14), 2x 12			
Sicherheitsrelevar	nte Kenngrößen:						
B10 value / with high	n demand rate						
 according to SN 3 	31920			1,000,00	0		
T1 value / for proof t	est interval or servio	ce life					
according to IEC	61508		а	20			
Proportion of dange	rous failures						
 with low demand 	rate / according to SN	1 31920	%	40			
• with high demand	I rate / according to S	N 31920	%	73			
Failure rate (FIT valu	ie) / with low deman	d rate					
according to SN 3	31920		FIT	100			
Product function							
 mirror contact to I 	EC 60947-4-1			Yes			
• comment				with 3RH	129		
 positively driven of 	operation to IEC 6094	7-5-1		No			
Certificates/appro	vals						
General Product A					Functional Safety / Safety of Machinery	Declaration of Conformity	
	(SA	GOST			Type Examination	EG-Konf.	
Test Certificates							
Special Test Certificate							
Shipping Approval							
ABS	BUREAU VERITAS		GL GL		Llovďs Register Lrs	PRS	
Shipping Approval		other					
RINA	RMRS	<u>Confirmation</u>					
Further informatio	on:						
Information- and Downloadcenter (Catalogs, Brochures,) http://www.siemens.com/industrial-controls/catalogs							
Industry Mall (Online http://www.siemens.co	om/industrial-controls	/mall					
Cax online generator							

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT2016-1AK61/all

3.

2T1

3RT20

2

4

4T2

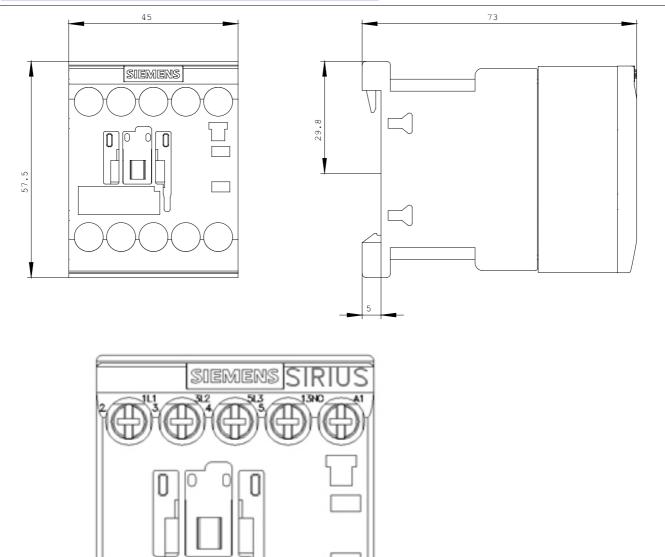
5

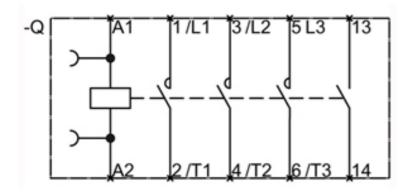
613

1410

A2

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2016-1AK61





last change:

Feb 15, 2013