SIEMENS

Product data sheet 3RT1023-1AK60

CONTACTOR, AC-3 4 KW/400 V, AC 110 V 50 HZ / 120 V 60 HZ 3-POLE, SIZE S0, SCREW CONNECTION

General details:		
product brand name		SIRIUS
product designation		power contactor
Size of the contactor		S0
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature / during operating	°C	-25 +60
Active power loss / per conductor / typical	W	0.4
Item designation		
according to DIN EN 61346-2		Q
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		К
Mechanical operating cycles as operating time		
of the contactor / typical		10,000,000
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:		
Main Circuit.		
Number of poles / for main current circuit		3
		3 0
Number of poles / for main current circuit		
Number of poles / for main current circuit Number of NC contacts / for main contacts	- - A	0
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient	A A	0 3
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient		0 3 40
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value		0 3 40
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value Operating current	А	0 3 40 35
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value Operating current • at AC-3 / at 400 V / rated value	А	0 3 40 35
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value Operating current • at AC-3 / at 400 V / rated value • with 1 current path	А	0 3 40 35
Number of poles / for main current circuit Number of NC contacts / for main contacts Number of NO contacts / for main contacts Operating current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value Operating current • at AC-3 / at 400 V / rated value • with 1 current path • at DC-1	A	0 3 40 35

• at 110 V / rated value • with 2 current paths in series • at DC-1 • at 24 V / rated value • at 110 V / rated value • at 24 V / rated value • at DC-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value • at 24 V / rated value • at 35 • at 24 V / rated value • at 110 V / rated value • at 110 V / rated value • at A 35 • at AC-3 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • kW 4.5 • at 690 V / rated value • kW 5.5	• at 24 V / rated value	Α	20
• at DC-1 • at 24 V / rated value • at 110 V / rated value • at DC-3 / at DC-5 • at 24 V / rated value A 35 • at 110 V / rated value A 15 • with 3 current paths in series • at DC-1 • at 24 V / rated value A 35 • at 110 V / rated value A 35 • at 110 V / rated value A 35 • at 110 V / rated value A 35 • at 24 V / rated value A 35 • at 24 V / rated value A 35 • at 24 V / rated value A 35 • at 24 V / rated value A 35 • at 24 V / rated value A 35 • at AC-3 / at DC-5 • at 24 V / rated value A 35 Service power • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at AC-3 • at 400 V / rated value • at S00 V / rated value	• at 110 V / rated value	Α	2.5
 at 24 V / rated value at 110 V / rated value at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value with 3 current paths in series at DC-1 at 24 V / rated value at 110 V / rated value at 35 at DC-3 / at DC-5 at 24 V / rated value at 35 at DC-3 / at DC-5 at 24 V / rated value at 35 at 110 V / rated value at 35 at AC-1 / at 400 V / rated value at AC-2 / at 400 V / rated value at 400 V / rated value kW 4 at 400 V / rated value kW 4 at 400 V / rated value kW 4 4.5 	• with 2 current paths in series		
 at 110 V / rated value at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value with 3 current paths in series at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 35 at 110 V / rated value at 36 service power at AC-1 / at 400 V / rated value at AC-3 at 400 V / rated value kW at 400 V / rated value kW 4.5 	• at DC-1		
 at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value with 3 current paths in series at DC-1 at 24 V / rated value at 110 V / rated value at DC-3 / at DC-5 at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 35 at 110 V / rated value A 35 at AC-1 / at 400 V / rated value at AC-2 / at 400 V / rated value at AC-3 at 400 V / rated value kW 4 at 500 V / rated value kW 4 4.5 	• at 24 V / rated value	Α	35
 at 24 V / rated value at 110 V / rated value with 3 current paths in series at DC-1 at 24 V / rated value at 110 V / rated value at 110 V / rated value at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value at 110 V / rated value at A 35 at 110 V / rated value at A 35 at 110 V / rated value at 35 at 110 V / rated value at 36 at 110 V / rated value at 36 at 110 V / rated value at 400 V / rated value at 400 V / rated value at 400 V / rated value at 500 V / rated value kW 4 at 500 V / rated value kW 4.5 	• at 110 V / rated value	Α	35
• at 110 V / rated value • with 3 current paths in series • at DC-1 • at 24 V / rated value • at 110 V / rated value • at 24 V / rated value • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value • kW • 4	• at DC-3 / at DC-5		
with 3 current paths in series • at DC-1 • at 24 V / rated value • at 110 V / rated value • at DC-3 / at DC-5 • at 24 V / rated value • at 24 V / rated value • at 110 V / rated value • at 35 Service power • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value	at 24 V / rated value	Α	35
• at DC-1 • at 24 V / rated value • at 110 V / rated value • at DC-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value • at 110 V / rated value • at AC-1 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value kW 4.5	at 110 V / rated value	Α	15
 at 24 V / rated value at 110 V / rated value at DC-3 / at DC-5 at 24 V / rated value at 24 V / rated value at 110 V / rated value at 110 V / rated value at AC-1 / at 400 V / rated value at AC-2 / at 400 V / rated value at AC-3 at 400 V / rated value at 500 V / rated value kW 45 	 with 3 current paths in series 		
• at 110 V / rated value • at DC-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value A 35 Service power • at AC-1 / at 400 V / rated value • at AC-3 • at 400 V / rated value kW 4 • at 500 V / rated value kW 4.5	• at DC-1		
• at DC-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value A 35 Service power • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value kW 4 • at 500 V / rated value kW 4.5	at 24 V / rated value	Α	35
 at 24 V / rated value at 110 V / rated value A 35 Service power at AC-1 / at 400 V / rated value at AC-2 / at 400 V / rated value at AC-3 at 400 V / rated value at 500 V / rated value kW 4 4.5 	at 110 V / rated value	Α	35
• at 110 V / rated value Service power • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value kW 4 • the service power kW 4 • the service p	• at DC-3 / at DC-5		
Service power kW 23 • at AC-1 / at 400 V / rated value kW 4 • at AC-3 kW 4 • at 400 V / rated value kW 4 • at 500 V / rated value kW 4.5	at 24 V / rated value	Α	35
 at AC-1 / at 400 V / rated value at AC-2 / at 400 V / rated value at AC-3 at 400 V / rated value at 500 V / rated value kW 4 4.5 	• at 110 V / rated value	Α	35
 at AC-2 / at 400 V / rated value at AC-3 at 400 V / rated value at 500 V / rated value kW 4 4.5 	Service power		
• at AC-3 • at 400 V / rated value	• at AC-1 / at 400 V / rated value	kW	23
 at 400 V / rated value at 500 V / rated value kW 4.5 	• at AC-2 / at 400 V / rated value	kW	4
• at 500 V / rated value kW 4.5	• at AC-3		
	• at 400 V / rated value	kW	4
• at 690 V / rated value kW 5.5	• at 500 V / rated value	kW	4.5
	• at 690 V / rated value	kW	5.5

Control circuit:		
Design of activation		conventional
Type of voltage / of the controlled supply voltage		AC
Control supply voltage frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Control supply voltage / 1		
• at 50 Hz / for AC		
• rated value	V	110
• at 60 Hz / for AC		
• rated value	V	120

Auxiliary circuit:	
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
lagging switching	0

Number of NO contacts / for auxiliary contacts		
• instantaneous switching		0
leading switching		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	6
• at 400 V	Α	3
• at DC-12		
• at 60 V	Α	6
• at 110 V	Α	3
• at 220 V	А	1
• at DC-13		
• at 24 V	А	10
• at 60 V	А	2
• at 110 V	А	1
• at 220 V	А	0.3

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 	fuse gL/gG: 63 A	
 at type of coordination 2 / required 	fuse at /aG: 25 A	

Installation/mounting/dimensions:		
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
series installation		Yes
Width	mm	45
Height	mm	85
Depth	mm	91
Distance, to be maintained, to earthed part / sidewards	mm	6

Connection type:	
Design of the electrical connection	
for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery





KETI

ROSTEST



SUVA

Test Certificates

Manufacturer

Shipping Approval









GL





other

Manufacturer other

Further information:

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator

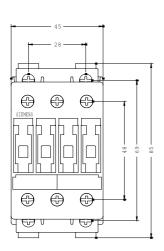
http://www.siemens.com/cax

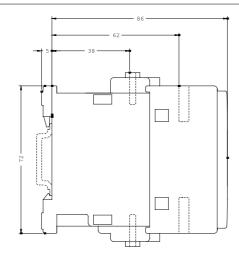
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

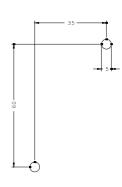
http://support.automation.siemens.com/WW/view/en/3RT1023-1AK60/all

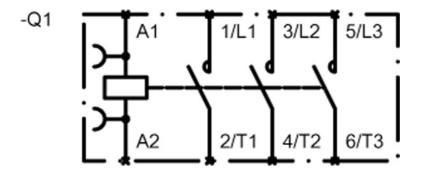
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1023-1AK60}}$









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