SIEMENS

Product data sheet 3RT1024-1AK60

CONTACTOR, AC-3 5,5KW/400 V, AC 110V 50HZ/120V 60HZ, 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	0.5
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
		F 000 000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000
		5,000,000
switch block / typical		3
switch block / typical Main circuit:		
switch block / typical Main circuit: Number of poles / for main current circuit		3
Switch block / typical Main circuit: Number of poles / for main current circuit Number of NC contacts / for main contacts	A	3
switch block / typical Main circuit: 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	3 0 3
Main circuit: 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		3 0 3 40
Main circuit: 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		3 0 3 40
Main circuit: 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	A	3 0 3 40 35
Main circuit: 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	A	3 0 3 40 35
Main circuit: 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	A	3 0 3 40 35
Main circuit: 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	3 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 110 V / rated value • at 24 V / rated value • at 24 V / rated value • at 24 V / rated value • at 110 V / rated value • at 24 V / rated value • at 35 • at 10 C-3 / at DC-5 • at 24 V / rated value • at 110 V / rated value • at 35 • at C-3 / at 24 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 690 V / rated value	• at 24 V / rated value	Α	20
• 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 • 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 DC-3 / at DC-5 • at 24 V / rated value • at AC-3 / at DC-5 • 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 AC-3 • at 400 V / rated value • at 500 V / rated value • kW 5.5 • at 400 V / rated value • kW 7.5	• 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 AC 110 V / rated value at 35 at 110 V / rated value at 35 at 400 V / rated value kW 23 at 400 V / rated value kW 5.5 at 400 V / rated value kW 5.5 at 400 V / rated value kW 5.5 at 400 V / rated value kW 7.5 	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 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 110 V / rated value 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 500 V / rated value kW 5.5 at 500 V / rated value kW 7.5 	• at DC-1		
• 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 24 V / rated value • at DC-3 / at DC-5 • at 24 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 400 V / rated value • at 500 V / rated value • kW 5.5 • at 500 V / rated value kW 7.5	• 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 24 V / rated value • at 24 V / rated value • at 110 V / rated value • at 24 V / rated value • at 35 Service power • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at 400 V / rated value • at 400 V / rated value • at 55 • at 400 V / rated value • at 500 V / rated value • www 5.5	• 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 DC-3 / at DC-5 at 24 V / rated value at 24 V / rated value at 35 at 110 V / rated value A 35 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 5.5 at 500 V / rated value kW 7.5 	• 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 110 V / rated value A 35 • 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 5.5 • at 500 V / rated value kW 7.5	• 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 7.5	• 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 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 	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 • 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 5.5 • at 500 V / rated value kW 7.5	• 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 5.5 • at 500 V / rated value kW 7.5	• 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 kW 5.5 • at 500 V / rated value kW 7.5	• 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 kW 5.5 • at 500 V / rated value kW 7.5	• at DC-3 / at DC-5		
Service power kW 23 • at AC-1 / at 400 V / rated value kW 5.5 • at AC-3 kW 5.5 • at 400 V / rated value kW 5.5 • at 500 V / rated value kW 7.5	• at 24 V / rated value	Α	35
• at AC-1 / at 400 V / rated value	• at 110 V / rated value	Α	35
• at AC-2 / at 400 V / rated value	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 7.5 	• at AC-2 / at 400 V / rated value	kW	5.5
• at 500 V / rated value kW 7.5	• at AC-3		
	• at 400 V / rated value	kW	5.5
• at 690 V / rated value kW 7.5	• at 500 V / rated value	kW	7.5
	• at 690 V / rated value	kW	7.5

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	А	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	screv	v-type terminals	
• for auxiliary and control current circuit	screv	v-type terminals	

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery





KETI

ROSTEST



SUVA

Test Certificates

Manufacturer

Shipping Approval









GL





Shipping Approval

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

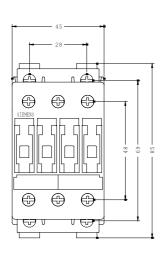
http://www.siemens.com/cax

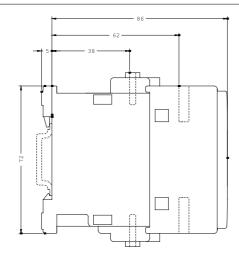
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

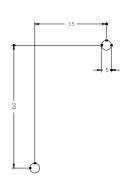
http://support.automation.siemens.com/WW/view/en/3RT1024-1AK60/all

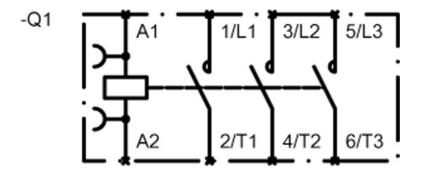
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1024-1AK60









last change: Feb 10, 2012