# **SIEMENS**

Product data sheet 3RT1016-1AK22



CONTACT. 3-PH., 4KW/400V, 1NC, 120 V AC 50/60 HZ, 3-POLE, SIZE S00, SCREW CONNECTION

General details:		
Product brand name		SIRIUS
Product designation		power contactor
Size of the contactor		S00
Protection class IP / frontal/front side		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2000
Ambient temperature / during the operating phase	°C	-25 60
Real loss power / per conductor / typical	W	0.7
Item designation		
according to DIN EN 61346-2		Q
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		К
Mechanical operating cycles as operating time		
of the contactor / typical		30000000
of the contactor with added auxiliary switch block / typical		10000000
<ul> <li>of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		5000000

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 current / at AC-1 / at 400 V / at 40 °C ambient temperature / rated value	А	22
Operating current / at AC-1 / at 400 V / at 60 °C ambient temperature / rated value	A	20
Operating current		
• at AC-3 / at 400 V / rated value	Α	9
with 1 current path		
• at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.1
• at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.15
• with 2 current paths in series		
• at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	12
• at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	0.35
• with 3 current paths in series		
• at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20
• at DC-3 / at DC-5		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	20
Service power		
• at AC-1 / at 400 V / rated value	kW	13
• at AC-2 / at 400 V / rated value	kW	4
• at AC-3		
• at 400 V / rated value	kW	4
• at 500 V / rated value	kW	4.5
• at 690 V / rated value	kW	5.5

Control circuit:		
Design of activation of the operating mechanism		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	120
• 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		1	
• lagging switching		0	
Number of NO contacts / for auxiliary contact			
• 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	Α	1	
• at DC-13			
• at 24 V	Α	10	
• at 60 V	Α	2	
• at 110 V	Α	1	
• at 220 V	Α	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			
<ul> <li>at type of coordination 1 / required</li> </ul>	fuse gL/gG: 35 A		
• at type of coordination 2 / required	fuse gL/gG: 20 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	57.5
Depth	mm	72
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	
Identification number and letter for switching elements		01 E	

### Certificates/approvals:

General Product Approval Test Certificates



**KETI** 

**ROSTEST** 



Manufacturer

#### **Shipping Approval**

ABS









PRS

#### **Shipping Approval**

other







other

## **Further information:**

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

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

Industry Mall (Online ordering system)

 $\underline{\text{http://www.siemens.com/industrial-controls/mall}}$ 

#### **CAx-Online-Generator**

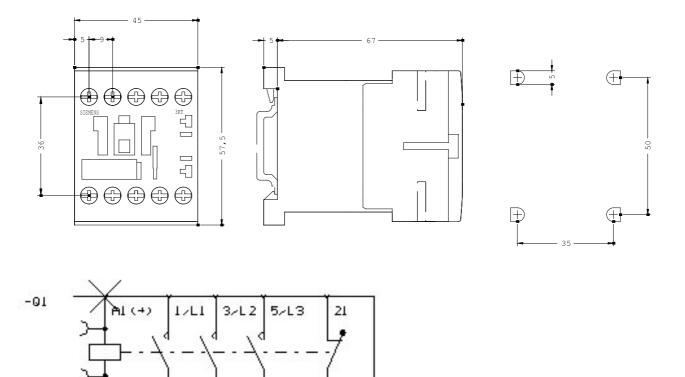
http://www.siemens.com/cax

 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$ 

http://support.automation.siemens.com/WW/view/en/3RT1016-1AK22/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT1016-1AK22



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last change: Sep 20, 2010

1/T2

6/T3

2/11

A2 (-)

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