## SIEMENS

## **Product data sheet**

## 3RT1046-1AH24



CONTACTOR, AC-3 45 KW/400 V, AC 48 V, 50 HZ, 2 NO + 2 NC 3-POLE, SIZE S3, SCREW CONNECTION

General technical data:				
product brand name		SIRIUS		
Size of the contactor		\$3		
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		
Mechanical operating cycles as operating time				
of the contactor / typical		10,000,000		
<ul> <li>of the contactor with added auxiliary switch block / typical</li> </ul>		10,000,000		
<ul> <li>of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		5,000,000		
Main circuit:				
Number of NC contacts / for main contacts	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	120		
• at AC-3 / at 400 V / rated value	А	95		
• at AC-4 / at 400 V / rated value	А	80		

<ul> <li>with 1 current path / at DC-1</li> <li>at 24 V / rated value</li> <li>at 110 V / rated value</li> </ul>	A A	100 9
• at 110 V / rated value	А	0
		3
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	А	100
• at 110 V / rated value	А	100
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	А	100
• at 110 V / rated value	А	100
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	А	40
• at 110 V / rated value	А	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	100
• at 110 V / rated value	А	100
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	А	100
• at 110 V / rated value	А	100
Service power		
• at AC-2 / at 400 V / rated value	kW	45
• at AC-3 / at 400 V / rated value	kW	45
• at AC-4 / at 400 V / rated value	W	45,000
Control circuit:		

Voltage type / of control feed voltage		AC
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		0.8 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	298
Apparent holding power / of the solenoid / for AC	V·A	27
Inductive power factor / with the pull-in power of the coil		0.7
Inductive power factor / with the pull-in power of the coil		0.29
Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)

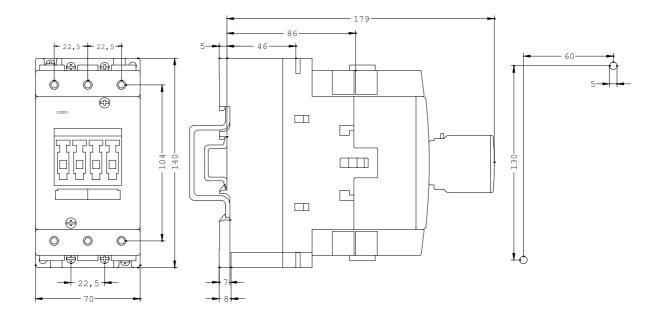
Contact reliability / of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching	2
Number of NO contacts / for auxiliary contacts / instantaneous switching	2

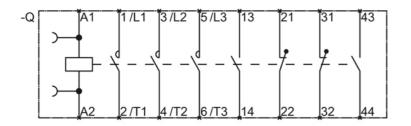
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>		fuse gL/gG: 10 A
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
<ul> <li>with type of assignment 1 / required</li> </ul>		fuse gL/gG: 250 A
at type of coordination 2 / required		fuse gL/gG: 160 A
Installation/mounting/dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail
series installation		Yes
Width	mm	70
Height	mm	146
Depth	mm	188
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
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (2.5 16 mm²)
• stranded		2x (10 50 mm²)
finely stranded		
with conductor end processing		2x (2.5 35 mm²)
<ul> <li>without conductor final cutting</li> </ul>		2x (10 35 mm²)
for AWG conductors / for main contacts		2x (10 1/0)
for auxiliary contacts		
• solid		2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ), max. 2x (0.75 4 mm <sup>2</sup> )
finely stranded		
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14), 1x 12

Certificates/approvals:

General Product Ap	pproval			Functional Safety / Safety of Machinery	Declaration of Conformity
	(SA) CSA	EHC		Type Examination	EG-Konf.
Test Certificates	Shipping Appro	val			
Special Test Certificate	ABS	GL	Lloyd's Register Lrs	RINA	RMRS
other					
Confirmation	other	Environmental Confirmations			
Further informatio	n:				
Information- and Dov http://www.siemens.co					
Industry Mall (Online http://www.siemens.co					
Cax online generator http://www.siemens.co					
		s, Characteristics, FAQs, W/view/en/3RT1046-1AH2	•		
Image database (pro	duct images, 2D di	imension drawings, 3D m	odels, device circu	iit diagrams,)	

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT1046-1AH24





last change:

Jul 28, 2014