## SIEMENS

## **Product data sheet**

## 3RT1045-1AP04-3MA0



CONTACTOR, AC-3, 37KW/400V, 230V AC, 50HZ, 2NO+2NC, 3-POLE, SIZE S3, SCREW TERMINAL AUXIL. SWITCH BLOCK FRONT S. PERMANENT. JOINTED FOR SUVA APPLICATIONS

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S3	
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	
of the contactor with added auxiliary switch block / typical		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		0	
Number of NO contacts / for main contacts		3	
Operational current			
• at AC-1 / at 400 V			
• at 40 °C ambient temperature / rated value	А	120	
• at 60 °C ambient temperature / rated value	А	100	
• at AC-3 / at 400 V / rated value	А	80	

• at AC-4 / at 400 V / rated valueA66• with 1 current path / at DC-1A100• at 24 V / rated valueA9• with 2 current paths in series / at DC-1-• at 24 V / rated valueA100• at 10 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• with 3 current paths in series / at DC-1-• at 24 V / rated valueA100• with 1 current path / at DC-3 / at DC-5-• at 24 V / rated valueA40• at 110 V / rated valueA2.5• with 2 current paths in series / at DC-3 / at DC-5-• at 24 V / rated valueA100• with 2 current paths in series / at DC-3 / at DC-5-• at 24 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5-• at 24 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5-• at 24 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5-• at 24 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5-• at AC-2 / at 400 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5-• at AC-2 / at 400 V / rated valueA100• at AC-2 / at 400 V / rated valueKW37• at AC-3 / at			
• at 24 V / rated value       A       100         • at 110 V / rated value       A       9         • with 2 current paths in series / at DC-1       -       -         • at 24 V / rated value       A       100         • at 110 V / rated value       A       100         • at 110 V / rated value       A       100         • at 110 V / rated value       A       100         • with 3 current paths in series / at DC-1       -       -         • at 24 V / rated value       A       100         • at 110 V / rated value       A       100         • at 110 V / rated value       A       100         • with 1 current path / at DC-3 / at DC-5       -       -         • at 24 V / rated value       A       40         • at 110 V / rated value       A       100         • with 2 current paths in series / at DC-3 / at DC-5       -       -         • at 24 V / rated value       A       100       -         • at 110 V / rated value       A       100       -         • with 3 current paths in series / at DC-3 / at DC-5       -       -         • at 24 V / rated value       A       100       -         • at 110 V / rated value       A       100	• at AC-4 / at 400 V / rated value	А	66
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<ul> <li>at 110 V / rated value</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-1</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>with 1 current path / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 40</li> <li>at 110 V / rated value</li> <li>A 2.5</li> <li>with 2 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> </ul>	• with 2 current paths in series / at DC-1		
<ul> <li>with 3 current paths in series / at DC-1</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>with 1 current path / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 40</li> <li>at 110 V / rated value</li> <li>A 2.5</li> <li>with 2 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 40</li> <li>at 24 V / rated value</li> <li>A 40</li> <li>at 110 V / rated value</li> <li>A 40</li> <li>at 24 V / rated value</li> <li>A 40</li> <li>at 24 V / rated value</li> <li>A 40</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>at AC-2 / at 400 V / rated value</li> <li>kW 37</li> <li>at AC-3 / at 400 V / rated value</li> <li>kW 37</li> </ul>	• at 24 V / rated value	А	100
• at 24 V / rated valueA100• at 110 V / rated valueA100• with 1 current path / at DC-3 / at DC-5A40• at 24 V / rated valueA2.5• at 110 V / rated valueA100• at 110 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 110 V / rated valueA100• at 110 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 110 V / rated valueA100• at AC-2 / at 400 V / rated valueKW37• at AC-3 / at 400 V / rated valueKW37• at AC-3 / at 400 V / rated valueKW37	• at 110 V / rated value	А	100
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<ul> <li>with 1 current path / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>at 110 V / rated value</li> <li>A 40</li> <li>A 2.5</li> <li>with 2 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at AC-2 / at 400 V / rated value</li> <li>KW 37</li> <li>at AC-3 / at 400 V / rated value</li> </ul>	at 24 V / rated value	А	100
• at 24 V/ rated valueA40• at 110 V/ rated valueA2.5• with 2 current paths in series / at DC-3 / at DC-5A100• at 24 V/ rated valueA100• at 110 V/ rated valueA100• with 3 current paths in series / at DC-3 / at DC-5A100• with 3 current paths in series / at DC-3 / at DC-5A100• at 24 V/ rated valueA100• at 24 V/ rated valueA100• at 10 V/ rated valueA100• at AC-2 / at 400 V/ rated valueKW37• at AC-3 / at 400 V/ rated valueKW37	• at 110 V / rated value	А	100
• at 110 V / rated valueA2.5• with 2 current paths in series / at DC-3 / at DC-5A100• at 24 V / rated valueA100• at 110 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5A100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at AC -2 / at 400 V / rated valueA100• at AC-2 / at 400 V / rated valueKW37• at AC-3 / at 400 V / rated valueKW37	• with 1 current path / at DC-3 / at DC-5		
<ul> <li>with 2 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>at 110 V / rated value</li> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 24 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>at 110 V / rated value</li> <li>A 100</li> <li>at AC-2 / at 400 V / rated value</li> <li>kW 37</li> <li>at AC-3 / at 400 V / rated value</li> <li>kW 37</li> </ul>	at 24 V / rated value	А	40
• at 24 V / rated valueA100• at 110 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5• at 24 V / rated valueA100• at 110 V / rated valueA100• at 110 V / rated valueA100Service power• at AC-2 / at 400 V / rated valueKW37• at AC-3 / at 400 V / rated valueKW37	• at 110 V / rated value	А	2.5
• at 110 V / rated valueA100• with 3 current paths in series / at DC-3 / at DC-5A100• at 24 V / rated valueA100• at 110 V / rated valueA100• at 110 V / rated valueA100• at AC-2 / at 400 V / rated valueKW37• at AC-3 / at 400 V / rated valueKW37	• with 2 current paths in series / at DC-3 / at DC-5		
<ul> <li>with 3 current paths in series / at DC-3 / at DC-5</li> <li>at 24 V / rated value</li> <li>at 110 V / rated value</li> <li>A 100</li> <l< td=""><td>at 24 V / rated value</td><td>А</td><td>100</td></l<></ul>	at 24 V / rated value	А	100
• at 24 V / rated valueA100• at 110 V / rated valueA100Service powerKW37• at AC-2 / at 400 V / rated valuekW37• at AC-3 / at 400 V / rated valuekW37	• at 110 V / rated value	А	100
• at 110 V / rated valueA100Service powerKW37• at AC-2 / at 400 V / rated valuekW37• at AC-3 / at 400 V / rated valuekW37	• with 3 current paths in series / at DC-3 / at DC-5		
Service power     kW     37       • at AC-2 / at 400 V / rated value     kW     37       • at AC-3 / at 400 V / rated value     kW     37	• at 24 V / rated value	А	100
• at AC-2 / at 400 V / rated valuekW37• at AC-3 / at 400 V / rated valuekW37	• at 110 V / rated value	А	100
• at AC-3 / at 400 V / rated value kW 37	Service power		
	• at AC-2 / at 400 V / rated value	kW	37
• at AC-4 / at 400 V / rated value W 37,000	• at AC-3 / at 400 V / rated value	kW	37
	• at AC-4 / at 400 V / rated value	W	37,000

Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz		
• for AC		0.8 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	270
Apparent holding power / of the solenoid / for AC	V·A	22
Inductive power factor / with the pull-in power of the coil		0.68
Inductive power factor / with the pull-in power of the coil		0.27
Auxiliary circuit:		

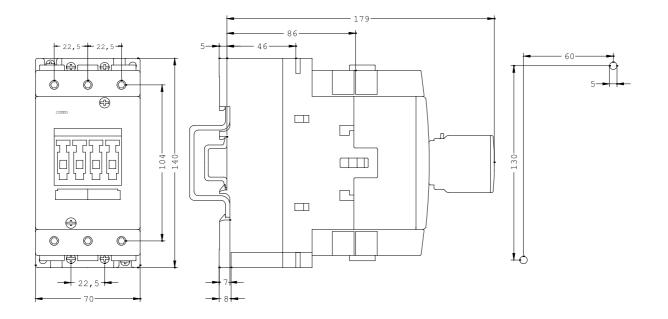
Contact reliability / of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching	2
Number of NO contacts / for auxiliary contacts / instantaneous switching	2

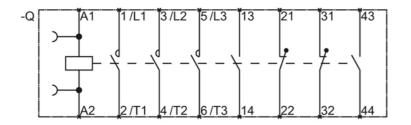
Design of the fuse link		
for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 10 A
for short-circuit protection of the main circuit		
with type of assignment 1 / required		fuse gL/gG: 250 A
at type of coordination 2 / required		fuse gL/gG: 160 A
Installation/mounting/dimensions:		
Type of mounting		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
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of the connectable conductor cross-section		
for main contacts		
• solid		2x (2.5 16 mm²)
• stranded		2x (4 50 mm²)
finely stranded		
with conductor end processing		2x (2.5 35 mm²)
<ul> <li>without conductor final cutting</li> </ul>		2x (4 35 mm²)
for AWG conductors / for main contacts		2x (10 1/0)
for auxiliary contacts		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
finely stranded		
<ul> <li>with conductor end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

Certificates/approvals:

General Product	Approval				Functional Safety / Safety of Machinery
	(SA)	GOST	KETI		Type Examination
Declaration of Conformity	Test Certificates	3			
EG-Konf.	Special Test Certificate				
Shipping Approva	al				
ABS	B U R E A U V E R I TA S	GL	Lloyd's Register Lrs	RINA	RMRS
other					
<u>Confirmation</u>	other	Environmental Confirmations			
Further informati	ion:				
	ownloadcenter (Cata com/industrial-controls				
	ne ordering system) com/industrial-control	s/mall			
Cax online generat					
		<b>, Characteristics, FAQs</b> W/view/en/3RT1045-1AP			
	-	mension drawings, 3D r		t diagrams,)	

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT1045-1AP04-3MA0





last change:

Feb 15, 2013