SIEMENS

Product data sheet

3RT1045-1AP00-1AA0



CONTACTOR, AC-3 37 KW/400 V, AC 230 V, 50 HZ, 3-POLE, SIZE S3, SCREW CONNECTION MOUNTING POSITION VERTICAL

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
 of the contactor with added electronics-compatible auxiliary switch block / typical 		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
• at 110 V / rated valueA9• with 2 current paths in series / at DC-1A100• at 24 V / rated valueA100• at 110 V / rated valueA100• with 3 current paths in series / at DC-1A100• at 24 V / rated valueA100• at 110 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 24 V / rated valueA2.5• 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• 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 24 V / rated valueA100• at 11	• with 1 current path / at DC-1		
• with 2 current paths in series / at DC-1A100• at 24 V / rated valueA100• at 110 V / rated valueA100• with 3 current paths in series / at DC-1A100• at 24 V / rated valueA100• at 24 V / rated valueA100• at 110 V / rated valueA100• with 1 current path / at DC-3 / at DC-5• at 24 V / rated valueA40• at 110 V / rated valueA2.5• 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-• with 3 current paths in series / at DC-3 / at DC-5-• with 3 current paths in series / at DC-3 / at DC-5-• at 110 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• 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	• at 24 V / rated value	А	100
• at 24 V/ rated valueA100• at 110 V/ rated valueA100• with 3 current paths in series / at DC-1• at 24 V/ rated valueA100• at 110 V/ rated valueA100• at 110 V/ rated valueA100• with 1 current path / at DC-3 / at DC-5• at 24 V/ rated valueA40• at 110 V/ rated valueA2.5• at 110 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 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 110 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	• at 110 V / rated value	А	9
 at 110 V / rated value 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 with 1 current path / at DC-3 / at DC-5 at 24 V / rated value A 40 at 110 V / rated value A 2.5 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 at 110 V / rated value A 100 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 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 	• with 2 current paths in series / at DC-1		
 with 3 current paths in series / at DC-1 at 24 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 2.5 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 40 at 24 V / rated value A 40 at 110 V / rated value A 40 at 24 V / rated value A 40 at 24 V / rated value A 40 at 24 V / rated value A 100 at 110 V / rated value A 100 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 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
• at 110 V / rated valueA100• with 1 current path / at DC-3 / at DC-5A40• at 24 V / rated valueA2.5• with 2 current paths in series / at DC-3 / at DC-5A100• with 2 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• 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 3 current paths in series / at DC-1		
 with 1 current path / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value A 40 A 2.5 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 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 with 3 current paths in series / at DC-3 / at DC-5 at AC-2 / at 400 V / rated value KW 37 at AC-3 / at 400 V / rated value 	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		
 with 2 current paths in series / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value A 100 at 24 V / rated value A 100 at 110 V / rated value A 100 at 110 V / rated value A 100 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	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		
 with 3 current paths in series / at DC-3 / at DC-5 at 24 V / rated value at 110 V / rated value A 100 <l< td=""><td>at 24 V / rated value</td><td>А</td><td>100</td></l<>	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:		

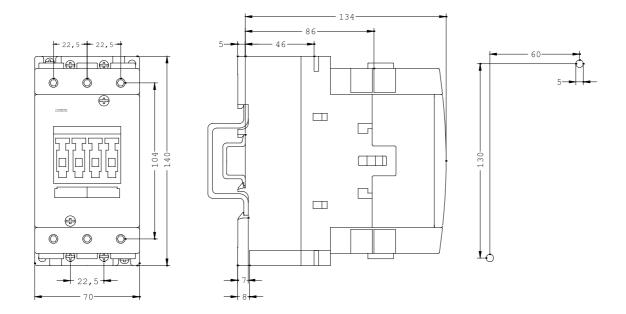
Contact reliability / of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching	0
Number of NO contacts / for auxiliary contacts / instantaneous switching	0

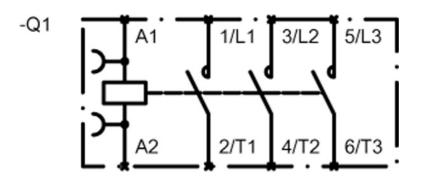
Short-circuit:		
Design of the fuse link		
 for short-circuit protection of the auxiliary switch / required 		fuse gL/gG: 10 A
 for short-circuit protection of the main circuit 		
 with type of assignment 1 / required 		fuse gL/gG: 250 A
at type of coordination 2 / required		fuse gL/gG: 160 A
Installation/mounting/dimensions:		
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	139
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 (4 50 mm²)
finely stranded		
with conductor end processing		2x (2.5 35 mm²)
 without conductor final cutting 		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		
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

Certificates/approvals:

General Product	Approval				Functional Safety / Safety of Machinery
	CSA	GOST			Type Examination
Declaration of Conformity	Test Certificates	3			
EG-Konf.	Special Test Certificate				
Shipping Approva	al				
ABS	BUREAU VERITAS	GL	Lloyd's Register Irs	RINA	RMRS
other					
<u>Confirmation</u>	other	Environmental Confirmations			
Further informat	ion:				
	ownloadcenter (Cata .com/industrial-control				
	ne ordering system) .com/industrial-control	s/mall			
Cax online generat					
		, Characteristics, FAQs W/view/en/3RT1045-1AP			
	-	mension drawings, 3D r		t diagrams,)	

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1045-1AP00-1AA0





last change:

Feb 15, 2013