# **SIEMENS**

Product data sheet 3RT1045-1BB40



CONTACTOR, AC-3 37 KW/400 V, DC 24 V, 3-POLE, SIZE S3, SCREW CONNECTION

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
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	Α	120
• at 60 °C ambient temperature / rated value	Α	100
• at AC-3 / at 400 V / rated value	Α	80

• at AC-4 / at 400 V / rated value	Α	66
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	100
• at 110 V / rated value	Α	9
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	100
• at 110 V / rated value	Α	100
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	Α	100
• at 110 V / rated value	Α	100
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	Α	40
• at 110 V / rated value	Α	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	Α	100
• at 110 V / rated value	Α	100
<ul> <li>with 3 current paths in series / at DC-3 / at DC-5</li> </ul>		
• at 24 V / rated value	Α	100
• at 110 V / rated value	Α	100
Service power		
• at AC-2 / at 400 V / rated value	kW	37
• at AC-3 / at 400 V / rated value	kW	37
• at AC-4 / at 400 V / rated value	W	37,000
Active power loss / per conductor / typical	W	7.7

Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC		
• rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.8 1.1
Pull-in power / of the solenoid / for DC	W	15
Holding power / of the solenoid / for DC	W	15

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

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>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:		
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	152
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		
<ul> <li>with conductor end processing</li> </ul>	2x (2.5 35 mm²)	

• without conductor final cutting

• for AWG conductors / for main contacts

• for auxiliary contacts

solid

• finely stranded

• with conductor end processing

• for AWG conductors / for auxiliary contacts

2x (4 ... 35 mm²)

2x (10 ... 1/0)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x

(0.75 ... 4 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

#### **Certificates/approvals:**

#### **General Product Approval**

Functional Safety / Safety of Machinery











Type Examination

Declaration of Conformity

**Test Certificates** 



other

Special Test Certificate

### **Shipping Approval**







GL



LRS



other

Confirmation

other

Environmental Confirmations

## 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:

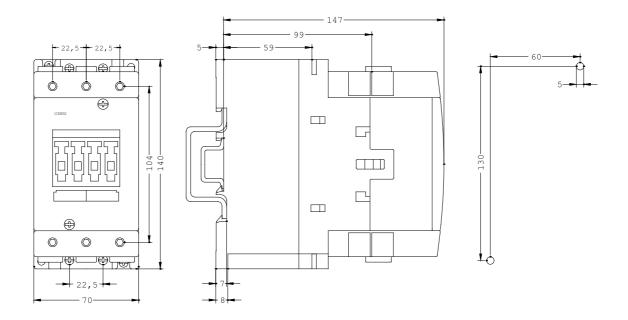
http://www.siemens.com/cax

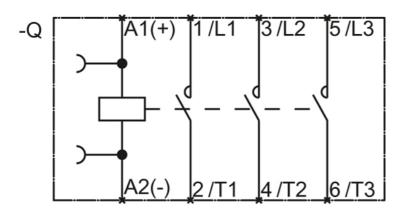
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RT1045-1BB40/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RT1045-1BB40}$ 





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