



CONTACTOR 3-PH 37 KW/400 V, 120 V AC,
50/60 HZ, 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
• 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
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	120
• at AC-3 / at 400 V / rated value	A	80
• at AC-4 / at 400 V / rated value	A	66

• with 1 current path / at DC-1		
• 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
• 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
• 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
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

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)
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
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
 - at type of coordination 2 / required

fuse gL/gG: 10 A

fuse gL/gG: 250 A

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

139

Distance, to be maintained, to earthed part / sideways

mm

6

Connection type:

Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

- for main contacts
 - solid
 - stranded
 - finely stranded
 - with conductor end processing
 - 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 (2.5 ... 16 mm²)

2x (10 ... 50 mm²)

2x (2.5 ... 35 mm²)

2x (10 ... 35 mm²)

2x (10 ... 1/0)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

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	Declaration of Conformity
 CCC	 CSA	 EAC	 UL	Type Examination	 EG-Konf.
Test Certificates		Shipping Approval			
Special Test Certificate		 ABS	 GL	 LRS	 RINA
					 RMRS
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/3RT1045-1AK20/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1045-1AK20



last change:

Jul 28, 2014