



CONTACTOR,AC3:30KW/400V, 2NO+2NC,  
48 - 80V AC/DC, WITH VARISTOR, 3-POLE,  
SIZE S2, SPRING-TYPE TERMINAL

General technical data:		
product brand name		SIRIUS
Size of contactor		S2
Product expansion		
• Auxiliary switch		No
• function module for communication		No
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... +80
• during operation	°C	-25 ... +60
Surge voltage resistance / Rated value	kV	6
Insulation voltage / Rated value	V	690
maximum permissible voltage for safe isolation / between coil and main contacts / acc. to EN 60947-1	V	400
Mechanical service life (switching cycles)		
• 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
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	mm <sup>2</sup>	25
• at 60 °C / minimum permissible	mm <sup>2</sup>	35
Operating current		
• at AC-1 / up to 690 V		
• at ambient temperature 40 °C / Rated value	A	80
• at ambient temperature 60 °C / Rated value	A	70
• at AC-2 / at 400 V / Rated value	A	65
• at AC-3		
• at 400 V / Rated value	A	65
• at 500 V / Rated value	A	65
• at 690 V / Rated value	A	47
• at AC-4 / at 400 V / Rated value	A	55
Operating current / for $\geq 200000$ operating cycles / at AC-4		
• at 400 V / Rated value	A	28
• at 690 V / Rated value	A	22
Operating current		
• with 1 current path / at DC-1		
• at 24 V / Rated value	A	70
• at 110 V / Rated value	A	4.5
• at 220 V / Rated value	A	2
• at 440 V / Rated value	A	0.4
• at 600 V / Rated value	A	0.25
• with 2 current paths in series / at DC-1		
• at 24 V / Rated value	A	70
• at 110 V / Rated value	A	45
• at 220 V / Rated value	A	5
• at 440 V / Rated value	A	1
• at 600 V / Rated value	A	0.8
• with 3 current paths in series / at DC-1		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	45
• at 220 V / Rated value	A	45
• at 440 V / Rated value	A	2.9
• at 600 V / Rated value	A	1.4

<b>Operating current</b>		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / Rated value	A	35
• at 110 V / Rated value	A	2.5
• at 220 V / Rated value	A	2
• at 440 V / Rated value	A	0.1
• at 600 V / Rated value	A	0.06
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	25
• at 220 V / Rated value	A	5
• at 440 V / Rated value	A	0.27
• at 600 V / Rated value	A	0.16
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / Rated value	A	55
• at 110 V / Rated value	A	45
• at 220 V / Rated value	A	25
• at 440 V / Rated value	A	0.6
• at 600 V / Rated value	A	0.6
<b>Operating power</b>		
• at AC-1 / at 230 V / Rated value	kW	30
• at AC-1 / at 400 V / Rated value	kW	53
• at AC-1 / at 690 V / Rated value	kW	91
• at AC-2		
• at 400 V / Rated value	kW	30
• at AC-3		
• at 230 V / Rated value	kW	18.5
• at 400 V / Rated value	kW	30
• at 500 V / Rated value	kW	37
• at 690 V / Rated value	kW	37
• at AC-4		
• at 400 V / Rated value	kW	30
<b>Operating power / for <math>\geq 200000</math> operating cycles / at AC-4</b>		
• at 400 V / Rated value	kW	14.7
• at 690 V / Rated value	kW	20
<b>Thermal short-time current / restricted to 10 s</b>		
	A	520
<b>Active power loss / at AC-3 / at 400 V / for rated value of the operating current / per conductor</b>		
	W	3.8
<b>No-load switching frequency</b>		
• with AC	1/h	1,500

• for DC	1/h	1,500
<b>Operating frequency</b>		
• at AC-1 / maximum	1/h	800
• at AC-2 / maximum	1/h	400
• at AC-3 / maximum	1/h	700
• at AC-4 / maximum	1/h	200
<b>Control circuit/ Control:</b>		
<b>Design of the surge suppressor</b>		with varistor
<b>Type of voltage / of the control supply voltage</b>		AC/DC
<b>Control supply voltage</b>		
• for DC		
• Rated value	V	48 ... 80
• with AC / at 50 Hz		
• Rated value	V	48 ... 80
• with AC / at 60 Hz		
• Rated value	V	48 ... 80
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• with AC / at 50 Hz		0.8 ... 1.1
• with AC / at 60 Hz		0.8 ... 1.1
• for DC		0.8 ... 1.1
<b>Apparent pick-up power / of the magnet coil / with AC</b>		
• at 50 Hz	V·A	40
• at 60 Hz	V·A	40
<b>Apparent holding power / of the magnet coil / with AC</b>		
• at 50 Hz	V·A	2
• at 60 Hz	V·A	2
<b>Closing power / of the magnet coil / for DC</b>	W	23
<b>Holding power / of the magnet coil / for DC</b>	W	1
<b>Closing delay</b>		
• with AC	ms	45 ... 70
• for DC	ms	45 ... 60
<b>Opening delay</b>		
• with AC	ms	35 ... 55
• for DC	ms	35 ... 55
<b>Arcing time</b>	ms	10 ... 20
<b>Residual current / of the electronics / for control with signal &lt;0&gt;</b>		
• with AC / at 230 V / maximum permissible	mA	20
• for DC / at 24 V / maximum permissible	mA	20

**Auxiliary circuit:****Number of NC contacts / for auxiliary contacts / instantaneous contact**

2

**Number of NO contacts / for auxiliary contacts / instantaneous contact**

2

**Operating current**

- at AC-12 / maximum
- at AC-15
  - at 230 V / Rated value
  - at 400 V / Rated value
  - at 500 V / Rated value
  - at 690 V / Rated value

A

10

A

6

A

3

A

2

A

1

**Operating current / at DC-12**

- at 24 V / Rated value
- at 48 V / Rated value
- at 60 V / Rated value
- at 110 V / Rated value
- at 125 V / Rated value
- at 220 V / Rated value
- at 440 V / Rated value
- at 600 V / Rated value

A

10

A

6

A

6

A

3

A

2

A

1

A

0.3

A

0.15

**Operating current / at DC-13**

- at 24 V / Rated value
- at 48 V / Rated value
- at 60 V / Rated value
- at 110 V / Rated value
- at 125 V / Rated value
- at 220 V / Rated value
- at 440 V / Rated value
- at 600 V / Rated value

A

6

A

2

A

2

A

1

A

0.9

A

0.3

A

0.14

A

0.1

**UL/CSA ratings:****yielded mechanical performance [hp]**

- for single-phase AC motor
  - at 110/120 V / Rated value
  - at 230 V / Rated value
- for three-phase AC motor
  - at 200/208 V / Rated value
  - at 220/230 V / Rated value
  - at 460/480 V / Rated value
  - at 575/600 V / Rated value

hp

5

hp

10

hp

20

hp

20

hp

50

hp

50

<b>Full-load current (FLA) / for three-phase AC motor</b>  • at 480 V / Rated value  • at 600 V / Rated value	A	65
	A	52
<b>Contact rating / of the auxiliary contacts / acc. to UL</b>		A600 / Q600

#### Short-circuit:

##### Design of the fuse link

- for short-circuit protection of the auxiliary switch / required

fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

##### mounting position

+/-180° rotation possible on vertical mounting surface;  
can be tilted forward and backward by +/- 22.5° on  
vertical mounting surface

##### Mounting type

screw and snap-on mounting onto 35 mm standard  
mounting rail according to DIN EN 50022

##### Width

mm

55

##### Height

mm

113.4

##### Depth

mm

177.8

##### Spacing required / with side-by-side mounting

mm

0

#### Connections/ terminals:

##### Design of the electrical connection

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

screw-type terminals

spring-loaded terminals

##### Type of connectable conductor cross-section

- for main contacts
  - single or multi-stranded
  - finely stranded / with core end processing
- for AWG conductors / for main contacts

2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)

2x (1 ... 25 mm<sup>2</sup>), 1x (1 ... 35 mm<sup>2</sup>)

2x (18 ... 2), 1x (18 ... 1)

##### Type of connectable conductor cross-section

- for auxiliary contacts
  - single or multi-stranded
  - finely stranded / with core end processing
  - finely stranded / without core end processing
- for AWG conductors / for auxiliary contacts

2x (0,5 ... 2,5 mm<sup>2</sup>)

2x (0,5 ... 1,5 mm<sup>2</sup>)

2x (0,5 ... 2,5 mm<sup>2</sup>)

2x (20 ... 14)

#### Safety related data:

##### Proportion of dangerous failures

- with low demand rate / acc. to SN 31920
- with high demand rate / acc. to SN 31920

%

40

%

73

##### Product function

- Mirror contact acc. to IEC 60947-4-1

Yes

• positively driven operation acc. to IEC 60947-5-1

No

#### Certificates/ approvals:

General Product Approval

other



[Confirmation](#)

#### Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT2037-3NE34/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2037-3NE34](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2037-3NE34)



