



LOAD FEEDER FUSELESS DIRECT START,  
AC 400V, SZ S0, 4.5. . .6.3A,  
AC 230V SCREW CONNECTION FOR RAIL-MOUNTING,  
TYPE OF COORDINATION 2,  
IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)  
1NO+1NC (CONTACTOR)

### General technical data:

Product brand name		SIRIUS
product designation		non-fused load feeders 3RA2
Design of the product		direct starter
Size of the load feeder		S0
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during transport	°C	-55 ... 80
• during storage	°C	-55 ... 80
• during operating	°C	-20 ... 60
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	2.3
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		Q
• according to DIN EN 61346-2		Q
Type of assignment		2

<b>Mechanical operating cycles as operating time / of the contactor</b>		
• typical		10,000,000
<b>Manufacturer article number</b>		
• of the circuit-breakers included in the scope of supply		<a href="#">3RV2011-1GA10</a>
• of the contactor included in the scope of supply		<a href="#">3RT2024-1AP00</a>
• of the link module included in the scope of supply		<a href="#">3RA2921-1AA00</a>
<b>Design of the switching contact</b>		mechanical
<b>Type of the motor protection</b>		bimetal
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	4.5 ... 6.3

<b>Communication:</b>		
<b>Product function / bus-communication</b>		No
<b>Protocol / will be supported</b>		
• AS interface protocol		No
• PROFIBUS DP protocol		No
• PROFINET protocol		No
<b>Product extension / function module for communication</b>		No

<b>Main circuit:</b>		
<b>Number of poles / for main current circuit</b>		3
<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		3
<b>Operating voltage / at AC-3 / rated value / maximum</b>	V	690
<b>Operating current</b>		
• at AC-1 / at 400 V / rated value	A	6.3
• at AC-2 / at 400 V / rated value	A	4.9
• at AC-3 / at 400 V / rated value	A	4.9
• at AC-4 / at 400 V / rated value	A	4.9
<b>Service power</b>		
• at AC-2 / at 400 V / rated value	W	2,200
• at AC-3		
• at 400 V / rated value	W	2,200
• at 500 V / rated value	W	3,000
• at 690 V / rated value	W	4,000
• at AC-4 / at 400 V / rated value	W	2,200
<b>Off-load operating frequency</b>	1/h	5,000
<b>Frequency of operation</b>		
• at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	1,000

- at AC-3 / according to IEC 60947-6-2 / maximum
- at AC-4 / according to IEC 60947-6-2 / maximum

1/h	1,000
1/h	300

#### Control circuit:

Type of voltage / of the controlled supply voltage

AC

Control supply voltage frequency

- 1 / rated value

Hz

50

Control supply voltage / 1

- at 50 Hz / for AC / rated value
- at 60 Hz / for AC / rated value

V

230

V

230

Apparent holding power / of the solenoid / for AC

V·A

8.5

Inductive power factor / with the pull-in power of the coil

0.25

#### Auxiliary circuit:

Product extension / auxiliary switch

Yes

Number of NC contacts / for auxiliary contacts

1

Number of NO contacts / for auxiliary contacts

1

Number of change-over switches / for auxiliary contacts

0

#### Inputs/ Outputs:

Number of digital inputs

0

#### Short-circuit:

Product function / short circuit protection

Yes

Design of the short-circuit protection

circuit-breakers

Breaking capacity limit short-circuit current (Icu)

- at 400 V / rated value
- at 500 V / rated value
- at 690 V / rated value

A

100,000

A

100,000

A

4,000

#### Installation/mounting/dimensions:

Built in orientation

vertical

Type of mounting

screw and snap-on mounting onto 35 mm standard mounting rail

Width

mm

45

Height

mm

193.1

Depth

mm

97.1

Distance, to be maintained, to the ranks assembly

- forwards
- backwards
- upwards
- downwards

mm

10

mm

0

mm

30

mm

30

• sideways	mm	0
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sideways	mm	9
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sideways	mm	9

### Connections:

<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• stranded		2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
• for AWG conductors / for main contacts		2 x (16 ... 14), 2x (14 ... 8)
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 14)

### Certificates/approvals:

<b>Verification of suitability</b>		CE / UL / CSA / CCC
<b>Varification of suitability / ATEX</b>		No

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Test Certificates</b>
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[ROSTEST](#)



[DEKRA EXAM,](#)  
[DMT](#)

[Manufacturer](#)

**Shipping Approval**

**other**



ABS



PRS



RINA

[Manufacturer](#)

[other](#)

## Safety:

### B10 value / with high demand rate

- according to SN 31920

1,000,000

### Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT

150

### Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

75

### T1 value / for proof test interval or service life

- according to IEC 61508

a

10

### Protection against electrical shock

finger-safe

## 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

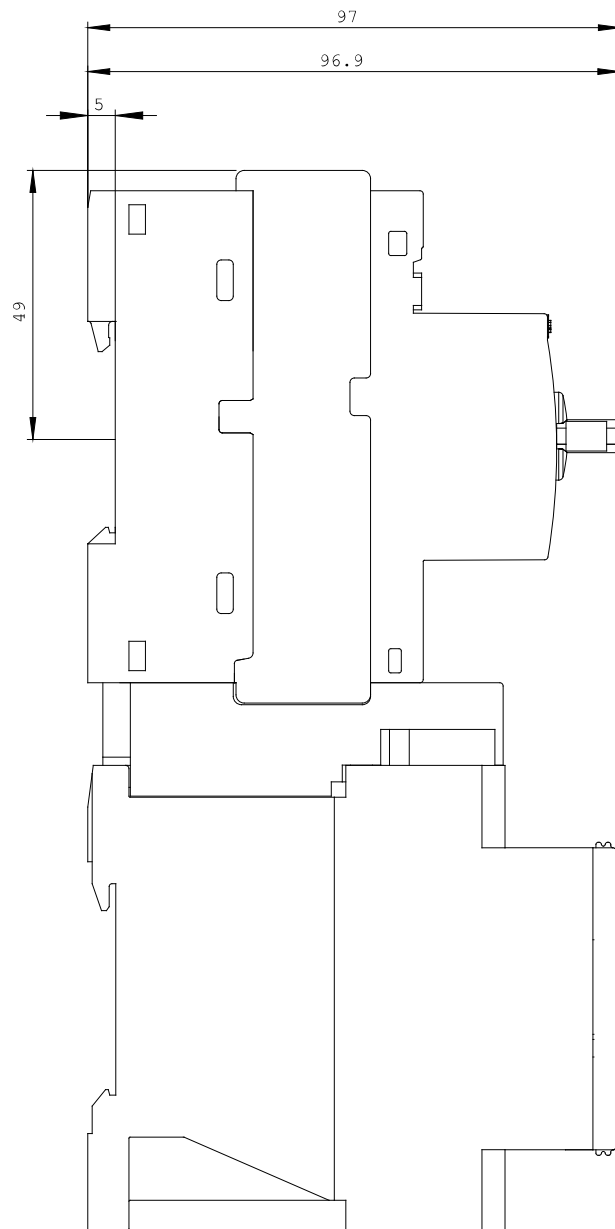
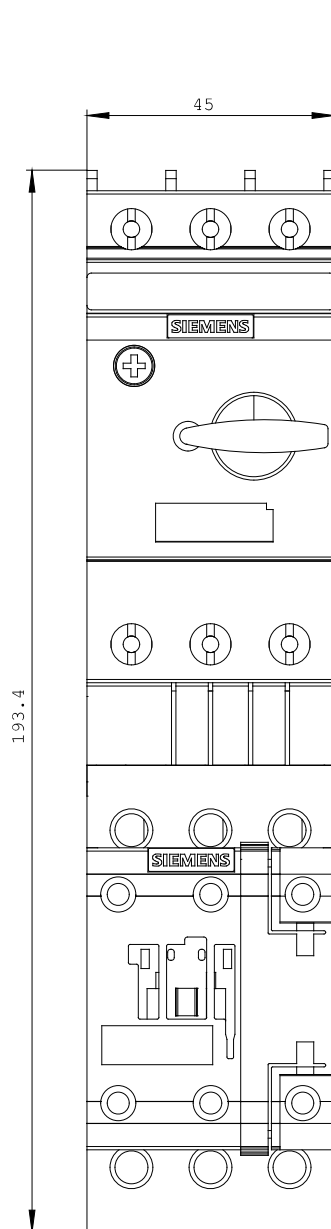
<http://www.siemens.com/cax>

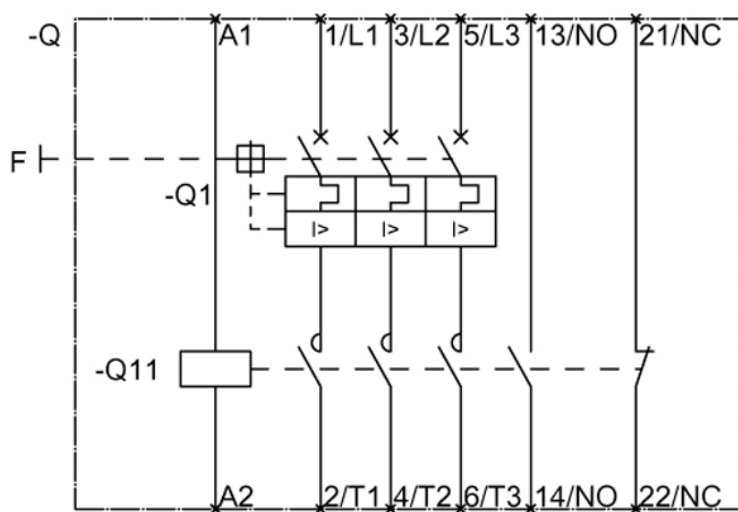
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA2120-1GA24-0AP0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2120-1GA24-0AP0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2120-1GA24-0AP0)





last change:

Oct 24, 2011