



LOAD FEEDER FUSELESS REVERSING DUTY,  
AC 400V, SZ S0, 4.5. . .6.3A,  
AC 230V SCREW CONNECTION FOR BUSBAR SYSTEMS  
60MM 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		reversing 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 <ul style="list-style-type: none"> <li>during transport</li> <li>during storage</li> <li>during operating</li> </ul>	°C	-55 ... 80 -55 ... 80 -20 ... 60
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	2.3
Item designation <ul style="list-style-type: none"> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> <li>according to DIN EN 61346-2</li> </ul>		Q 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 RS applied assembly kit		<a href="#">8US1250-5AT10</a>
• of the link module included in the scope of supply		<a href="#">3RA2921-1AA00</a>
• of the busbar adapter included in the scope of supply		<a href="#">8US1251-5NT10</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
- at AC-2 / according to IEC 60947-6-2 / maximum
- 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	1,000
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

for snapping onto 60 mm busbar systems

Width

mm

90

Height

mm

260

Depth

mm

155.1

Center line spacing

mm

60

Distance, to be maintained, to the ranks assembly

- forwards
- backwards

mm

10

mm

0

• upwards	mm	30
• downwards	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

250

### 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

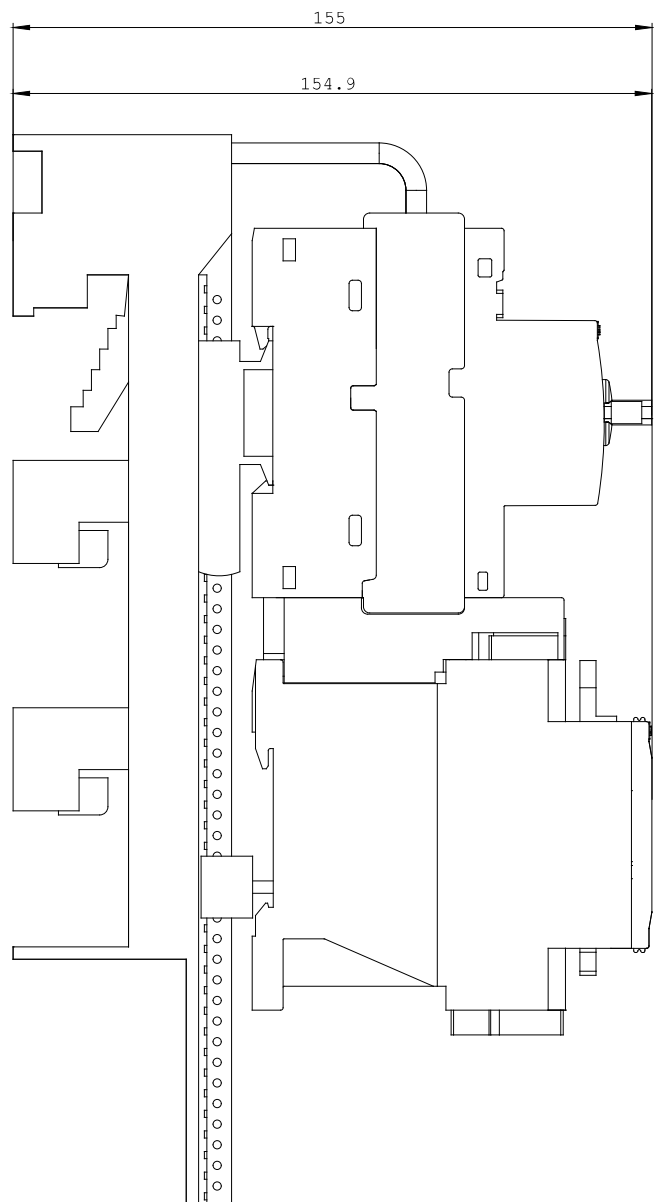
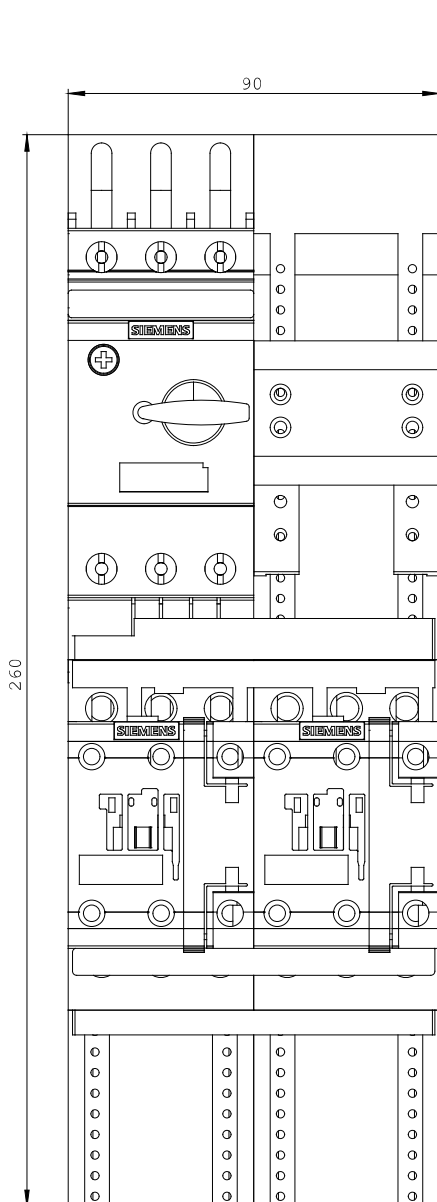
<http://www.siemens.com/cax>

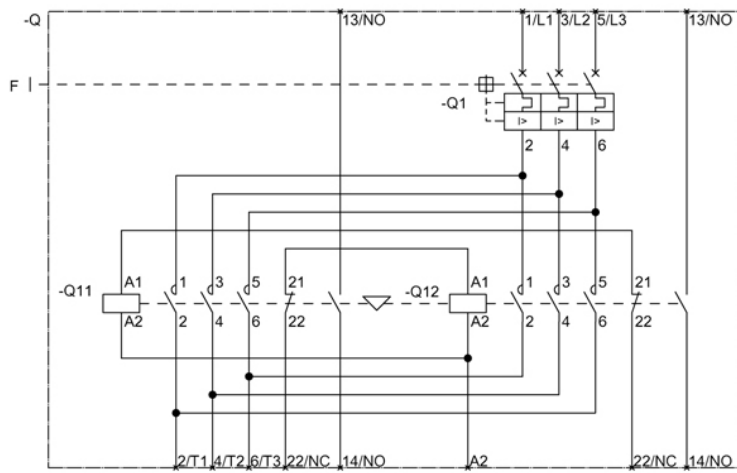
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA2220-1GD24-0AP0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2220-1GD24-0AP0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2220-1GD24-0AP0)





last change:

Oct 24, 2011