



LOAD FEEDER FUSELESS REVERSING DUTY,  
AC 400V, SZ S00, 9. . .12.5A,  
AC 230V SCREW CONNECTION FOR RAIL-MOUNTING,  
TYPE OF COORDINATION 1,  
IQ = 150KA 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		S00
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	3.5
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		1

<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="#">3RV2011-1KA10</a>
• of the contactor included in the scope of supply		<a href="#">3RT2017-1AP02</a>
• of the link module included in the scope of supply		<a href="#">3RA1921-1DA00</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	9 ... 12.5

#### Communication:

<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

#### Main circuit:

<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	12
• at AC-2 / at 400 V / rated value	A	11.5
• at AC-3 / at 400 V / rated value	A	11.5
• at AC-4 / at 400 V / rated value	A	11.5
<b>Service power</b>		
• at AC-2 / at 400 V / rated value	W	5,500
• at AC-3		
• at 400 V / rated value	W	5,500
• at 500 V / rated value	W	5,500
• at 690 V / rated value	W	7,500
• at AC-4 / at 400 V / rated value	W	5,500
<b>Off-load operating frequency</b>	1/h	10,000
<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	750

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

1/h	750
1/h	250

#### 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	V	230
• at 60 Hz / for AC / rated value	V	230
Apparent holding power / of the solenoid / for AC	V·A	5.7
Inductive power factor / with the pull-in power of the coil		0.28

#### Auxiliary circuit:

Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		0
Number of change-over switches / for auxiliary contacts		0

#### Inputs/ Outputs:

Number of digital inputs		0
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#### 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	A	100,000
• at 500 V / rated value	A	42,000
• at 690 V / rated value	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	90
Height	mm	170
Depth	mm	97.1
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• downwards	mm	30

• sideways	mm	0
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• downwards	mm	10
• sideways	mm	9
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	20
• 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 (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• stranded		2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• finely stranded		
• with conductor end processing		2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors / for main contacts		2x (18 ... 14), 2x 12
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 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 ... 16), 2x (18 ... 14), 2x 12

### 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](#)

## UL/CSA ratings

### yielded mechanical performance (hp)

- for single-phase squirrel cage motors
  - at 110/120 V / rated value
  - at 230 V / rated value
- for three-phase squirrel cage motors
  - 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	0.5
hp	2
hp	3
hp	3
hp	7.5
hp	10

### Operating current (FLA) / for three-phase squirrel cage motors

- at 480 V / rated value
- at 600 V / rated value

A	11
A	11

### Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

## 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>

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**Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrial-controls/mall>

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**CAX-Online-Generator**  
<http://www.siemens.com/cax>

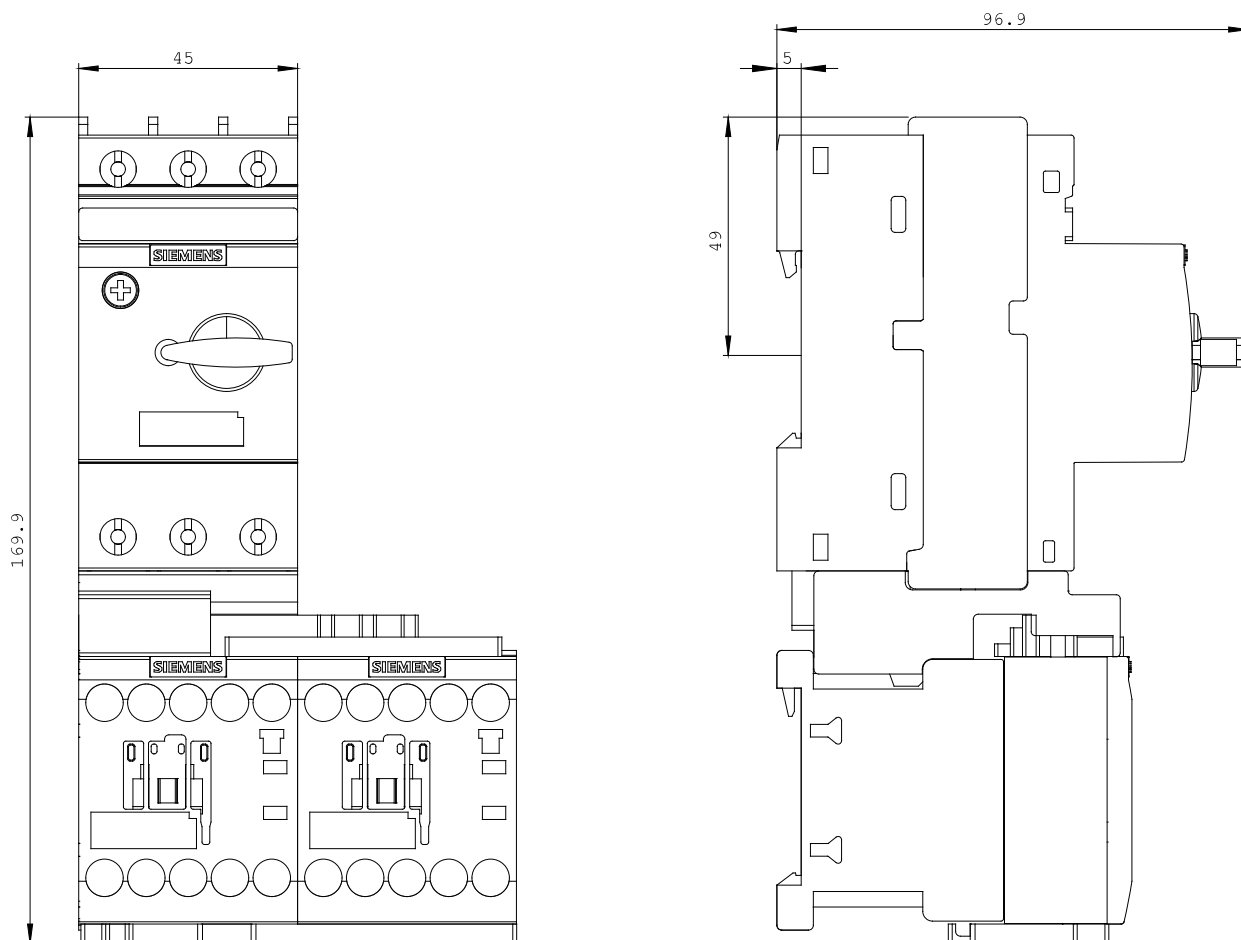
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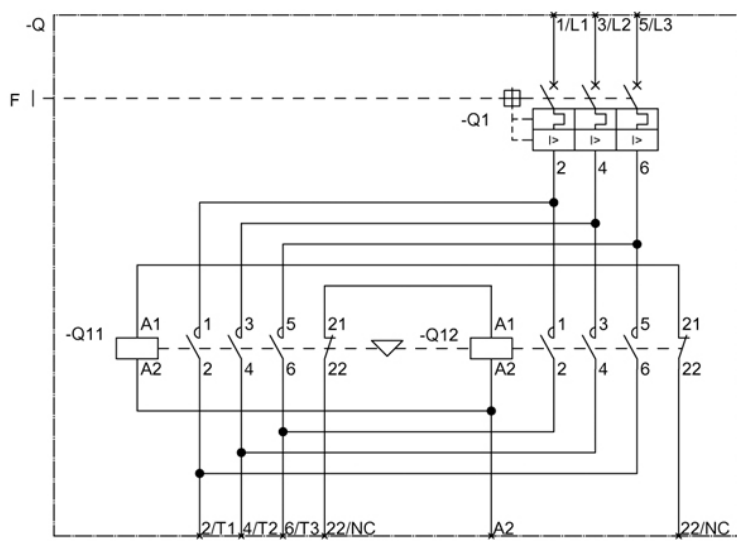
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3RA2210-1KA17-2AP0/all>

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**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2210-1KA17-2AP0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2210-1KA17-2AP0)

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last change:

Oct 24, 2011