



LOAD FEEDER FUSELESS DIRECT START,  
AC 400V, SZ S00 4.5. . .6.3A,  
DC 24V SPRING-LOADED CONNECTION FOR RAIL-  
MOUNTING,  
TYPE OF COORDINATION 1,  
IQ = 150KA 1NO (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		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	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		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="#">3RV2011-1GA20</a>
• of the contactor included in the scope of supply		<a href="#">3RT2015-2BB41</a>
• of the link module included in the scope of supply		<a href="#">3RA2911-2AA00</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	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**

DC

**Control supply voltage frequency**

- 1 / rated value

Hz

0

**Control supply voltage / 1**

- for DC / rated value

V

24

**Holding power / of the solenoid / for DC**

W

4

#### Auxiliary circuit:

**Product extension / auxiliary switch**

Yes

**Number of NC contacts / for auxiliary contacts**

0

**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

197.6

**Depth**

mm

97.1

**Distance, to be maintained, to the ranks assembly**

- forwards
- backwards
- upwards
- downwards
- sideways

mm

0

mm

0

mm

20

mm

30

mm

0

**Distance, to be maintained, to earthed part**

• 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:

##### Design of the electrical connection

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

spring-loaded terminals  
spring-loaded 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
    - without conductor final cutting
- for AWG conductors / for auxiliary contacts

2x (0.5 ... 4 mm<sup>2</sup>)  
2x (0.5 ... 4 mm<sup>2</sup>)  
  
2x (0.5 ... 2.5 mm<sup>2</sup>)  
2x (0.5 ... 2.5 mm<sup>2</sup>)  
2x (20 ... 12)  
  
2x (0.5 ... 4 mm<sup>2</sup>)  
  
2x (0.5 ... 2.5 mm<sup>2</sup>)  
2x (0.5 ... 2.5 mm<sup>2</sup>)  
2x (20 ... 12)

#### Certificates/approvals:

##### Verification of suitability

CE / UL / CSA / CCC

##### Varification of suitability / ATEX

No

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Test Certificates</b>
---------------------------------	---------------------------------------	--------------------------

[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	0.25
hp	0.5
hp	1
hp	1.5
hp	3
hp	5

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

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

A	4.8
A	6.1

### 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 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/3RA2110-1GE15-1BB4/all>

---

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RA2110-1GE15-1BB4](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2110-1GE15-1BB4)

---



