



LOAD FEEDER FUSELESS DIRECT START,
AC 400V, SZ S0, 3.5. . . 5A,
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

Mechanical operating cycles as operating time / of the contactor		
• typical		10,000,000
Manufacturer article number		
• of the circuit-breakers included in the scope of supply		3RV2011-1FA10
• of the contactor included in the scope of supply		3RT2024-1AP00
• of the link module included in the scope of supply		3RA2921-1AA00
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
• of the current-dependent overload release	A	3.5 ... 5

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

Main circuit:		
Number of poles / for main current circuit		3
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating voltage / at AC-3 / rated value / maximum	V	690
Operating current		
• at AC-1 / at 400 V / rated value	A	5
• at AC-2 / at 400 V / rated value	A	3.6
• at AC-3 / at 400 V / rated value	A	3.6
• at AC-4 / at 400 V / rated value	A	3.6
Service power		
• at AC-2 / at 400 V / rated value	W	1,500
• at AC-3		
• at 400 V / rated value	W	1,500
• at 500 V / rated value	W	2,200
• at 690 V / rated value	W	3,000
• at AC-4 / at 400 V / rated value	W	1,500
Off-load operating frequency	1/h	5,000
Frequency of operation		
• 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
Distance, to be maintained, to earthed part		
• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sideways	mm	9
Distance, to be maintained, conductive elements		
• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sideways	mm	9

Connections:

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

Certificates/approvals:

Verification of suitability		CE / UL / CSA / CCC
Varification of suitability / ATEX		No

General Product Approval	For use in hazardous locations	Test Certificates
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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

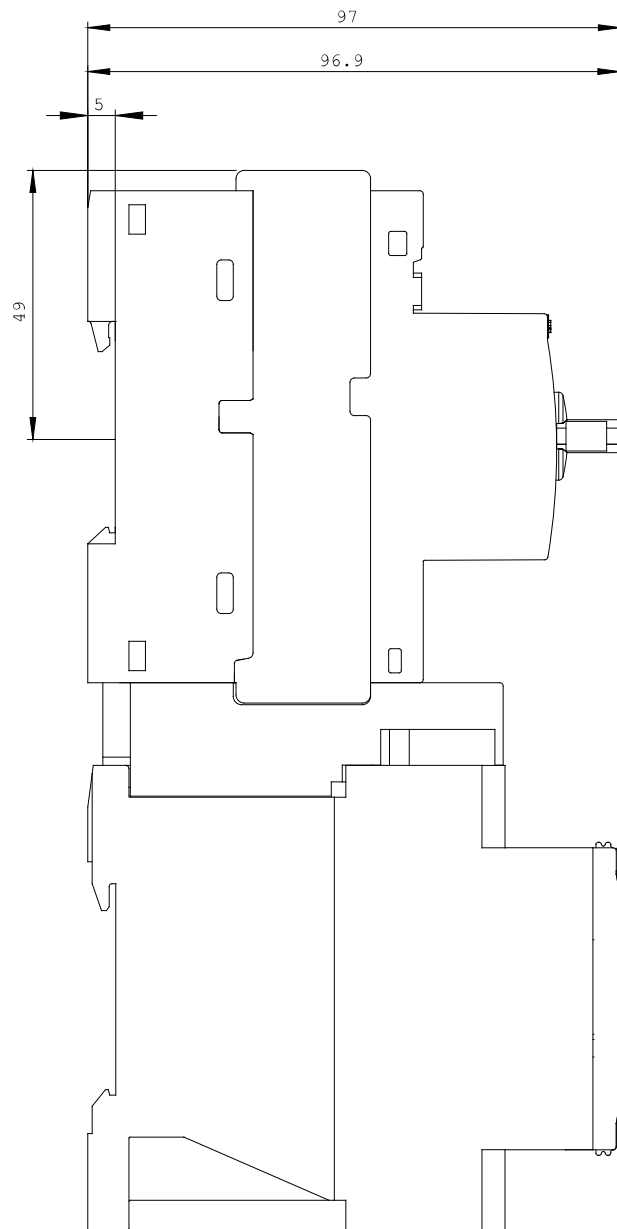
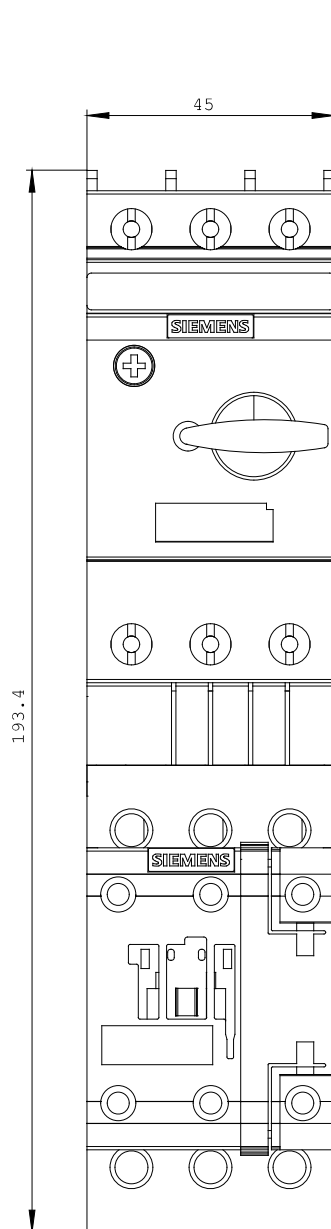
<http://www.siemens.com/cax>

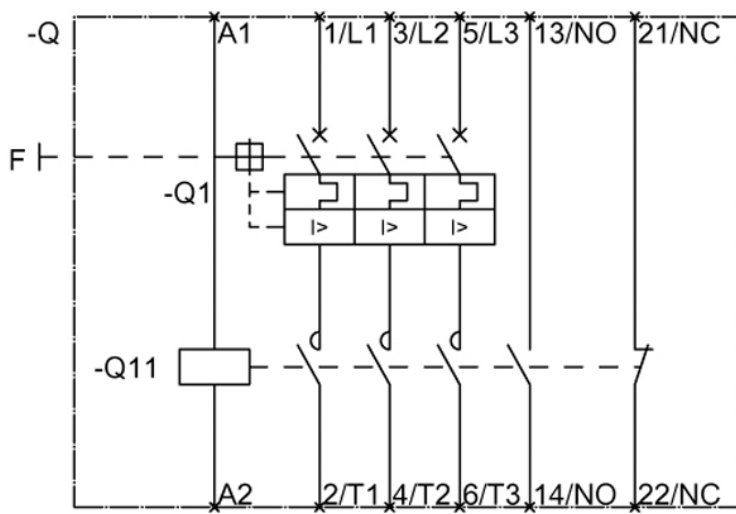
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA2120-1FA24-0AP0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2120-1FA24-0AP0





last change:

Oct 24, 2011