SIEMENS

Product data sheet 3RA2120-1FA24-0BB4



LOAD FEEDER FUSELESS DIRECT START,
AC 400V, SZ S0, 3.5...5A,
DC 24V 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 assignement		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 		3RT2024-1BB40
of the link module included in the scope of supply		3RA2921-1BA00
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
of the current-dependent overload release	Α	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	Α	5
• at AC-2 / at 400 V / rated value	Α	3.6
• at AC-3 / at 400 V / rated value	Α	3.6
• at AC-4 / at 400 V / rated value	Α	3.6
Service power		
• at AC-2 / at 400 V / rated value	W	1,500

• at AC-3

• at 400 V / rated value

• at 500 V / rated value

• at 690 V / rated value

Off-load operating frequency

Frequency of operation

• at AC-4 / at 400 V / rated value

• at AC-1 / according to IEC 60947-6-2 / maximum

• at AC-2 / according to IEC 60947-6-2 / maximum

W

W

W

W

1/h

1/h

1/h

1,500

2,200

3,000

1,500

1,500

1,000

1,000

/h	300
	DC
lz	0
/	24
V	5.9
	Yes
	1
	1
	0
	0
	Yes
	circuit-breakers
A	100,000
4	100,000
4	4,000
	vertical
	screw and snap-on mounting onto 35 mm standard mounting rail
m	45
m	193.1
m	107
m	10
m	0
m	30
m	30
m	0
	M M M M M M M

• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sidewards	mm	9
Distance, to be maintained, conductive elements		
• forwards	mm	10
• backwards	mm	0
• upwards	mm	30
• downwards	mm	10
• sidewards	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 mm²), 2x (2.5 10 mm²)
• stranded	2x (1.0 2.5 mm2), 2x (2.5 10 mm2)
• finely stranded	
 with conductor end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
• for AWG conductors / for main contacts	2 x (16 14), 2x (14 8)
for auxiliary contacts	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• 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

ROSTEST



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM},}{\mathsf{DMT}}$

Manufacturer

Shipping Approval









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 	%	40
with high demand rate / according to SN 31920	%	75
T1 value / for proof test interval or service life		
according to IEC 61508	а	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)

 $\underline{\text{http://www.siemens.com/industrial-controls/mall}}$

CAx-Online-Generator

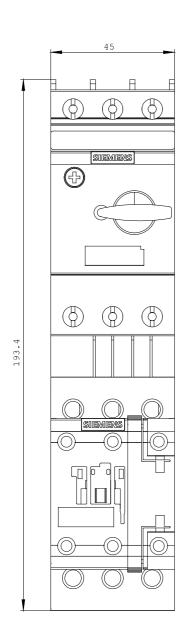
http://www.siemens.com/cax

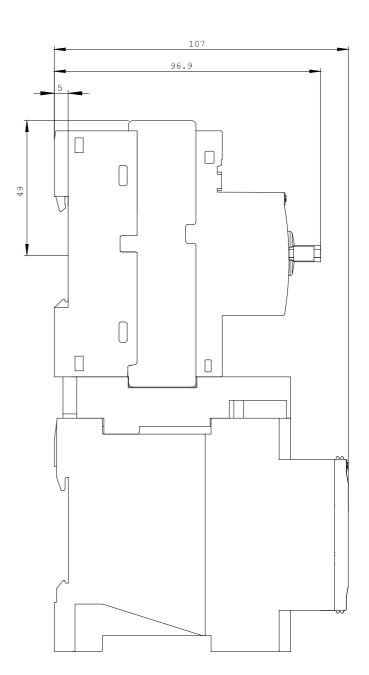
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

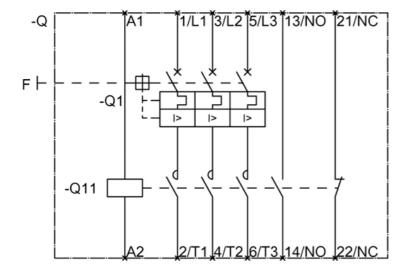
http://support.automation.siemens.com/WW/view/en/3RA2120-1FA24-0BB4/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2120-1FA24-0BB4







last change: Oct 24, 2011