

LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ. S0, 9. . .12.5A, DC 24V SCREW CONNECTION FOR RAIL MOUNTING, W. MOUNTING RAIL ADAPTER TYPE OF COORD. 2,IQ = 150KA (ALSO ACHIEVES TYPE OF COORD.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		
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		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		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		
<ul> <li>of the standard mounting rail adapter included in the scope of supply</li> </ul>		3RA2922-1AA00
of the circuit-breakers included in the scope of supply		3RV2011-1KA10
<ul> <li>of the contactor included in the scope of supply</li> </ul>		3RT2024-1BB40
of the link module included in the scope of supply		3RA2921-1BA00
of the RH applied assembly kit		3RA2923-1BB1
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
of the current-dependent overload release	А	9 12.5
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	12
• at AC-2 / at 400 V / rated value	А	11.5
• at AC-3 / at 400 V / rated value	Α	11.5
• at AC-4 / at 400 V / rated value	Α	11.5
Service power		
• 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
Off-load operating frequency	1/h	10,000
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	1/h	1,000
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	300
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	5.9
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	Α	100,000
• at 500 V / rated value	Α	42,000
• at 690 V / rated value	Α	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	265
Depth	mm	129.9
Distance, to be maintained, to the ranks assembly		
• forwards	mm	10

• backwards

• downwards

• upwards

0

30

30

 $\mathsf{m}\mathsf{m}$ 

mm

mm

• sidewards	mm	0
Distance, to be maintained, to earthed part		
• 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
<ul> <li>for auxiliary and control current circuit</li> </ul>	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	
<ul> <li>with conductor end processing</li> </ul>	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	
<ul> <li>with conductor end processing</li> </ul>	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 / C	CC
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**

other







Manufacturer

other

UL/CSA ratings		
yielded mechanical performance (hp)		
for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.5
• at 230 V / rated value	hp	2
for three-phase squirrel cage motors		
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	7.5
• at 575/600 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	11
at 600 V / rated value	Α	11
Contact rating designation / for auxiliary contacts / according to		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		
<ul> <li>with low demand rate / according to SN 31920</li> </ul>	%	40
with high demand rate / according to SN 31920	%	75
T1 value / for proof test interval or service life		
according to IEC 61508	а	16
Protection against electrical shock		finger-safe

# Further information:

Information- and Download center (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

### **CAx-Online-Generator**

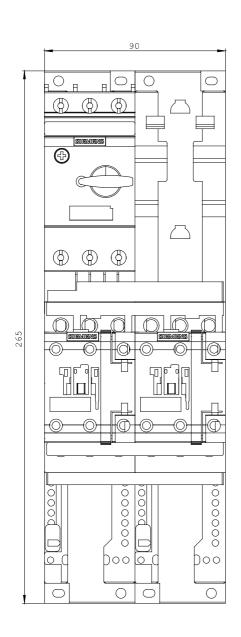
http://www.siemens.com/cax

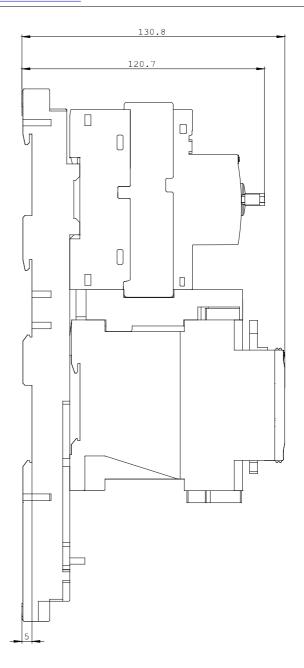
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

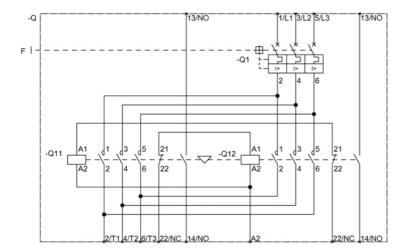
http://support.automation.siemens.com/WW/view/en/3RA2220-1KB24-0BB4/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2220-1KB24-0BB4







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