# SIEMENS

# **Product data sheet**

## 3RA2220-4AF26-0AP0



LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ S0, 11...16A, AC 230V SPRING-LOADED CONNECTION FOR RAIL-MOUNTING, W. DIN RAIL ADAPTER 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		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	4.3
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>		<u>3RA2922-1AA00</u>
<ul> <li>of the circuit-breakers included in the scope of supply</li> </ul>		<u>3RV2021-4AA20</u>
<ul> <li>of the contactor included in the scope of supply</li> </ul>		3RT2026-2AP00
<ul> <li>of the link module included in the scope of supply</li> </ul>		3RA2921-2AA00
of the RH applied assembly kit		<u>3RA2923-1BB2</u>
Design of the switching contact	-	mechanical
Type of the motor protection		bimetal
Adjustable response current		
• of the current-dependent overload release	А	11 16
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	16
• at AC-2 / at 400 V / rated value	A	15.5
• at AC-3 / at 400 V / rated value	А	15.5
• at AC-4 / at 400 V / rated value	А	15.5
Service power		
• at AC-2 / at 400 V / rated value	W	7,500
• at AC-3		
• at 400 V / rated value	W	7,500
• at 500 V / rated value	W	7,500
• at 690 V / rated value	W	11,000
• at AC-4 / at 400 V / rated value	W	7,500
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	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		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	9.8
Inductive power factor / with the pull-in power of the coil		0.27

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
·	1 0

Inputs/ Outputs:	ts/ Outputs:	
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Number of digital inputs

Short-circuit:				
Product function / short circuit protection		Yes		
Design of the short-circuit protection		circuit-breakers		
Breaking capacity limit short-circuit current (lcu)				
• at 400 V / rated value	А	25,000		
• at 500 V / rated value	А	5,000		
• at 690 V / rated value	А	2,000		

0

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	269.4
Depth	mm	130.7
Distance, to be maintained, to the ranks assembly		
forwards	mm	10
backwards	mm	0

• upwards	mm	30
downwards	mm	30
• 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:		
Connections: Design of the electrical connection		
	_	spring-loaded terminals
Design of the electrical connection		spring-loaded terminals spring-loaded terminals
Design of the electrical connection • for main current circuit		
Design of the electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control current circuit</li> </ul>		
Design of the electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control current circuit</li> </ul> Type of the connectable conductor cross-section		
Design of the electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control current circuit</li> </ul> <li>Type of the connectable conductor cross-section <ul> <li>for main contacts</li> </ul></li>		spring-loaded terminals
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         Type of the connectable conductor cross-section         • for main contacts         • solid		spring-loaded terminals 2x (1 10 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         Type of the connectable conductor cross-section         • for main contacts         • solid         • stranded		spring-loaded terminals 2x (1 10 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         Type of the connectable conductor cross-section         • for main contacts         • solid         • stranded         • finely stranded		spring-loaded terminals 2x (1 10 mm <sup>2</sup> ) 2x (1.0 10 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         Type of the connectable conductor cross-section         • for main contacts         • solid         • stranded         • finely stranded         • with conductor end processing		spring-loaded terminals 2x (1 10 mm <sup>2</sup> ) 2x (1 10 mm2) 2x (1 6 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         Type of the connectable conductor cross-section         • for main contacts         • solid         • stranded         • finely stranded         • with conductor end processing         • without conductor final cutting		spring-loaded terminals 2x (1 10 mm <sup>2</sup> ) 2x (1.0 10 mm <sup>2</sup> ) 2x (1 6 mm <sup>2</sup> ) 2x (1 6 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         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		spring-loaded terminals 2x (1 10 mm <sup>2</sup> ) 2x (1.0 10 mm <sup>2</sup> ) 2x (1 6 mm <sup>2</sup> ) 2x (1 6 mm <sup>2</sup> )
Design of the electrical connection         • for main current circuit         • for auxiliary and control current circuit         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		spring-loaded terminals 2x (1 10 mm <sup>2</sup> ) 2x (1 10 mm2) 2x (1 6 mm <sup>2</sup> ) 2x (1 6 mm <sup>2</sup> ) 1x (18 8)

without conductor final cutting 2x (0.5 ... 1.5 mm<sup>2</sup>)
 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 Ap	proval	For use in hazardous locations	Test Certificates	
ROSTEST		DEKRA EXAM, DMT	Manufacturer	
Shipping Approval			other	
ABS	PRS	RINA	<u>Manufacturer</u>	other

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ouldry.		
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	%	40
<ul> <li>with high demand rate / according to SN 31920</li> </ul>	%	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)

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

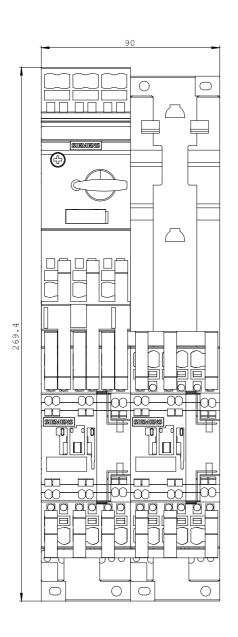
#### CAx-Online-Generator

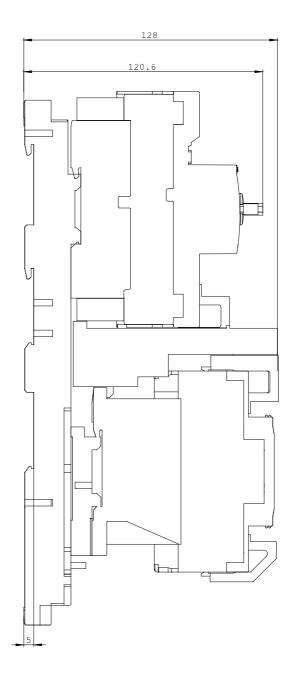
http://www.siemens.com/cax

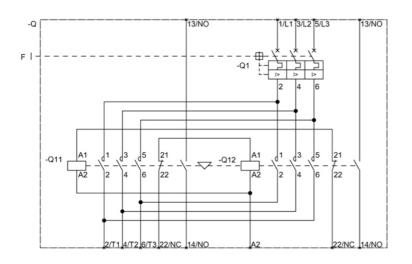
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA2220-4AF26-0AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA2220-4AF26-0AP0







last change:

Oct 24, 2011