SIEMENS

Product data sheet

3RA2220-1HB24-0BB4



LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ S0, 5,5. . .8A, DC 24V SCREW 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	3.5
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 standard mounting rail adapter included in the scope of supply 		<u>3RA2922-1AA00</u>
of the circuit-breakers included in the scope of supply		<u>3RV2011-1HA10</u>
of the contactor included in the scope of supply		<u>3RT2024-1BB40</u>
of the link module included in the scope of supply		3RA2921-1BA00
of the RH applied assembly kit		<u>3RA2923-1BB1</u>
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
of the current-dependent overload release	А	5.5 8
Communication		
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	А	8
• at AC-2 / at 400 V / rated value	А	6.5
• at AC-3 / at 400 V / rated value	А	6.5
• at AC-4 / at 400 V / rated value	А	6.5
Service power		
• at AC-2 / at 400 V / rated value	W	3,000
• at AC-3		
• at 400 V / rated value	W	3,000
• at 500 V / rated value	W	4,000
• at 690 V / rated value	W	5,500
• at AC-4 / at 400 V / rated value	W	3,000
Off-load operating frequency	1/h	1,500
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 (lcu)		
• at 400 V / rated value	А	100,000
• at 500 V / rated value	А	42,000
• at 690 V / rated value	А	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	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:		
Design of the electrical connection		

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 Certific	ates		
ROSTEST	DEKRA EXAM, DMT	Manufacture	Manufacturer		
Shipping Approval		other			
ABS PRS	RINA	Manufacture	<u>r</u> other		
UL/CSA ratings					
yielded mechanical performance (hp)					
 for single-phase squirrel cage motors 					
• at 110/120 V / rated value		hp	0.333		
 for three-phase squirrel cage motors 					
• at 220/230 V / rated value		hp	2		
• at 460/480 V / rated value		hp	5		
• at 575/600 V / rated value		hp	5		
Operating current (FLA) / for three-phase squirrel cage motors					
• at 480 V / rated value		А	8		
• at 600 V / rated value		А	8		
Contact rating designation / for auxiliary outputs of the second	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					
• with low demand rate / according to SN 3	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

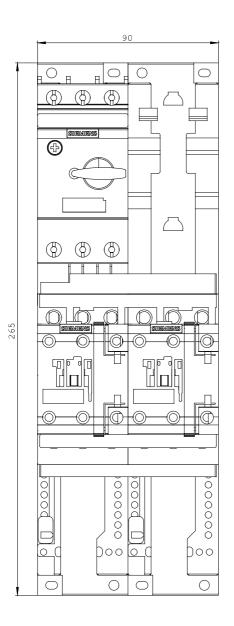
Industry Mall (Online ordering system)

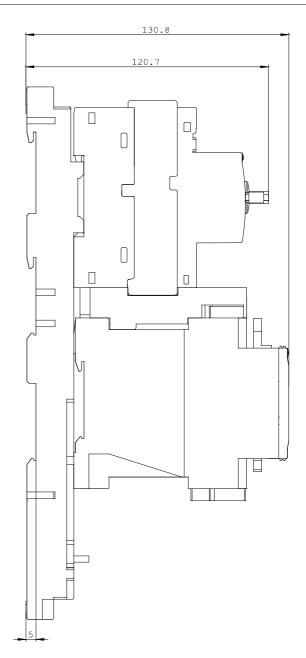
http://www.siemens.com/industrial-controls/mall

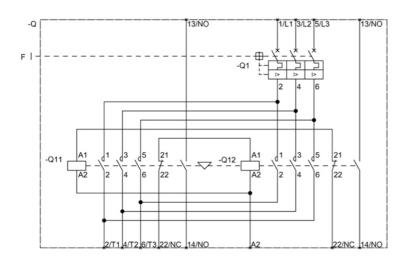
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA2220-1HB24-0BB4/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2220-1HB24-0BB4







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