SIEMENS

Product data sheet

3RA2120-1HD24-0AP0



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ S0, 5,5. . .8A, AC 230V SCREW CONNECTION FOR BUSBAR SYSTEMS 60MM TYPE OF COORDINATION 2, IQ = 150KA (ALSO FULFILLS TYPE OF COORDINATION 1)

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	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 circuit-breakers included in the scope of supply 		<u>3RV2011-1HA10</u>
 of the contactor included in the scope of supply 		3RT2024-1AP00
 of the link module included in the scope of supply 		3RA2921-1AA00
 of the busbar adapter included in the scope of supply 		8US1251-5NT10
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:		
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	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		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	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	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		for snapping onto 60 mm busbar systems
Width	mm	45
Height	mm	260
Depth	mm	155
Center line spacing	mm	60
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		
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	
	DEKRA EXAM, DMT	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 so	quirrel cage motors		
• at 480 V / rated value		А	8
• at 600 V / rated value		А	8
Contact rating designation / for auxiliary co UL	ontacts / 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 ra	ate		
according to SN 31920		FIT	150
Proportion of dangerous failures			
• with low demand rate / according to SN 31	920	%	40
• with high demand rate / according to SN 3	1920	%	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

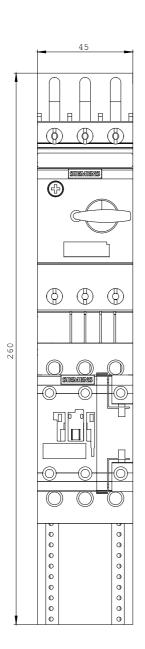
Industry Mall (Online ordering system)

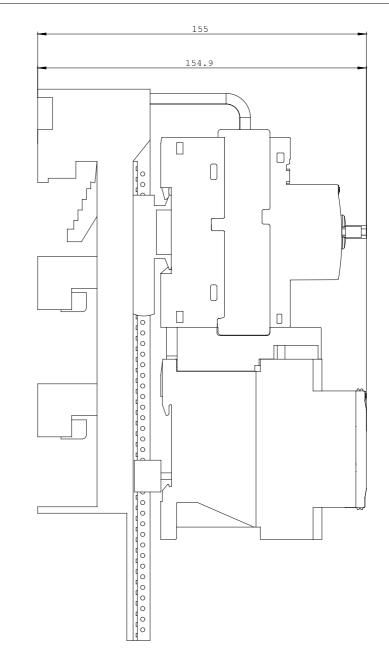
http://www.siemens.com/industrial-controls/mall

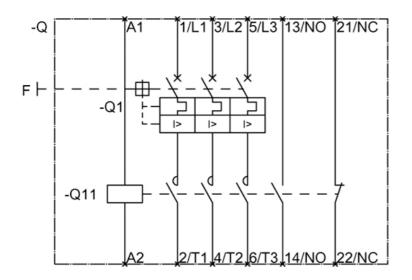
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA2120-1HD24-0AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2120-1HD24-0AP0







last change:

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