SIEMENS

Product data sheet

3RA2220-4DD27-0AP0



LOAD FEEDER FUSELESS REVERSING DUTY, AC 400V, SZ S0, 20. . .25A, AC 230V SCREW CONNECTION FOR BUSBAR SYSTEMS 60MM 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		
 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>3RV2021-4DA10</u>
 of the contactor included in the scope of supply 		<u>3RT2027-1AP00</u>
of the RS applied assembly kit		8US1250-5AT10
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	20 25
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
Number of NO contacts / for main contacts Operating voltage / at AC-3 / rated value / maximum	V	3 690
	V	
Operating voltage / at AC-3 / rated value / maximum	V	
Operating voltage / at AC-3 / rated value / maximum Operating current		690
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value	A	690 25
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value	A	690 25 22
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 / at 400 V / rated value	A A A	690 25 22 22
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 / at 400 V / rated value • at AC-4 / at 400 V / rated value	A A A	690 25 22 22
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 / at 400 V / rated value • at AC-4 / at 400 V / rated value Service power	A A A A	690 25 22 22 22
Operating voltage / at AC-3 / rated value / maximum Operating current • at AC-1 / at 400 V / rated value • at AC-2 / at 400 V / rated value • at AC-3 / at 400 V / rated value • at AC-4 / at 400 V / rated value Service power • at AC-2 / at 400 V / rated value	A A A A	690 25 22 22 22

• at 690 V / rated value

• at AC-4 / at 400 V / rated value

W

W

22,000

11,000

5,000

• 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

Inputs/ Outputs:

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		for snapping onto 60 mm busbar systems
Width	mm	90
Height	mm	260
Depth	mm	155.1
Center line spacing	mm	60
Distance, to be maintained, to the ranks assembly		
forwards	mm	10
backwards	mm	0

Verification of suitability		CE / UL / CSA / CCC
Certificates/approvals:		
 for AWG conductors / for auxiliary contacts 		2x (20 14)
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
finely stranded		
• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for auxiliary contacts		
 for AWG conductors / for main contacts 		2 x (16 14), 2x (14 8)
 with conductor end processing 		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
finely stranded		
• stranded		2x (1.0 2.5 mm2), 2x (2.5 10 mm2)
• solid		2x (1 2.5 mm²), 2x (2.5 10 mm²)
• for main contacts		
Type of the connectable conductor cross-section		
 for auxiliary and control current circuit 		screw-type terminals
for main current circuit		screw-type terminals
Design of the electrical connection		
Connections:		
• sidewards	mm	9
• downwards	mm	10
• upwards	mm	30
backwards	mm	0
• forwards	mm	10
Distance, to be maintained, conductive elements		
• sidewards	mm	9
• downwards	mm	10
• upwards	mm	30
• backwards	mm	0
• forwards	mm	10
Distance, to be maintained, to earthed part		
• sidewards	mm	0
downwards	mm	30

Varification of suitability / ATEX	
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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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Salely.		
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
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

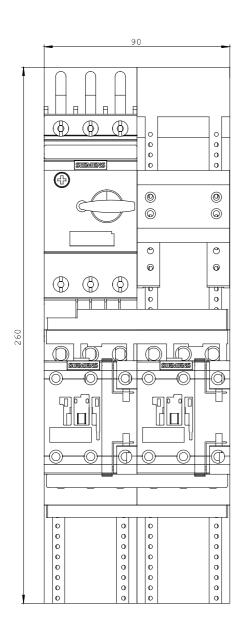
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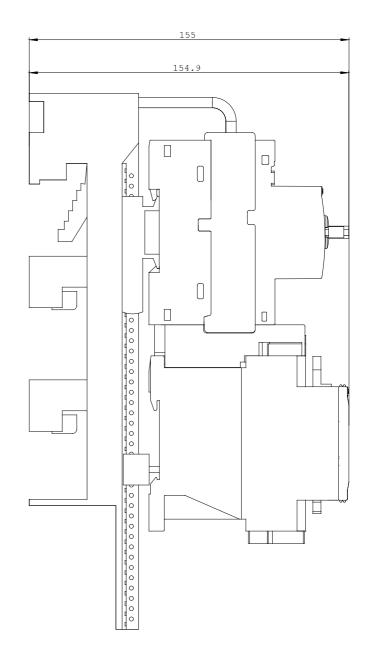
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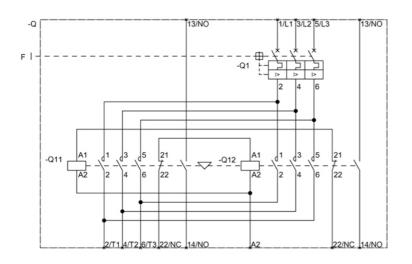
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA2220-4DD27-0AP0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2220-4DD27-0AP0







last change:

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