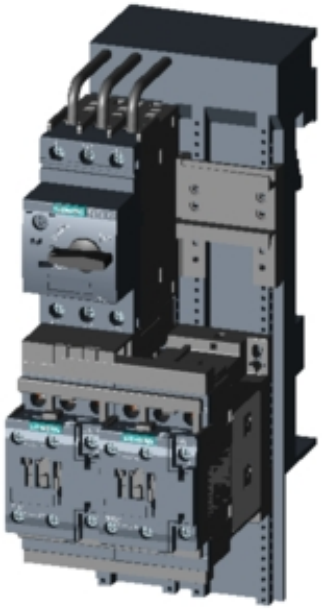
SIEMENS

Product data sheet 3RA2220-4ED27-0BB4



LOAD FEEDER FUSELESS REVERSING DUTY,
AC 400V, SZ. S0, 27...32A,
DC 24V SCREW CONNECTION FOR BUSBAR SYSTEMS
60MM 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	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		3RV2021-4EA10
• of the contactor included in the scope of supply		3RT2027-1BB40
• of the RS applied assembly kit		8US1250-5AT10
• of the link module included in the scope of supply		3RA2921-1BA00
• 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	A	27 … 32

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	32
• at AC-2 / at 400 V / rated value	A	29
• at AC-3 / at 400 V / rated value	A	29
• at AC-4 / at 400 V / rated value	A	29
Service power		
• at AC-2 / at 400 V / rated value	W	15,000
• at AC-3		
• at 400 V / rated value	W	15,000
• at 500 V / rated value	W	18,500
• at 690 V / rated value	W	30,000
• at AC-4 / at 400 V / rated value	W	15,000
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		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	A	25,000
• at 500 V / rated value	A	5,000
• at 690 V / rated value	A	2,000

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	164.5
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	Shipping Approval		
ROSTEST	DEKRA EXAM, DMT	Manufacturer	ABS	PRS	RINA
other					
Manufacturer	other				

UL/CSA ratings		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 230 V / rated value	hp	5
• for three-phase squirrel cage motors		
• at 220/230 V / rated value	hp	10
• at 460/480 V / rated value	hp	20
• at 575/600 V / rated value	hp	25
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	A	14
• at 600 V / rated value	A	17
Contact rating designation / for auxiliary contacts / according to UL		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 31920	%	40
• with high demand rate / according to SN 31920	%	75
T1 value / for proof test interval or service life		
• according to IEC 61508	a	10
Protection against electrical shock		finger-safe

Further information:

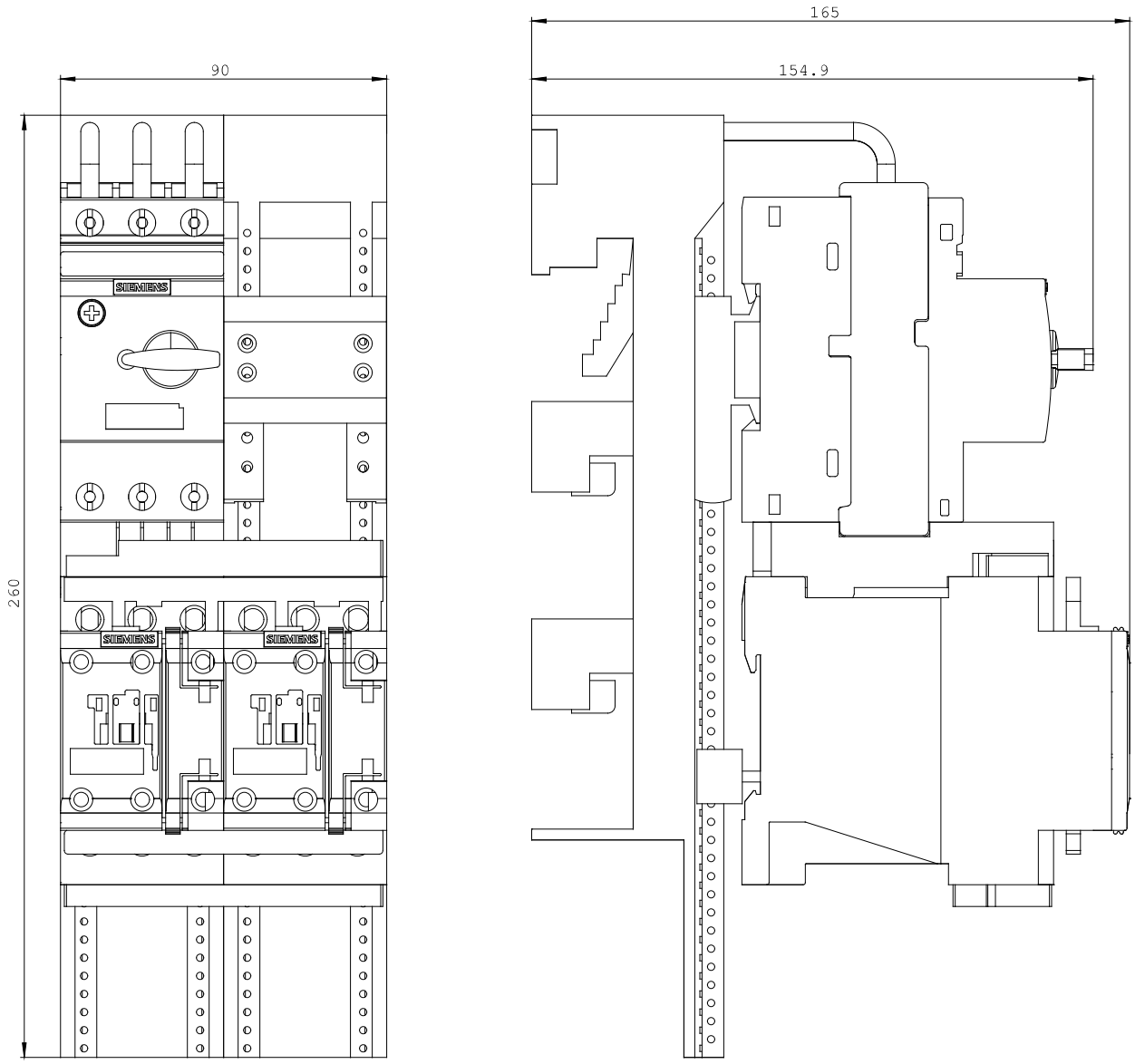
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

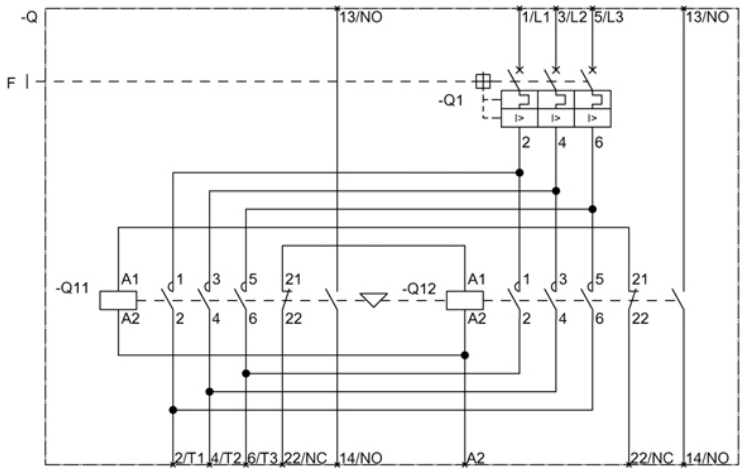
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RA2220-4ED27-0BB4/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2220-4ED27-0BB4





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