Product data sheet



LOAD FEEDER FUSELESS DIRECT START, AC 400V, SZ. S0, 27...32A, AC 230V SCREW CONNECTION FOR RAIL MOUNTING, 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		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	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	

• 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		3RT2027-1AP00
• of the link module included in the scope of supply		3RA2921-1AA00
Design of the switching contact		mechanical
Type of the motor protection		bimetal
Adjustable response current		
of the current-dependent overload release	А	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		
Number of No contacts / for main contacts		3
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 32
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 A	690 32 29
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 32 29 29
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 32 29 29
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	690 32 29 29 29
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	690 32 29 29 29
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 • at AC-3	A A A	690 32 29 29 29 15,000
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 • at AC-3 • at 400 V / rated value	A A A W	690 32 29 29 29 15,000

Off-load operating frequency

• at AC-1 / according to IEC 60947-6-2 / maximum

• at AC-2 / according to IEC 60947-6-2 / maximum

Frequency of operation

1/h

1/h

1/h

10,000

1,000

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		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	Α	25,000
• at 500 V / rated value	Α	
• at 690 V / rated value	^	5,000
	A	5,000 2,000
Installation/mounting/dimensions:		
Installation/mounting/dimensions: Built in orientation		
•		2,000
Built in orientation		vertical screw and snap-on mounting onto 35 mm standard
Built in orientation Type of mounting Width	A	vertical screw and snap-on mounting onto 35 mm standard mounting rail
Built in orientation Type of mounting Width Height	Mm	vertical screw and snap-on mounting onto 35 mm standard mounting rail 45
Built in orientation Type of mounting Width Height Depth	Mm mm	vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 193.1
Built in orientation Type of mounting Width Height Depth	Mm mm	vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 193.1
Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly	mm mm mm	vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 193.1 97.1
Built in orientation Type of mounting Width Height Depth Distance, to be maintained, to the ranks assembly • forwards	mm mm mm	vertical screw and snap-on mounting onto 35 mm standard mounting rail 45 193.1 97.1

• 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 / C	CC
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	Α	14		
• at 600 V / rated value	Α	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	150
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)

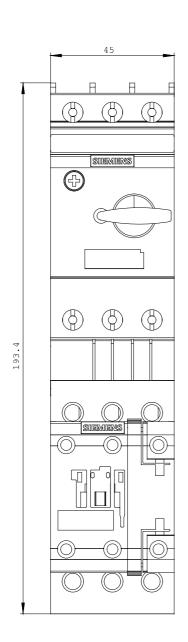
http://www.siemens.com/industrial-controls/mall

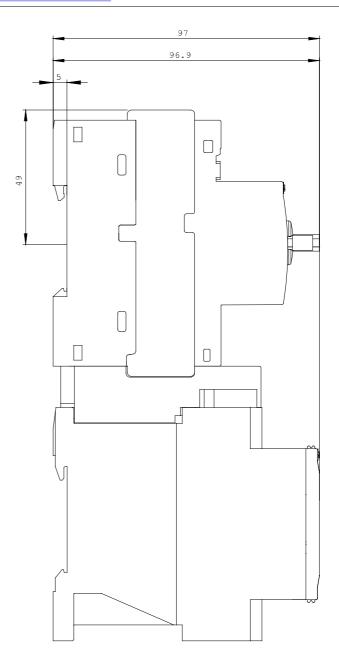
CAx-Online-Generator

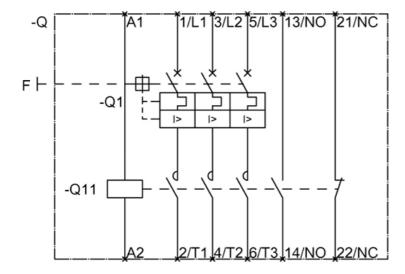
http://www.siemens.com/cax

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2120-4EA27-0AP0







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