SIEMENS

Product data sheet 3RV2021-4AA25



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 11...16A, N-RELEASE 208A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY, W. TRANSVERSE AUX. SWITCH 1NO+1NC

General technical data:		
Product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Trip class		CLASS 10
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-50 80
during operating	°C	-20 60
during transport	°C	-50 80
Resistance against shock		25g / 11 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Active power loss / total / typical	W	8.3
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F

Mechanical operating cycles as operating time		
of the main contacts / typical		100,000
of the auxiliary contacts / typical		100,000
Design of the auxiliary switch		transverse
Type of the driving mechanism / motor drive		No
Design of the operating mechanism		selector switch
Product function		
overload protection		Yes
phase disturbance recognition		Yes
Product component		
auxiliary switch		Yes
• undervoltage release mechanism		No
• trip indicator		No
Product extension / optional / motor drive		No
Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at AC-3 / rated value / maximum	٧	690
Operating current / at AC-3 / at 400 V / rated value	Α	15.5
Service power / at AC-3		
• at 400 V / rated value	W	7,500
• at 500 V / rated value	W	7,500
• at 690 V / rated value	W	11,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum	1/h	15
Arrangement of electrical connectors / for main current circuit		Top and bottom
Adjustable response current		
of the non-delayed short-circuit release	Α	208 208
of the current-dependent overload release	Α	11 16
Service power / at AC-3 / at 230 V / rated value	W	4,000
Continuous current / rated value	А	16
Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous		1

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Number of change-over switches / for auxiliary contacts		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	2.5

• at AC-15		
• at 24 V	Α	2
• at 230 V	Α	0.5
• at DC-13		
• maximum	Α	1
• at 24 V	Α	1
• at 60 V	Α	0.15

Inputs/ Outputs:		
Number of digital inputs		0
Short-circuit:		
Breaking capacity limit short-circuit current (lcu)		
• at 400 V / rated value	Α	55,000
at 500 V / rated value	Α	10,000
at 690 V / rated value	Α	4,000
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
Design of the overcurrent release and short-circuit release		thermomagnetic

Installation/mounting/dimensions:		
Built in orientation		any
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Width	mm	45
Height	mm	119
Depth	mm	91
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sidewards	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• sidewards	mm	30
• downwards	mm	50
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0

• upwards	mm	50
• downwards	mm	50
• sidewards	mm	30

Connections:	
Product function	
• removable terminal for main circuit	No
• removable terminal for auxiliary and control circuit	No
Design of the electrical connection	
for main current circuit	spring-loaded terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (1 10 mm²)
• stranded	2x (1 10 mm²)
• finely stranded	
 with conductor end processing 	2x (1 6 mm²)
 without conductor final cutting 	2x (1 6 mm²)
• for AWG conductors / for main contacts	2x (18 8)
for auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 1.5 mm²)
 without conductor final cutting 	2x (0.5 1.5 mm²)
• for AWG conductors / for auxiliary contacts	2x (20 14)

Certificates/approvals:		
Verification of suitability	CE / UL / CSA	
• für Staubexplosionsschutz für Zone 21/22	no	
• for gas explosion protection for zone 1/2	no	

General Product Approval

For use in hazardous locations





ROSTEST



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM,}}{\mathsf{DMT}}$

Test Certificates

Manufacturer other

Shipping Approval





GL









other

Manufacturer

other



UL/CSA ratings		
yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1
• at 230 V / rated value	hp	2
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	Α	14
Contact rating designation / for auxiliary contacts / according to UL		C300 / R300

Safety:		
B10 value / with high demand rate		
according to SN 31920		50,000
T1 value / for proof test interval or service life		
according to IEC 61508	а	10
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	50
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	40
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

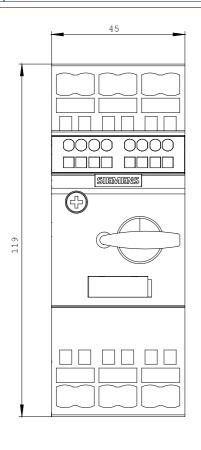
http://www.siemens.com/cax

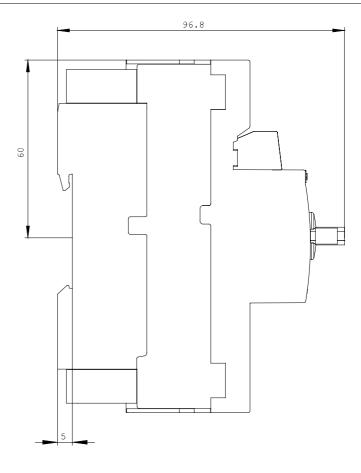
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

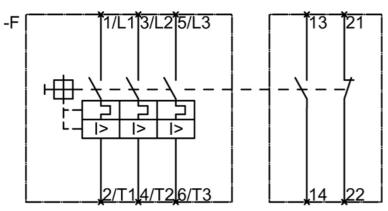
http://support.automation.siemens.com/WW/view/en/3RV2021-4AA25/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4AA25







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