SIEMENS

Product data sheet 3RV2011-1KA20

CIRCUIT-BREAKER SZ S00,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 9..12.5A, N-RELEASE 156A,
SPRING-L. CONNECTION,

General technical data:		
Product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S00
Trip class		CLASS 10
Protection class IP / frontal/front side		IP20
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 … 80
• during the operating phase	°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
Real loss power / total / typical	W	7
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Mechanical switching cycle as operating period		
• of the main contacts / typical		100,000
• of the auxiliary contacts / typical		100,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
• Overload protection		Yes
• Short-circuit to earth recognition		No
• Phase disturbance recognition		Yes
Product component		
• auxiliary switch		No

• 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 3 AC / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	A	11.5
Service power / at AC-3		
• at 400 V / rated value	W	5,500
• at 500 V / rated value	W	7,500
• at 690 V / rated value	W	7,500
Switching frequency / 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 current-dependent overload release	A	9 … 12.5
Service power / at AC-3 / at 230 V / rated value	W	3,000
Continuous current / rated value	A	12.5

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Number of change-over switches / for auxiliary contact		0

Inputs/ Outputs:		
Number of digital inputs		0

Short-circuit:		
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	A	100,000
• at 500 V / rated value	A	42,000
• at 690 V / rated value	A	6,000
Design of the overcurrent release and short-circuit release		thermomagnetic

Installation/mounting/dimensions:		
built in orientation		any
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Width	mm	45

Height	mm	109
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
Type of the connectable conductor cross-section		
• for main contacts		
• unifilar		2x (0.5 ... 4 mm2)
• stranded wire		2x (0.5 ... 4 mm2)
• stranded wire		
• with conductor end processing		2 x (0.5 ... 2.5 mm2)
• without conductor final cutting		2x (0.5 ... 2.5 mm2)
• at AWG-conductors / for main contacts		2x (20 ... 12)

Certificates/approvals:

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

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	a	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

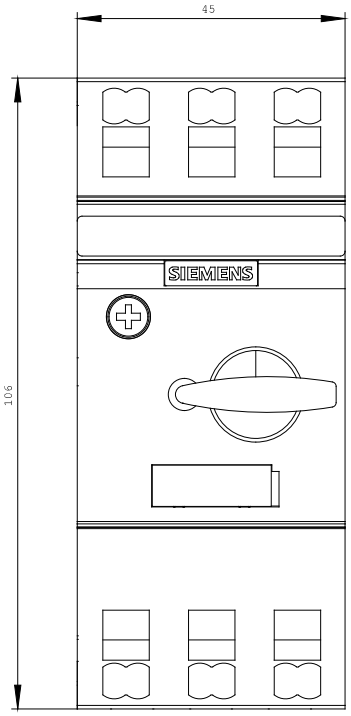
Further information:

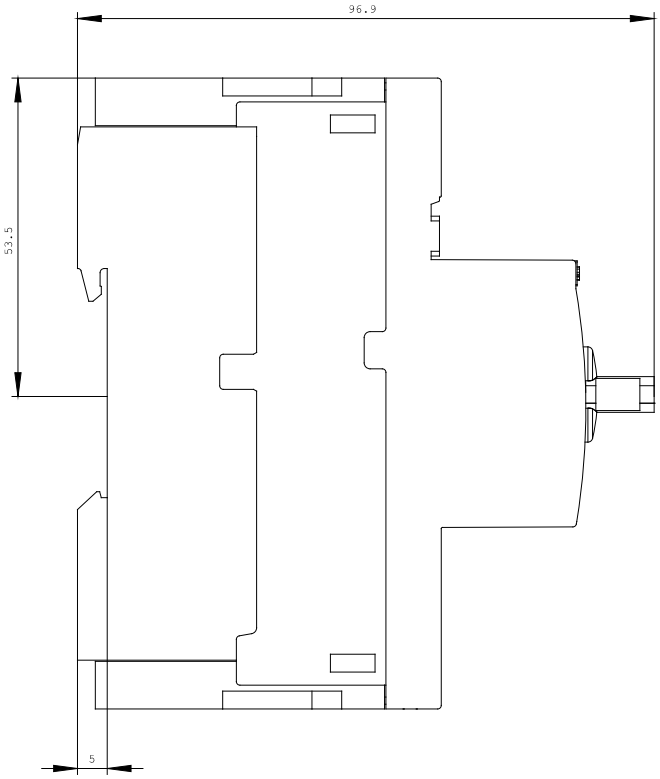
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

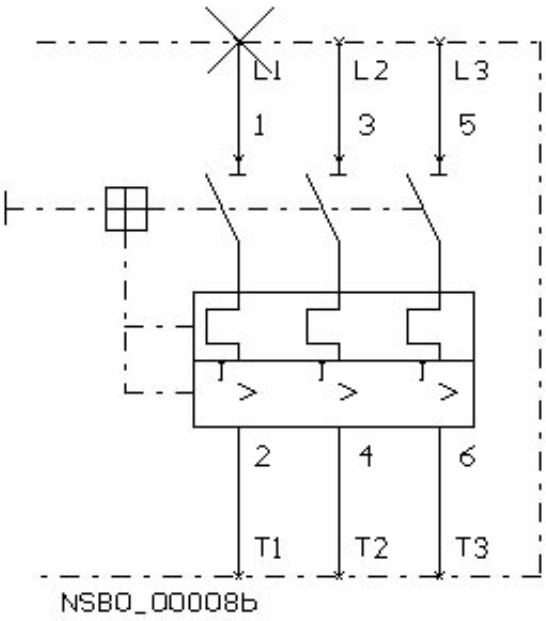
Global Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RV2011-1KA20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1KA20







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