SIEMENS

Industry Automation and Drive Technologies Service & Support

3RV2011-1JA10 CIRCUIT-BREAKER SCREW CONNECTION 10A

Technical / CAx data

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CIRCUIT-BREAKER SZ S00, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 7...10A, N-RELEASE 130A, SCREW CONNECTION, STANDARD SW. CAPACITY

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 / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	℃	-50…+80
• during operating	℃	-20…+60
• during transport	℃	-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	8.7
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Mechanical operating cycles as operating time		
• 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

• 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 AC-3 / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	A	8.5
Service power / at AC-3		
• at 400 V / rated value	W	4,000
• at 500 V / rated value	W	5,500
• at 690 V / rated value	W	7,500
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	A	130…130
• of the current-dependent overload release	A	7…10
Service power / at AC-3 / at 230 V / rated value	W	2,200
Continuous current / rated value	A	10

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 contacts		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 mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Width	mm	45
Height	mm	97
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
	mm	0

• backwards		
• 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	screw-type terminals
Type of the connectable conductor cross-section	
• for main contacts	
• solid	2x (0.75 ... 2.5 mm²), 2x 4 mm²
• finely stranded	
• with conductor end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
• for AWG conductors / for main contacts	2x (18 ... 14), 2x 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

General Product Approval				For use in hazardous locations
☒ CCC	☒ CSA	☒ GOST	☒ UL	☒ ATEX-EC-Typ

Test Certificates		
other	Special Test Certificate	Type Test Certificates/Test Report

Shipping Approval					
☒ ABS (America	☒ GL / Germanis	☒ LRS / Lloyds	☒ PRS / Polski R	☒ RINA / Registr	☒ RMRS / Russia

other		
☒ Household ar	Declaration of Conformity	other

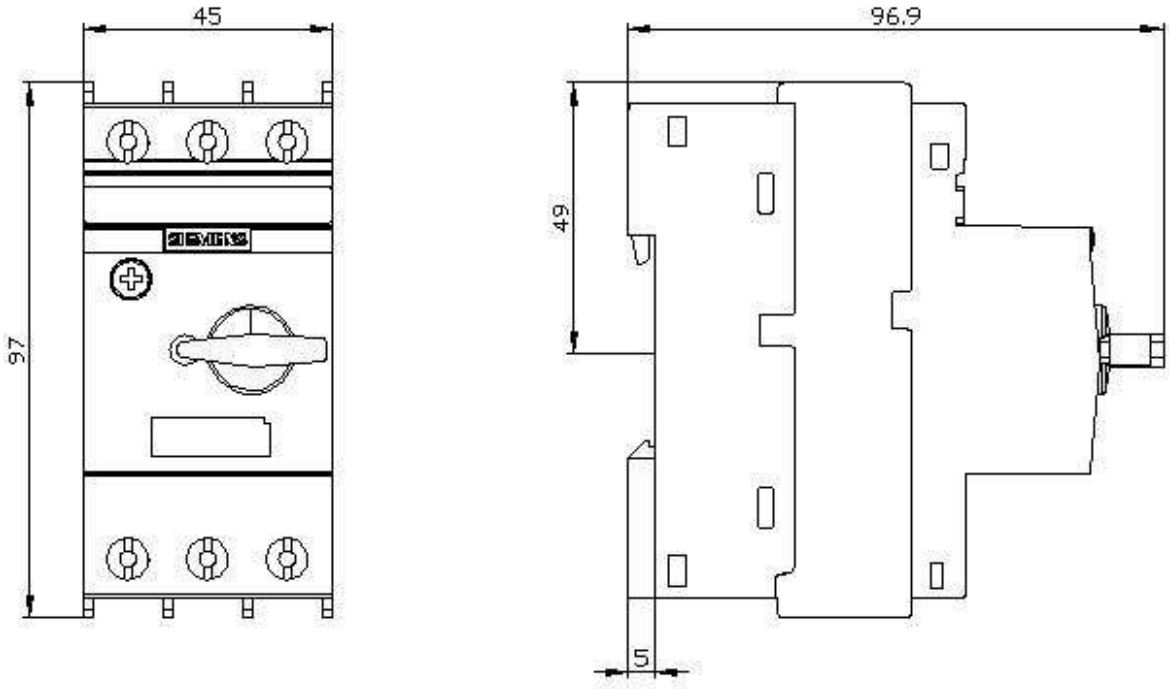
UL/CSA ratings

yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.5
• at 230 V / rated value	hp	1.5
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
	A	7.6

• at 480 V / rated value • at 600 V / rated value	A	9

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
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/3RV2011-1JA10/all
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2011-1JA10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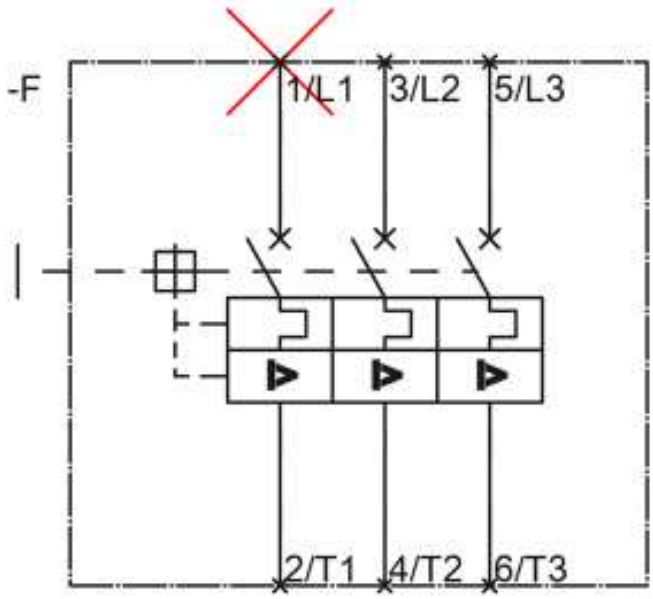

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