

3RV2021-4EA10 CIRCUIT-BREAKER SCREW CONNECTION 32A

Technical / CAx data

☒ Technical Data ☐ CAx data



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION,
CLASS 10, A-RELEASE 27...32A, N-RELEASE 400A,
SCREW CONNECTION, STANDARD SW. CAPACITY,

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	12.2
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	29
Service power / 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
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	400...400
• of the current-dependent overload release	A	27...32
Service power / at AC-3 / at 230 V / rated value	W	7,500
Continuous current / rated value	A	32

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	55,000
• at 500 V / rated value	A	10,000
• at 690 V / rated value	A	4,000
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
• sideways	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	0
	mm	0

- backwards - upwards - sideways - downwards	mm 50
	mm 30
	mm 50
Distance, to be maintained, conductive elements	
forwards	mm 0
backwards	mm 0
upwards	mm 50
downwards	mm 50
sideways	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 (1 ... 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	2x (16 ... 12), 2x (14 ... 8)

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-Type
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Test Certificates

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

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

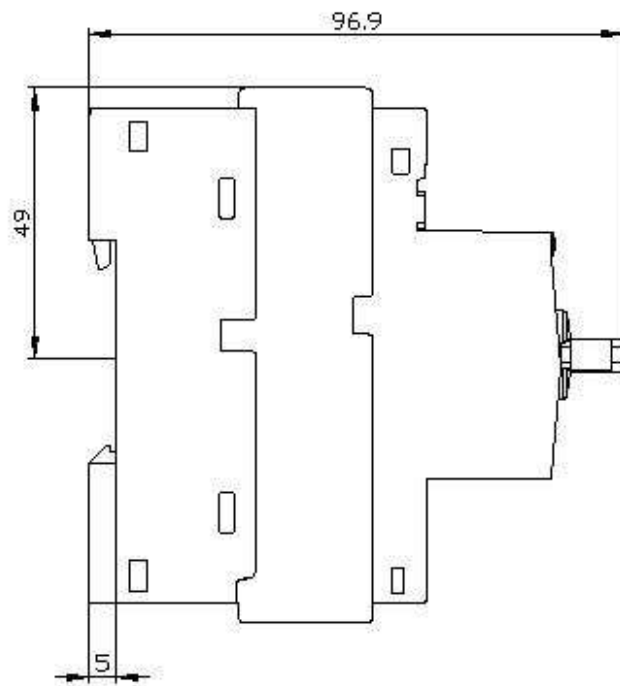
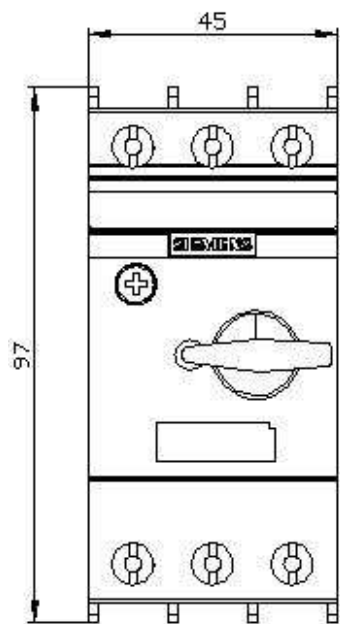
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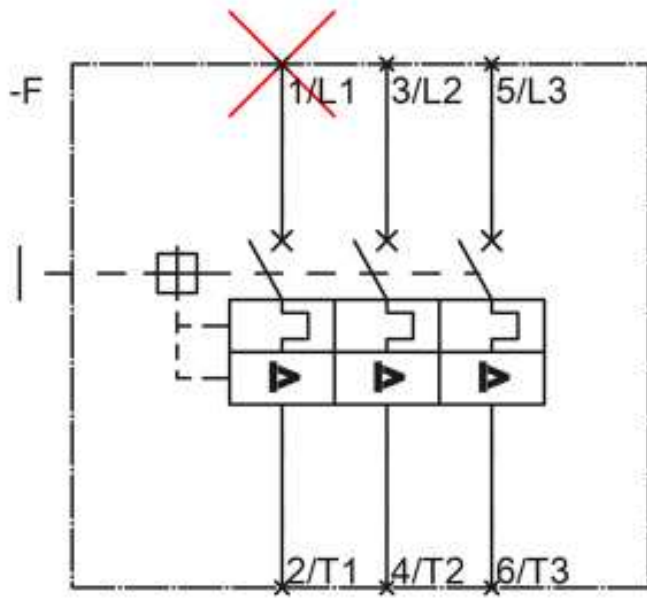
UL/CSA ratings

yielded mechanical performance (hp)	
for single-phase squirrel cage motors	
at 110/120 V / rated value	hp 2
at 230 V / rated value	hp 5
for three-phase squirrel cage motors	
at 200/208 V / rated value	hp 7.5
at 220/230 V / rated value	hp 10
at 460/480 V / rated value	hp 20
Operating current (FLA) / for three-phase squirrel cage motors	
at 480 V / rated value	A 27

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 • with high demand rate / according to SN 31920	%	40
	%	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/3RV2021-4EA10/all	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA10	





last change:

Mar 27, 2012