

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

Technical / CAx data

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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

<ul style="list-style-type: none"> <li>• phase disturbance recognition</li> </ul>	Yes
<b>Product component</b>	
<ul style="list-style-type: none"> <li>• auxiliary switch</li> <li>• undervoltage release mechanism</li> <li>• trip indicator</li> </ul>	No
<b>Product extension / optional / motor drive</b>	No

**Main circuit:**

<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at AC-3 / rated value / maximum</b>	V	690
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	29
<b>Service power / at AC-3</b>		
<ul style="list-style-type: none"> <li>• at 400 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	W	15,000
	W	18,500
	W	30,000
<b>Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum</b>	1/h	15
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Adjustable response current</b>		
<ul style="list-style-type: none"> <li>• of the non-delayed short-circuit release</li> <li>• of the current-dependent overload release</li> </ul>	A	400...400
	A	27...32
<b>Service power / at AC-3 / at 230 V / rated value</b>	W	7,500
<b>Continuous current / rated value</b>	A	32

**Auxiliary circuit:**

<b>Product extension / auxiliary switch</b>	Yes
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>	0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>	0
<b>Number of change-over switches / for auxiliary contacts</b>	0

**Inputs/ Outputs:**

<b>Number of digital inputs</b>	0
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**Short-circuit:**

<b>Breaking capacity limit short-circuit current (Icu)</b>		
<ul style="list-style-type: none"> <li>• at 400 V / rated value</li> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	A	55,000
	A	10,000
	A	4,000
<b>Design of the overcurrent release and short-circuit release</b>		thermomagnetic

**Installation/mounting/dimensions:**

<b>Built in orientation</b>		any
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>Width</b>	mm	45
<b>Height</b>	mm	97
<b>Depth</b>	mm	91
<b>Distance, to be maintained, to the ranks assembly</b>		
<ul style="list-style-type: none"> <li>• forwards</li> <li>• backwards</li> <li>• upwards</li> <li>• downwards</li> <li>• sideways</li> </ul>	mm	0
	mm	0
	mm	50
	mm	50
	mm	0
<b>Distance, to be maintained, to earthed part</b>		
<ul style="list-style-type: none"> <li>• forwards</li> </ul>	mm	0
	mm	0

<ul style="list-style-type: none"> <li>backwards</li> <li>upwards</li> <li>sideways</li> <li>downwards</li> </ul>	mm	50
	mm	30
	mm	50
<b>Distance, to be maintained, conductive elements</b>		
<ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>sideways</li> </ul>	mm	0
	mm	0
	mm	50
	mm	50
	mm	30

<b>Connections:</b>		
<b>Product function</b>		
<ul style="list-style-type: none"> <li>removable terminal for main circuit</li> <li>removable terminal for auxiliary and control circuit</li> </ul>		No
		No
<b>Design of the electrical connection</b>		
<ul style="list-style-type: none"> <li>for main current circuit</li> </ul>		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>for main contacts</li> <li>solid</li> <li>finely stranded</li> <li>with conductor end processing</li> <li>for AWG conductors / for main contacts</li> </ul>		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
		2x (16 ... 12), 2x (14 ... 8)

<b>Certificates/approvals:</b>		
<b>Verification of suitability</b>		CE / UL / CSA
<ul style="list-style-type: none"> <li>für Staubexplosionsschutz für Zone 21/22</li> <li>for gas explosion protection for zone 1/2</li> </ul>		no
		no

<b>General Product Approval</b>		<b>For use in hazardous locations</b>		
<input checked="" type="checkbox"/> CCC	<input checked="" type="checkbox"/> CSA	<input checked="" type="checkbox"/> GOST	<input checked="" type="checkbox"/> UL	<input checked="" type="checkbox"/> ATEX-EC-Type

<b>Test Certificates</b>		
other	Special Test Certificate	Type Test Certificates/Test Report

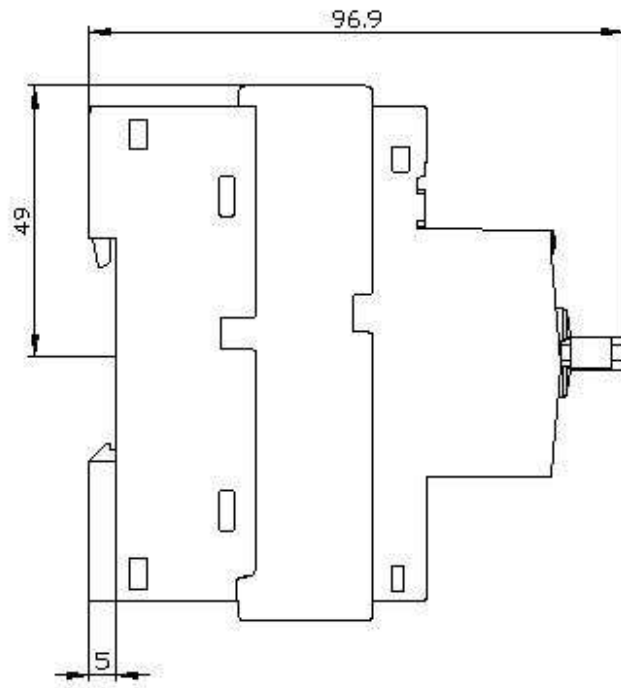
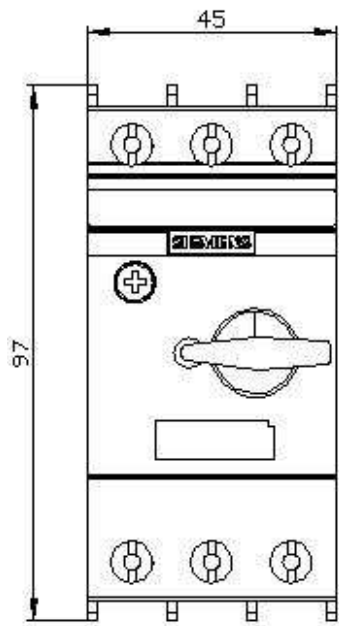
<b>Shipping Approval</b>					
<input checked="" type="checkbox"/> ABS (American Bureau of Shipping)	<input checked="" type="checkbox"/> GL / Germanischer Lloyd	<input checked="" type="checkbox"/> LRS / Lloyds Register	<input checked="" type="checkbox"/> PRS / Polski Rejestr Statku	<input checked="" type="checkbox"/> RINA / Registro Italiano Navale	<input checked="" type="checkbox"/> RMRS / Russian Maritime Register of Shipping

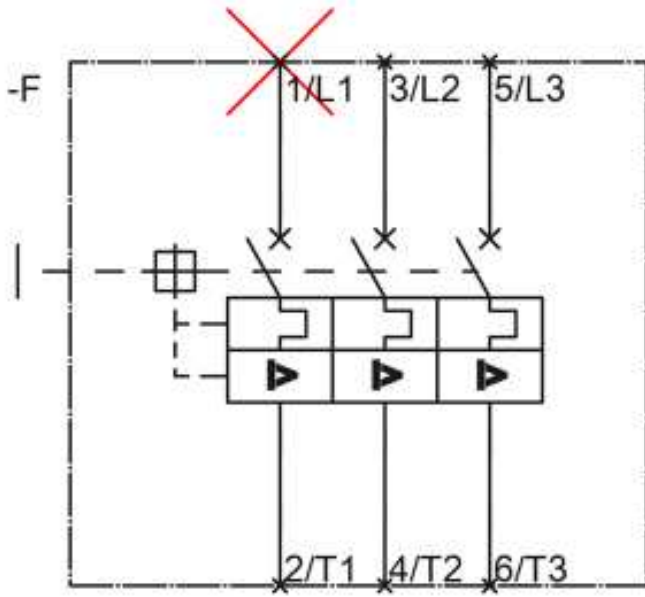
<b>other</b>		
<input checked="" type="checkbox"/> Household appliances	Declaration of Conformity	other

<b>UL/CSA ratings</b>		
<b>yielded mechanical performance (hp)</b>		
<ul style="list-style-type: none"> <li>for single-phase squirrel cage motors</li> <li>at 110/120 V / rated value</li> <li>at 230 V / rated value</li> <li>for three-phase squirrel cage motors</li> <li>at 200/208 V / rated value</li> <li>at 220/230 V / rated value</li> <li>at 460/480 V / rated value</li> </ul>	hp	2
	hp	5
	hp	7.5
	hp	10
	hp	20
<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
<ul style="list-style-type: none"> <li>at 480 V / rated value</li> </ul>	A	27

Safety:		
<b>B10 value / with high demand rate</b> <ul style="list-style-type: none"><li>• according to SN 31920</li></ul>		50,000
<b>T1 value / for proof test interval or service life</b> <ul style="list-style-type: none"><li>• according to IEC 61508</li></ul>	a	10
<b>Failure rate (FIT value) / with low demand rate</b> <ul style="list-style-type: none"><li>• according to SN 31920</li></ul>	FIT	50
<b>Proportion of dangerous failures</b> <ul style="list-style-type: none"><li>• with low demand rate / according to SN 31920</li><li>• with high demand rate / according to SN 31920</li></ul>	%	40
	%	40
<b>Protection against electrical shock</b>		finger-safe

Further information:	
<b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>	
<b>Industry Mall (Online ordering system)</b> <a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>	
<b>CAX-Online-Generator</b> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>	
<b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b> <a href="http://support.automation.siemens.com/WW/view/en/3RV2021-4EA10/all">http://support.automation.siemens.com/WW/view/en/3RV2021-4EA10/all</a>	
<b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b> <a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA10">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA10</a>	





last change:

Mar 27, 2012