# **SIEMENS**

#### Data sheet

## 3RU2116-1JC1



OVERLOAD RELAY 7.0...10 A FOR MOTOR PROTECTION SZ S00, CLASS 10, STAND-ALONE INSTALLATION MAIN CIRCUIT: SPRING TERMINAL AUX. CIRCUIT: SPRING TERMINAL MANUAL-AUTOMATIC-RESET

product brand name	-	SIRIUS	
Product designation	-	3RU2 thermal overload relay	
		Sixez thermal overload relay	
General technical data:			
Active power loss total typical	W	6.1	
Insulation voltage			
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690	
Shock resistance	-		
• acc. to IEC 60068-2-27		8g / 11 ms	
Surge voltage resistance Rated value	kV	6	
Temperature compensation	°C	-40 +60	
Size of contactor can be combined company-specific	-	S00	
Type of assignment	-	2	
Protection class IP	-		
• on the front		IP20	
• of the terminal		IP20	
Equipment marking	-		
• acc. to DIN EN 81346-2		F	
Main circuit:			
Number of poles for main current circuit		3	
Adjustable response value current of the current-	А	7 10	
dependent overload release			
Operating voltage			
Rated value	V	690	
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690	

Operating frequency Rated value

50 ... 60

Hz

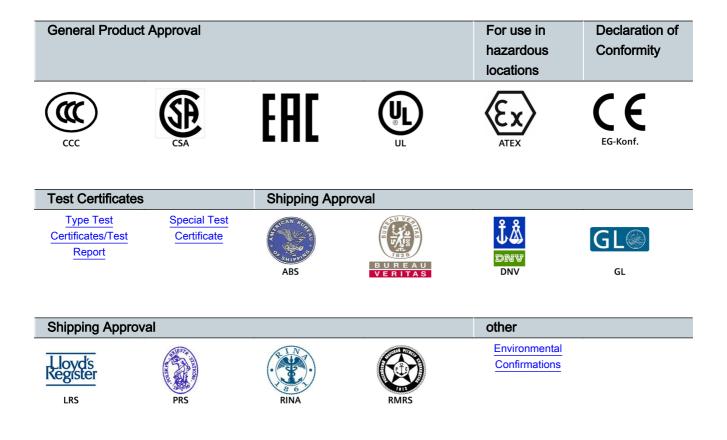
Operating current         Image of the surface of	Operating current Rated value	А	10		
	Operating current				
Auxiliary contacts         I                • for auxiliary contacts             • for auxili	• at AC-3				
Number of NC contacts         1           • for auxiliary contacts         1           Note         for contactor disconnection           Number of NC contacts         1           Note         for contactor disconnection           Number of CC contacts         1           Note         for message "Tripped"           Number of CC contacts         0           Design of the auxiliary contacts at AC-15         0           • at 24 V         A         3           • at 110 V         A         3           • at 120 V         A         3           • at 230 V         A         2           • at 24 V         A         3           • at 25 V         A         2           • at 24 V         A         2           • at 24 V         A         3           • at 25 V         A         2           • at 24 V         A         0.22           • at 220 V         A         0.11           Protective and monitoring functions:         Trip class         CLASS 10           Design of the overload circuit breaker         A         10           JL/CSA ratings:         Fullead current (FLA) for three-phase AC motor         B600	— at 400 V Rated value	А	10		
Number of NC contacts         1           • for auxiliary contacts         1           Note         for contactor disconnection           Number of NC contacts         1           Note         for contactor disconnection           Number of CC contacts         1           Note         for message "Tripped"           Number of CC contacts         0           Design of the auxiliary contacts at AC-15         0           • at 24 V         A         3           • at 110 V         A         3           • at 120 V         A         3           • at 230 V         A         2           • at 24 V         A         3           • at 25 V         A         2           • at 24 V         A         2           • at 24 V         A         3           • at 25 V         A         2           • at 24 V         A         0.22           • at 220 V         A         0.11           Protective and monitoring functions:         Trip class         CLASS 10           Design of the overload circuit breaker         A         10           JL/CSA ratings:         Fullead current (FLA) for three-phase AC motor         B600	Auxiliary circuit				
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Contact rating of the auxiliary contacts acc. to ULB600 / R300Installation/ mounting/ dimensions:mounting positionMounting typeHeightWidthDepthmm79	• at 480 V Rated value	А	10		
Installation/ mounting/ dimensions:     any       mounting position     any       Mounting type     stand-alone installation       Height     mm     102       Width     mm     45       Depth     mm     79	• at 600 V Rated value	А	10		
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Heightmm102Widthmm45Depthmm79			any		
Width         mm         45           Depth         mm         79	Mounting type		stand-alone installation		
Depth mm 79	Height	mm	102		
	Width	mm	45		
Required spacing	Depth	mm	79		
	Required spacing				

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## Connections/ Terminals:

Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	spring-loaded terminals
• for auxiliary and control current circuit	spring-loaded terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
Type of connectable conductor cross-section	
<ul> <li>for main contacts</li> </ul>	
— single or multi-stranded	1x (0,5 4 mm²)
— finely stranded with core end processing	1x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	1x (0.5 2.5 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>	1x (20 12)
<ul> <li>for auxiliary contacts</li> </ul>	
— single or multi-stranded	2x (0,5 2,5 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 1.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 14)
Design of screwdriver shaft	5 to 6 mm diameter

Safety related data:				
Proportion of dangerous failures				
with low demand rate acc. to SN 31920	%	50		
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	50		
Failure rate [FIT] with low demand rate acc. to SN	FIT	50		
31920				
MTTF with high demand rate	у	2 280		
T1 value for proof test interval or service life acc. to IEC 61508	У	20		
Protection against electrical shock	-	finger-safe		
Mechanical data:				
Size of overload relay		S00		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
<ul> <li>during operation</li> </ul>	°C	-40 +70		
during storage	°C	-55 +80		
during transport	°C	-55 +80		
Relative humidity during operation	%	0 90		
Display:				
Display version				
<ul> <li>for switching status</li> </ul>		Slide switch		
Certificates/ approvals:				



#### Further information

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

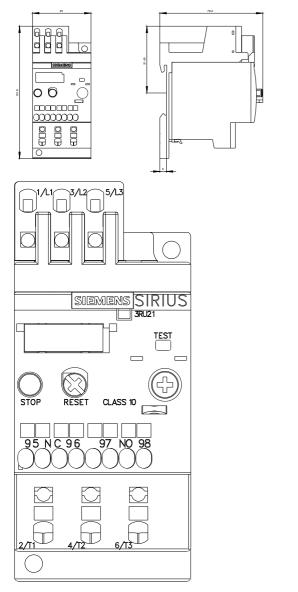
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

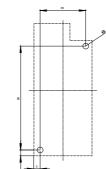
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU21161JC1

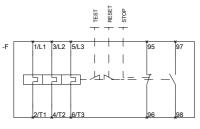
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU21161JC1/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU21161JC1&lang=en\_\_\_\_\_





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