# **SIEMENS**

Product data sheet 3RU2116-1KJ0



OVERLOAD RELAY 9.0...12.5 A FOR MOTOR PROTECTION BGR S00, CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT:RING TERMINAL END AUXILARY CIRCUIT:RING TERMINAL END MANUAL-AUTOMATIC-RESET

General technical data:		
Product brand name		SIRIUS
product designation		3RU2 thermal overload relay
Protection class IP / on the front		IP20
Insulation voltage / with degree of pollution 3		
• rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during transport	°C	-55 80
during storage	°C	-55 80
during operating	°C	-40 70
Relative humidity		
during operating phase	/ %	90
Resistance against shock		8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / total / typical	W	5.1
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		F
according to DIN EN 61346-2		F

Trip class	CLASS 10
Type of assignement	2
Size of overload relay	S00
Size of the contactor / can be combined	
• company-specific	S00

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	Α	12.5
Service power / at AC-3		
• at 400 V / rated value	kW	5.5
• at 500 V / rated value	kW	7.5
• at 690 V / rated value	kW	7.5
Adjustable response current		
of the current-dependent overload release	Α	9 12.5
Operating current / of the fuse link / rated value	Α	35

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		1
Number of change-over switches / for auxiliary contacts		0
Operating current / of the auxiliary contacts		
• at AC-15		
• at 24 V	Α	3
• at 110 V	Α	3
• at 120 V	Α	3
• at 125 V	Α	3
• at 230 V	Α	2
• at 400 V	Α	1
• at DC-13		
• at 24 V	Α	1
• at 110 V	Α	0.22
• at 125 V	Α	0.22
• at 220 V	Α	0.11

## Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gG: 10 A
Installation/mounting/dimensions:		
Built in orientation		vertical
Type of mounting		direct mounting
Width	mm	45
Height	mm	87
Depth	mm	73
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Connections:		
Design of the electrical connection		
for main current circuit		ring cable connection
for auxiliary and control current circuit		ring cable connection
Product function / removable terminal for auxiliary and control circuit		No
Certificates/approvals:		
Verification of suitability		CE / UL / CSA

• ATEX

No

#### **General Product Approval**

For use in hazardous locations

**Test Certificates** 





**ROSTEST** 



DEKRA EXAM, DMT

Manufacturer

#### **Shipping Approval**













**Shipping Approval** 

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Manufacturer

Reliability figures:		
Mean time to failure (MTTF) / with high demand rate	а	2,280
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	50
with high demand rate / according to SN 31920	%	50
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	50
T1 value / for proof test interval or service life		
according to IEC 61508	а	20
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:

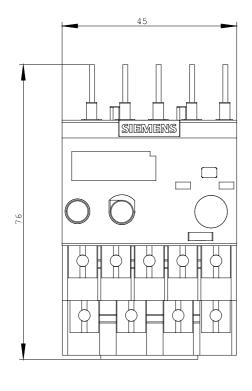
http://www.siemens.com/cax

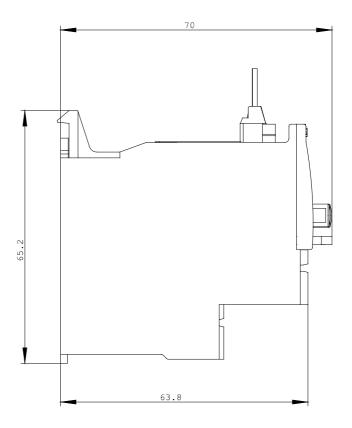
 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$ 

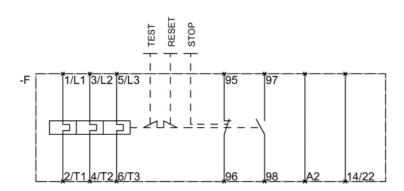
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RU2116-1KJ0/all}}$ 

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RU2116-1KJ0







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