## **SIEMENS**

Data sheet 3RU2116-0BC0



Overload relay 0.14...0.20 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
General technical data	
size of overload relay	S00
size of contactor can be combined company-specific	S00
power loss [W] for rated value of the current at AC in hot operating state	4.8 W
• per pole	1.6 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
<ul> <li>in networks with ungrounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with ungrounded star point between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-40 +70 °C
during storage	-55 +80 °C
during transport	-55 +80 °C
temperature compensation	-40 +60 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	0.14 0.2 A
operating voltage	
rated value	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.2 A
operational current at AC-3e at 400 V rated value	0.2 A

operating power	
• at AC-3	
— at 400 V rated value	0.06 kW
— at 500 V rated value	0.06 kW
— at 690 V rated value	0.09 kW
• at AC-3e	
— at 400 V rated value	0.06 kW
— at 500 V rated value	0.06 kW
— at 690 V rated value	0.09 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
• note	for contactor disconnection
number of NO contacts for auxiliary contacts	1
• note	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	·
• at 24 V	3 A
• at 110 V	3 A
• at 110 V	3 A
	3 A
• at 125 V	
• at 230 V	2 A
• at 400 V	1 A
• at 690 V	0.75 A
operational current of auxiliary contacts at DC-13	
• at 24 V	2 A
• at 60 V	0.3 A
• at 110 V	0.22 A
● at 125 V	0.22 A
	0.11 A
● at 220 V	
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	B600 / R300 CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings	B600 / R300 CLASS 10
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contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings	B600 / R300 CLASS 10
contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value	B600 / R300  CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	B600 / R300  CLASS 10 thermal
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link	B600 / R300  CLASS 10 thermal  0.2 A 0.2 A
contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required	B600 / R300  CLASS 10 thermal  0.2 A 0.2 A
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position	CLASS 10 thermal  0.2 A 0.2 A fuse gG: 6 A, quick: 10 A
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height	CLASS 10 thermal  0.2 A 0.2 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm
contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	B600 / R300  CLASS 10 thermal  0.2 A 0.2 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm 45 mm
contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	B600 / R300  CLASS 10 thermal  0.2 A 0.2 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm 45 mm
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit	CLASS 10 thermal  0.2 A 0.2 A  1.2 A  1.2 A  1.3 A  1.4 A  1.5 A  1.5 A  1.6 A  1.7 A
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current	CLASS 10 thermal  0.2 A 0.2 A 0.2 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm 45 mm 70 mm  No  spring-loaded terminals spring-loaded terminals
contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit	CLASS 10 thermal  0.2 A 0.2 A 0.2 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm 45 mm 70 mm  No  spring-loaded terminals spring-loaded terminals
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contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts  — solid or stranded	CLASS 10 thermal  0.2 A 0.2 A 0.2 A fuse gG: 6 A, quick: 10 A  any Contactor mounting 87 mm 45 mm 70 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom

2x (0.5 2.5 mm²)
2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
2x (0.5 1.5 mm²)
2x (20 14)
Diameter 3 mm
3,0 x 0,5 mm
50 FIT
2 280 a
20 a
IP20
finger-safe, for vertical contact from the front
Slide switch

Confirmation











For use in hazardous locations

**Test Certificates** 

Marine / Shipping





Special Test Certificate Type Test Certificates/Test Report





Marine / Shipping

ĴÅ DNV

Confirmation



LRS







**Miscellaneous** 

other

other Railway

Special Test Certificate



**Environment** 

Environmental Confirmations

## Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-0BC0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RU2116-0BC0}$ 

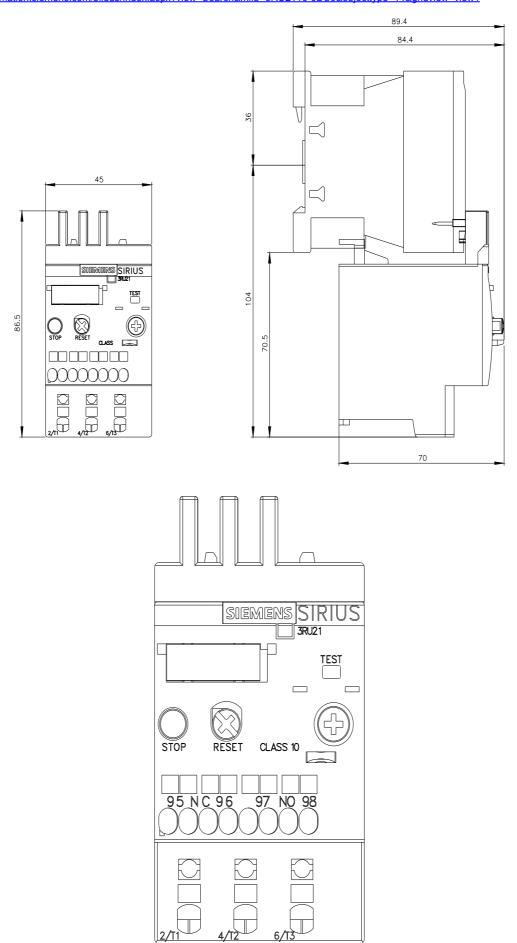
 $Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)$ 

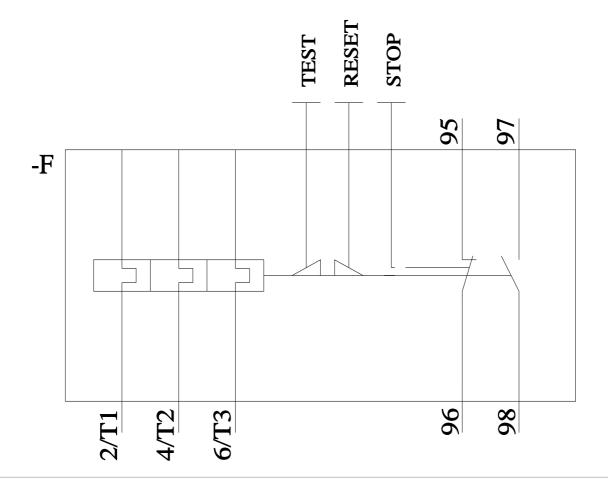
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0BC0

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2116-0BC0&lang=en

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last modified: 4/5/2024 🖸