## **SIEMENS**

Data sheet 3RU2116-0KB1



Overload relay 0.90...1.25 A Thermal For motor protection Size S00, Class 10 Stand-alone installation Main circuit: Screw Auxiliary circuit: Screw 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	5.7 W
• per pole	1.9 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	0.9 1.25 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	1.25 A
operational current at AC-3e at 400 V rated value	1.25 A

operating power	
• at AC-3	
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.55 kW
— at 690 V rated value	0.75 kW
• at AC-3e	
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.55 kW
— at 690 V rated value	0.75 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 120 V	3 A
• at 125 V	3 A
• at 125 v	2 A
	1A
• at 400 V	0.75 A
• at 690 V	0.75 A
operational current of auxiliary contacts at DC-13	0.4
• at 24 V	2 A
• at 60 V	0.3 A
• at 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	0.11 A
contact rating of auxiliary contacts according to UL	B600 / R300
Protective and monitoring functions	
Protective and monitoring functions trip class	CLASS 10
Protective and monitoring functions trip class design of the overload release	
Protective and monitoring functions trip class design of the overload release UL/CSA ratings	CLASS 10
Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10 thermal
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	CLASS 10 thermal
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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	CLASS 10 thermal
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	CLASS 10 thermal  1.3 A 1.3 A
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	CLASS 10 thermal  1.3 A 1.3 A
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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  1.3 A 1.3 A fuse gG: 6 A, quick: 10 A
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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	thermal  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm
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	CLASS 10 thermal  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm
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	CLASS 10 thermal  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm
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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  1.3 A 1.3 A 1.3 A fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm 80 mm
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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  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm 80 mm  No  screw-type terminals screw-type terminals
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10 thermal  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm 80 mm  No  screw-type terminals screw-type terminals Top and bottom  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
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  — finely stranded with core end processing	CLASS 10 thermal  1.3 A 1.3 A 1.3 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 89 mm 45 mm 80 mm  No  Screw-type terminals screw-type terminals Top and bottom  2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²

2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
2x (20 16), 2x (18 14)	
0.8 1.2 N·m	
0.8 1.2 N·m	
Diameter 5 6 mm	
Pozidriv PZ 2	
M3	
M3	
50 FIT	
2 280 a	
20 a	
IP20	
finger-safe, for vertical contact from the front	
Slide switch	
Approvals Certificates	



**General Product Approval** 





Confirmation







For use in hazardous locations

**Test Certificates** 

Marine / Shipping







Type Test Certificates/Test Report

Special Test Certificate





Marine / Shipping











**Miscellaneous** 

other

other Railway

Confirmation Special Test Certificate



**Environment** 

Environmental Confirmations

## urther 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=3RU2116-0KB1

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-0KB1

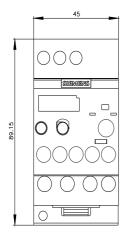
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0k

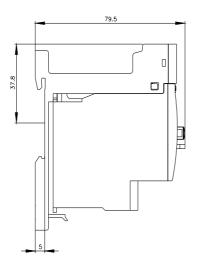
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RU2116-0KB1&lang=en

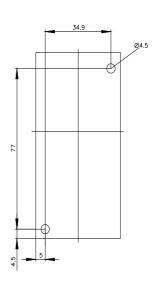
Characteristic: Tripping characteristics, I2t, Let-through current

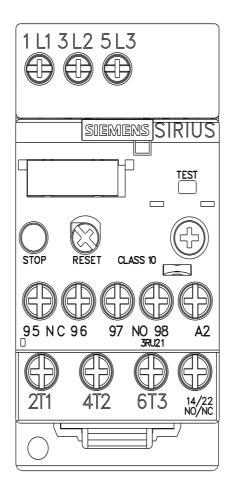
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0KB1/char

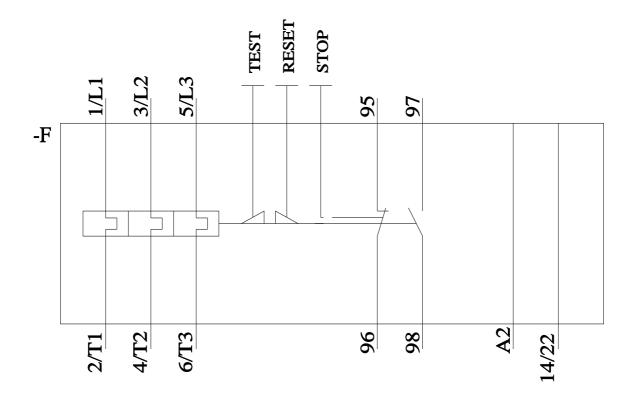
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0KB1&objecttype=14&gridview=view1











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