## **SIEMENS**

Data sheet 3RU2116-0GB0



Overload relay 0.45...0.63 A Thermal For motor protection Size S00, Class 10 Contactor mounting 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	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 safe isolation in networks with grounded star point	
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 98 ATEX G 001
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul><li>during storage</li></ul>	-55 +80 °C
<ul> <li>during transport</li> </ul>	-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	0.45 0.63 A
operating voltage	
rated value	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.63 A
operational current at AC-3e at 400 V rated value	0.63 A

4	
operating power	
• at AC-3	0.401114
— at 400 V rated value	0.18 kW
— at 500 V rated value	0.18 kW
— at 690 V rated value	0.25 kW
• at AC-3e	0.40 13M
— at 400 V rated value	0.18 kW
— at 500 V rated value	0.18 kW
— at 690 V rated value	0.25 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 for manages "Tripped"
• note	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15  • at 24 ∨	3 A
• at 110 V	3 A
• at 120 V	3 A
• at 125 V	3 A
• 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
• at 220 V	0.11 A
contact rating of auxiliary contacts according to UL	B600 / R300
Protective and monitoring functions	
	0.100.10
trip class	CLASS 10
trip class design of the overload release	CLASS 10 thermal
•	
design of the overload release	
design of the overload release UL/CSA ratings	
design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal
design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	0.63 A
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	0.63 A
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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  0.63 A 0.63 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 76 mm
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design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  0.63 A 0.63 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 76 mm 45 mm 70 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
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- solid or stranded

- finely stranded with core end processing

• at AWG cables for auxiliary contacts

tightening torque

• for main contacts with screw-type terminals

• for auxiliary contacts with screw-type terminals

design of screwdriver shaft size of the screwdriver tip

design of the thread of the connection screw

· for main contacts

• of the auxiliary and control contacts

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

Safety related data

failure rate [FIT] with low demand rate according to SN 31920

MTTF with high demand rate

T1 value for proof test interval or service life according to

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529

50 FIT

2 280 a

20 a

IP20

finger-safe, for vertical contact from the front

Display

display version for switching status

Slide switch

Certificates/ approvals

## **General Product Approval**

For use in hazardous locations



Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



IECEx





Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping













other

Railway

**Confirmation** 

Vibration and Shock

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RU2116-0GB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-0GB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0GB0

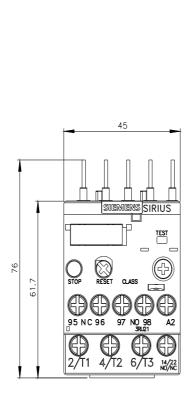
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2116-0GB0&lang=en

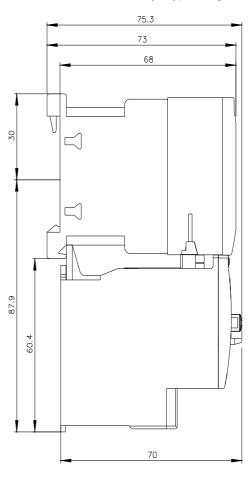
Characteristic: Tripping characteristics, I2t, Let-through current

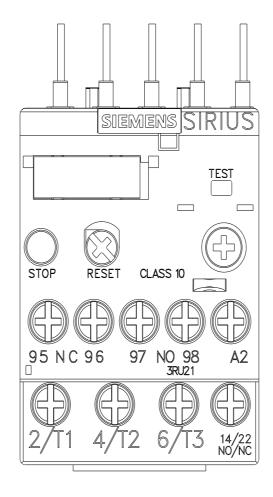
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0GB0/char

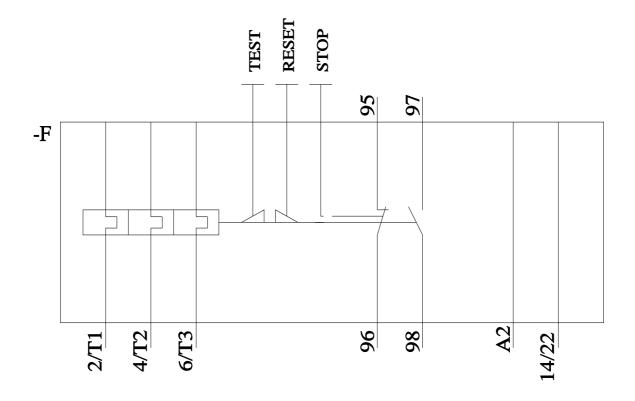
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0GB0&objecttype=14&gridview=view1









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