



Overload relay 0.28...0.40 A Thermal For motor protection Size S00, Class 10 Stand-alone installation 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
<ul style="list-style-type: none"> 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 style="list-style-type: none"> between auxiliary and auxiliary circuit between auxiliary and auxiliary circuit between main and auxiliary circuit between main and auxiliary circuit 	440 V 440 V 440 V 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 style="list-style-type: none"> during operation during storage during transport 	-40 ... +70 °C -55 ... +80 °C -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	0.28 ... 0.4 A
operating voltage	
<ul style="list-style-type: none"> rated value at AC-3e rated value maximum 	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	0.4 A
operational current at AC-3e at 400 V rated value	0.4 A

operating power	
<ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value 	<p>0.09 kW 0.12 kW 0.18 kW</p> <p>0.09 kW 0.12 kW 0.18 kW</p>

Auxiliary circuit

design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	for contactor disconnection
number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> ● at 24 V ● at 110 V ● at 120 V ● at 125 V ● at 230 V ● at 400 V 	<p>3 A 3 A 3 A 3 A 2 A 1 A</p>
operational current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> ● at 24 V ● at 60 V ● at 110 V ● at 125 V ● at 220 V 	<p>2 A 0.3 A 0.22 A 0.22 A 0.11 A</p>
contact rating of auxiliary contacts according to UL	B600 / R300

Protective and monitoring functions

trip class	CLASS 10
design of the overload release	thermal

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	<p>0.4 A 0.4 A</p>

Short-circuit protection

design of the fuse link	
<ul style="list-style-type: none"> ● for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A

Installation/ mounting/ dimensions

mounting position	any
fastening method	stand-alone installation
height	102 mm
width	45 mm
depth	79 mm

Connections/ Terminals

product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
<ul style="list-style-type: none"> ● for main current circuit ● for auxiliary and control circuit 	<p>spring-loaded terminals spring-loaded terminals</p>
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> ● for main contacts <ul style="list-style-type: none"> — solid or stranded — finely stranded with core end processing — finely stranded without core end processing ● at AWG cables for main contacts 	<p>1x (0,5 ... 4 mm²) 1x (0.5 ... 2.5 mm²) 1x (0.5 ... 2.5 mm²) 1x (20 ... 12)</p>
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> ● for auxiliary contacts 	

- solid or stranded
- finely stranded with core end processing
- finely stranded without core end processing
- at AWG cables for auxiliary contacts

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

design of screwdriver shaft
size of the screwdriver tip

Safety related data

failure rate [FIT] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life according to IEC 61508	20 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Display

display version for switching status	Slide switch
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Certificates/ approvals

General Product Approval	For use in hazardous locations
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[Confirmation](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping



other	Railway
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[Confirmation](#)

[Vibration and Shock](#)

Further information

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=3RU2116-0EC1>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-0EC1>

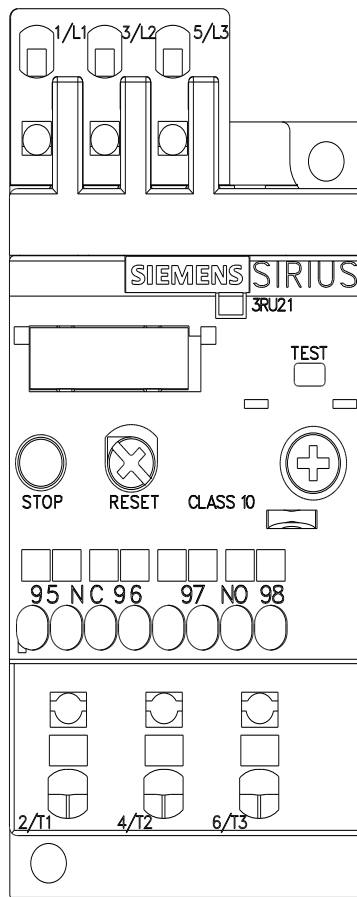
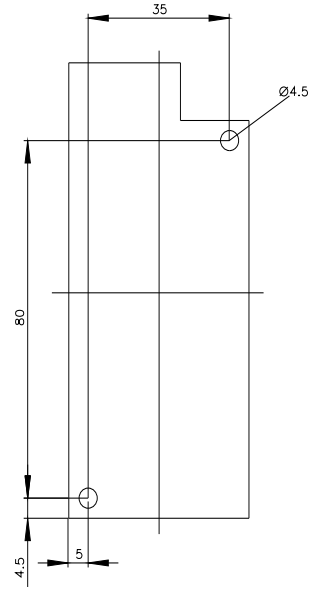
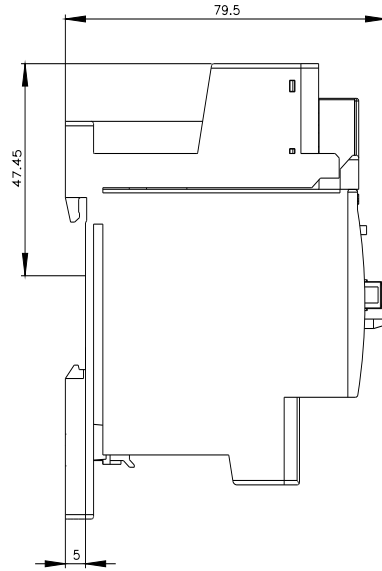
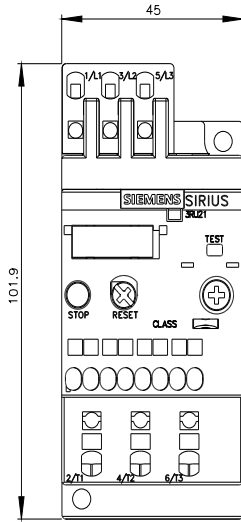
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0EC1>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-0EC1&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current



last modified:

3/8/2022 