



OVERLOAD RELAY 40... 50 A FOR MOTOR PROTECTION  
SIZE S2,  
CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN  
CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW  
TERMINAL MANUAL-AUTOMATIC-RESET.

General technical data:		
product brand name		SIRIUS
Product designation		3RU2 thermal overload relay
Size of overload relay		S2
Size of contactor / can be combined / company-specific		S2
Number of poles / for main current circuit		3
Product function / removable terminal for auxiliary and control circuit		No
Product function		
• overload protection		Yes
• Phase failure detection		Yes
• Ground fault detection		No
Product component		
• Auxiliary switch		Yes
• Trip indicator		Yes
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Surge voltage resistance / Rated value	kV	6
Protection class IP		
• of the terminal		IP00
• on the front		IP20

<b>Installation altitude / at height above sea level / maximum</b>	m	2,000
<b>Shock resistance / acc. to IEC 60068-2-27</b>		8g / 11 ms
<b>Ambient temperature</b>		
• during transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operation	°C	-40 ... +70
<b>Relative humidity</b>		
• during operation	%	0 ... 90
<b>Type of protection</b>		on request
<b>Active power loss / total / typical</b>	W	11

<b>Main circuit:</b>		
<b>Operating current / Rated value</b>	A	50
<b>Operating voltage / Rated value</b>	V	690
<b>Type of voltage / for main current circuit</b>		AC/DC
<b>Operating frequency</b>		
• Rated value	Hz	50 ... 60
<b>Operating current / at AC-3 / at 400 V / Rated value</b>	A	50
<b>Type of assignment</b>		2

<b>Steuerstromkreis</b>		
<b>Type of voltage / for auxiliary and control current circuit</b>		AC/DC

<b>Auxiliary circuit:</b>		
<b>Design of the auxiliary switch</b>		integrated
<b>Number of NC contacts / for auxiliary contacts</b>		1
<b>Number of NO contacts / for auxiliary contacts</b>		1
<b>Number of CO contacts / for auxiliary contacts</b>		0
<b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b>		fuse gG: 6 A, quick: 10 A
<b>Operating current / of the auxiliary contacts</b>		
• at AC-15		
• at 24 V	A	3
• at 110 V	A	3
• at 120 V	A	3
• at 125 V	A	3
• at 230 V	A	2
• at 400 V	A	1
• at DC-13		
• at 24 V	A	2
• at 110 V	A	0.22

- at 125 V
- at 220 V

A	0.22
A	0.11

#### Protective and monitoring functions:

##### Design of the overload circuit breaker

thermal

##### Trip class

CLASS 10

##### Adjustable response value current

- of the current-dependent overload release

A 40 ... 50

#### Installation/ mounting/ dimensions:

##### Mounting type

direct mounting

##### mounting position

any

##### Depth

mm 105

##### Height

mm 90

##### Width

mm 55

#### Connections/ terminals:

##### Arrangement of electrical connectors / for main current circuit

Top and bottom

##### Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

##### Type of connectable conductor cross-section / for main contacts

- single or multi-stranded
- finely stranded
- with core end processing

2x (1 ... 35 mm<sup>2</sup>), 1x (1 ... 50 mm<sup>2</sup>)

2x (1 ... 25 mm<sup>2</sup>), 1x (1 ... 35 mm<sup>2</sup>)

##### Type of connectable conductor cross-section / for AWG conductors / for main contacts

2x (18 ... 2), 1x (18 ... 1)

##### Type of connectable conductor cross-section / for auxiliary contacts

- single or multi-stranded
- finely stranded
- with core end processing

2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

##### Type of connectable conductor cross-section / for AWG conductors / for auxiliary contacts

2x (20 ... 16), 2x (18 ... 14)

#### UL/CSA ratings:

##### Full-load current (FLA) / for three-phase AC motor

- at 480 V / Rated value
- at 600 V / Rated value

A 50  
A 50

##### Contact rating / of the auxiliary contacts / acc. to UL

B600 / R300

#### Certificates/ approvals:



[Type Test  
Certificates/Test  
Report](#)

#### Further information:

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

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

##### Cax online generator

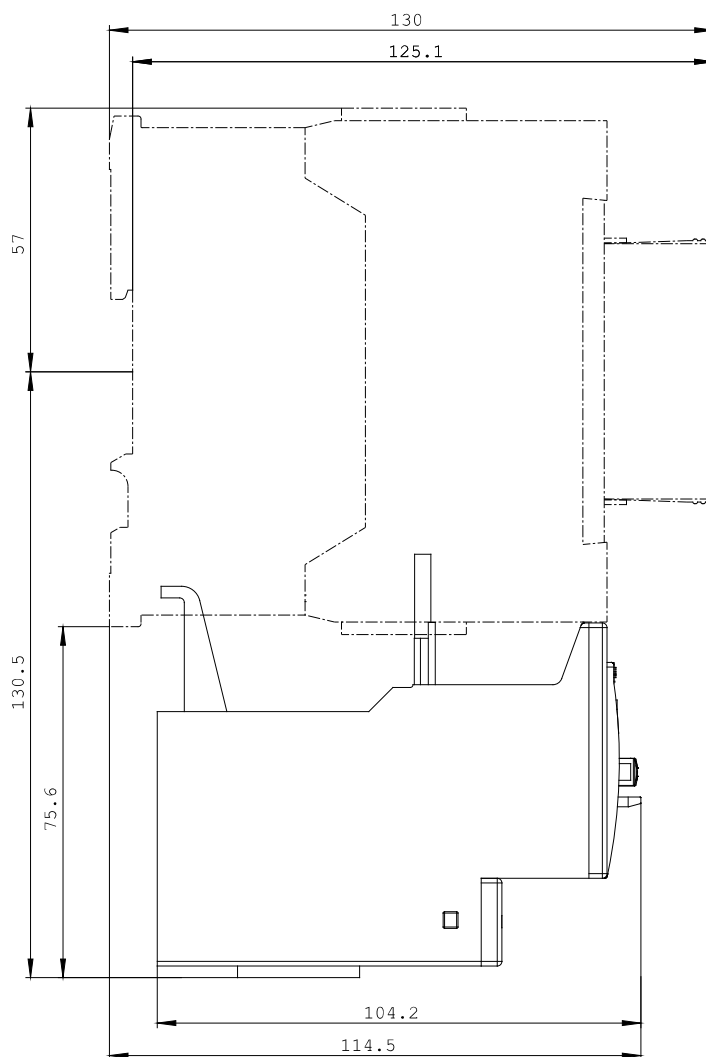
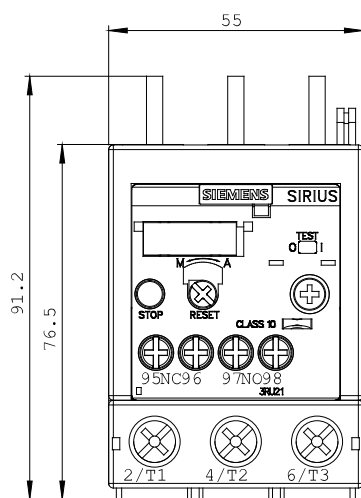
<http://www.siemens.com/cax>

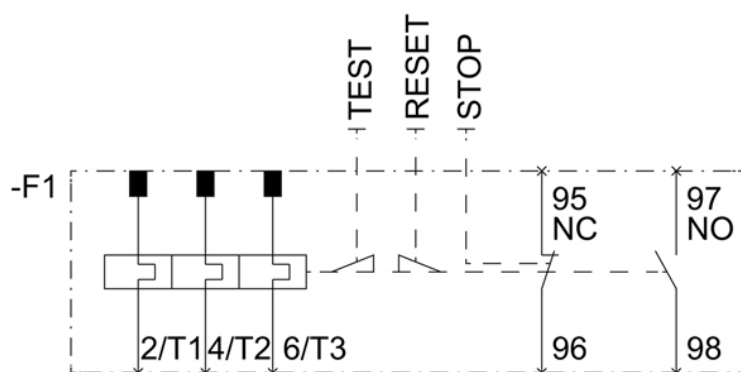
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RU2136-4HB0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RU2136-4HB0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2136-4HB0)





last change:

Dec 3, 2014