



Overload relay 14...20 A Thermal For motor protection Size S2, Class 10
 Contactor mounting Main circuit: Screw 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	S2
size of contactor can be combined company-specific	S2
power loss [W] for rated value of the current at AC in hot operating state	10.5 W
per pole	3.5 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	
- between auxiliary and auxiliary circuit - between auxiliary and auxiliary circuit - between main and auxiliary circuit - between main and auxiliary circuit	415 V 415 V 690 V 690 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)	10/15/2014

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
- 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	14 ... 20 A
operating voltage	
- rated value - at AC-3e rated value maximum	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	20 A
operational current at AC-3e at 400 V rated value	20 A

operating power	
- at AC-3 - at 400 V rated value - at 500 V rated value - at 690 V rated value - at AC-3e - at 400 V rated value - at 500 V rated value - at 690 V rated value	7.5 kW 11 kW 15 kW 7.5 kW 11 kW 15 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 - at 110 V - at 120 V - at 125 V - at 230 V - at 400 V - at 690 V	3 A 3 A 3 A 3 A 2 A 1 A 0.75 A
operational current of auxiliary contacts at DC-13	
- at 24 V - at 60 V - at 110 V - at 125 V - at 220 V	2 A 0.3 A 0.22 A 0.22 A 0.11 A
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
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	
- at 480 V rated value - at 600 V rated value	20 A 20 A
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	Contactor mounting
height	90 mm
width	55 mm
depth	105 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
- for main current circuit - for auxiliary and control circuit	screw-type terminals spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections for main contacts	
- solid or stranded - finely stranded with core end processing	2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
type of connectable conductor cross-sections	

- 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 (0.5 ... 2.5 mm²)
 2x (20 ... 14)

tightening torque

- for main contacts with screw-type terminals

3 ... 4.5 N·m
 Diameter 5 ... 6 mm
 Pozidriv PZ 2

design of screwdriver shaft

size of the screwdriver tip

design of the thread of the connection screw

- for main contacts

M6

Safety related data

T1 value for proof test interval or service life according to IEC 61508

20 a

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

Certificates/ approvals

General Product Approval

For use in hazard-
ous locations



[Confirmation](#)



For use in hazard-
ous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping



other

Railway

[Confirmation](#)

[Special Test Certificate](#)

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=3RU2136-4BD0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4BD0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4BD0>

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

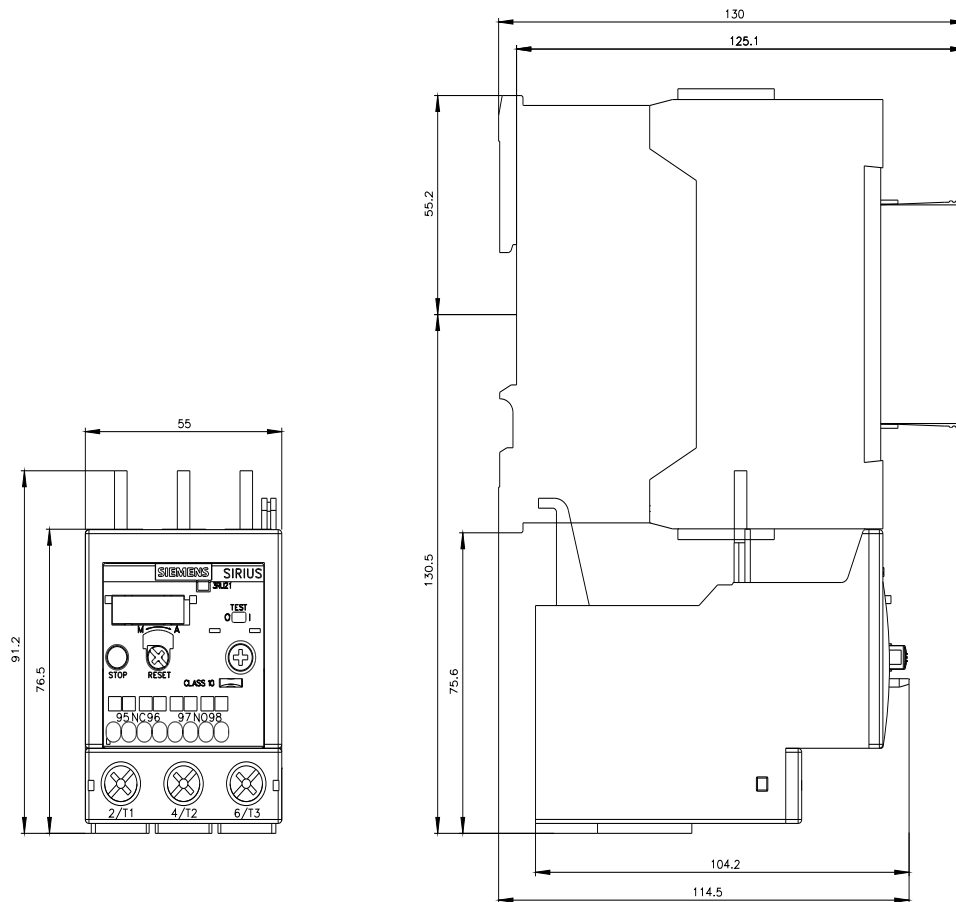
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4BD0&lang=en

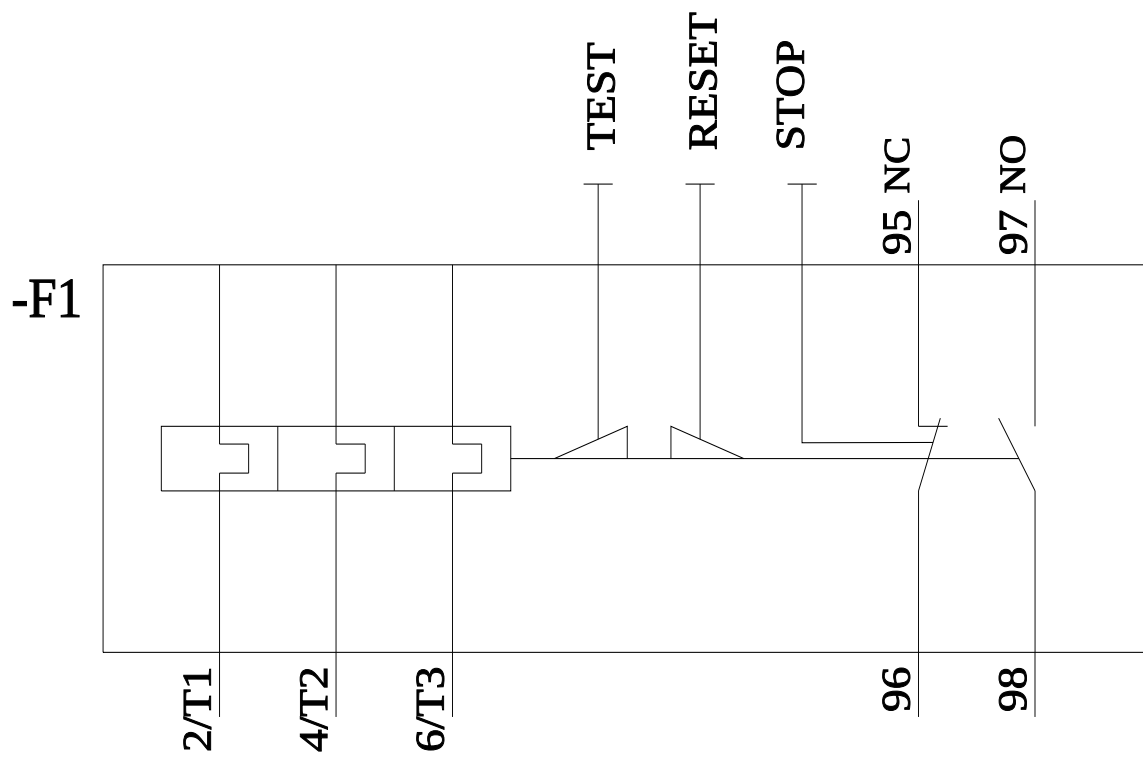
Characteristic: Tripping characteristics, I^2t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4BD0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4BD0&objecttype=14&gridview=view1>





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3/8/2022 