

Overload relay 28...40 A Thermal For motor protection Size S2,
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	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 - at AC in hot operating state per pole	15.6 W 5.2 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 - in networks with grounded star point between auxiliary and auxiliary circuit - in networks with grounded star point between main and auxiliary circuit	415 V 415 V 690 V

• in networks with grounded star point between main and auxiliary circuit	690 V
protection class IP	
• on the front • of the terminal	IP20 IP00
shock resistance	
• acc. to IEC 60068-2-27	8g / 11 ms
recovery time	
• after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset	10 min 10 min 10 min
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 acc. to IEC 81346-2	F

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	28 ... 40 A
operating voltage	
• rated value • at AC-3 rated value maximum	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	40 A

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 230 V	2 A
• at 400 V	1 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
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	40 A
• at 600 V rated value	40 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	Contactors mounting
height	90 mm
width	55 mm
depth	105 mm
Connections/ Terminals	
product function	
• removable terminal for auxiliary and control circuit	No
type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type 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 • at AWG cables for main contacts	2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1)
• type of connectable conductor cross-sections for auxiliary contacts — solid or stranded — finely stranded with core end processing • type of connectable conductor cross-sections at AWG cables for auxiliary contacts	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14)
tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	3 ... 4.5 N·m 0.8 ... 1.2 N·m
design of screwdriver shaft	Diameter 5 ... 6 mm
size of the screwdriver tip	Pozidriv PZ 2
design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts	M6 M3
Safety related data	
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Display	
display version • for switching status	Slide switch
Certificates/ approvals	

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Confirmation](#)

Railway

[Special Test Certificate](#)

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=3RU2136-4FB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4FB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4FB0>

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

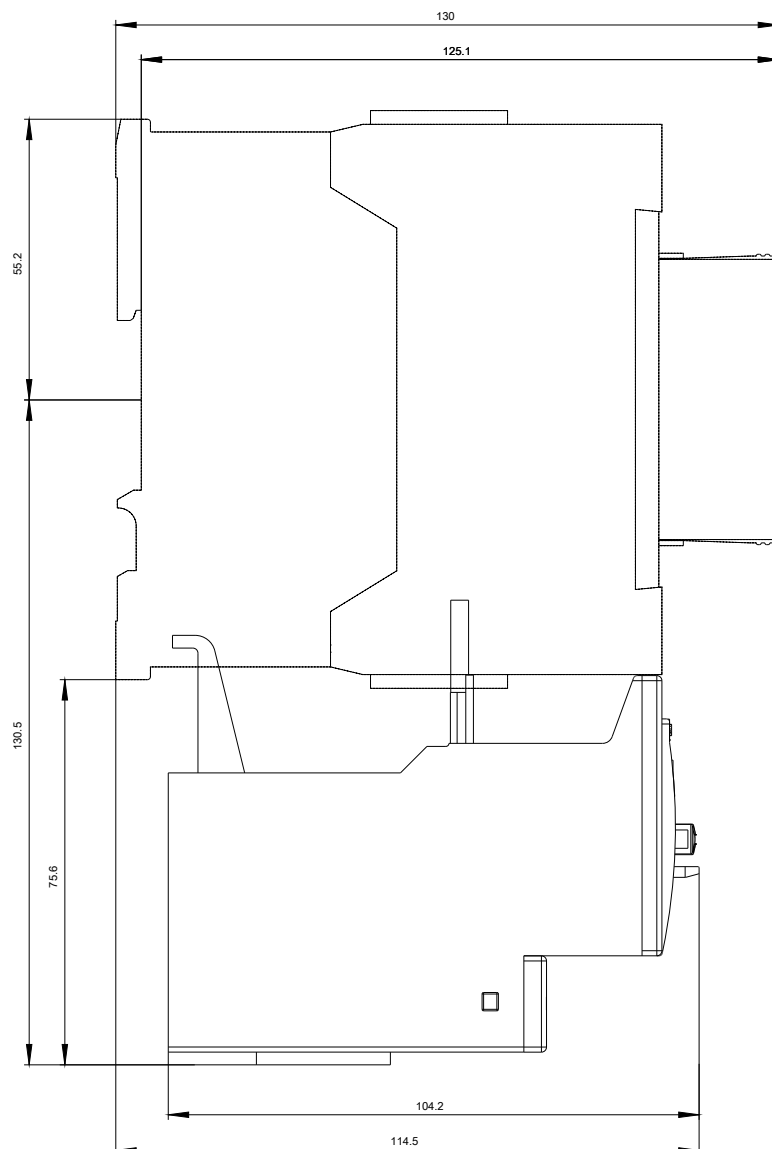
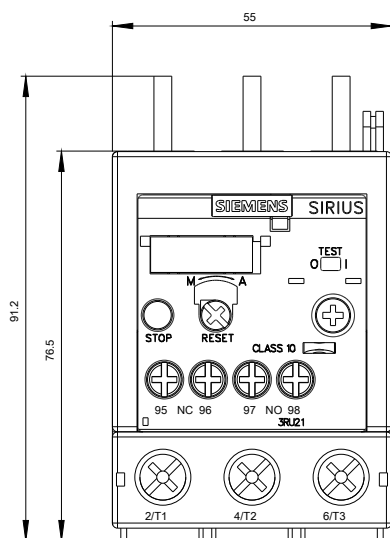
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4FB0&lang=en

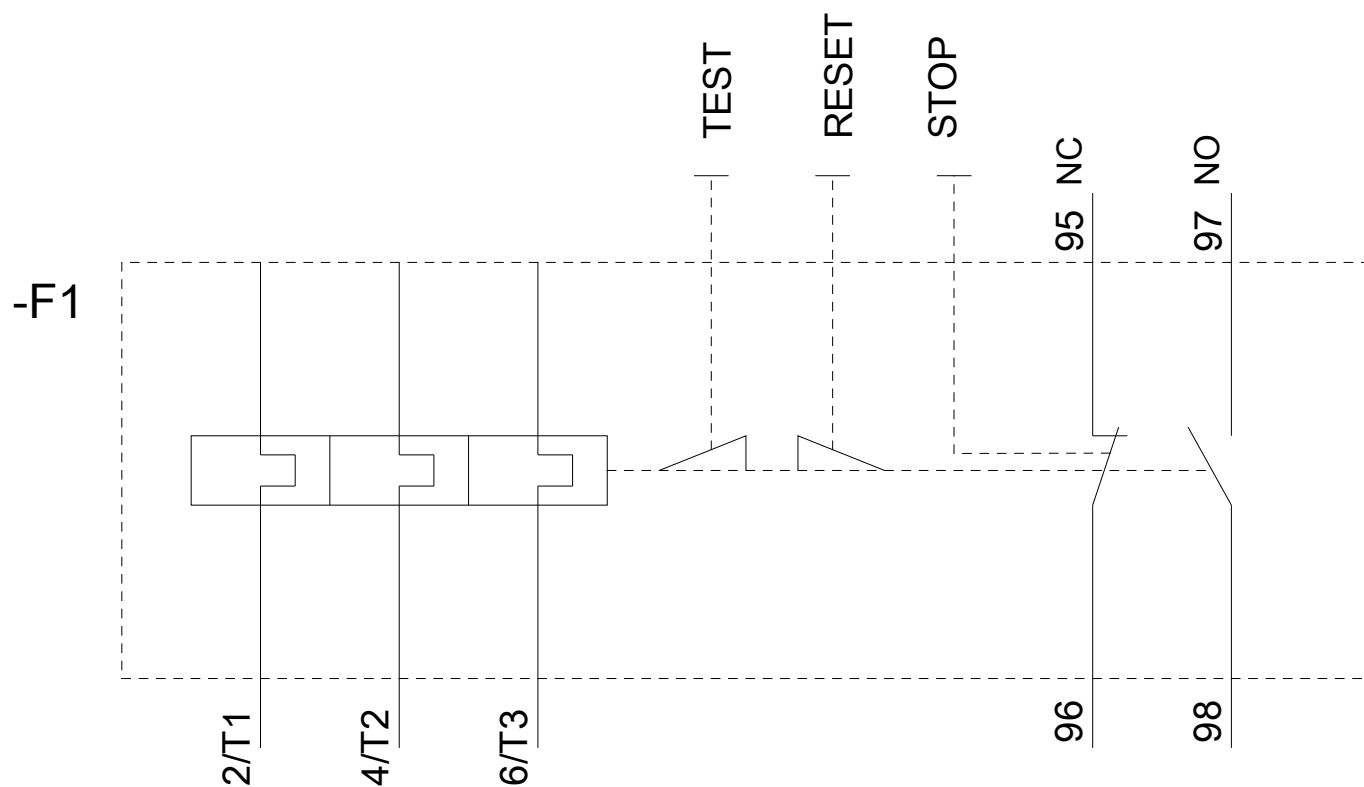
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4FB0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4FB0&objecttype=14&gridview=view1>





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