



Overload relay 9.0...12.5 A Thermal For motor protection Size S0, 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	S0
size of contactor can be combined company-specific	S0
power loss [W] for rated value of the current at AC in hot operating state	6.6 W
per pole	2.2 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 - 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	
- 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	9 ... 12.5 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	12.5 A
operational current at AC-3e at 400 V rated value	12.5 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	5.5 kW 7.5 kW 7.5 kW 5.5 kW 7.5 kW 7.5 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	3 A 3 A 3 A 3 A 2 A 1 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
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	12.5 A 12.5 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	85 mm
width	45 mm
depth	85 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 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 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²) 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² 2x (16 ... 12), 2x (14 ... 8)
type of connectable conductor cross-sections	
• for auxiliary contacts — solid or stranded	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)

— 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 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14) 2 ... 2.5 N·m 0.8 ... 1.2 N·m Diameter 5 ... 6 mm Pozidriv PZ 2 M4 M3
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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

Certificates/ approvals	
General Product Approval	For use in hazardous locations



[Confirmation](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping
 IECEX	 UKCA	 EG-Konf.	 ABS

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

Marine / Shipping



other	Railway
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=3RU2126-1KB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1KB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1KB0>

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

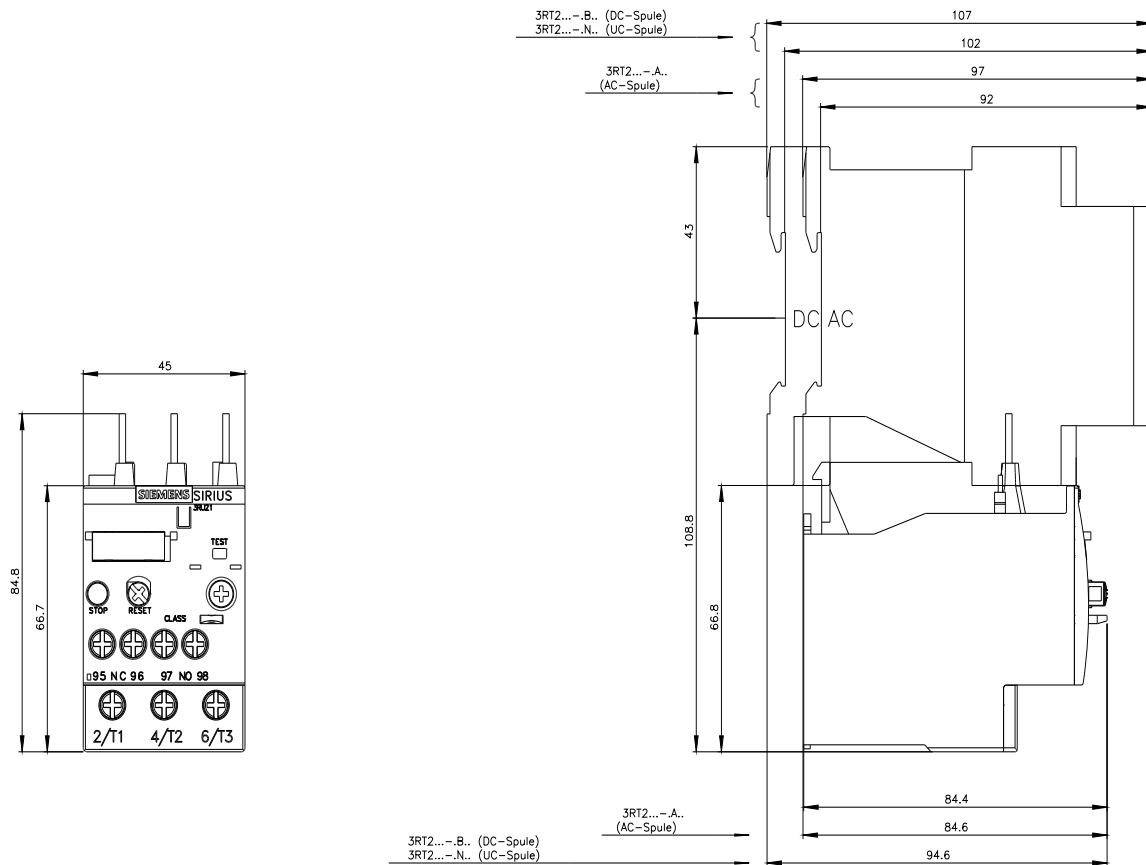
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-1KB0&lang=en

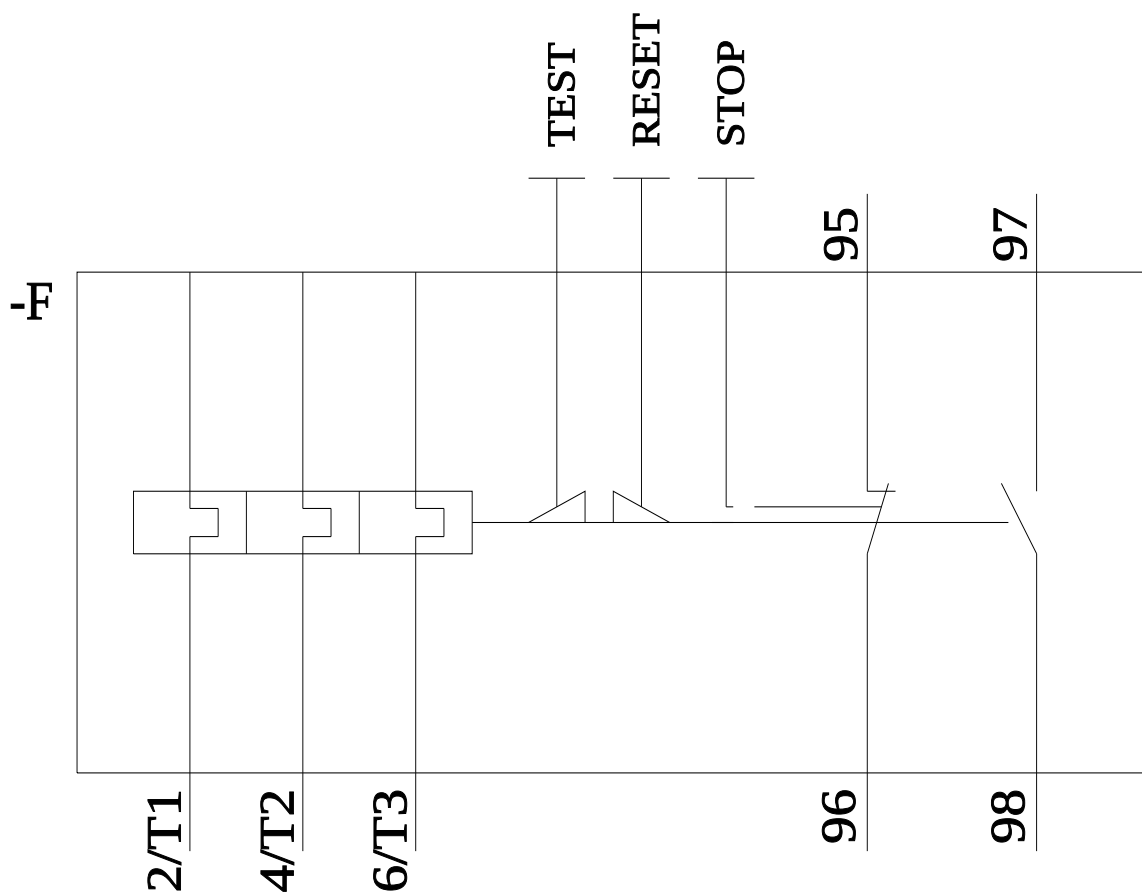
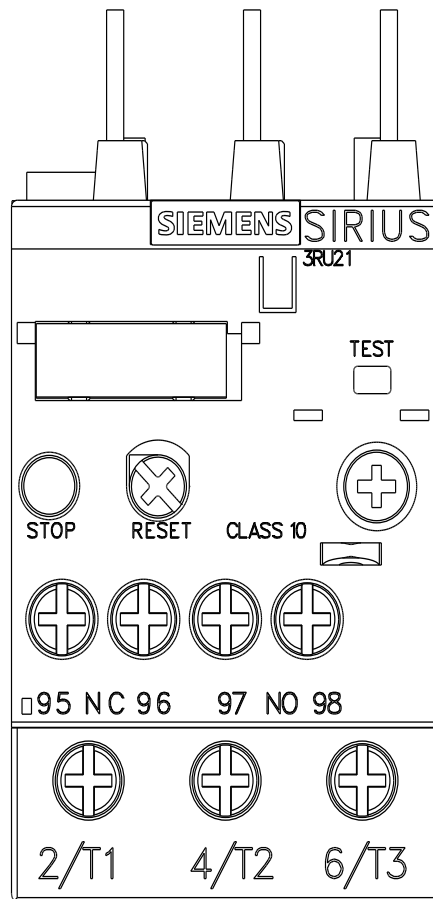
Characteristic: Tripping characteristics, I^2t , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1KB0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1KB0&objecttype=14&gridview=view1>





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