

Overload relay 14...20 A Thermal For motor protection Size S0,
Class 10 Stand-alone installation 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
<ul style="list-style-type: none"> power loss [W] for rated value of the current at AC in hot operating state 	8.1 W
<ul style="list-style-type: none"> power loss [W] for rated value of the current at AC in hot operating state per pole 	2.7 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	
<ul style="list-style-type: none"> in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
<ul style="list-style-type: none"> in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
<ul style="list-style-type: none"> in networks with grounded star point between main and auxiliary circuit 	440 V

<ul style="list-style-type: none"> in networks with grounded star point between main and auxiliary circuit 	440 V
protection class IP	
<ul style="list-style-type: none"> on the front 	IP20
<ul style="list-style-type: none"> of the terminal 	IP20
<ul style="list-style-type: none"> shock resistance acc. 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 acc. to DIN EN 81346-2	F

Ambient conditions

<ul style="list-style-type: none"> installation altitude at height above sea level maximum 	2 000 m
<ul style="list-style-type: none"> ambient temperature during operation 	-40 ... +70 °C
<ul style="list-style-type: none"> ambient temperature during storage 	-55 ... +80 °C
<ul style="list-style-type: none"> ambient temperature during transport 	-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 pick-up value current of the current-dependent overload release	14 ... 20 A
<ul style="list-style-type: none"> operating voltage rated value 	690 V
<ul style="list-style-type: none"> operating voltage at AC-3 rated value maximum 	690 V
operating frequency rated value	50 ... 60 Hz
operating current rated value	20 A
operating power at AC-3	
<ul style="list-style-type: none"> at 400 V rated value 	7.5 kW
<ul style="list-style-type: none"> at 500 V rated value 	11 kW
<ul style="list-style-type: none"> at 690 V rated value 	15 kW

Auxiliary circuit

design of the auxiliary switch	integrated
<ul style="list-style-type: none"> number of NC contacts for auxiliary contacts 	1
<ul style="list-style-type: none"> number of NC contacts for auxiliary contacts note 	for contactor disconnection
<ul style="list-style-type: none"> number of NO contacts for auxiliary contacts 	1
<ul style="list-style-type: none"> number of NO contacts for auxiliary contacts note 	for message "Tripped"
<ul style="list-style-type: none"> number of CO contacts for auxiliary contacts 	0
operating 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 	3 A 3 A 3 A 3 A 2 A 1 A
operating 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 	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 three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value 	20 A 20 A

Short-circuit protection

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

<ul style="list-style-type: none"> • mounting position • mounting type 	any stand-alone installation
height	97 mm
width	45 mm
depth	95 mm

Connections/ Terminals

<ul style="list-style-type: none"> • product function 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 current circuit 	screw-type terminals screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
<ul style="list-style-type: none"> • type of connectable conductor cross-sections for main contacts single or multi-stranded 	1x (1 ... 2,5 mm ²), 1x (2,5 ... 10 mm ²)

<ul style="list-style-type: none"> • type of connectable conductor cross-sections for main contacts finely stranded with core end processing 	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
<ul style="list-style-type: none"> • type of connectable conductor cross-sections at AWG conductors for main contacts 	2x (16 ... 12), 2x (14 ... 8)
<ul style="list-style-type: none"> • type of connectable conductor cross-sections for auxiliary contacts single or multi-stranded 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
<ul style="list-style-type: none"> • type of connectable conductor cross-sections for auxiliary contacts finely stranded with core end processing 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
<ul style="list-style-type: none"> • type of connectable conductor cross-sections at AWG conductors for auxiliary contacts 	2x (20 ... 16), 2x (18 ... 14)
<ul style="list-style-type: none"> • tightening torque for main contacts with screw-type terminals 	2 ... 2.5 N·m
<ul style="list-style-type: none"> • tightening torque for auxiliary contacts with screw-type terminals 	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	
<ul style="list-style-type: none"> • for main contacts 	M4
<ul style="list-style-type: none"> • of the auxiliary and control contacts 	M3

Safety related data

failure rate [FIT]	
<ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Display

display version	
<ul style="list-style-type: none"> • 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

[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=3RU2126-4BB1>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4BB1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4BB1>

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

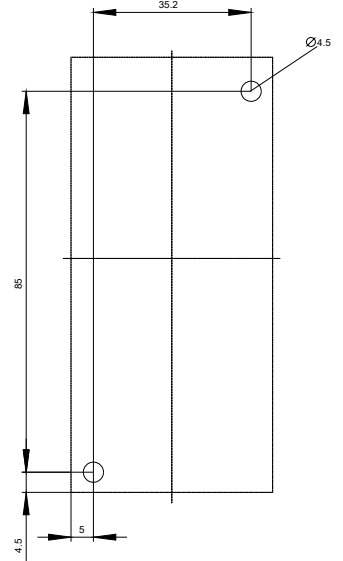
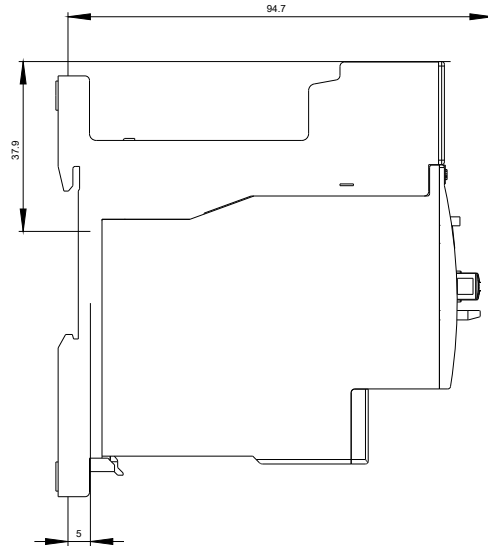
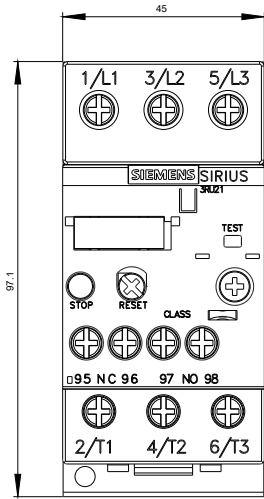
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4BB1&lang=en

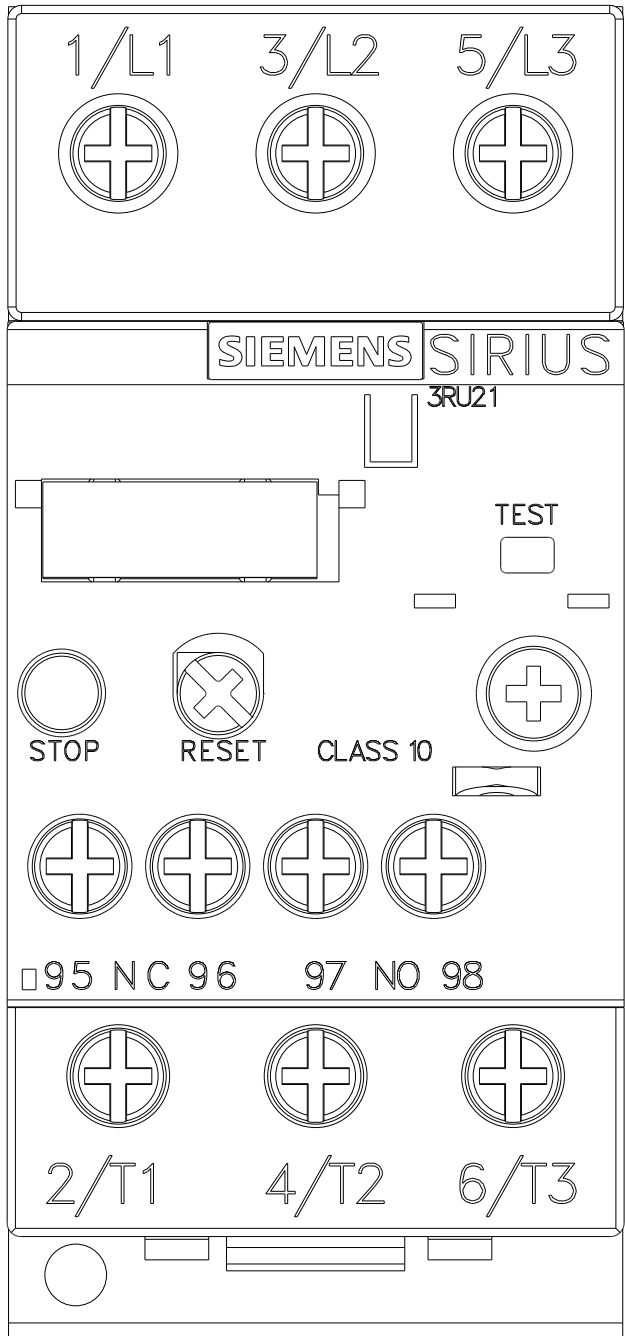
Characteristic: Tripping characteristics, I²t, Let-through current

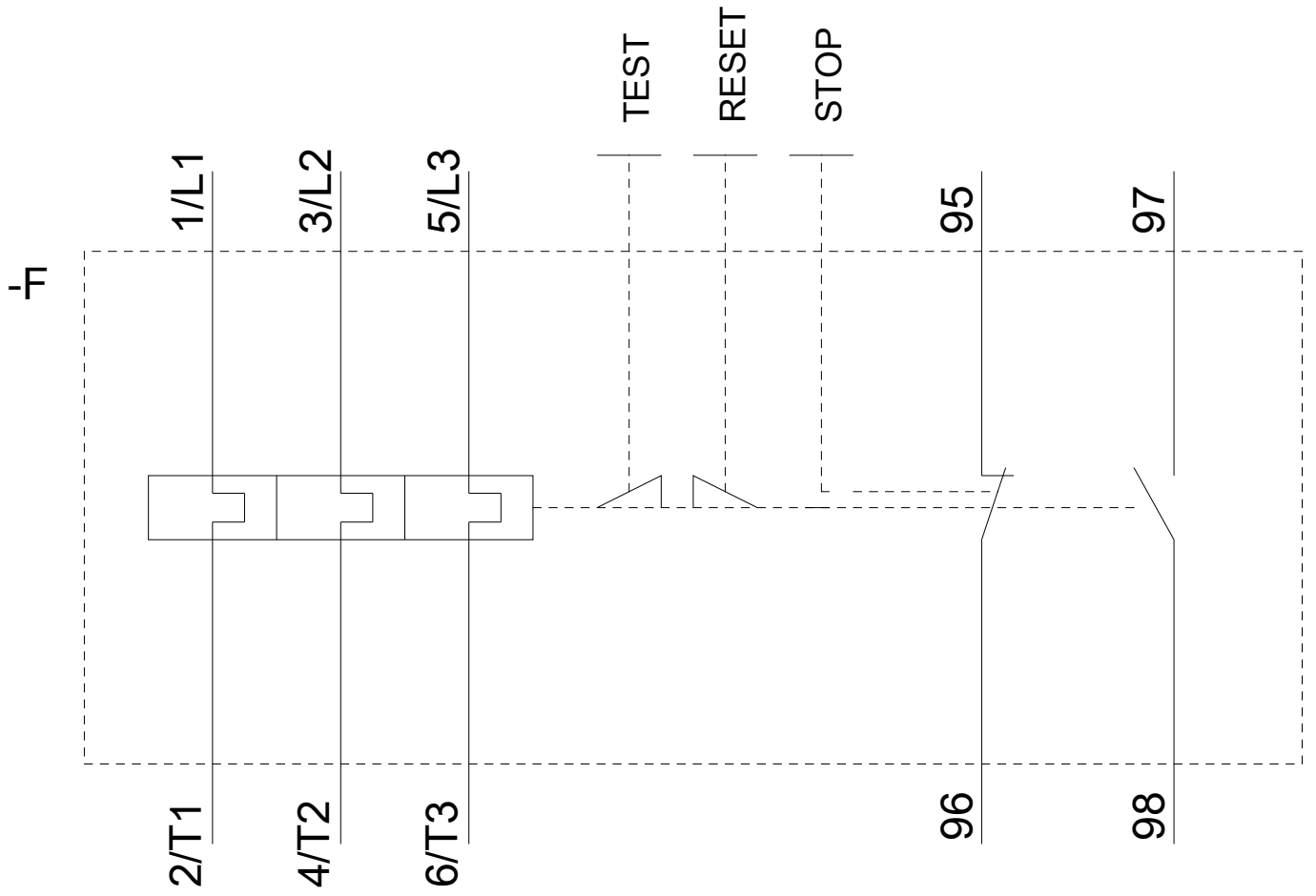
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4BB1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4BB1&objecttype=14&gridview=view1>







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