



Overload relay 20...25 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
power loss [W] for rated value of the current at AC in hot operating state	8.1 W
<ul style="list-style-type: none"> 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 in networks with grounded star point	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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	20 ... 25 A
operating voltage	
<ul style="list-style-type: none"> rated value at AC-3e rated value maximum 	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	25 A
operational current at AC-3e at 400 V rated value	25 A

operating power	
<ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value ● at AC-3e <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value — at 690 V rated value 	11 kW 15 kW 22 kW 11 kW 15 kW 22 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	for contactor disconnection
number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> ● note 	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational 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 ● 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	
<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 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	25 A 25 A
Short-circuit protection	
design of the fuse link	
<ul style="list-style-type: none"> ● for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	stand-alone installation
height	97 mm
width	45 mm
depth	95 mm
Connections/ Terminals	
product component 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 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	
<ul style="list-style-type: none"> ● solid or stranded ● finely stranded with core end processing 	1x (1 ... 2,5 mm ²), 1x (2,5 ... 10 mm ²) 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> ● for auxiliary contacts <ul style="list-style-type: none"> — solid or stranded 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)

— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• at AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)
tightening torque	
• for main contacts with screw-type terminals	2 ... 2.5 N·m
• 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	
• for main contacts	M4
• of the auxiliary and control contacts	M3

Safety related data	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 a
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 hazardous locations



[Confirmation](#)



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

Marine / Shipping					

other	Railway
Confirmation	Vibration and Shock

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=3RU2126-4DB1

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4DB1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB1>

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

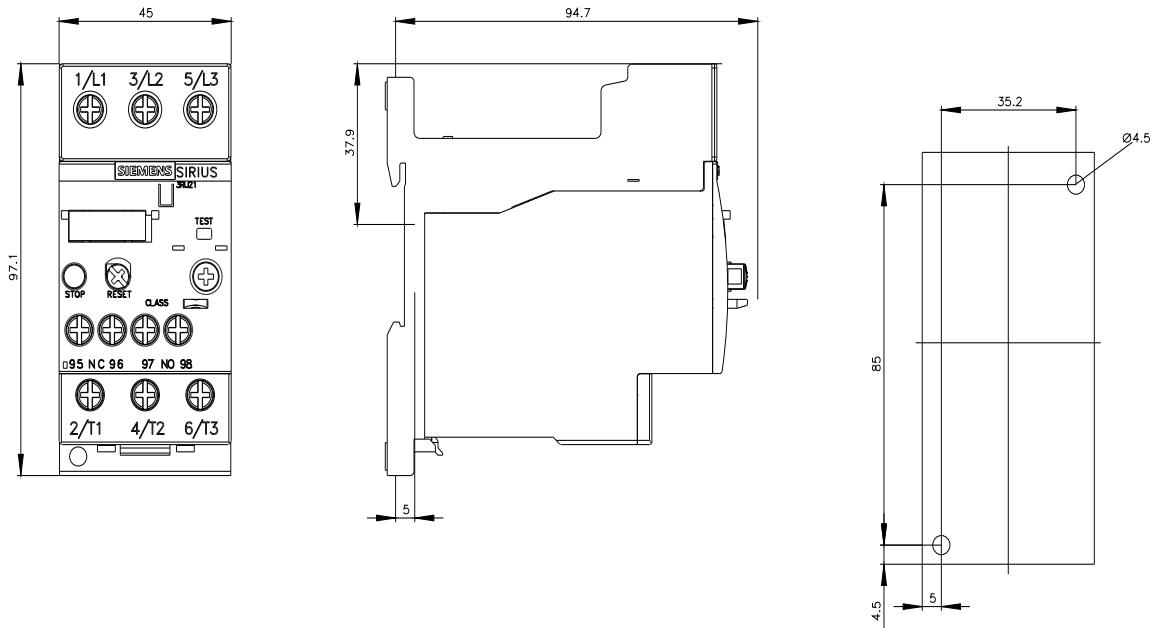
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4DB1&lang=en

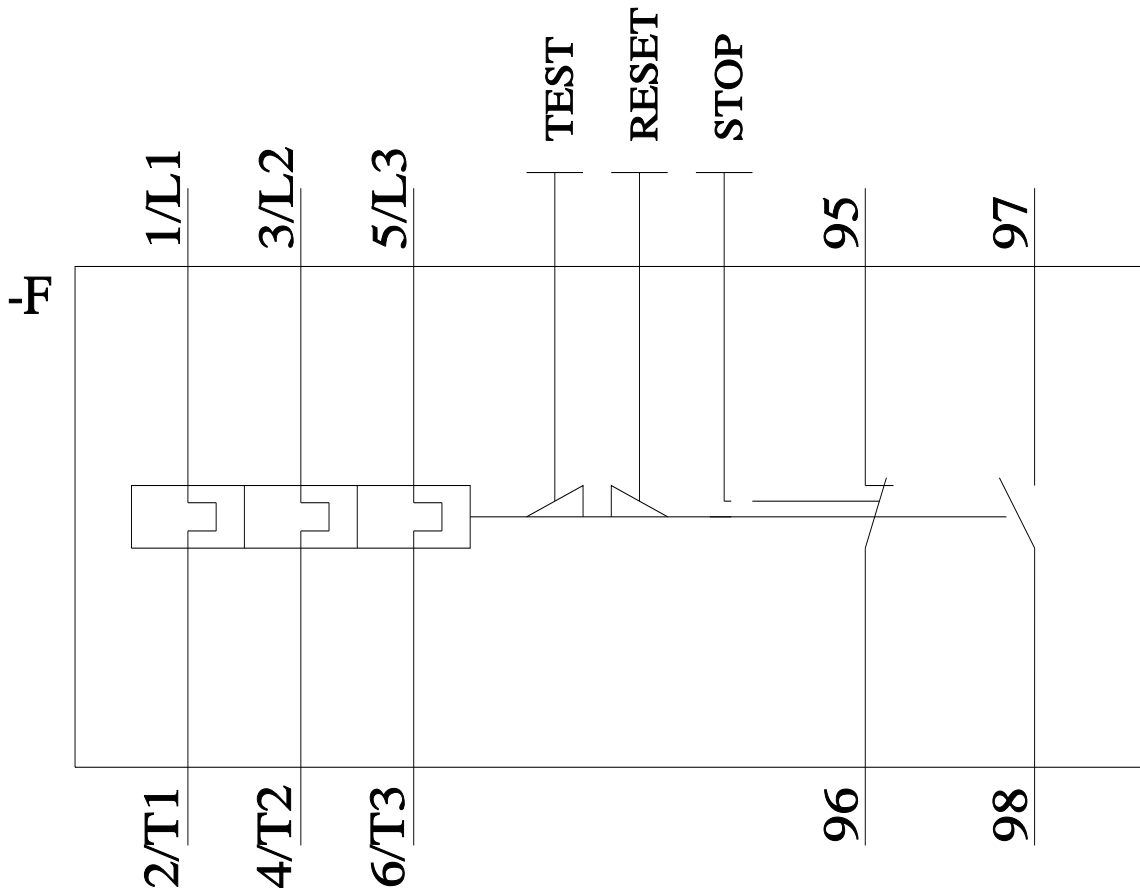
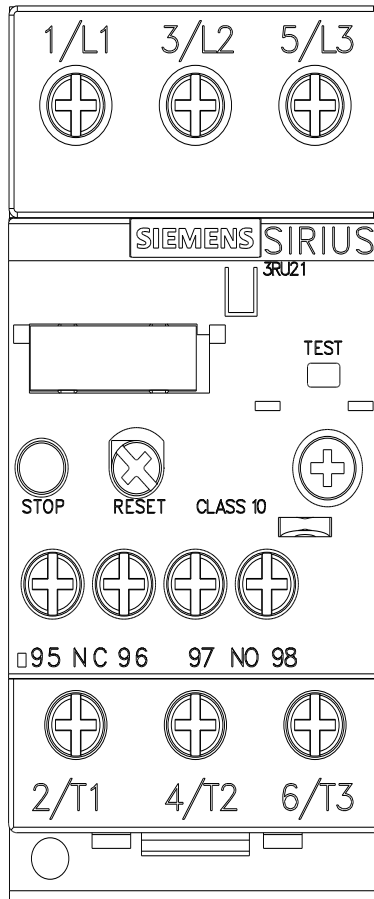
Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB1/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4DB1&objecttype=14&gridview=view1>





last modified:

3/8/2022