# **SIEMENS**

Data sheet 3RU2126-4PB1

Overload relay 30...36 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] total typical	7.5 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	440 V
Protection class IP	

• on the front	IP20
• of the terminal	IP20
Shock resistance	
• acc. to IEC 60068-2-27	8g / 11 ms
Certificate of suitability according to ATEX directive 2014/34/EU	DMT 98 ATEX G 001
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	F
Ambient conditions	

Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul><li>during storage</li></ul>	-55 +80 °C
<ul> <li>during transport</li> </ul>	-55 +80 °C
Temperature compensation	-40 +60 °C
Relative humidity during operation	0 90 %

Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	30 36 A
dependent overload release	
Operating voltage	
• rated value	690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	36 A
Operating power at AC-3	
• at 400 V rated value	18.5 kW
• at 500 V rated value	22 kW
• at 690 V rated value	30 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
Operating 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
Operating 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
Contact rating of auxiliary contacts according to UL	B600 / R300

Protective and monitoring functions	
Trip class	CLASS 10
Design of the overload release	thermal

## Full-load current (FLA) for three-phase AC motor

at 480 V rated valueat 600 V rated value36 A

#### Short-circuit protection

UL/CSA ratings

## 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
Mounting type	stand-alone installation
Height	97 mm
Width	45 mm
Depth	95 mm
Required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— at the side	6 mm

— downwards	6 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm

Connections/ Terminals	
Product function	
<ul> <li>removable terminal for auxiliary and control</li> </ul>	No
circuit	
Type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
• for main contacts	
<ul> <li>single or multi-stranded</li> </ul>	1x (1 2,5 mm²), 1x (2,5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 8)
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— single or multi-stranded</li></ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
Tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	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 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

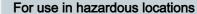
#### Display version

• for switching status

Slide switch

## Certificates/ approvals

## **General Product Approval**















IECEx

#### **Declaration of Conformity**

#### **Test Certificates**

### Marine / Shipping



Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate





other

## Marine / Shipping



LRS









Confirmation

### Railway

Vibration and Shock

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-4PB1

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4PB1

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4PB1

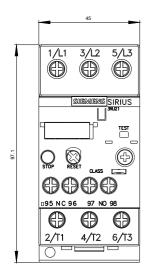
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

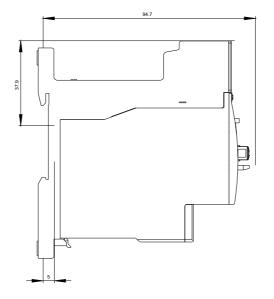
Characteristic: Tripping characteristics, I²t, Let-through current

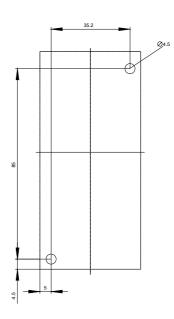
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4PB1/char

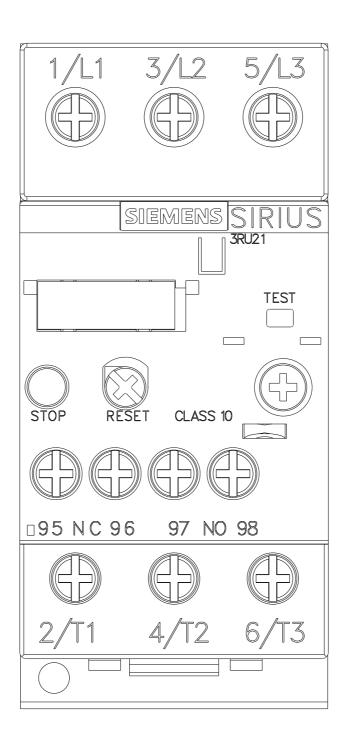
Further characteristics (e.g. electrical endurance, switching frequency)

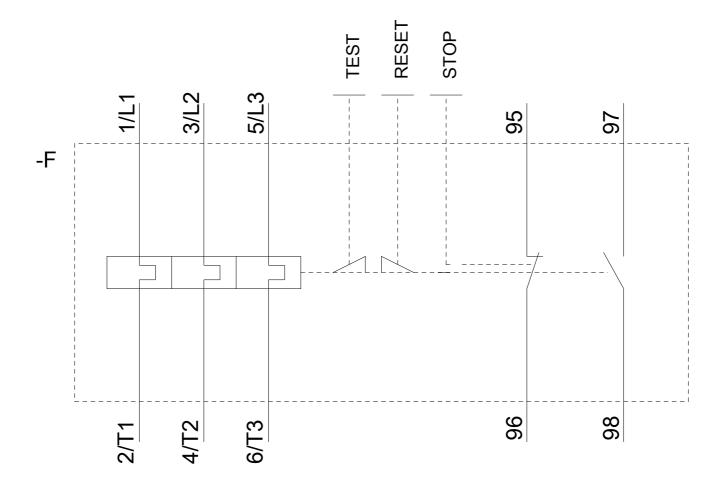
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4PB1&objecttype=14&gridview=view1











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