# **SIEMENS**

Data sheet 3RU2126-1GJ0

Overload relay 4.5...6.3 A Thermal For motor protection Size S0, Class 10 Contactor mounting Main circuit: Ring cable lug Auxiliary circuit: ring cable lug Manual-Automatic-Reset



product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2

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
• at AC in hot operating state 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	
<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
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	
installation altitude at height above sea level	2 000 m
maximum	
ambient temperature	
<ul><li>during operation</li></ul>	-40 +70 °C
during storage	-55 +80 °C
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-	4.5 6.3 A
dependent overload release	
operating voltage	
• rated value	690 V
• at AC 2 rated value maximum	0001/
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operating frequency rated value operating current rated value	
operating frequency rated value	50 60 Hz 6.3 A
operating frequency rated value operating current rated value	50 60 Hz
operating frequency rated value operating current rated value operating power at AC-3	50 60 Hz 6.3 A
operating frequency rated value operating current rated value operating power at AC-3  • at 400 V rated value	50 60 Hz 6.3 A 2.2 kW
operating frequency rated value operating current rated value operating power at AC-3  • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit	50 60 Hz 6.3 A 2.2 kW 3 kW 4 kW
operating frequency rated value operating current rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit design of the auxiliary switch	50 60 Hz 6.3 A 2.2 kW 3 kW
operating frequency rated value operating current rated value operating power at AC-3  • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit	50 60 Hz 6.3 A  2.2 kW 3 kW 4 kW  integrated 1
operating frequency rated value operating current rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts • note	50 60 Hz 6.3 A  2.2 kW 3 kW 4 kW
operating frequency rated value operating current rated value operating power at AC-3  • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts	50 60 Hz 6.3 A  2.2 kW 3 kW 4 kW  integrated 1
operating frequency rated value operating current rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts • note	50 60 Hz 6.3 A  2.2 kW 3 kW 4 kW  integrated 1 for contactor disconnection
operating frequency rated value operating current rated value operating power at AC-3 • at 400 V rated value • at 500 V rated value • at 690 V rated value  Auxiliary circuit design of the auxiliary switch number of NC contacts for auxiliary contacts • note number of NO contacts for auxiliary contacts	50 60 Hz 6.3 A  2.2 kW 3 kW 4 kW  integrated 1 for contactor disconnection 1

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
UL/CSA ratings	
full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	6.3 A
at 600 V rated value	6.3 A
Short-circuit protection	
design of the fuse link	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 6 A, quick: 10 A
_	
Installation/ mounting/ dimensions	
mounting position	any
mounting type	Contactor mounting
height	85 mm
width	45 mm
depth	85 mm
Connections/ Terminals	
product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
type of electrical connection	
• for main current circuit	Ring cable lug connection
<ul> <li>for auxiliary and control current circuit</li> </ul>	ring cable connection
arrangement of electrical connectors for main current circuit	Top and bottom
tightening torque	

<ul> <li>for main contacts for ring cable lug</li> </ul>	2.5 2 N·m
<ul> <li>for auxiliary contacts for ring cable lug</li> </ul>	0.8 1.2 N·m
outer diameter of the usable ring cable lug maximum	7.5 mm
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]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	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**















**IECE**x

#### **Declaration of Conformity**

**Test Certificates** 

Marine / Shipping



Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate





## Marine / Shipping

other



LRS









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=3RU2126-1GJ0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1GJ0

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

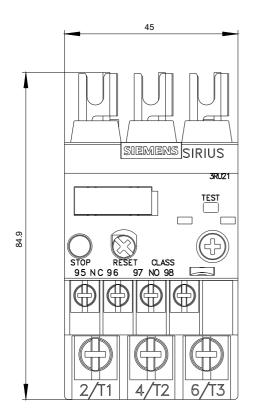
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1GJ0

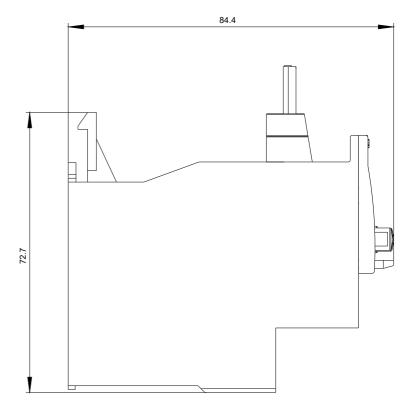
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-1GJ0&lang=en

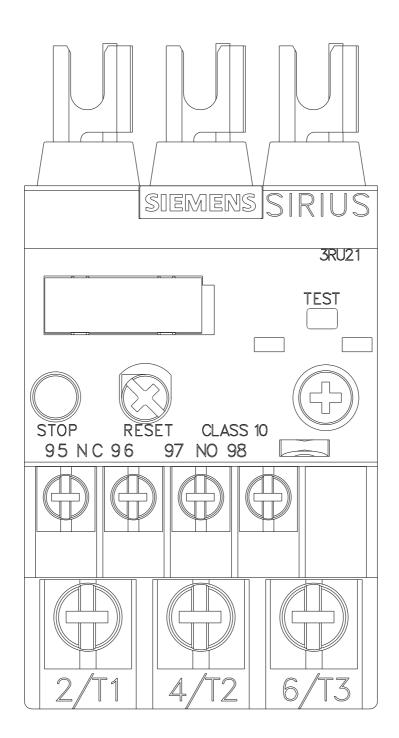
Characteristic: Tripping characteristics, I2t, Let-through current

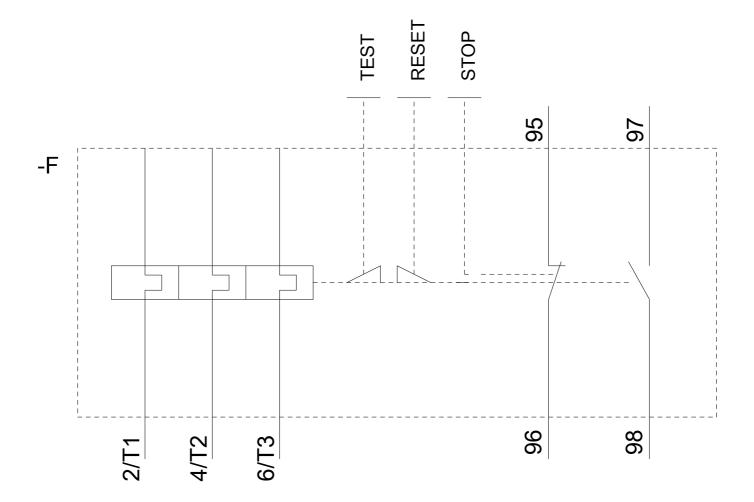
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1GJ0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1GJ0&objecttype=14&gridview=view1









last modified: 09/08/2020