# **SIEMENS**

Data sheet 3RU2126-4FB0

Overload relay 34...40 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

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	9.6 W
• at AC in hot operating state per pole	3.2 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
Protection class IP 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	
• maximum	2 000 m
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-	34 40 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	40 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	37 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	
<ul> <li>for auxiliary contacts</li> </ul>	0

<ul> <li>operating current of auxiliary contacts at AC-15 at 24 V</li> </ul>	3 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 110 V</li> </ul>	3 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 120 V</li> </ul>	3 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 125 V</li> </ul>	3 A
<ul> <li>Operating current of auxiliary contacts at AC-15 at 230 V</li> </ul>	2 A
<ul> <li>operating current of auxiliary contacts at AC-15 at 400 V</li> </ul>	1 A
<ul> <li>operating current of auxiliary contacts at DC-13 at 24 V</li> </ul>	2 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 60 V</li> </ul>	0.3 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 110 V</li> </ul>	0.22 A
<ul> <li>operating current of auxiliary contacts at DC-13 at 125 V</li> </ul>	0.22 A
<ul> <li>Operating current of auxiliary contacts at DC-13 at 220 V</li> </ul>	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	

Trip class	CLASS 10
Design of the overload release	thermal
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	

#### 40 A • at 480 V rated value 40 A • at 600 V rated value

## Short-circuit protection Design of the fuse link fuse gG: 6 A, quick: 10 A • for short-circuit protection of the auxiliary switch

Installation/ mounting/ dimensions	lation/ mounting/ dimensions	
mounting position	any	
Mounting type	Contactor mounting	
Height	85 mm	
Width	45 mm	
Depth	85 mm	

Connections/ Terminals	
Product function	

required

<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
Type of electrical connection for main current circuit	screw-type terminals
<ul> <li>Type of electrical connection 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>	2x (1 2,5 mm²), 2x (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	
• for auxiliary contacts	
<ul> <li>— single or multi-stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
— finely stranded with core end processing	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	
• 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
<ul> <li>of the auxiliary and control contacts</li> </ul>	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

Special Test Certificate

Type Test Certificates/Test Report





# 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=3RU2126-4FB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4FB0

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

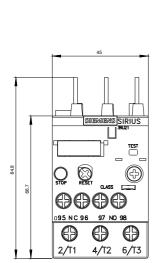
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4FB0

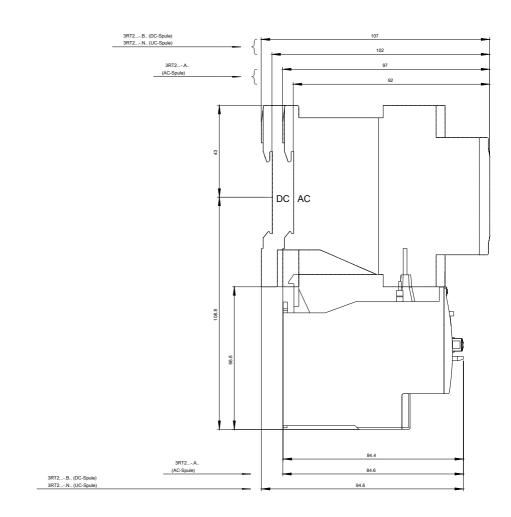
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4FB0\&lang=en}}$ 

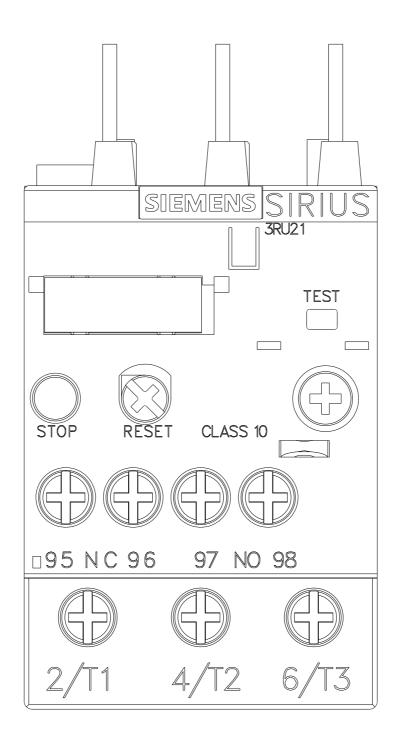
Characteristic: Tripping characteristics, I2t, Let-through current

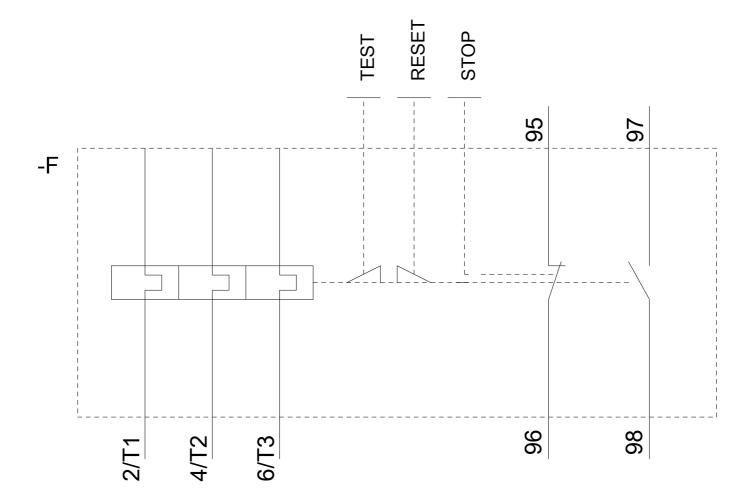
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4FB0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4FB0&objecttype=14&gridview=view1









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