## SIEMENS

## Data sheet

## 3RU2126-1FB0



Overload relay 3.5...5.0 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
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	6.6 W
• 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 protective separation in networks with grounded star point	
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	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> <li>during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-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 current response value current of the current-dependent overload release	3.5 5 A
operating voltage	
rated value	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz



energianal aurrent rated value	5 A
operational current rated value	5 A
operational current at AC-3e at 400 V rated value	A C
operating power • at AC-3	
	4 5 100
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 kW
• at AC-3e	
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 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
operational 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	1A
operational current of auxiliary contacts at DC-13	
• at 24 V	2 A
• at 24 V	0.3 A
• at 110 V	0.3 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 3-phase AC motor	
<ul> <li>at 480 V rated value</li> </ul>	5 A
<ul> <li>at 600 V rated value</li> </ul>	5 A
Short-circuit protection	
design of the fuse link	
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	fuse gG: 6 A, quick: 10 A
required	
Installation/ mounting/ dimensions	
mounting position	any
fastening method	Contactor mounting
height	85 mm
width	45 mm
depth	85 mm
Connections/ Terminals	
product component removable terminal for auxiliary	No
and control circuit	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
	,, , , , , , , , , , , , , , , , , , , ,



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— finely stranded with core end processing		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²				
at AWG cables	at AWG cables for main contacts     type of connectable conductor cross-sections		2x (16 12), 2x (14 8)			
type of connectable	conductor cross-section	ons				
<ul> <li>for auxiliary cor</li> </ul>						
— solid or str			2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )			
	— finely stranded with core end processing		2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )			
	for auxiliary contacts	2	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			Л4 ЛЗ			
	• of the auxiliary and control contacts					
Safety related data						
failure rate [FIT] with 31920	low demand rate accordin	ng to SN 5	50 FIT			
MTTF with high dem	nand rate	2	2 280 y			
T1 value for proof tes IEC 61508	t interval or service life a	ccording to 2	20 y			
	on the front according t	o IEC	P20			
	the front according to	IEC 60529 fi	inger-safe, for vertical conta	ct from the front		
Display						
display version for sw	vitching status		Slide switch			
Certificates/ approval	-					
					For use in hazard-	
	_				For use in nazaru-	
General Product Ap	oproval				ous locations	
General Product Ap	oproval				ous locations	
General Product Ap	oproval <u>Confirmation</u>				ous locations	
General Product Ap		(III)	መ	FAL	ous locations	
General Product Ap		<b>3</b>	(لِل	EAC		
General Product Ap			<b>U</b>	EAC	IECEx	
General Product Ap		(CCC)	UL	EAC	IECEx	
SP CSA	Confirmation	CCC	UL	EAC	IECE×	
General Product Ap		ccc	UL UL Test Certificates	EAC	IECE×	
For use in hazard-	Confirmation			EAC	IECE×	
For use in hazard-	Confirmation		Special Test Certific-	<b>ERE</b>	IECE×	
For use in hazard-	Confirmation			<b>ERF</b> <u>Type Test Certific- ates/Test Report</u>	IECE×	
For use in hazard-	Confirmation	rmity UKA	Special Test Certific-		IECE×	
For use in hazard-	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard-	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard- ous locations	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard-	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard- ous locations	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard- ous locations	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard- ous locations	Confirmation Declaration of Confo	UK CA	Special Test Certific-		IECE×	
For use in hazardous locations	Confirmation Declaration of Confo		Special Test Certific-		IECE×	
For use in hazard- ous locations	Confirmation Declaration of Confo CEG-Konf.	UK CA	Special Test Certific-		IECE×	
For use in hazardous locations	Confirmation Declaration of Confo CEG-Konf.	UK CA	Special Test Certific-		IECE×	
For use in hazardous locations	Confirmation Declaration of Confo CEG-Konf.	UK CA	Special Test Certific-		IECE×	
For use in hazardous locations   For use in hazardous locations  Example to the total t	Confirmation Declaration of Confo CEG-Konf.	UK CA	Special Test Certific-		IECE×	
For use in hazardous locations	Confirmation Declaration of Confo CCC EG-Konf.	UK CA	Special Test Certific-		IECE×	



## **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=3RU2126-1FB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1FB0

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

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

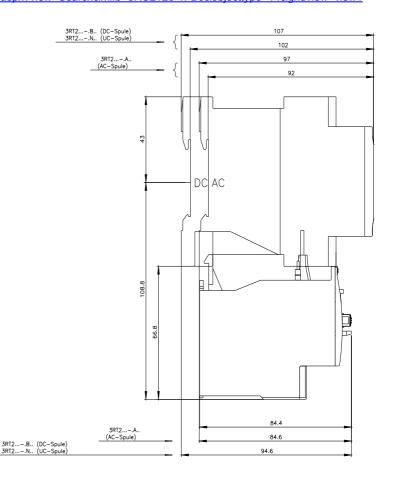
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-1FB0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-1FB0&lang=en</a>

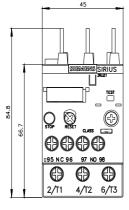
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1FB0/char

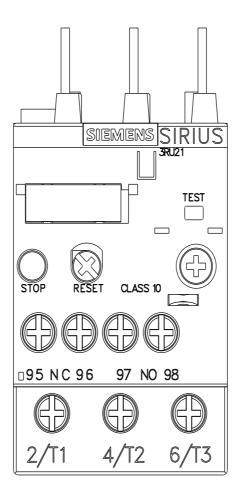
Further characteristics (e.g. electrical endurance, switching frequency)

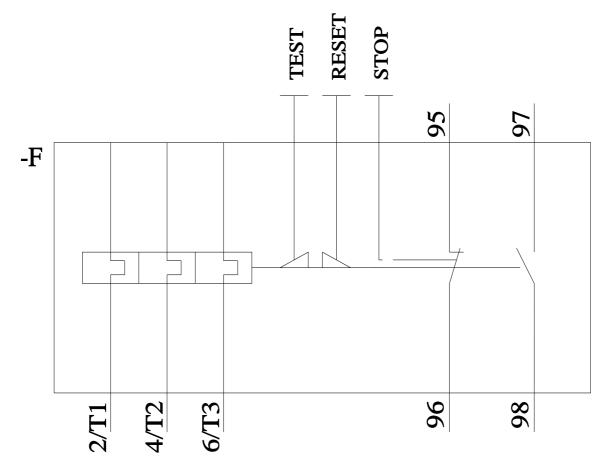
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1FB0&objecttype=14&gridview=view1











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