# **SIEMENS**

Data sheet 3RU2126-4EC1



Overload relay 27...32 A Thermal For motor protection Size S0, Class 10 Stand-alone installation Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal 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	9.6 W
• 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 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
between main and auxiliary circuit	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
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 current response value current of the current-dependent overload release	27 32 A
operating voltage	
rated value	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz

operational current reted value	32 A
operational current rated value operational current at AC-3e at 400 V rated value	32 A 32 A
operational current at AC-3e at 400 V rated value  operating power	02 A
• at AC-3	
■ at AC-3  — at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	30 kW
at AC-3e	30 KVV
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value  — at 690 V rated value	30 kW
	30 KW
Auxiliary circuit	integrated
design of the auxiliary switch	integrated 1
number of NC contacts for auxiliary contacts  • note	for contactor disconnection
number of NO contacts for auxiliary contacts	1
note  number of CO contracts for auxiliany contacts.	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 24 V     at 110 V	3 A 3 A
• at 120 V	3 A
• at 125 V	3 A
<ul><li>at 230 V</li><li>at 400 V</li></ul>	2 A 1 A
	1 A
operational current of auxiliary contacts at DC-13  • at 24 V	2 A
● at 24 V ● at 60 V	0.3 A
	0.22 A
• at 110 V	0.22 A 0.22 A
• at 125 V	
at 220 V  contact rating of auxiliary contacts according to UL	0.11 A B600 / R300
Protective and monitoring functions	B000 / K300
-	CLASS 10
trip class design of the overload release	thermal
UL/CSA ratings	tiletitiai
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value	22 A
at 480 V rated value     at 600 V rated value	32 A
	32 A
Short-circuit protection	
design of the fuse link	funo aCt 6 A quink 10 A
<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
fastening method	stand-alone installation
height	114 mm
width	45 mm
depth	95 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
for main current circuit	spring-loaded terminals
for auxiliary and control circuit	spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
<ul><li>for main contacts</li><li>— solid or stranded</li></ul>	1x (1 10 mm²)

<ul> <li>finely stranded with core end processing</li> </ul>	1x (1 6 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	1x (1 6 mm²)
<ul> <li>at AWG cables for main contacts</li> </ul>	1x (18 8)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 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>finely stranded without core end processing</li> </ul>	2x (0.5 1.5 mm²)
at AWG cables for auxiliary contacts	2x (20 14)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm
Safety related data	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life according to IEC 61508	20 y
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	

Certificates/ approvals

## **General Product Approval**

For use in hazardous locations



Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping







Special Test Certificate

Type Test Certificates/Test Report



## Marine / Shipping













other

Railway

Confirmation

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=3RU2126-4EC1

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4EC1

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4EC1

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4EC1&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4EC1/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4EC1&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4EC1&objecttype=14&gridview=view1</a>

3/8/2022 last modified: