## **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	SO
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 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 IEC 81346-2	F
Substance Prohibitance (Date)	01.10.2009 00:00:00
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	27 32 A
operating voltage	
rated value	690 V
at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz

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operational current rated value	32 A
operating power 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
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	1 A
operational 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 3-phase AC motor	
<ul> <li>at 480 V rated value</li> </ul>	32 A
at 600 V rated value	32 A
Short-circuit protection	
decian of the fuse link	
design of the fuse link	
for short-circuit protection of the auxiliary switch	fuse gG: 6 A, quick: 10 A
for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions	
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position	any
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method	any stand-alone installation
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method height	any stand-alone installation 114 mm
• for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	any stand-alone installation 114 mm 45 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth	any stand-alone installation 114 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals	any stand-alone installation 114 mm 45 mm 95 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth	any stand-alone installation 114 mm 45 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary	any stand-alone installation 114 mm 45 mm 95 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit	any stand-alone installation 114 mm 45 mm 95 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	any stand-alone installation 114 mm 45 mm 95 mm
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection     for main current circuit	any stand-alone installation 114 mm 45 mm 95 mm  No
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     or or auxiliary and control circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections     for main contacts	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections     for main contacts     solid or stranded	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections     for main contacts         — solid or stranded         — finely stranded with core end processing	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom  1x (1 10 mm²) 1x (1 6 mm²)
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections     for main contacts         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom  1x (1 10 mm²) 1x (1 6 mm²) 1x (1 6 mm²)
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections     for main contacts         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing         — at AWG cables for main contacts	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom  1x (1 10 mm²) 1x (1 6 mm²)
• for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • at AWG cables for main contacts  type of connectable conductor cross-sections	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom  1x (1 10 mm²) 1x (1 6 mm²) 1x (1 6 mm²)
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections     for main contacts         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing         — at AWG cables for main contacts	any stand-alone installation 114 mm 45 mm 95 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom  1x (1 10 mm²) 1x (1 6 mm²) 1x (1 6 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 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
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
Display	
display version for switching status	Slide switch
Certificates/ approvals	

**General Product Approval** 

For use in hazardous locations













Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping









Confirmation

other

Vibration and Shock

Railway

## **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, ...)

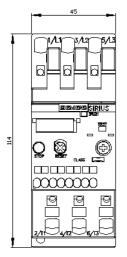
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4EC1&lang=en

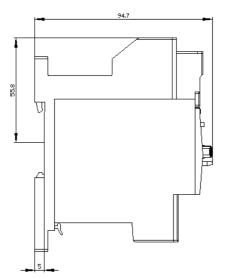
Characteristic: Tripping characteristics, I2t, Let-through current

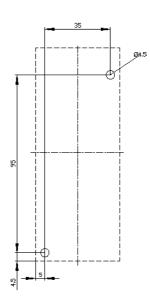
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4EC1/char

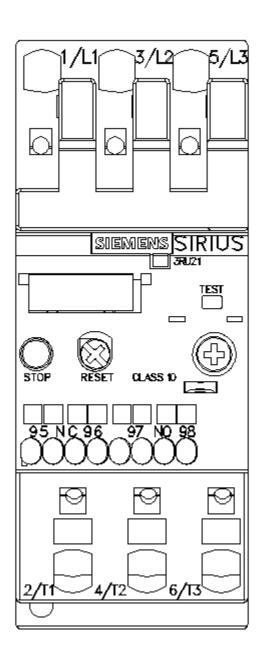
Further characteristics (e.g. electrical endurance, switching frequency)

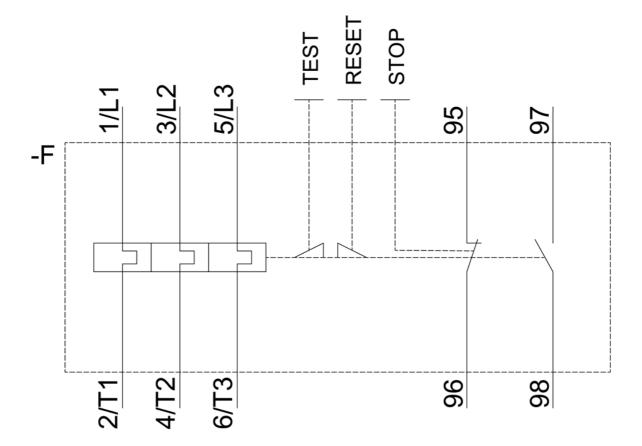
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4EC1&objecttype=14&gridview=view1











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