## **SIEMENS**

Data sheet 3RU2126-1HB0



Overload relay 5.5...8.0 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 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
reference code according to IEC 01340-2	
Substance Prohibitance (Date)	10/01/2009
	•
Substance Prohibitance (Date)	•
Substance Prohibitance (Date) Ambient conditions	10/01/2009
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum	10/01/2009
Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature	10/01/2009 2 000 m
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation	10/01/2009 2 000 m -40 +70 °C
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage	10/01/2009 2 000 m -40 +70 °C -55 +80 °C
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation  relative humidity during operation	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation relative humidity during operation  Main circuit	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  temperature compensation  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • rated value	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %  3  5.5 8 A
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  • during transport  temperature compensation  relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage  • rated value  • at AC-3e rated value maximum	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %  3  5.5 8 A
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage • during transport  temperature compensation relative humidity during operation  Main circuit  number of poles for main current circuit  adjustable current response value current of the current-dependent overload release  operating voltage • rated value • at AC-3e rated value maximum  operating frequency rated value	10/01/2009  2 000 m  -40 +70 °C  -55 +80 °C  -55 +80 °C  -40 +60 °C  10 95 %  3  5.5 8 A  690 V  690 V  50 60 Hz

• at AC-3	
● at AC-3 — at 400 V rated value	3 kW
— at 500 V rated value	4 kW
— at 690 V rated value  • at AC-3e	5.5 kW
	2 MA
— at 400 V rated value	3 kW
— at 500 V rated value — at 690 V rated value	4 kW 5.5 kW
Auxiliary circuit	5.5 KW
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
• at 690 V	0.75 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	
• at 480 V rated value	8 A
at 600 V rated value	8 A
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
Installation/ mounting/ dimensions	any
mounting position	any Contactor mounting
fastening method height	Contactor mounting 85 mm
width	45 mm
depth	85 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
type of electrical connection  • for main current circuit	screw-type terminals
	screw-type terminals screw-type terminals
• for main current circuit	•
for main current circuit     for auxiliary and control circuit     arrangement of electrical connectors for main current	screw-type terminals
for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit	screw-type terminals
for main current circuit     for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections	screw-type terminals
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	screw-type terminals Top and bottom
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	screw-type terminals  Top and bottom  2x (1 2.5 mm²), 2x (2.5 10 mm²)
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	2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
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	2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²

— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 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>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	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] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 a
T1 value for proof test interval or service life according to IEC 61508	20 a
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	

**®** 

**General Product Approval** 

Confirmation









For use in hazard-

ous locations

For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



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Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping













other

Railway

Confirmation



Vibration and Shock

## Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$ 

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-1HB0}$ 

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1HB0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1HB0">https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1HB0</a>

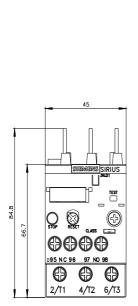
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RU2126-1HB0&lang=en

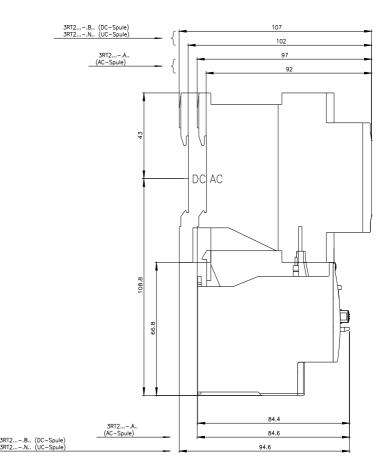
Characteristic: Tripping characteristics, I²t, Let-through current

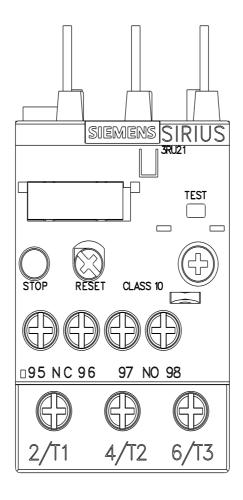
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1HB0/char

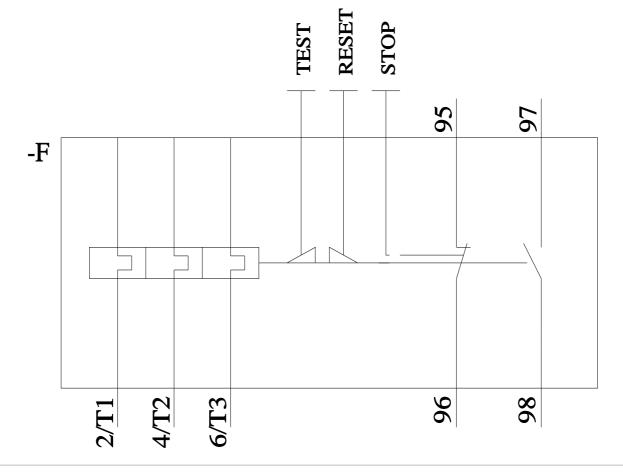
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1HB0&objecttype=14&gridview=view1









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