# **SIEMENS**

Data sheet 3RU2126-4NB0



Overload relay 23...28 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	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 protective separation	
<ul> <li>in networks with ungrounded 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 ungrounded 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
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.2 kg
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	23 28 A
operating voltage	
rated value	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	28 A

anagetional augment at AO Ot 400 Vt - t	20. A
operational current at AC-3e at 400 V rated value	28 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	22 kW
• at AC-3e	
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	22 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
• 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
	U.ZZ A
• at 220 V	0.11 A
• at 220 V contact rating of auxiliary contacts according to UL	
at 220 V  contact rating of auxiliary contacts according to UL  Protective and monitoring functions	0.11 A B600 / R300
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	0.11 A B600 / R300 CLASS 10
at 220 V  contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release	0.11 A B600 / R300
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings	0.11 A B600 / R300 CLASS 10
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	0.11 A B600 / R300  CLASS 10 thermal
at 220 V  contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor      at 480 V rated value	0.11 A B600 / R300  CLASS 10 thermal
at 220 V  contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor      at 480 V rated value      at 600 V rated value	0.11 A B600 / R300  CLASS 10 thermal
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value Short-circuit protection	0.11 A B600 / R300  CLASS 10 thermal
at 220 V contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value  Short-circuit protection design of the fuse link	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A
	0.11 A B600 / R300  CLASS 10 thermal
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value Short-circuit protection design of the fuse link     for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A fuse gG: 6 A, quick: 10 A
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value Short-circuit protection design of the fuse link     for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A fuse gG: 6 A, quick: 10 A
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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  10 fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm
at 220 V contact rating of auxiliary contacts according to UL  Protective and monitoring functions  trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value  Short-circuit protection design of the fuse link     for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions  mounting position fastening method	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting
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● at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor ● at 480 V rated value ● at 600 V rated value Short-circuit protection design of the fuse link ● for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value Short-circuit protection design of the fuse link     for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm
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at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings  full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value     for short-circuit protection design of the fuse link     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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm
at 220 V contact rating of auxiliary contacts according to UL Protective and monitoring functions  trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor     at 480 V rated value     at 600 V rated value Short-circuit protection design of the fuse link     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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm
at 220 V     contact rating of auxiliary contacts according to UL     Protective and monitoring functions     trip class     design of the overload release     UL/CSA ratings     full-load current (FLA) for 3-phase AC motor	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No
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type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— 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>for 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
IEC 61508	
T1 value	
<ul> <li>for proof test interval or service life according to IEC 61508</li> </ul>	20 a
Electrical Safety	
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
Approvals Certificates	

#### Approvais Certificates









Confirmation





## For use in hazardous locations

## **Test Certificates**

## Marine / Shipping





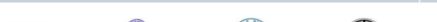
Special Test Certificate

Type Test Certificates/Test Report





# Marine / Shipping















Miscellaneous

other

other

Railway

Environment

Confirmation

Special Test Certificate



Environmental Confirmations

#### **Further informatior**

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-4NB0

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4NB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4NB0

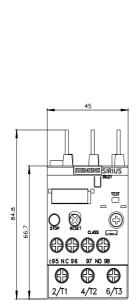
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4NB0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4NB0&lang=en</a>

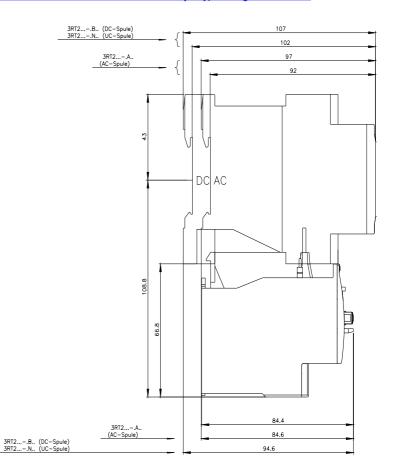
Characteristic: Tripping characteristics, I2t, Let-through current

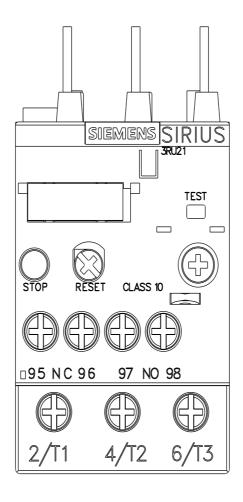
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4NB0/char

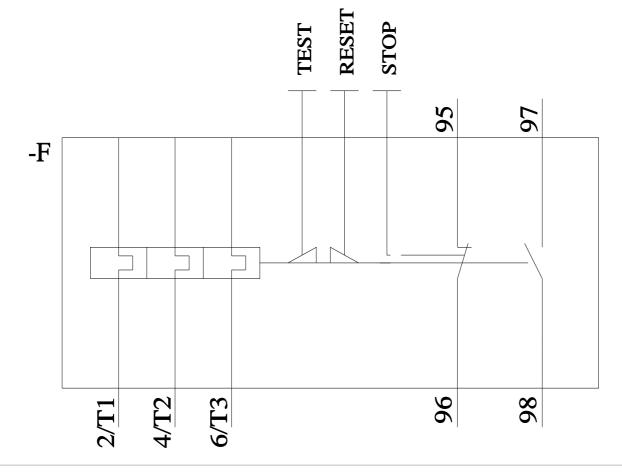
Further characteristics (e.g. electrical endurance, switching frequency)

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