## **SIEMENS**

Data sheet 3RU2126-4NC0



Overload relay 23...28 A Thermal For motor protection Size S0, Class 10 Contactor mounting 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 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	0.248 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

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	1A
• at 690 V	0.75 A
operational current of auxiliary contacts at DC-13	0.1071
• 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
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
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	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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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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 102 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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 102 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 102 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 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 102 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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 102 mm 45 mm 84 mm  No  spring-loaded terminals
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  fuse gG: 6 A, quick: 10 A  any Contactor mounting 102 mm 45 mm 84 mm  No  spring-loaded terminals spring-loaded terminals
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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  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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 102 mm 45 mm 84 mm  No  spring-loaded terminals spring-loaded terminals
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 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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A  28 A  any Contactor mounting 102 mm 45 mm 84 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom
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  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	0.11 A B600 / R300  CLASS 10 thermal  28 A 28 A 28 A  any Contactor mounting 102 mm 45 mm 84 mm  No  spring-loaded terminals spring-loaded terminals Top and bottom

<ul> <li>for 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)
for 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 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	
General Product Approval	







Confirmation





For use in hazardous locations

**Test Certificates** 

Marine / Shipping





**Miscellaneous** 

Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping













other Railway Environment

Confirmation

Special Test Certificate



Environmental Confirmations

## Further information

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=3RU2126-4NC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4NC0

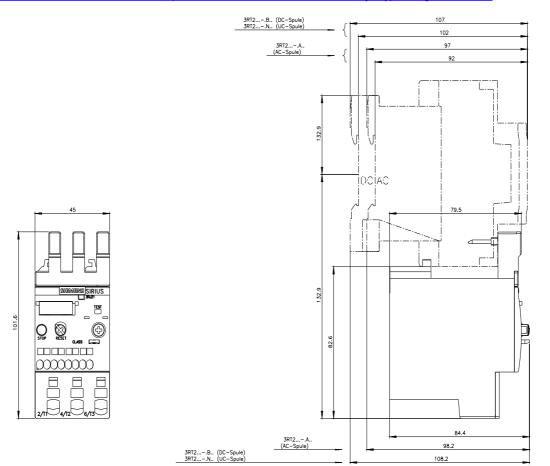
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

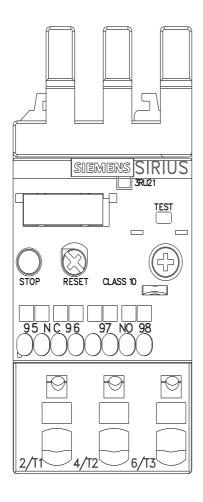
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4NC0

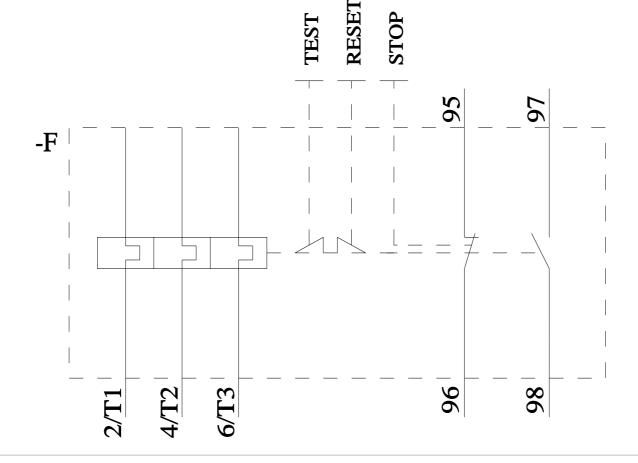
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$ 

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4NC0&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4NC0&objecttype=14&gridview=view1</a>







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