# **SIEMENS**

Data sheet 3RU2136-4KD1



Overload relay 62...73 A Thermal For motor protection Size S2, Class 10A Stand-alone installation Main circuit: Screw 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	S2
size of contactor can be combined company-specific	S2
power loss [W] for rated value of the current at AC in hot operating state	17.1 W
• per pole	5.7 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>	415 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	415 V
<ul> <li>between main and auxiliary circuit</li> </ul>	690 V
<ul> <li>between main and auxiliary circuit</li> </ul>	690 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)	10/15/2014
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
<ul> <li>during transport</li> </ul>	-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	62 73 A
operating voltage	
rated value	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	73 A
operational current at AC-3e at 400 V rated value	73 A

operating power	
• at AC-3	
— at 400 V rated value	37 kW
— at 500 V rated value	45 kW
— at 690 V rated value	55 kW
• at AC-3e	
— at 400 V rated value	37 kW
— at 500 V rated value	45 kW
— at 690 V rated value	55 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
• at 220 V	0.11 A
design of the miniature circuit breaker for short-circuit	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
protection of the auxiliary switch required	
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	B600 / R300
Protective and monitoring functions trip class	B600 / R300 CLASS 10A
Protective and monitoring functions	
Protective and monitoring functions trip class	CLASS 10A
Protective and monitoring functions  trip class design of the overload release  UL/CSA ratings	CLASS 10A
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Protective and monitoring functions  trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10A thermal
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	CLASS 10A thermal
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	CLASS 10A thermal
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	CLASS 10A thermal  73 A 73 A
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	CLASS 10A thermal
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rip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	CLASS 10A thermal  73 A 73 A fuse gG: 6 A, quick: 10 A  any stand-alone installation
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rip class design of the overload release UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	CLASS 10A thermal  73 A 73 A  fuse gG: 6 A, quick: 10 A  any stand-alone installation 105 mm 55 mm 117 mm  No  screw-type terminals spring-loaded terminals Top and bottom

• for auxiliary contacts

- solid or stranded

- finely stranded with core end processing

- finely stranded without core end processing

• at AWG cables for auxiliary contacts

#### tightening torque

• for main contacts with screw-type terminals

design of screwdriver shaft size of the screwdriver tip

design of the thread of the connection screw

• for main contacts

2x (0.5 ... 2.5 mm²) 2x (0.5 ... 1.5 mm<sup>2</sup>) 2x (0.5 ... 2.5 mm<sup>2</sup>) 2x (20 ... 14)

3 ... 4.5 N·m

Diameter 5 ... 6 mm

Pozidriv PZ 2

M6

### Safety related data

T1 value for proof test interval or service life according to

IEC 61508

protection class IP on the front according to IEC

60529

touch protection on the front according to IEC 60529

20 a

IP20

finger-safe, for vertical contact from the front

display version for switching status Slide switch

#### Certificates/ approvals

## **General Product Approval**

For use in hazardous locations



Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping







Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>



## Marine / Shipping













other

Railway

Confirmation

**Special Test Certific-**

<u>ate</u>

#### **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=3RU2136-4KD1

Cax online generator

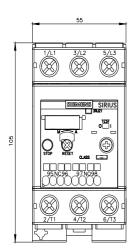
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

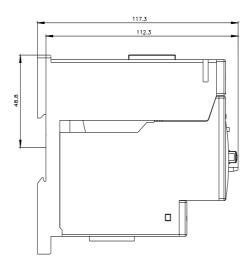
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4KD1

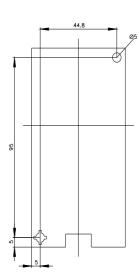
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4KD1&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4KD1&lang=en</a>

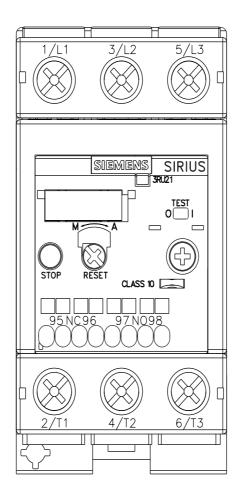
Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4KD1/char">https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4KD1/char</a>

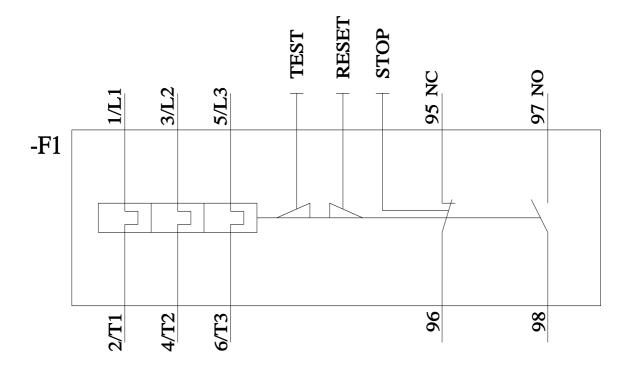
Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4KD1&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4KD1&objecttype=14&gridview=view1</a>











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