# **SIEMENS**

Data sheet 3RU2136-4JD0



Overload relay 54...65 A Thermal For motor protection Size S2, Class 10 Contactor mounting 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	15.6 W
• per pole	5.2 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>	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
during storage	-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	54 65 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	65 A
operational current at AC-3e at 400 V rated value	65 A

operating power	
• at AC-3	20 134
— at 400 V rated value	30 kW
— at 500 V rated value	45 kW
<ul><li>— at 690 V rated value</li><li>• at AC-3e</li></ul>	55 kW
	30 kW
<ul><li>— at 400 V rated value</li><li>— at 500 V rated value</li></ul>	45 kW
— at 690 V rated value	55 kW
	35 KVV
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	0.4
• 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	0.4
• 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 protection of the auxiliary switch required	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
protection of the auxiliary switch required	
	B600 / R300
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release	
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings	CLASS 10
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	CLASS 10 thermal
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	CLASS 10 thermal
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	CLASS 10 thermal
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	CLASS 10 thermal
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	CLASS 10 thermal  65 A 65 A
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	CLASS 10 thermal
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	CLASS 10 thermal  65 A 65 A
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	CLASS 10 thermal  65 A 65 A
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	CLASS 10 thermal  65 A 65 A fuse gG: 6 A, quick: 10 A  any
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	CLASS 10 thermal  65 A 65 A fuse gG: 6 A, quick: 10 A  any Contactor mounting
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	CLASS 10 thermal  65 A 65 A fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm
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	CLASS 10 thermal  65 A 65 A fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm
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	CLASS 10 thermal  65 A 65 A fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals spring-loaded terminals
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals spring-loaded terminals Top and bottom
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals spring-loaded terminals
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	CLASS 10 thermal  65 A 65 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals spring-loaded terminals Top and bottom  2x (1 35 mm²), 1x (1 50 mm²)

• 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 mm<sup>2</sup>) 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

display version for switching status

Slide switch

### Certificates/ approvals

## **General Product Approval**

For use in hazardous locations



Confirmation









IECEx

For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping







Special Test Certificate

Type Test Certificates/Test Report



## 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=3RU2136-4JD0

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RU2136-4JD0}$ 

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

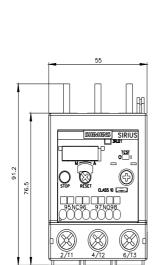
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4JD0

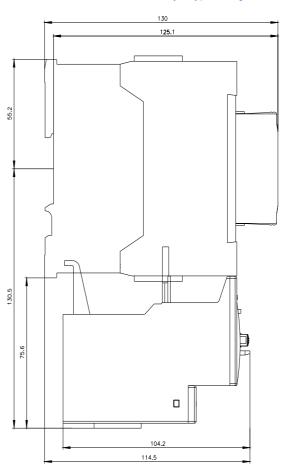
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4JD0&lang=en

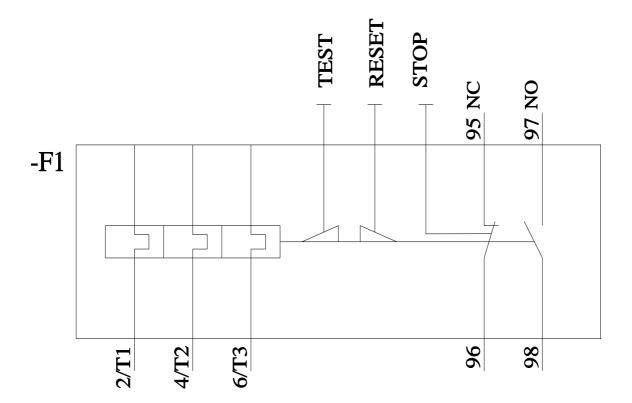
Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4JD0/char">https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4JD0/char</a>

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4JD0&objecttype=14&gridview=view1







last modified: 3/8/2022 🖸