# **SIEMENS**

Data sheet 3RU2136-4EB0



Overload relay 22...32 A Thermal For motor protection Size S2, 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	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	13.8 W
• per pole	4.6 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 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
between main and auxiliary circuit	690 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/15/2014
SVHC substance name	Lead - 7439-92-1
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	22 32 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	32 A
operational current at AC-3e at 400 V rated value	32 A
operating power  • at AC-3	

at 400 V rated value	45 120
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	30 kW
• at AC-3e	
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	30 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 protection	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
of the auxiliary switch required	
contact rating of auxiliary contacts according to UL	B600 / R300
Protective and monitoring functions	
trip class	CLASS 10
trip class design of the overload release	CLASS 10 thermal
trip class design of the overload release UL/CSA ratings	
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal 32 A
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	thermal
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	thermal 32 A
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	thermal  32 A 32 A
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	thermal 32 A
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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	thermal  32 A 32 A fuse gG: 6 A, quick: 10 A
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	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting
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	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm
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trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm
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trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm  No
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals screw-type terminals
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals screw-type terminals
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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  • for main contacts	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals screw-type terminals Top and bottom
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals screw-type terminals Top and bottom  2x (1 35 mm²), 1x (1 50 mm²)
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 90 mm 55 mm 105 mm  No  screw-type terminals screw-type terminals Top and bottom  2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²)

<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	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>	3 4.5 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	M6
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
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





Type Test Certificates/Test Report

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





### Marine / Shipping











Confirmation

other

### Railway

Environment

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

**Environmental Confirmations** 

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=3RU2136-4EB0

Cax online generator

rt.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4EB0

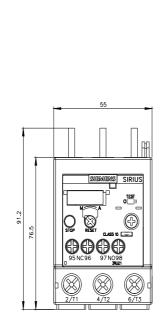
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4EB0

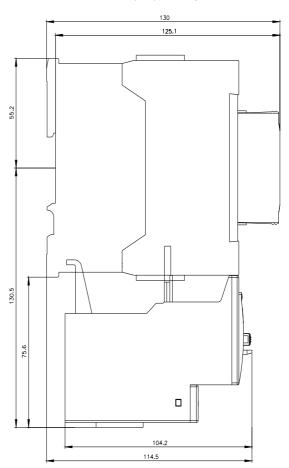
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

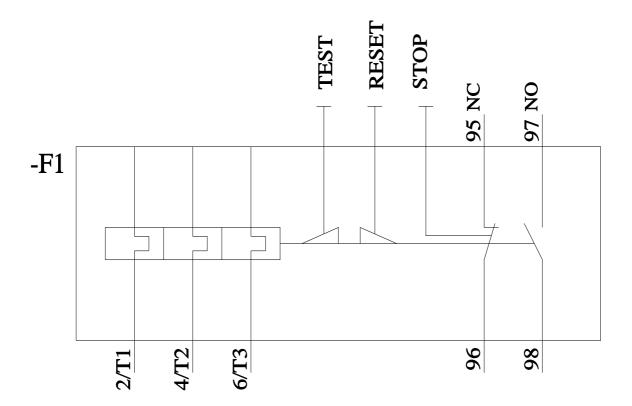
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4EB0&lang=en

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4EB0&objecttype=14&gridview=view1







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