## **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 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
between main and auxiliary circuit	690 V
shock resistance acc. to IEC 60068-2-27	8g / 11 ms
recovery time after overload trip	
<ul> <li>with automatic reset typical</li> </ul>	10 min
<ul><li>with remote-reset</li></ul>	10 min
with manual reset	10 min
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 acc. to IEC 81346-2	F
Substance Prohibitance (Date)	15.10.2014 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature during operation	-40 +70 °C
ambient temperature during storage	-55 +80 °C
ambient temperature 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		
<ul> <li>operating voltage rated value</li> </ul>	690 V		
<ul> <li>operating voltage at AC-3 rated value maximum</li> </ul>	690 V		
operating frequency rated value	50 60 Hz		
operational current rated value	32 A		
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		
operational current of auxiliary contacts at DC-13	TA .		
• 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)		
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			
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 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	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 • for short-circuit protection of the auxiliary switch	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 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 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	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 • 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	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 • 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	thermal  32 A 32 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 90 mm 55 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		
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		
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		
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		
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		
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 function 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	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		
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		
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		

<ul> <li>at AWG cables for main contacts</li> </ul>	2x (18 2), 1x (18 1)		
type of connectable conductor cross-sections			
for auxiliary contacts			
<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)		
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)		
<ul> <li>tightening torque for main contacts with screw-type terminals</li> </ul>	3 4.5 N·m		
<ul> <li>tightening torque 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			
<ul> <li>for main contacts</li> </ul>	M6		
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3		
Safety related data			
T1 value for proof test interval or service life acc. to IEC 61508	20 y		
protection class IP on the front acc. to IEC 60529	IP20		
touch protection on the front acc. to IEC 60529	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	













**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

Miscellaneous



Special Test Certificate Type Test Certificates/Test Report





Marine / Shipping

Lloyd's Register uis









Confirmation

other

Railway

Special Test Certificate

## Further information

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

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

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

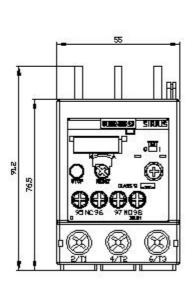
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4EB0

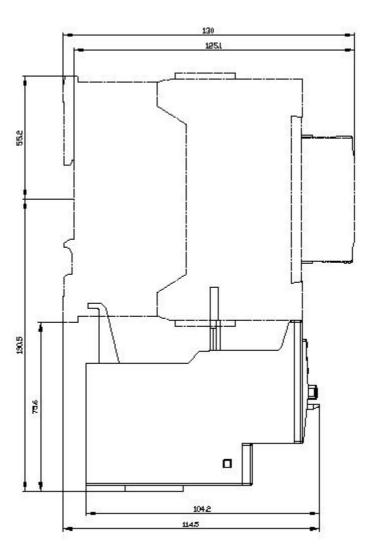
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4EB0&lang=en

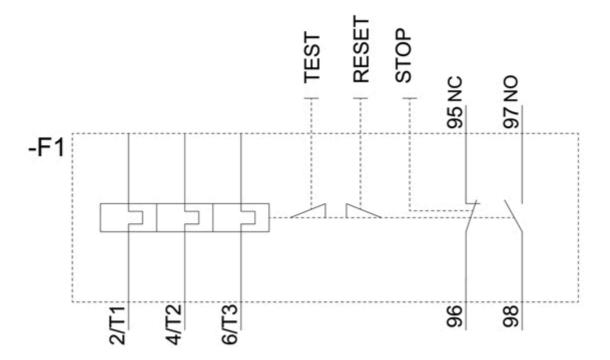
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4EB0/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4EB0&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4EB0&objecttype=14&gridview=view1</a>







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