## SIEMENS

## Data sheet

## 3RU2136-4AD0



Overload relay 11...16 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	SINUZ
	C2
size of overload relay	S2 S2
size of contactor can be combined company-specific	
power loss [W] for rated value of the current at AC in hot operating state	10.5 W
• per pole	3.5 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
<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	
during operation	-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	11 16 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	16 A
operational current at AC-3e at 400 V rated value	16 A

● at AC-3					
	7.5 KW				
— at 400 V rated value	7.5 kW				
— at 500 V rated value	7.5 kW				
— at 690 V rated value	11 kW				
• at AC-3e					
— at 400 V rated value	7.5 kW				
— at 500 V rated value	7.5 kW				
— at 690 V rated value	11 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				
	B600 / R300				
contact rating of auxiliary contacts according to UL	B600 / R300 CLASS 10				
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	CLASS 10				
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 16 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	CLASS 10 thermal 16 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	CLASS 10 thermal 16 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	CLASS 10 thermal 16 A 16 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 16 A 16 A 16 A fuse gG: 6 A, quick: 10 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         mounting position	CLASS 10 thermal 16 A 16 A 16 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         • 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	CLASS 10 thermal 16 A 16 A 16 A fuse gG: 6 A, quick: 10 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         mounting position	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 17 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         • 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	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 16 A 16 A 16 M 10 M 10 M 10 M 10 M 10 M 10 M 10 M 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         • 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 16 A 16 A 16 A 16 A 16 A 16 A 16 A 16 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         mounting position         fastening method         height         width         depth         Connections/ Terminals	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 16 A 10 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	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 16 A 16 A 16 M 10 M 10 M 10 M 10 M 10 M 10 M 10 M 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         • 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	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 16 A 10 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> Short-circuit protection       design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> Installation/ mounting/ dimensions       mounting position         fastening method       height         width       depth         Connections/ Terminals       product component removable terminal for auxiliary and control circuit	CLASS 10 thermal 16 A 16 A 16 A 16 A 16 A 16 A 10 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> </ul> Short-circuit protection       design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> 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	CLASS 10 thermal 16 A 16 A 16 A 16 A 17 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> Short-circuit protection       design of the fuse link         of or 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	CLASS 10 thermal 16 A 16 A 16 A 16 A 17 Fuse gG: 6 A, quick: 10 A any Contactor mounting 90 mm 55 mm 105 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> </ul> Short-circuit protection       design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> 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       e for main current circuit         e for auxiliary and control circuit       arrangement of electrical connectors for main current	CLASS 10 thermal 16 A 16 A 16 A fuse gG: 6 A, quick: 10 A any Contactor mounting 90 mm 55 mm 105 mm No 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> </ul> short-circuit protection         design of the fuse link         ofor 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         of or main current circuit         of or auxiliary and control circuit	CLASS 10 thermal 16 A 16 A 16 A fuse gG: 6 A, quick: 10 A any Contactor mounting 90 mm 55 mm 105 mm No 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>short-circuit protection</li> </ul> design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> 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         e for auxiliary and control circuit         arrangement of electrical connectors for main current circuit         type of connectable conductor cross-sections	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         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         • for auxiliary and control circuit         arrangement of electrical connectors for main current circuit         • for main contacts         - solid or stranded	CLASS 10 thermal 16 A 16 A 16 A 16 A 17 Second State of the second				
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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> <li>Short-circuit protection</li> <li>design of the fuse link         <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> </li> <li>Installation/ mounting/ dimensions         <ul> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>arrangement of electrical connectors for main current circuit</li> <li>for main contacts</li> <li>for main contacts</li> </ul> </li>	CLASS 10 thermal				

type of connectable cond	uctor cross-sectio	ns					
<ul> <li>for auxiliary contacts</li> </ul>							
— solid or stranded			2x (0.5 2.5 m	nm²)			
<ul> <li>finely stranded with core end processing</li> </ul>			2x (0.5 1.5 m	nm²)			
- finely stranded without core end processing			2x (0.5 2.5 m	nm²)			
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>		2x (20 14)					
tightening torque							
<ul> <li>for main contacts with screw-type terminals</li> </ul>			3 4.5 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				
afety related data							
T1 value for proof test interval or service life according to IEC 61508			20 a				
protection class IP on the	front according to	DIEC 60529	IP20				
touch protection on the fi	ont according to I	EC 60529	finger-safe, for	vertical contact	from the front		
isplay							
display version for switching	g status		Slide switch				
ertificates/ approvals							
General Product Approva	al				For use in hazardous	locations	
Confirmation		-				_	
Confirmation	(m)	<u></u>	Г	יחר	<b>IECEx</b>	$\langle c \rangle$	
	<u>m</u>	<b>W</b>	F	·HI	incock.	\c x/	
	CCC	UL	-		IECEx	ATEX	
Declaration of Conformit	<b>y</b>	Test Certificat			Marine / Shipping		
UK CA	CE EG-Konf.	<u>Type Test Cer</u> ates/Test Re	<u>tific- Special</u> port	<u>I Test Certific-</u> ate	ABS	BUREAU VERITAS	
Marine / Shipping						other	
2 2		SPA		AL A		Confirmation	
	Lloyd's Register us	PRS	(	RINA	<b>KARS</b>		
Railway							
Special Test Certific-							
ate							
urther information							
Siemens has decided to e	wit the Russian m	arket (see horo)					
https://press.siemens.com/			<u>own-russian</u> -busin	<u>iess</u>			
Siemens is working on th Please contact your local S	e renewal of the cu	urrent EAC certification	ates.		d to import or offer to sup	olv these products to a	
EAC relevant market (other							
Information on the packa	than the sanctione <b>ging</b>	d EAEU member sta					
EAC relevant market (other Information on the packa https://support.industry.sier Information- and Downloa	than the sanctione <b>ging</b> nens.com/cs/ww/en	d EAEU member sta /view/109813875				.,	

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2136-4ADD

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4AD0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4AD0

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

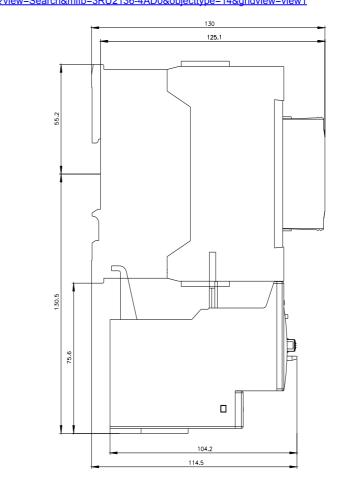
 http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4AD0&lang=en

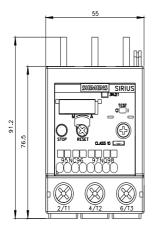
 Characteristic: Tripping characteristics, I²t, Let-through current

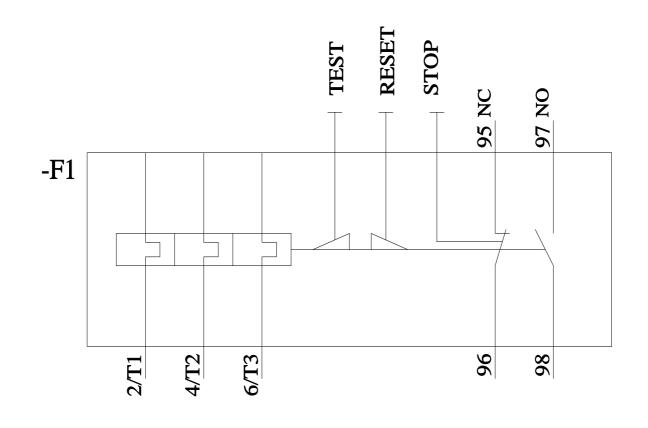
 https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4AD0/char

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

 http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4AD0&objecttype=14&gridview=view1







last modified:

3/8/2022 🖸

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3RU21364AD0