## SIEMENS

## Data sheet

## 3RU2136-4GD0



Overload relay 36...45 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	SRUZ
	00
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 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
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	36 45 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	45 A
operational current at AC-3e at 400 V rated value	45 A
operating power	

● at AC-3	
	22 kW
— at 400 V rated value	
— at 500 V rated value	30 kW
— at 690 V rated value	37 kW
• at AC-3e	
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	37 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	D000 / D000
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 45 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
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 45 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 45 A 45 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	CLASS 10 thermal 45 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 45 A 45 A 45 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 45 A 45 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 45 A 45 A 45 A 45 A 45 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	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 M 45 M
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 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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 45 A 45 A 45 A 45 A 45 A 45 A 45 M 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	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 M 45 M
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         type of electrical connection       type of electrical connection	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 M 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         type of electrical connection       • for main current circuit	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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 <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       for auxiliary and control circuit	CLASS 10 thermal 45 A 45 A 45 A 45 A 7 use 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 <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 circuit	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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 <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>if or auxiliary and control circuit</li> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections</li> </ul> </li>	CLASS 10 thermal 45 A 45 A 45 A 45 A 7 use 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 <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 circuit	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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         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 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 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 <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>of or auxiliary and control circuit</li> </ul> </li>	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 A

ype of connectable con	ductor cross-soctio	ne			
<ul> <li>for auxiliary contact</li> </ul>		115			
- solid or strand			$2x (0.5 - 2.5 \text{ mm}^2)$		
<ul> <li>— finely stranded with core end processing</li> </ul>		$2x (0.5 \dots 2.5 \text{ mm}^2)$			
-		-	2x (0.5 1.5 mm <sup>2</sup> )		
<ul> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> </ul>		2x (0.5 2.5 mm <sup>2</sup> )			
			2x (20 14)		
ightening torque			2 4 5 N m		
for main contacts with screw-type terminals  design of screwdriver shaft		3 4.5 N·m			
size of the screwdriver tip		Diameter 5 6 mm			
	-		Pozidriv PZ 2		
design of the thread of the connection screw		10			
for main contacts			M6		
fety related data					_
T1 value for proof test interval or service life according to IEC 61508			20 a		
protection class IP on th	e front according to	DIEC 60529	IP20		
ouch protection on the	front according to I	EC 60529	finger-safe, for vertical contact	ct from the front	
splay					
display version for switchin	ng status		Slide switch		
ertificates/ approvals					
General Product Approv	val			For use in hazardous	locations
Confirmation					
Committation	(m)	(III)	<b>101</b>	IECEx	<u>(c.)</u>
		<u></u>	r m i		
Declaration of Conformi	ty	Test Certificat		Marine / Shipping	_
UK CA	ty CE EG-Konf.	Test Certificat	tific- Special Test Certific-	Marine / Shipping	BUREAU VERITAS
UK CA	CE	Type Test Cer	tific- Special Test Certific-	Marine / Shipping	<b>BUREAU</b> VERITAS
	CE	Type Test Cer	tific- Special Test Certific-	Marine / Shipping	<b>DUREAU</b> VERITAS
UK CA Marine / Shipping	EG-Konf.	Type Test Cer	tific- Special Test Certific-	Marine / Shipping	
UK Marine / Shipping	EG-Konf.	Type Test Cer	tific- Special Test Certific-	Marine / Shipping	
UK Marine / Shipping	EG-Konf.	Type Test Cer	tific- Special Test Certific-	Marine / Shipping	
UK Marine / Shipping	EG-Konf.	<u>Type Test Cer</u> ates/Test Rep Prs	tific- Special Test Certific-	Marine / Shipping	
UK Marine / Shipping	EG-Konf.	Type Test Cer ates/Test Rep PRS	tific- cort Special Test Certific- ate	Marine / Shipping	
VARINE / Shipping	EG-Konf.	Type Test Cer ates/Test Rep Prs arket (see here). ase/siemens-wind-dr urrent EAC certifica e status of validity of	tific- cort Special Test Certific- ate	ABS	Confirmation

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

https://www.siemens.com/ic10

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2136-4GD0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4GD0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4GD0

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

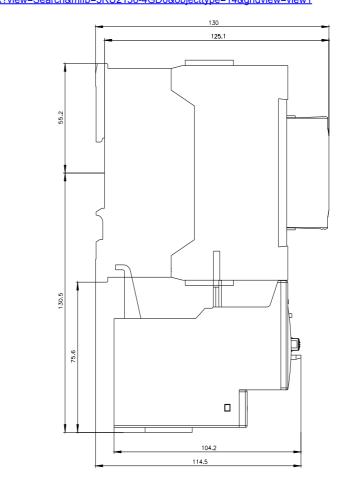
 http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4GD0&lang=en

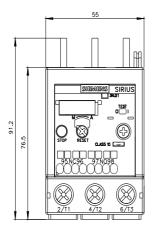
 Characteristic: Tripping characteristics, I²t, Let-through current

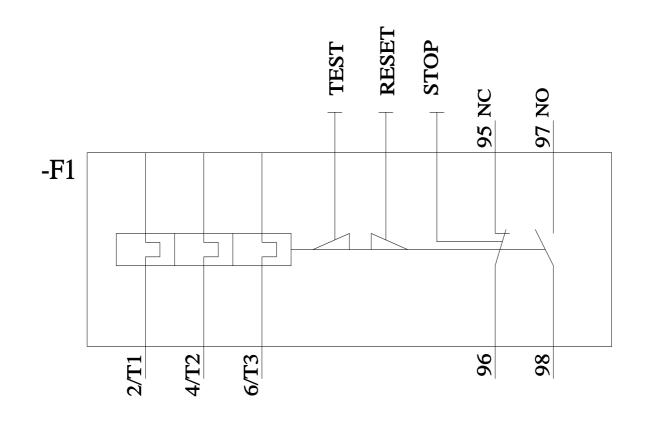
 https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4GD0/char

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

 http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4GD0&objecttype=14&gridview=view1







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