## SIEMENS

## Data sheet

## 3RU2136-4GD1



Overload relay 36...45 A Thermal For motor protection Size S2, Class 10 Standalone installation Main circuit: Screw Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

product brand name SIRI	US
product designation them	mal overload relay
product type designation 3RU	2
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 15.6 operating state	W
• per pole 5.2 V	N
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	
• between auxiliary and auxiliary circuit 415	V
• between auxiliary and auxiliary circuit 415	V
• between main and auxiliary circuit 690	V
between main and auxiliary circuit     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	<sup>-</sup> 98 ATEX G 001
reference code according to IEC 81346-2 F	
Substance Prohibitance (Date) 10/1	5/2014
Ambient conditions	
installation altitude at height above sea level maximum 2 00	0 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	. 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	
• at AC-3 — at 400 V rated value	22 kW
— at 400 V rated value	22 KW 30 KW
— at 690 V rated value	37 kW
• at AC-3e	20 IAN
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	37 kW
Auxiliary circuit	integrated
design of the auxiliary switch number of NC contacts for auxiliary contacts	integrated
2	
note	for contactor disconnection
number of NO contacts for auxiliary contacts	
note	for message "Tripped" 0
number of CO contacts for auxiliary contacts operational current of auxiliary contacts at AC-15	0
at 24 V	3 A
• at 110 V • at 120 V	3 A 3 A
• at 125 V	3 A 2 A
• at 230 V	
• 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	
of the auxiliary switch required contact rating of auxiliary contacts according to UL	B600 / R300
of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions	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 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 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	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 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 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 fuse gG: 6 A, quick: 10 A any stand-alone installation
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 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	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	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 10 A fuse gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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 45 A 45 A 45 A 45 A 45 A 10 A fuse gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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       type of electrical connection	CLASS 10 thermal 45 A 45 A 45 A 45 A 45 A 45 A 45 A 41 A 45 A 41 A 41 A 42 A 42 A 43 A 43 A 44 A 45 A 45 A 45 A 45 A 45 A 45 A 45
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 45 A 45 A 45 A 45 A 7 use gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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 <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 45 A 45 A 45 A fuse gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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         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         of or main current circuit         of or auxiliary and control circuit	CLASS 10 thermal 45 A 45 A 45 A fuse gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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 45 A 45 A 45 A fuse gG: 6 A, quick: 10 A any stand-alone installation 105 mm 55 mm 117 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> </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 45 A 45 A 45 A 45 A 45 A 45 A 45 A 45 A

type of connectable conductor cro	ss-sections									
<ul> <li>for auxiliary contacts</li> </ul>										
— solid or stranded		2x (0.5 2.5 mm²)								
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> </ul>		2x (0.5 1.5 mm²)								
		2x (0.5 2.5 mm <sup>2</sup> )								
		2x (20 14)								
ightening 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		3 4.5 N·m								
		Diameter 5 6 mm								
		Pozidriv PZ 2 M6								
						fety 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 IEC 60529		IP20								
ouch protection on the front acco	rding to IEC 60529	finger-safe, for vertical contact from the front								
splay										
isplay version for switching status		Slide switch								
rtificates/ approvals										
General Product Approval			For use in hazardous	locations						
Confirm	nation			IFOF						
(	(UL)	LUI	    	IECEX						
Declaration of Conformity	Test Certificat	es	Marine / Shipping							
	E Special Test Co ate ate	ertific- <u>Type Test Certific-</u> ates/Test Report	ABS	BUREAU VERITAS						
larine / Shipping				other						
	ster s	RINA	RMRS	<u>Confirmation</u>						
Railway										
Special Test Certific- ate										
rther information										
iemens has decided to exit the R ttps://press.siemens.com/global/en/ iemens is working on the renewa lease contact your local Siemens of AC relevant market (other than the	oressrelease/siemens-wind-do I of the current EAC certification fice on the status of validity of	ates. The EAC certification if you inte	nd to import or offer to sup	ply these products to						
AC relevant market (other than the <b>iformation on the packaging</b>	SAUGIONEO EAEU MEMDELSIA									
ttps://support.industry.siemens.com										

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

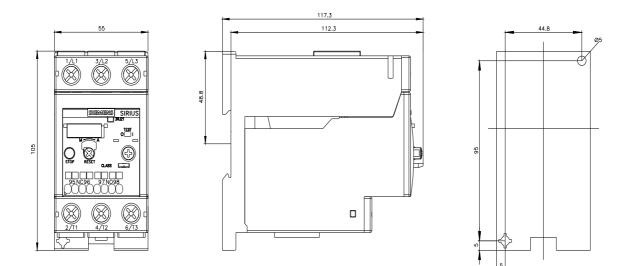
 http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2136-4GD1&lang=en

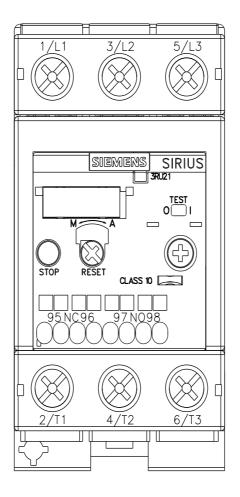
 Characteristic: Tripping characteristics, I²t, Let-through current

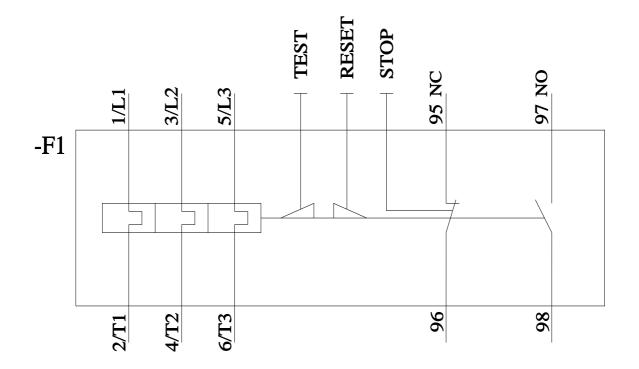
 https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4GD1/char

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

 http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4GD1&objecttype=14&gridview=view1







## last modified:

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