SIEMENS

Data sheet

3RU2136-4ED1



Overload relay 22...32 A Thermal For motor protection Size S2, Class 10 Stand-alone installation 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	
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	
 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 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	22 32 A
operating voltage	
 rated value 	690 V
 at AC-3e rated value maximum 	690 V
operating frequency rated value	50 60 Hz

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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	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 24 V	3 A		
• at 120 V	3 A		
• at 125 V	3 A		
• at 125 V • at 230 V	2 A		
	2A 1A		
• at 400 V			
operational current of auxiliary contacts at DC-13	0.4		
• 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		
design of the overload release	thermal		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	32 A		
• at 600 V rated value	32 A		
Short-circuit protection			
design of the fuse link			
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A		
Installation/ mounting/ dimensions			
mounting position	any		
fastening method	stand-alone installation		
height	105 mm		
width	55 mm		
depth	 117 mm		
Connections/ Terminals			
product component removable terminal for auxiliary	No		
and control circuit			
type of electrical connection			
• for main current circuit	screw-type terminals		
for auxiliary and control circuit	spring-loaded terminals		
arrangement of electrical connectors for main current circuit	Top and bottom		
type of connectable conductor cross-sections			

 for main contact 	cts					
— solid or stranded			2x (1 35 mm²), 1x (1 50 mm²)			
— finely stranded with core end processing			2x (1 25 mm ²), 1x (1 35 mm ²)			
at AWG cables for main contacts			2x (1 2) finit), fx (1 3) finit) 2x (18 2), 1x (18 1)			
type of connectable	e conductor cross-sections					
 for auxiliary co 						
— solid or stranded		:	2x (0.5 2.5 mm²)			
 finely stranded with core end processing 		:	2x (0.5 1.5 mm²)			
— finely stra	nded without core end process	ing :	2x (0.5 2.5 mm²)			
 at AWG cables 	s for auxiliary contacts		2x (20 14)			
tightening torque						
 for main contacts with screw-type terminals 		:	3 4.5 N·m			
design of screwdriv	ver shaft		Diameter 5 6 mm			
size of the screwdri	iver tip		Pozidriv PZ 2			
design of the thread	d of the connection screw					
 for main contact 	cts		M6			
Safety related data						
T1 value for proof tes IEC 61508	st interval or service life accordi	ng to	20 у			
protection class IP 60529	on the front according to IEC	;	IP20			
	touch protection on the front according to IEC 60529		finger-safe, for vertical conta	ct from the front		
Display						
display version for switching status			Slide switch			
Certificates/ approva	ls					
General Product A	pproval				For use in hazard- ous locations	
(SP)	<u>Confirmation</u>	3		EHC	IECEx	
For use in hazard- ous locations	Declaration of Conformity		Test Certificates		Marine / Shipping	
ATEX ATEX	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	ABS	
Marine / Shipping						
BUREAU VERITAS		Llovd's Kegister uis	PRS	RINA	RMRS	
other	Railway					
other Confirmation	Railway Special Test Certific- ate					

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=3RU2136-4ED1

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4ED1

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4ED1

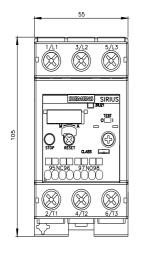
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4ED1&lang=en

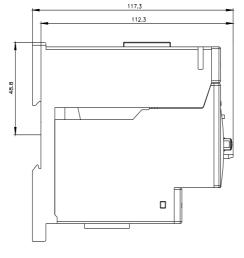
Characteristic: Tripping characteristics, I²t, Let-through current

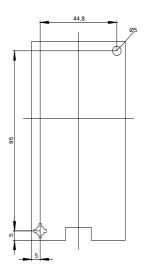
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4ED1/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4ED1&objecttype=14&gridview=view1







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