SIEMENS

Data sheet 3RU2136-1HB0

Overload relay 5.5...8 A Thermal For motor protection Size S2 Class 10 Contactor mounting Main circuit: screw terminal Auxiliary circuit: screw 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	7.5 W
● per pole	2.5 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	
● 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)	09/08/2017
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	5.5 ... 8 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	8 A
operational current at AC-3e at 400 V rated value	8 A
operating power	

Subject to change without notice
© Copyright Siemens

● at AC-3	
— at 400 V rated value	3 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
● at AC-3e	
— at 400 V rated value	3 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 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 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	8 A
● at 600 V rated value	8 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	Contactor mounting
height	90 mm
width	55 mm
depth	105 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
● for main current circuit	screw-type terminals
● for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
● for main contacts	
— solid or stranded	2x (1 ... 35 mm²), 1x (1 ... 50 mm²)
— finely stranded with core end processing	2x (1 ... 25 mm²), 1x (1 ... 35 mm²)
● for AWG cables for main contacts	2x (18 ... 2), 1x (18 ... 1)

Subject to change without notice
© Copyright Siemens

type of connectable conductor cross-sections	
● for auxiliary contacts	
— solid or stranded	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
● for AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)
tightening torque	
● for main contacts with screw-type terminals	3 ... 4.5 N·m
● for auxiliary contacts with screw-type terminals	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	
● for main contacts	M6
● of the auxiliary and control contacts	M3

Safety 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
touch protection on the front according 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**

Confirmation

CCC, UL, EAC, IECEx, ATEX

Declaration of Conformity | **Test Certificates** | **Marine / Shipping**

UKCA, CE EG-Konf.

Type Test Certificates/Test Report

Special Test Certificate

ABS, Bureau Veritas

Marine / Shipping | **other**

DNV, LRS, PRS, RINA, RMRS

Confirmation

Railway

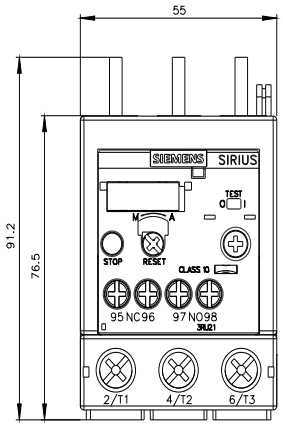
Special Test Certificate

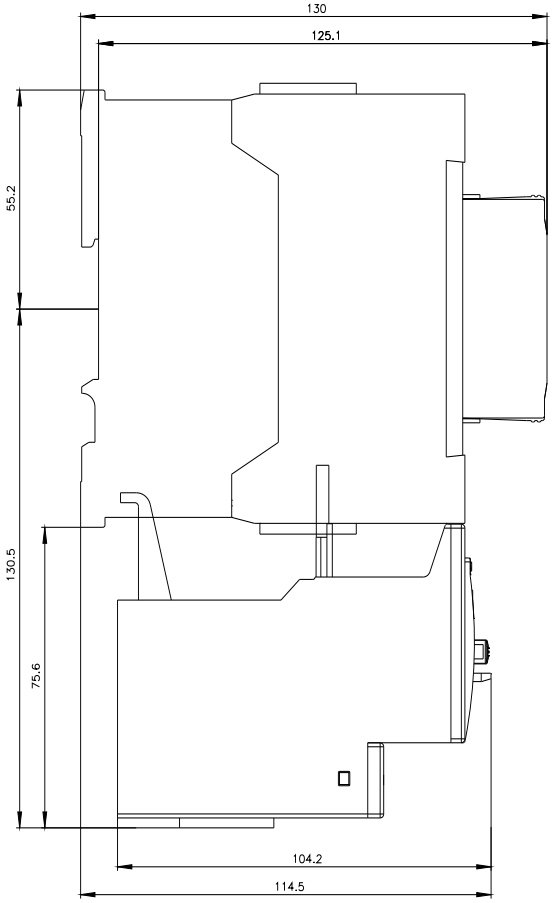
Further information

Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
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=3RU2136-1HB0
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-1HB0

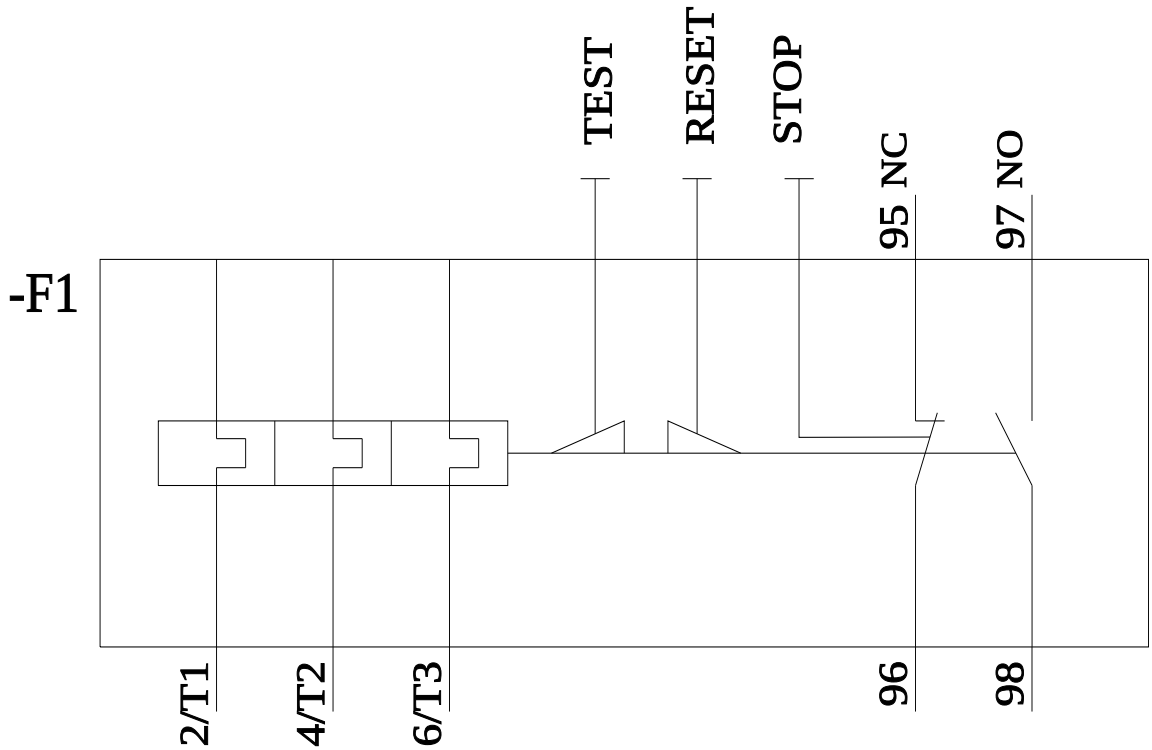
© Copyright Siemens

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-1HB0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-1HB0&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-1HB0/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-1HB0&objecttype=14&gridview=view1





Subject to change without notice
© Copyright Siemens



last modified: 3/8/2022

Subject to change without notice
© Copyright Siemens