SIEMENS

Data sheet 3RU2146-4LD0



Overload relay 70...90 A Thermal For motor protection Size S3, 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	
size of overload relay	S3
size of contactor can be combined company-specific	S3
power loss [W] for rated value of the current at AC in hot operating state	21 W
• per pole	7 W
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance rated value	8 kV
maximum permissible voltage for protective separation	
 in networks with ungrounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with ungrounded star point between main and auxiliary circuit 	440 V
 in networks with grounded star point between main and auxiliary circuit 	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	0.582 kg
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	70 90 A
operating voltage	
• rated value	1 000 V
• at AC-3e rated value maximum	1 000 V
operating frequency rated value	50 60 Hz
operational current rated value	90 A

Separation Sep		
# 24 AC-2	· ·	90 A
at 580 V rated value	• at AC-3	
	— at 400 V rated value	45 kW
and AG-Se and 400 V rated value and 500 V	— at 500 V rated value	55 kW
at 400 V rated value	— at 690 V rated value	75 kW
	• at AC-3e	
	— at 400 V rated value	45 kW
Austliany circuit design of the auxillary writch number of NC contacts for auxillary contacts note	— at 500 V rated value	55 kW
design of the auxiliary switch number of NC contacts for auxiliary contacts • note • note • note • note for contactor disconnection number of NO contacts for auxiliary contacts • note short of CO contacts for auxiliary contacts • note number of CO contacts for auxiliary contacts • al 24 V • al 110 V • al 120 V • al 1400 V • al 1600 V • operational current of auxiliary contacts at DC-13 • al 24 V • al 1600 V • operational current of auxiliary contacts at DC-13 • al 124 V • al 1600 V • operational current of auxiliary contacts at DC-13 • al 124 V • al 100 V • al 125 V • al 126 V • al 126 V • al 127 V • al 100 V • al 100 V • al 100 V • al 100 V • al 110 V • al 126 V • al 127 V • al 100 V • al 128 V • al 100 V • al 127 V • al 100 V • al 128 V • al 100 V • al 100 V • al 128 V • al 100 V	— at 690 V rated value	75 kW
number of NC contacts for auxiliary contacts	Auxiliary circuit	
• note number of NO contacts for auxiliary contacts • note number of CO contacts for auxiliary contacts • note number of CO contacts for auxiliary contacts operational current of auxiliary contacts at AC-15 • at 24 V • at 110 V • 3 A • at 120 V • 3 125 V • at 128 V • at 128 V • at 128 V • at 129 V • at 869 V Operational current of auxiliary contacts at DC-13 • at 24 V • at 160 V • at 180 V Operational current of auxiliary contacts at DC-13 • at 124 V • at 160 V • at 110 V • at 110 V • at 110 V • at 110 V • at 125 V • at 126 V Obesign of the ministure circuit breaker for short-circuit protection of the auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UtuCSA ratings full-load current (FLA) for 3-phase AC motor • at 80 V rated value * of a 800 V rated value * of or short-circuit protection design of the sus link • for short-circuit protection of the main circuit — with type of assignment 2 required • of or short-circuit protection of the main circuit — with type of ossignment 2 required • for short-circuit protection of the main circuit — with type of ossignment 2 required • for short-circuit protection of the auxiliary switch required fustalization mounting dimensions mounting position fastening method height 105 mm Connections / Ferminals product component removable terminal for auxiliary and control circuit • f	design of the auxiliary switch	integrated
number of NO contacts for auxiliary contacts • note • note number of CO contacts for auxiliary contacts 0 operational current of auxiliary contacts at AC-18 • al 21 10 V • al 11 10 V • al 12 D V • al 12 D V • al 23 D V • al 23 D V • al 400 V • al 400 V • al 400 V • al 600 V operational current of auxiliary contacts at DC-13 • al 22 D V operational current of auxiliary contacts at DC-13 • al 22 D V • al 60 D V • al 60 D V • al 110 V • al 60 V • al 110 V • al 22 D V • al 20 V V • al	number of NC contacts for auxiliary contacts	1
number of CC contacts for auxiliary contacts at AC-15 number of CC contacts for auxiliary contacts at AC-15 number of CC contacts for auxiliary contacts at AC-15 number of CC contacts at	• note	for contactor disconnection
number of CO contacts for auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 800 V • at 800 V • at 800 V • at 110 V • at 800 V • at 100 V • at 800 V • at 100 V • at 120 V	number of NO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15 a) 24 V 3A at 110 V 3A at 120 V 3A at 125 V 3A at 125 V 3A at 230 V 2A at 400 V 1A at 600 V 0,75 A operational current of auxiliary contacts at DC-13 at 24 V 2A at 150 V 0,3A at 125 V 0,22 A at 110 V 0,22 A at 125 V 0,22 A at	• note	for message "Tripped"
• at 24 V • at 110 V • at 120 V • at 125 V • at 125 V • at 230 V • at 230 V • at 400 V • at 50 V • poerational current of auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 24 V • at 10 V • at 110 V • at 125 V • at 120	number of CO contacts for auxiliary contacts	0
at 110 V at 125 V at 120 V at 120 V at 400 V at 400 V at 400 V at 600 V operational current of auxillary contacts at DC-13 at 124 V at 600 V at 600 V at 110 V at 125 V at 125 V at 120 V at 125 V at 120 V at 12	operational current of auxiliary contacts at AC-15	
at 120 V at 125 V at 125 V at 125 V at 120 V at 400 V at 400 V at 600 V 0.75 A Operational current of auxiliary contacts at DC-13 at 24 V at 60 V 0.3 A at 110 V at 125 V at 120 V design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class CLASS 10 design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A Short-circuit protection for short-circuit protection of the main circuit — with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary and control circuit for main current circuit for main current circuit for main current circuit for main current circuit for auxiliary and control circuit for auxiliary and	• at 24 V	3 A
at 125 V at 230 V 2 A at 320 V 2 A at 320 V 7 A at 690 V 90parational current of auxiliary contacts at DC-13 at 24 V at 690 V 3 A at 690 V 3 A at 10 V 3 A at 110 V 3 A at 110 V 3 A at 125 V 3 A A A A A A A A A A A A A A A A A A A	• at 110 V	3 A
at 230 V at 400 V 1 A at 800 V 0, at 800 V 0, 75 A operational current of auxiliary contacts at DC-13 at 24 V 2 A at 800 V 0, 3 A at 110 V 0, 22 A at 125 V 0, 22 A at 125 V 0, 22 A 0, 110 V 0, 122 A 0, 110 V	• at 120 V	3 A
at 400 V at 690 V at 690 V berational current of auxiliary contacts at DC-13 at 24 V at 60 V berational current of auxiliary contacts at DC-13 at 24 V at 60 V berational current of auxiliary contacts at DC-13 at 125 V beratic current of auxiliary contacts at DC-13 at 125 V beratic current of auxiliary contacts according to U. at 220 C beratic current of the miniature circuit breaker for short-circuit protection of the auxiliary switch required contact rating of auxiliary contacts according to UL BB00 / R300 Protective and monitoring functions trip class CLASS 10 design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required for short-circuit protection of the main circuit — with type of assignment 2 required for or short-circuit protection of the auxiliary switch required Installation mounting/ dimensions mounting position fastening method for short-circuit protection of the auxiliary switch required position fastening method fastening method for main current forcuit for main current forcuit for main current circuit for main current circuit spring-loaded terminals product component removable terminal for auxiliary and control circuit spring-loaded terminals arrangement of electrical connectors for main current Top and bottom	• at 125 V	3 A
e at 690 V operational current of auxiliary contacts at DC-13 e at 24 V e at 60 V e at 110 V e at 125 V e at 22 A e at 220 V out 22 A e at 220 V out 23 A design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class CLASS 10 design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value 77 A Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — for short-circuit protection of the auxiliary switch required in for short-circuit protection of the auxiliary switch required for so for-circuit protection of the auxiliary switch required installation/ mounting/ dimensions mounting position any fastening method height 105 mm width 70 mm depth Connections/ Torminals product component removable terminal for auxiliary and control circuit for auxiliary and control circuit for auxiliary and control circuit screw-type terminals spring-loaded terminals spring-loaded terminals arrangement of electrical connectors for main current Top and bottom	• at 230 V	2 A
at 24 V 2 A 3 to 40 V 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3	• at 400 V	1 A
at 24 V at 60 V 0.3 A 0.3 A 0.3 A 0.3 A 0.3 A 0.22 A 0.22 A 0.22 A 0.22 A 0.11 A design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required Contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class CLASS 10 design of the overload release ULCSA ratings ULCSA ratings ULCSA ratings ULCSA ratings ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A 77 A Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit — with type of coordination 1 required with type of coordination 1 required of short-circuit protection of the main circuit — with type of coordination 1 required of short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required of short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required of so Short-circuit protection of the auxiliary switch required for mounting position for main current removable terminal for auxiliary and control circuit for or auxiliary and control circuit for or auxiliary and control circuit for auxiliary and control cir	• at 690 V	0.75 A
at 160 V at 110 V at 1125 V at 122 V 0.11 A design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class CLASS 10 thermal ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of confiation 1 required — with type of assignment 2 required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method Contactor mounting type of electrical connections type of electrical connection for main current circuit for main current circuit for main current circuit for auxiliary and control circuit spring-loaded terminals road determinals product component removable terminal for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	operational current of auxiliary contacts at DC-13	
at 110 V at 125 V at 125 V being to the miniature circuit breaker for short-circuit protection of the auxiliary switch required beson of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class class 10 design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of coordination of the auxiliary switch required for short-circuit protection of the auxiliary switch required fastening method contactor mounting dimensions mounting position fastening method contactor mounting	• at 24 V	2 A
at 125 V at 22 V design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required 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 77 A at 800 V rated value 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary and control circuit type of electrical connection for main current circuit screw-type terminals screw-type terminals screw-type terminals screw-type terminals screw-type terminals screw-type terminals arrangement of electrical connectors for main current Top and bottom	• at 60 V	0.3 A
eat 220 V design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class CLASS 10 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 — with type of coordination 1 required — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height 105 mm vidth 70 mm depth Connections/ Terminals product component removable terminal for auxillary and control circuit • for auxiliary and control circuit **Source of a sund connectors for main current No 105 main current circuit **Source of a sund connectors for main current No 105 and bottom Top and bottom **Top and bottom **	• at 110 V	0.22 A
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required 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 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary and control circuit 70 mm depth Contactor mounting No Contactor mounting height 105 mm No Contactor mounting height 105 mm No Contactor mounting height 50 mm No Contactor mounting height 50 mm And Control circuit For auxiliary and control circuit Screw-type terminals For auxiliary and control circuit For auxiliary and control circui	• at 125 V	0.22 A
of the auxiliary switch required contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	● at 220 V	0.11 A
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 • at 600 V rated value		6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 77 A • at 600 V rated value 77 A Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method Contactor mounting height 105 mm width 70 mm depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit screw-type terminals arrangement of electrical connectors for main current Top and bottom	contact rating of auxiliary contacts according to UL	B600 / R300
design of the overload release thermal UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 77 A Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 690 V: gG: 250 A; 1000 V: a.M. / g.B.: 160 A — with type of assignment 2 required 690 V: gG: 160 A; 1000 V: a.M. / g.B.: 160 A for short-circuit protection of the auxiliary switch required 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 105 mm width 70 mm depth 25 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit screw-type terminals arrangement of electrical connectors for main current Top and bottom	Protective and monitoring functions	
### Connections/ Terminals ### Connections/ Terminals ### Product component removable terminal for auxillary and control circuit ### Con at 480 V rated value ### To A ###	trip class	CLASS 10
full-load current (FLA) for 3-phase AC motor at 480 V rated value 77 A at 600 V rated value 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required 690 V: gG: 250 A; 1000 V: a.M. / g.B.: 160 A with type of assignment 2 required 690 V: gG: 160 A; 1000 V: a.M. / g.B.: 160 A fuse gG: 6 A, quick: 10 A Installation/ mounting/ dimensions mounting position fastening method Contactor mounting height 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit screw-type terminals arrangement of electrical connectors for main current Top and bottom	design of the overload release	thermal
at 480 V rated value at 600 V rated value 77 A Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required 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 105 mm width 70 mm depth 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection of or main current circuit for auxiliary and control circuit spring-loaded terminals arrangement of electrical connectors for main current Top and bottom	UL/CSA ratings	
• at 600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • 690 V: gG: 250 A; 1000 V: a.M. / g.B.: 160 A — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position any fastening method height 105 mm width 70 mm depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	full-load current (FLA) for 3-phase AC motor	
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height 105 mm width 70 mm depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	• at 480 V rated value	77 A
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 690 V: gG: 250 A; 1000 V: a.M. / g.B.: 160 A — with type of assignment 2 required 690 V: gG: 160 A; 1000 V: a.M. / g.B.: 160 A • 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 105 mm width 70 mm depth 70 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	• at 600 V rated value	77 A
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height Installation/ mounting/ dimensions mounting position Installation/ mounting/ dimensions Installation/ mounting/ dimensions Installation/ mounting/ dimensions mounting position Installation/ mounting/ dimensions Installation/ gibbs.: 160 A fuse gG: 6 A, quick: 10 A Installation/ mounting/ dimensions Installation/ mounting/ dimensions Installation/ mounting/ dimensions Installation/ gibbs.: 160 A fuse gG: 6 A, quick: 10 A Installation/ mounting/ dimensions Installation/ m	Short-circuit protection	
- with type of coordination 1 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required of or short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position any fastening method Contactor mounting height 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection of or auxiliary and control circuit spring-loaded terminals arrangement of electrical connectors for main current Top and bottom	design of the fuse link	
— with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width 70 mm depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current 690 V: gG: 160 A; 1000 V: a.M. / g.B.: 160 A fuse gG: 6 A, quick: 10 A fuse gG:	• for short-circuit protection of the main circuit	
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 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary 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 Top and bottom	 — with type of coordination 1 required 	690 V: gG: 250 A; 1000 V: a.M. / g.B.: 160 A
Installation/ mounting/ dimensions mounting position fastening method Contactor mounting height 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	 — with type of assignment 2 required 	690 V: gG: 160 A; 1000 V: a.M. / g.B.: 160 A
mounting position fastening method Contactor mounting height 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	• for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
fastening method Contactor mounting height 105 mm width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	Installation/ mounting/ dimensions	
height width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	mounting position	any
width 70 mm depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	fastening method	Contactor mounting
depth 125 mm Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	height	105 mm
product component removable terminal for auxiliary and control circuit type of electrical connection	width	70 mm
product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	depth	125 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom	Connections/ Terminals	
 for main current circuit for auxiliary and control circuit arrangement of electrical connectors for main current Top and bottom 		No
• for auxiliary and control circuit spring-loaded terminals arrangement of electrical connectors for main current Top and bottom	type of electrical connection	
arrangement of electrical connectors for main current Top and bottom	for main current circuit	screw-type terminals
	for auxiliary and control circuit	spring-loaded terminals
circuit		Top and bottom
	circuit	

type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (2.5 16 mm²)
— stranded	2x (6 16 mm²), 2x (10 50 mm²), 1x (10 70 mm²)
— solid or stranded	2x (2,5 50 mm²), 1x (10 70 mm²)
 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)
 for AWG cables for main contacts 	2x (10 1/0), 1x (10 2/0)
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 14)
tightening torque	
for main contacts for ring cable lug	4.5 6 N·m
outer diameter of the usable ring cable lug maximum	19 m
tightening torque	
 for main contacts with screw-type terminals 	4.5 6 N·m
design of screwdriver shaft	Hexagonal socket
size of the screwdriver tip	4 mm hexagon socket
design of the thread of the connection screw	
for main contacts	M8
IEC 61508	
T1 value	
 for proof test interval or service life according to IEC 61508 	20 a
Electrical Safety	
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
Approvals Certificates	
A 15 1 14 1	

General Product Approval



Confirmation









For use in hazardous locations Test Certificates Marine / Shipping





Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping













other Railway Environment

<u>Confirmation</u> <u>Special Test Certificate</u>



Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2146-4LD0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2146-4LD0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2146-4LD0

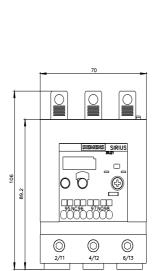
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2146-4LD0&lang=en

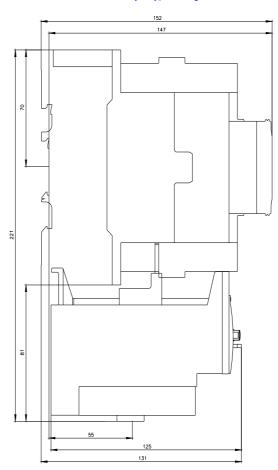
Characteristic: Tripping characteristics, I2t, Let-through current

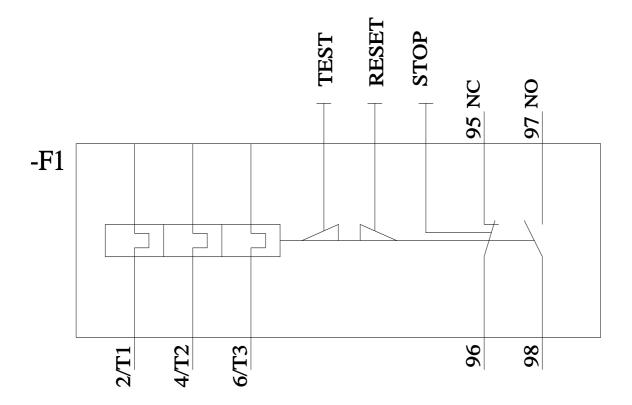
https://support.industry.siemens.com/cs/ww/en/ps/3RU2146-4LD0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2146-4LD0&objecttype=14&gridview=view1







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