



Overload relay 70...90 A For motor protection Size S3, Class 10 Contactor mounting Main circuit: Screw terminal Auxiliary circuit: Screw terminal Manual-Automatic-Reset !!! Phased-out product !!! Successor is SIRIUS 3RU2 Preferred successor type is >>3RU2146-4LB0<<

product brand name	SIRIUS
product designation	thermal overload relay
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
protection class IP on the front	IP20
shock resistance	8g / 10 ms
type of protection	DMT 98 ATEX G 001
reference code according to IEC 81346-2	F
Substance Prohibittance (Date)	07/01/2006
Weight	0.57 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-20 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-55 ... +80 °C
relative humidity during operation maximum	100 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	70 ... 90 A
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
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
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 110 V	0.22 A

<ul style="list-style-type: none"> • at 125 V • at 220 V 	<p>0.22 A</p> <p>0.11 A</p>
Protective and monitoring functions	
trip class	CLASS 10
Short-circuit protection	
design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required 	<p>gG: 250 A</p> <p>gG: 160 A</p> <p>fuse gL/gG: 6 A, quick: 10 A</p>
Installation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back
fastening method	Contactormounting
height	120 mm
width	70 mm
depth	140 mm
required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>6 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>6 mm</p>
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit 	<p>screw-type terminals</p> <p>screw-type terminals</p>
type of connectable conductor cross-sections for main contacts	
<ul style="list-style-type: none"> • solid • stranded • finely stranded with core end processing 	<p>2x (2.5 ... 16 mm²)</p> <p>2x (10 ... 50 mm²), 10 ... 70 mm²</p> <p>2x (2.5 ... 35 mm²), 2.5 ... 50 mm²</p>
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts 	<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14)</p>
Electrical Safety	
touch protection against electrical shock	finger-safe
Approvals Certificates	
General Product Approval	For use in hazardous locations



For use in hazardous locations	Test Certificates	Maritime application	other
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[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

other	Railway	Environment
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[Miscellaneous](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

Further information

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=3RU1146-4LB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU1146-4LB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4LB0>

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

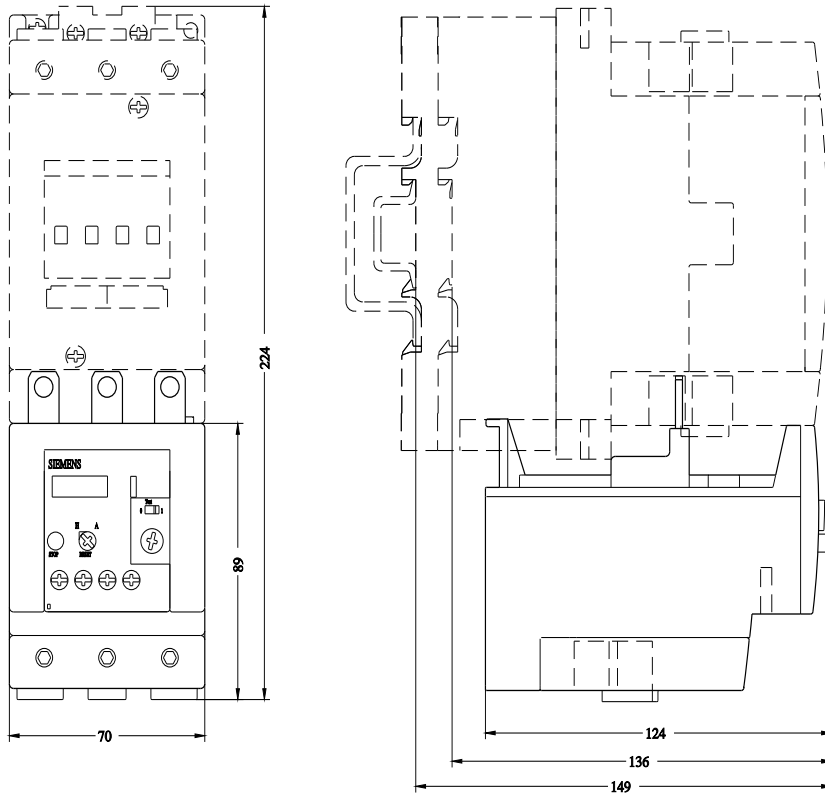
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU1146-4LB0&lang=en

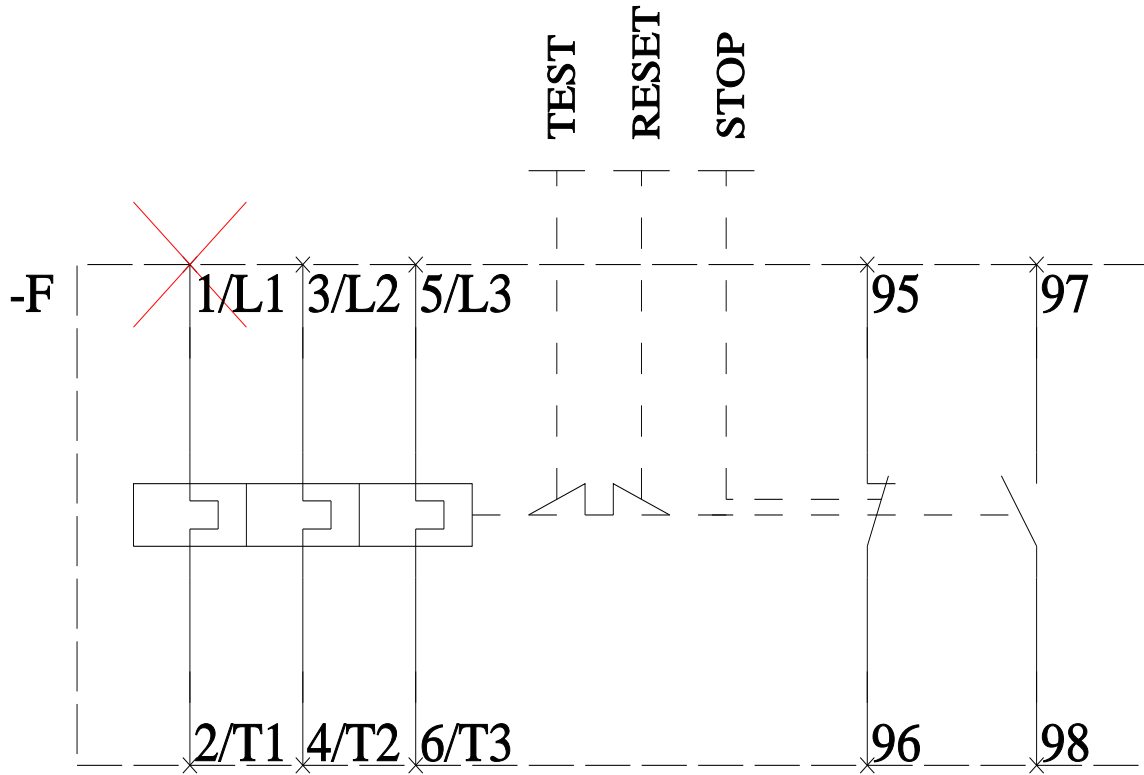
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4LB0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU1146-4LB0&objecttype=14&gridview=view1>





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