



Overload relay 80...100 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 >>3RU2146-4MB0<<

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
• at AC in hot operating state 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 acc. to DIN EN 81346-2	F
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	100 %

Main circuit	
number of poles for main current circuit	3
adjustable pick-up value current of the current-dependent overload release	80 ... 100 A
operating voltage	
• at AC-3 rated value maximum	1 000 V

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
operating 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
operating current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	0.11 A

Protective and monitoring functions	
trip class	CLASS 10

Short-circuit protection	
design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 250 A
— with type of assignment 2 required	gG: 200 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 6 A, quick: 10 A

Installation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back
mounting type	Contactor mounting

height	120 mm
width	70 mm
depth	140 mm
required spacing	
• with side-by-side mounting — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts — forwards 0 mm — backwards 0 mm — upwards 0 mm — at the side 6 mm — downwards 0 mm • for live parts — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 6 mm	

Connections/ Terminals

product function	
• removable terminal for auxiliary and control circuit	No
type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals screw-type terminals
type of connectable conductor cross-sections	
• for main contacts — solid 2x (2.5 ... 16 mm²) — stranded 2x (10 ... 50 mm²), 10 ... 70 mm² — finely stranded with core end processing 2x (2.5 ... 35 mm²), 2.5 ... 50 mm² • at AWG conductors for main contacts 2x (10 ... 1/0), 1x (10 ... 2/0)	
• type of connectable conductor cross-sections for auxiliary contacts — solid 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) • type of connectable conductor cross-sections at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)	

Certificates/ approvals

General Product Approval				For use in hazardous locations	
					
CCC	CSA	UL		ATEX	IECEX

Declaration of Conformity	Test Certificates		Marine / Shipping	
	Miscellaneous	Type Test Certificates/Test Report	Special Test Certificate	
EG-Konf.				

Marine / Shipping	other		Railway	
			Miscellaneous	Confirmation
LRS	RMRS	DNVGL.COM/AF		Special Test Certificate

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=3RU1146-4MB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU1146-4MB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4MB0>

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

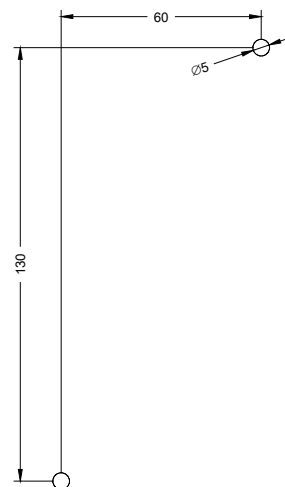
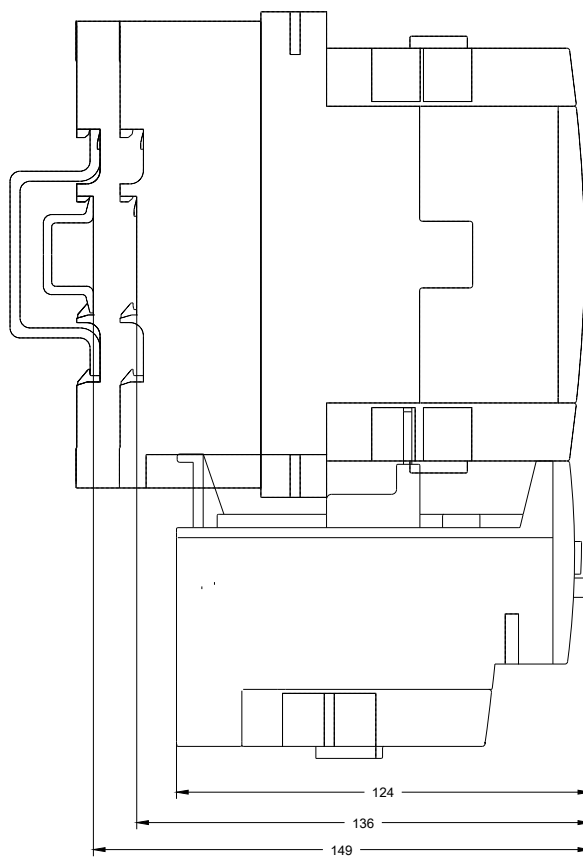
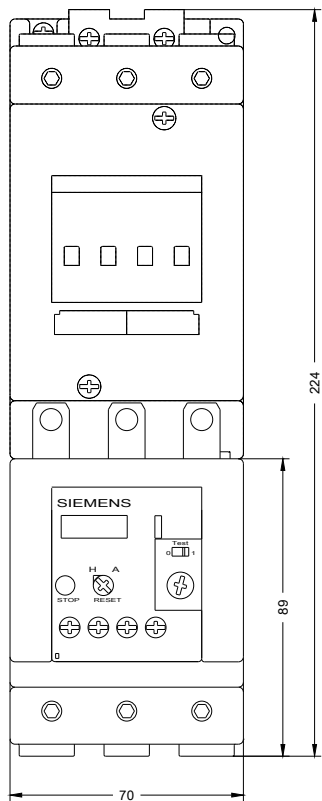
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU1146-4MB0&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

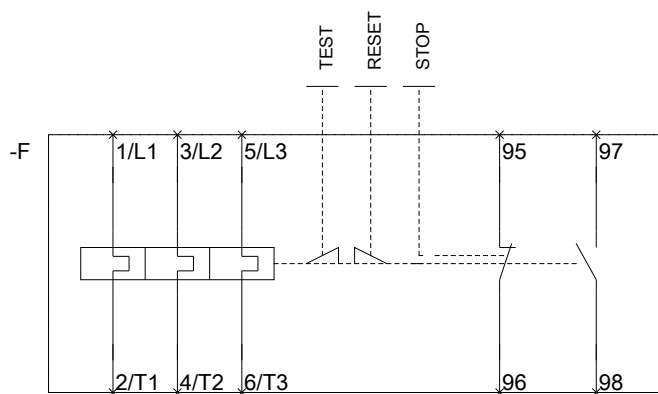
<https://support.industry.siemens.com/cs/ww/en/ps/3RU1146-4MB0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU1146-4MB0&objecttype=14&gridview=view1>



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