



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	8 g / 10 ms
type of protection	DMT 98 ATEX G 001
reference code according to IEC 81346-2	F
Substance Prohibitance (day/month/year)	07/01/2006
Net Weight	0.537 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	

<ul style="list-style-type: none">• at 24 V• at 110 V• at 125 V• at 220 V	1 A 0.22 A 0.22 A 0.11 A	
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	gG: 250 A gG: 160 A 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	
fastening method	Contactors mounting	
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	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm	
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	screw-type terminals screw-type terminals	
type of connectable conductor cross-sections for main contacts <ul style="list-style-type: none">• solid• stranded• finely stranded with core end processing	2x (2.5 ... 16 mm²) 2x (10 ... 50 mm²), 10 ... 70 mm² 2x (2.5 ... 35 mm²), 2.5 ... 50 mm²	
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	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)	
Electrical Safety		
touch protection against electrical shock	finger-safe	
Approvals Certificates		
Environment	General Product Approval	For use in hazardous locations

[Environmental Con-
firmations](#)



For use in hazard-
ous locations

Test Certificates

other



IECEX

[Type Test Certific-
ates/Test Report](#)

[Special Test Certific-
ate](#)

[Confirmation](#)

[Miscellaneous](#)



Railway

[Special Test Certific-
ate](#)

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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>

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, ...)

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

Cax online generator

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

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<https://curves.simaris.siemens.com/curves/3RU1146-4LB0>



