SIEMENS

Data sheet 3RU2146-4FB0



Overload relay 28...40 A Thermal For motor protection Size S3, Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw 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	13.5 W
• per pole	4.5 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 safe isolation in networks with grounded star point	
 between auxiliary and auxiliary circuit 	440 V
 between auxiliary and auxiliary circuit 	440 V
 between main and auxiliary circuit 	440 V
 between main and auxiliary circuit 	440 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)	03/01/2017
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	28 40 A
operating voltage	
rated value	690 V
 at AC-3e rated value maximum 	1 000 V
operating frequency rated value	50 60 Hz
operational current rated value	40 A
operational current at AC-3e at 400 V rated value	40 A

- at 400 V rated value	anageting names	
	operating power	
at 500 V rated value at 600 V rated value at 500 V rated value		40.5 130
at 690 V rated value at 490 V rated value at 590 V rated value at 590 V rated value at 590 V rated value 22 kW at 590 V rated value 22 kW at 590 V rated value 22 kW at 590 V rated value 27 kW 28 kW at 590 V rated value 28 kW at 590 V rated value 28 kW 28		
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solid 2x (2.5 ... 16 mm²) 2x (6 ... 16 mm²), 2x (10 ... 50 mm²), 1x (10 ... 70 mm²) stranded 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) 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) • at AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14) tightening torque 4.5 ... 6 N·m • for main contacts for ring cable lug outer diameter of the usable ring cable lug maximum 19 mm tightening torque 4.5 ... 6 N·m • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 0.8 ... 1.2 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 • of the auxiliary and control contacts M3 Safety related data T1 value for proof test interval or service life according to 20 a IEC 61508 protection class IP on the front according to IEC IP20 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front display version for switching status Slide switch

Certificates/ approvals

General Product Approval

For use in hazardous locations



Confirmation









For use in hazardous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Ko



Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping











other

Railway

Confirmation

Special Test Certific-

<u>ate</u>

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=3RU2146-4FB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2146-4FB0

 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3RU2146-4FB0

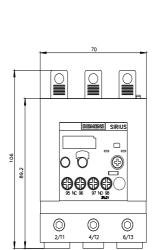
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2146-4FB0&lang=en

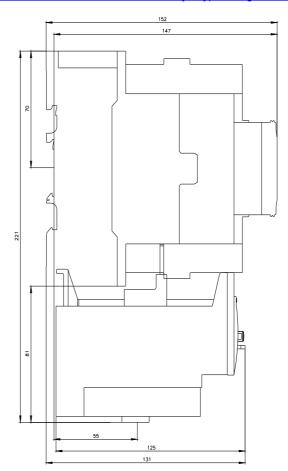
Characteristic: Tripping characteristics, I²t, Let-through current

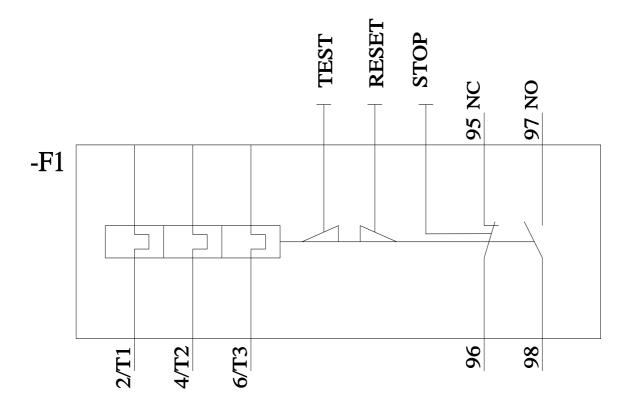
https://support.industry.siemens.com/cs/ww/en/ps/3RU2146-4FB0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2146-4FB0&objecttype=14&gridview=view1







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