

Overload relay 5.5...8.0 A Thermal For motor protection Size S00,
 Class 10 Contactor mounting Main circuit: Spring-type terminal
 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	S00
Size of contactor can be combined company-specific	S00
Power loss [W] total typical	6 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul style="list-style-type: none"> • in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
<ul style="list-style-type: none"> • in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
<ul style="list-style-type: none"> • in networks with grounded star point between main and auxiliary circuit 	440 V
<ul style="list-style-type: none"> • in networks with grounded star point between main and auxiliary circuit 	440 V
Protection class IP	

<ul style="list-style-type: none"> • on the front • of the terminal 	IP20 IP20
Shock resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 	8g / 11 ms
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	F

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Temperature compensation	-40 ... +60 °C
Relative humidity during operation	0 ... 90 %

Main circuit

Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	5.5 ... 8 A
Operating voltage	
<ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum 	690 V 690 V
Operating frequency rated value	50 ... 60 Hz
Operating current rated value	8 A
Operating power at AC-3	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 690 V rated value 	3 kW 4 kW 5.5 kW

Auxiliary circuit

Design of the auxiliary switch	integrated
Number of NC contacts for auxiliary contacts	1
<ul style="list-style-type: none"> • Note 	for contactor disconnection
Number of NO contacts for auxiliary contacts	1
<ul style="list-style-type: none"> • Note 	for message "Tripped"
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Operating current of auxiliary contacts at AC-15	
<ul style="list-style-type: none"> • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 400 V 	3 A 3 A 3 A 3 A 2 A 1 A
Operating current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> • at 24 V 	2 A

<ul style="list-style-type: none"> • at 60 V • at 110 V • at 125 V • at 220 V 	0.3 A 0.22 A 0.22 A 0.11 A
Contact rating of auxiliary contacts according to UL	B600 / R300

Protective and monitoring functions	
Trip class	CLASS 10
Design of the overload release	thermal

UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value 	8 A 8 A

Short-circuit protection	
Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	Contacteur mounting
Height	87 mm
Width	45 mm
Depth	70 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 	0 mm 0 mm 6 mm 6 mm 6 mm 0 mm 0 mm 6 mm 6 mm 6 mm 0 mm 0 mm 6 mm 6 mm

— at the side

6 mm

Connections/Terminals

Product function <ul style="list-style-type: none">removable terminal for auxiliary and control circuit	No
Type of electrical connection <ul style="list-style-type: none">for main current circuitfor auxiliary and control current circuit	spring-loaded terminals spring-loaded terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections <ul style="list-style-type: none">for main contacts<ul style="list-style-type: none">single or multi-strandedfinely stranded with core end processingfinely stranded without core end processingat AWG conductors for main contacts	1x (0,5 ... 4 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (20 ... 12)
Type of connectable conductor cross-sections <ul style="list-style-type: none">for auxiliary contacts<ul style="list-style-type: none">single or multi-strandedfinely stranded with core end processingfinely stranded without core end processingat AWG conductors for auxiliary contacts	2x (0,5 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14)
Design of screwdriver shaft	Diameter 3 mm
Size of the screwdriver tip	3,0 x 0,5 mm

Safety related data

Failure rate [FIT] <ul style="list-style-type: none">with low demand rate acc. to SN 31920	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Display

Display version <ul style="list-style-type: none">for switching status	Slide switch
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Certificates/approvals

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Confirmation](#)

Railway

[Vibration and Shock](#)

Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1HC0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-1HC0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1HC0>

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

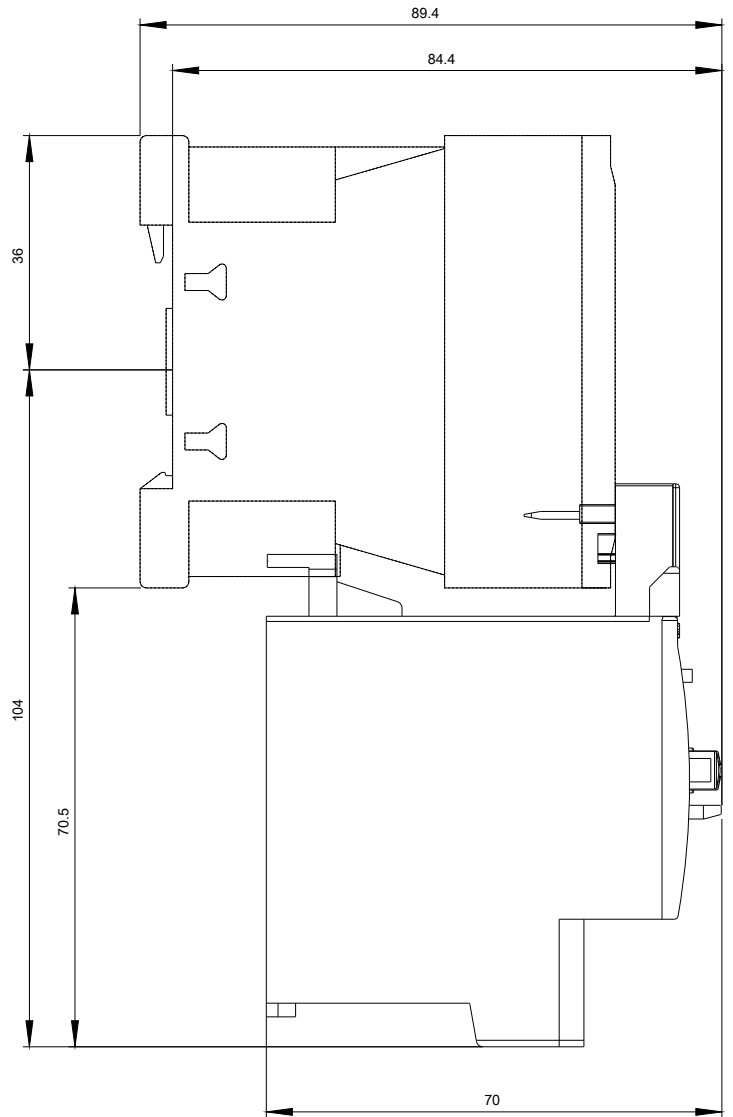
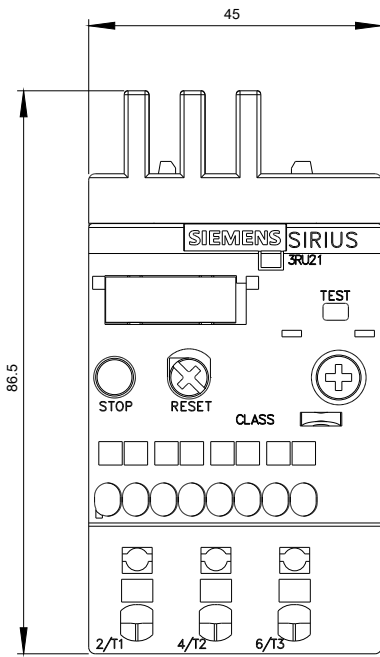
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1HC0&lang=en

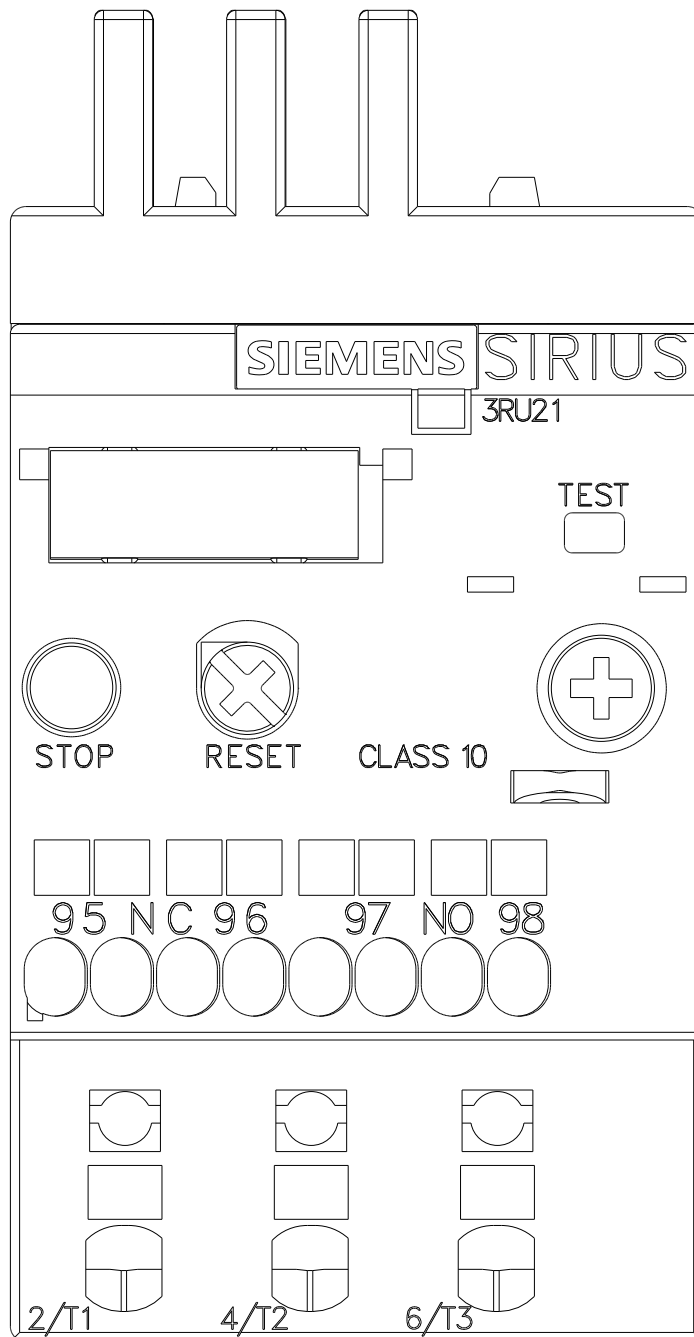
Characteristic: Tripping characteristics, I²t, Let-through current

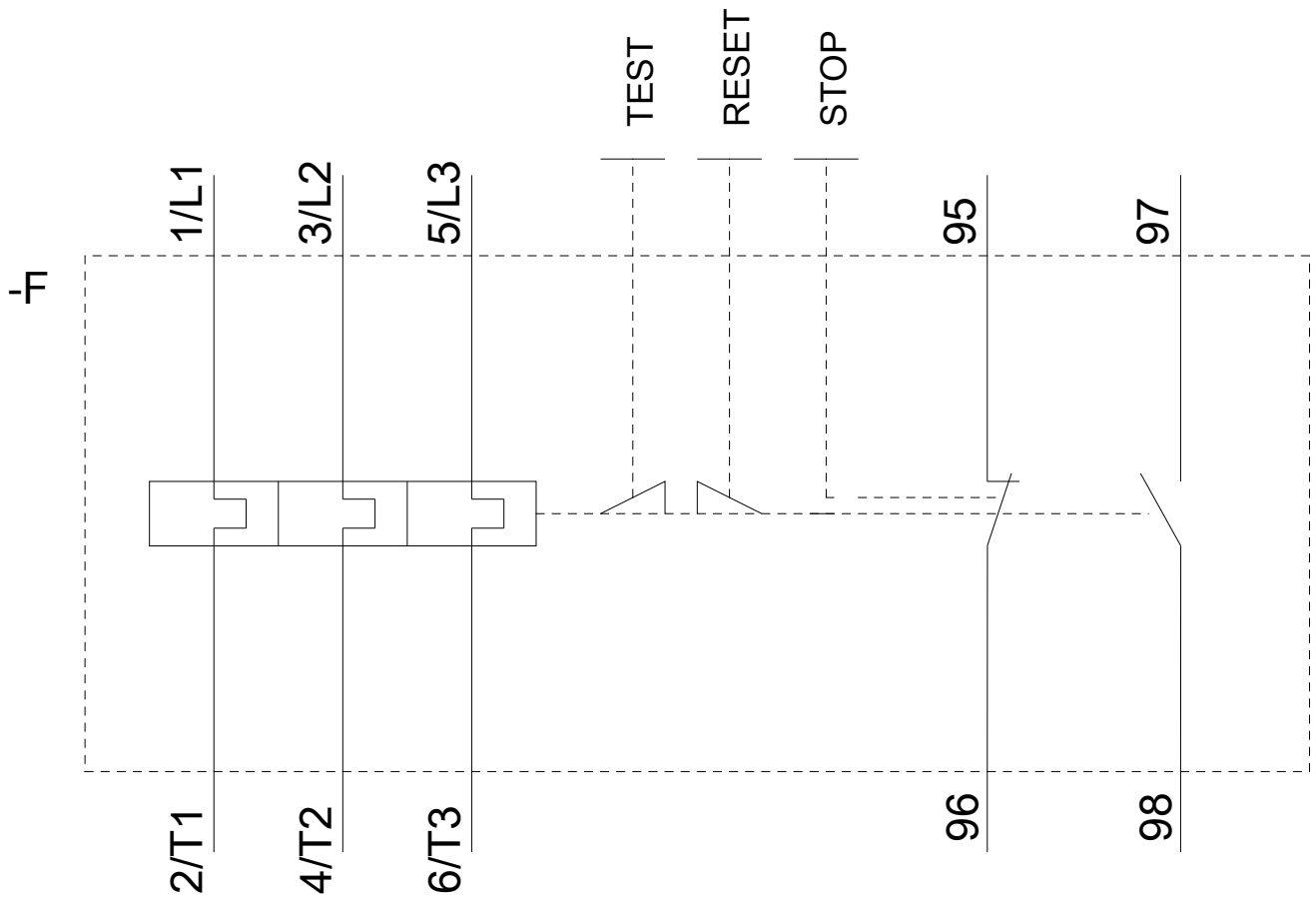
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1HC0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-1HC0&objecttype=14&gridview=view1>







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