



Overload relay 12.5...50 A Electronic For motor protection Size S2, Class 10E
 Contactor mounting Main circuit: Screw Auxiliary circuit: Spring-type terminal
 Manual-Automatic-Reset

product brand name	SIRIUS
product designation	solid-state overload relay
product type designation	3RB3
General technical data	
size of overload relay	S2
size of contactor can be combined company-specific	S2
power loss [W] for rated value of the current at AC in hot operating state	1.8 W
• per pole	0.6 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
• in networks with ungrounded star point between auxiliary and auxiliary circuit	300 V
• in networks with grounded star point between auxiliary and auxiliary circuit	300 V
• in networks with ungrounded star point between main and auxiliary circuit	600 V
• in networks with grounded star point between main and auxiliary circuit	690 V
shock resistance	15g / 11 ms
• according to IEC 60068-2-27	15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 8g / 11 ms
vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles
thermal current	50 A
recovery time after overload trip	
• with automatic reset typical	3 min
• with remote-reset	0 min
• with manual reset	0 min
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/15/2014
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1
Weight	0.225 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
temperature compensation	-25 ... +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	12.5 ... 50 A
operating voltage - rated value - at AC-3e rated value maximum	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	50 A
operational current at AC-3e at 400 V rated value	50 A
operating power - for 3-phase motors at 400 V at 50 Hz - for AC motors at 500 V at 50 Hz - for AC motors at 690 V at 50 Hz	7.5 ... 22 kW 11 ... 30 kW 11 ... 45 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts note	1 for contactor disconnection
number of NO contacts for auxiliary contacts note	1 for message "tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15 - at 24 V - at 110 V - at 120 V - at 125 V - at 230 V	4 A 4 A 4 A 4 A 3 A
operational current of auxiliary contacts at DC-13 - at 24 V - at 60 V - at 110 V - at 125 V - at 220 V	2 A 0.55 A 0.3 A 0.3 A 0.11 A
Protective and monitoring functions	
trip class	CLASS 10E
design of the overload release	electronic
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor - at 480 V rated value - at 600 V rated value	50 A 50 A
contact rating of auxiliary contacts according to UL	B600 / R300
Short-circuit protection	
design of the fuse link - for short-circuit protection of the main circuit - 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: 200 A fuse gG: 6 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	Contactor mounting
height	99 mm
width	55 mm
depth	104 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection - for main current circuit - for auxiliary and control circuit	screw-type terminals spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom

type of connectable conductor cross-sections for main contacts	• solid • stranded • finely stranded with core end processing	1x (1 ... 50 mm ²), 2x (1 ... 35 mm ²) 2x (10 ... 35 mm ²), 1x 50 mm ² 1x (1 ... 35 mm ²), 2x (1 ... 25 mm ²)
type of connectable conductor cross-sections		
• for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for auxiliary contacts		2x (0.25 ... 1.5 mm ²) 2x (0,25 ... 1,5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²) 1x (24 ... 16), 2x (24 ... 16)
tightening torque		
• for main contacts with screw-type terminals		3 ... 4.5 N·m
design of screwdriver shaft		Diameter 5 to 6 mm
size of the screwdriver tip		Pozidriv PZ 2
design of the thread of the connection screw		
• for main contacts		M6
Electrical Safety		
protection class IP on the front according to IEC 60529		IP20
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front
Communication/ Protocol		
type of voltage supply via input/output link master		No
Electromagnetic compatibility		
conducted interference		
• due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6		2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 2 kV (line to earth) corresponds to degree of severity 3 1 kV (line to line) corresponds to degree of severity 3 10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz
field-based interference according to IEC 61000-4-3		10 V/m
electrostatic discharge according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Display		
display version for switching status		Slide switch
Approvals Certificates		
General Product Approval		EMV



For use in hazardous locations	Test Certificates	Maritime application
---------------------------------------	--------------------------	-----------------------------



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application	other	Environment
-----------------------------	--------------	--------------------



[Confirmation](#)

[Environmental Confirmations](#)

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>

<https://www.siemens.com/ic10>

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3036-1UD0>

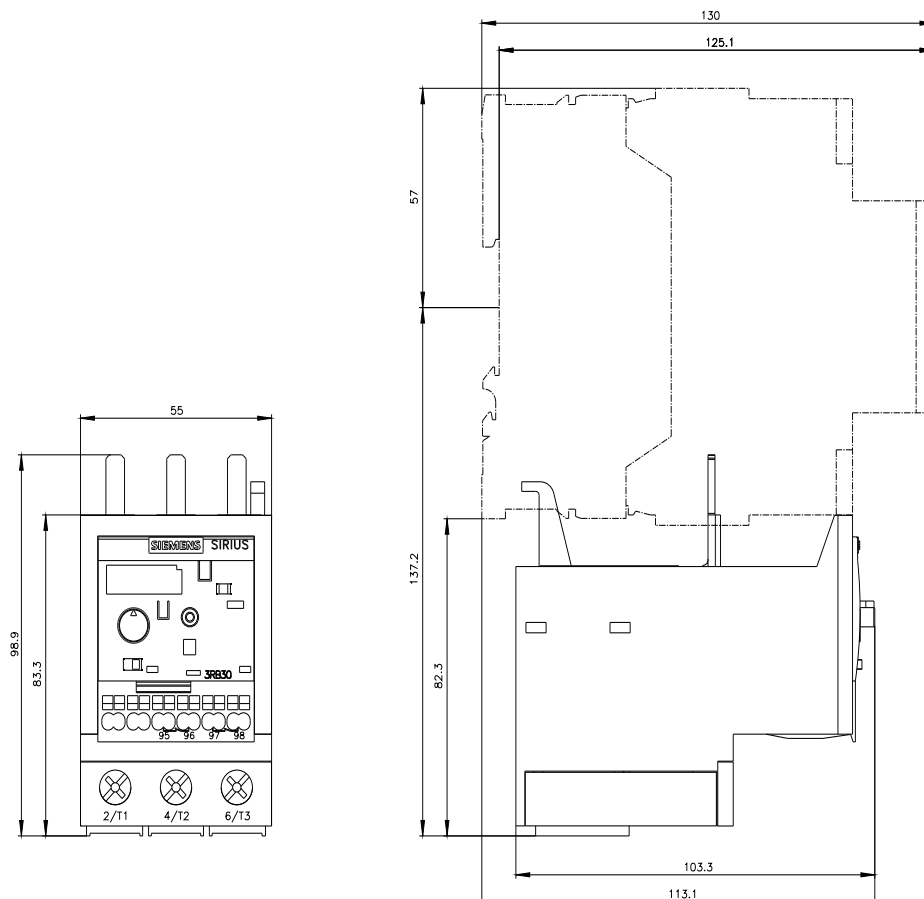
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3036-1UD0>

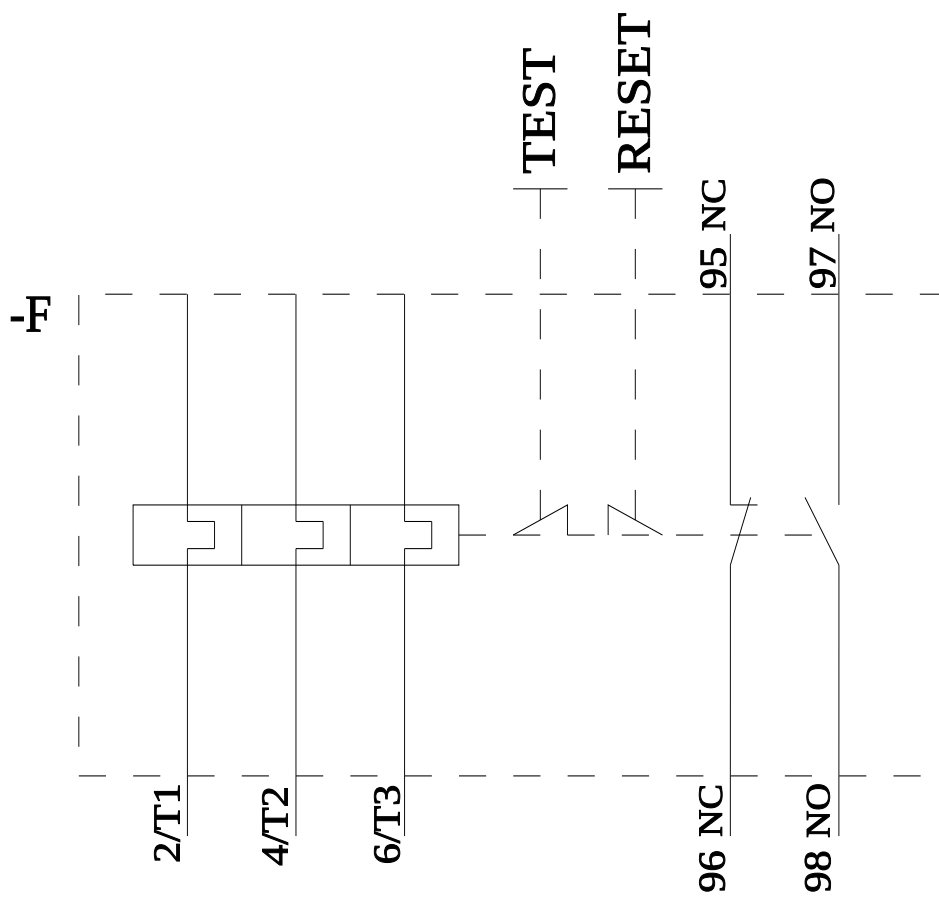
<https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-1UD0>

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3036-1UD0&lang=en

<https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-1UD0/char>

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3036-1UD0&objecttype=14&gridview=view1>





last modified:

4/2/2025 