## **SIEMENS**

Data sheet 3RB3036-2UX1



Overload relay 12.5...50 A Electronic For motor protection Size S2, Class 20E Stand-alone installation Main circuit: Straight-through transformer 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	0.1 W		
• per pole	0.03 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 safe isolation in networks with grounded star point			
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	300 V		
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	300 V		
<ul> <li>between main and auxiliary circuit</li> </ul>	600 V		
<ul> <li>between main and auxiliary circuit</li> </ul>	690 V		
shock resistance	15g / 11 ms		
<ul> <li>according to IEC 60068-2-27</li> </ul>	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 <sup>2</sup> ; 10 cycles		
thermal current	50 A		
type of protection according to ATEX directive 2014/34/EU	Ex II (2) G [Ex e] [Ex d] [Ex px]; Ex II (2) D [Ex t] [Ex p]		
certificate of suitability according to ATEX directive 2014/34/EU	PTB 09 ATEX 3001		
reference code according to IEC 81346-2	F		
Substance Prohibitance (Date)	10/15/2014		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
<ul> <li>during operation</li> </ul>	-25 +60 °C		
<ul> <li>during storage</li> </ul>	-40 +80 °C		
<ul> <li>during transport</li> </ul>	-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	690 V		
at AC-3e rated value maximum	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	
<ul> <li>for 3-phase motors at 400 V at 50 Hz</li> </ul>	7.5 22 kW
<ul> <li>for AC motors at 500 V at 50 Hz</li> </ul>	11 30 kW
<ul> <li>for AC motors at 690 V at 50 Hz</li> </ul>	11 45 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
• note	for contactor disconnection
number of NO contacts for auxiliary contacts	1
• note	for message "tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	4 A
• at 110 V	4 A
• at 120 V	4 A
• at 125 V	4 A
● at 230 V	3 A
operational current of auxiliary contacts at DC-13	
● at 24 V	2 A
● at 60 V	0.55 A
• at 110 V	0.3 A
● at 125 V	0.3 A
• at 220 V	0.11 A
Protective and monitoring functions	
trip class	CLASS 20E
design of the overload release	electronic
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul> <li>at 480 V rated value</li> </ul>	50 A
<ul> <li>at 600 V rated value</li> </ul>	50 A
contact rating of auxiliary contacts according to UL	B600 / R300
Short-circuit protection	
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 250 A
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 200 A
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	fuse gG: 6 A
required	
Installation/ mounting/ dimensions	
mounting position	any
fastening method	stand-alone installation
height	81 mm
width	55 mm
depth	109 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	
for main current circuit	straight-through transformers
<ul> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.25 1.5 mm²)
<ul><li>— solid or stranded</li></ul>	2x (0,25 1,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)
at AWG cables for auxiliary contacts	1x (24 16), 2x (24 16)
design of screwdriver shaft	Diameter 5 to 6 mm

size of the screwdriver tip	Pozidriv PZ 2		
Safety related data			
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			
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity $3$		
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV (line to earth) corresponds to degree of severity 3		
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV (line to line) corresponds to degree of severity 3		
<ul> <li>due to high-frequency radiation according to IEC 61000-4-6</li> </ul>	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		
Certificates/ approvals			
General Product Approval		EMC	

**(P)** 

Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping







Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping



LRS









Confirmation

other

## 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=3RB3036-2UX1

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3036-2UX1

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

https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-2UX1

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

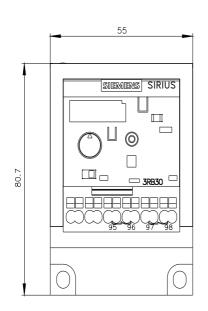
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB3036-2UX1&lang=en

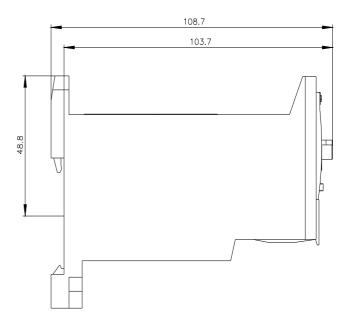
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

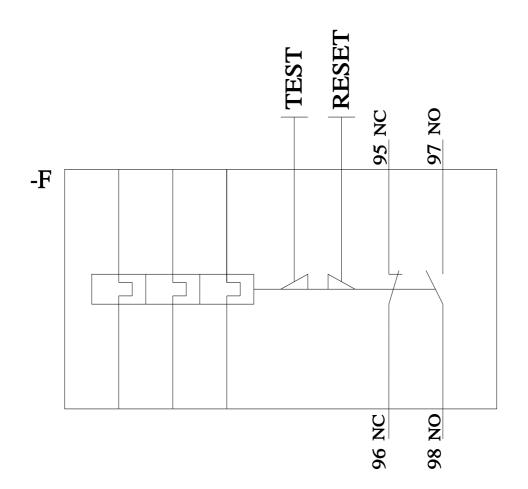
https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-2UX1/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3036-2UX1&objecttype=14&gridview=view1







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