## SIEMENS

## Data sheet

## 3RB3046-1UB0



Overload relay 12.5...50 A Electronic For motor protection Size S3, Class 10E Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

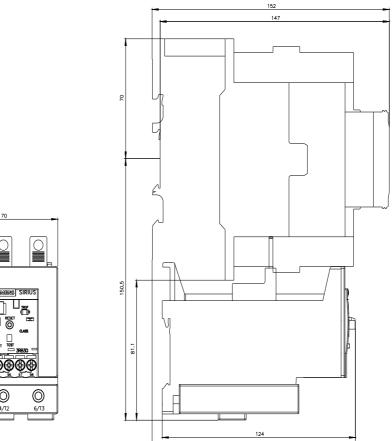
product brand name	SIRIUS				
product designation	solid-state overload relay				
product type designation	3RB3				
General technical data					
size of overload relay	S3				
size of contactor can be combined company-specific	S3				
power loss [W] for rated value of the current at AC in hot operating state	0.9 W				
• per pole	0.3 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 protective separation 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	8g / 11 ms				
according to IEC 60068-2-27	15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 8g / 11 ms				
thermal current	50 A				
reference code according to IEC 81346-2	F				
Substance Prohibitance (Date)	03/01/2017				
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8				
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				
<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	1 000 V				
• at AC-3e rated value maximum	1 000 V				
operating frequency rated value	50 60 Hz				
operational current rated value	50 A				

opprotional ourrant at AC 2a at 400 V 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	7.5 22 kW			
• for AC motors at 500 V at 50 Hz	11 30 kW			
for AC motors at 690 V at 50 Hz	11 45 kW			
Auxiliary circuit	integrated			
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 10E			
design of the overload release	electronic			
UL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				
• at 480 V rated value	50 A			
at 600 V rated value	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	0.000.4			
— with type of coordination 1 required	gG: 200 A			
— with type of assignment 2 required	gG: 200 A			
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 6 A			
Installation/ mounting/ dimensions				
mounting position	any Contactor mounting			
fastening method	Contactor mounting			
height	106 mm			
width	70 mm			
depth	124 mm			
Connections/ Terminals product component removable terminal for auxiliary and control circuit	Yes			
type of electrical connection				
for main current circuit	screw-type terminals			
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals			
arrangement of electrical connectors for main current	screw-type terminals Top and bottom			
circuit type of connectable conductor cross-sections for main contacts				
solid	2x (2.5 16 mm²)			
	2x (2.5 16 mm <sup>-</sup> ) 2x 16 mm <sup>2</sup>			
stranded     solid or stranded				
<ul> <li>solid or stranded</li> <li>finally stranded with core and processing</li> </ul>	$1x (2.5 70 \text{ mm}^2), 2x (2.5 50 \text{ mm}^2)$			
finely stranded with core end processing	1x (2,5 50 mm²), 2x (2,5 35 mm²)			
type of connectable conductor cross-sections				
for auxiliary contacts				
— solid	$1x (0.5 4 mm^2), 2x (0.5 2.5 mm^2)$			
<ul> <li>— solid or stranded</li> </ul>	1x (0,5 4 mm²), 2x (0,5 2,5 mm²)			

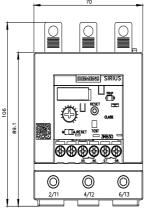
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	ded with core end process	sing	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)			
<ul> <li>for AWG cables</li> </ul>	for auxiliary contacts		2x (20 14)			
tightening torque						
<ul> <li>for main contacts</li> </ul>	s with screw-type terminal	s	4.5 6 N·m			
<ul> <li>for auxiliary cont</li> </ul>	acts with screw-type termi	nals	0.8 1.2 N·m			
design of screwdriver	shaft		Diameter 5 to 6 mm			
size of the screwdrive	er tip		Pozidriv PZ 2			
design of the thread o	of the connection screw					
<ul> <li>for main contacts</li> </ul>	3		M6			
<ul> <li>of the auxiliary a</li> </ul>	nd control contacts		M3			
Electrical Safety						
protection class IP on	the front according to I	EC 60529	IP20			
touch protection on the	ne front according to IEC	60529	finger-safe, for vertic	cal contact from the fro	ont	
Communication/ Protoc	ol					
type of voltage supply	via input/output link m	aster	No			
Electromagnetic compa	atibility					
conducted interference						
<ul> <li>due to burst according</li> </ul>	due to burst according to IEC 61000-4-4			1 kV (signal ports) cor	responds to dear	ee of severity 3
due to conductor-earth surge according to IEC 61000-4-5				orresponds to degree		,
	-conductor surge accordir			rresponds to degree of	-	
61000-4-5	-	-				
4-6	ency radiation according		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			10 V/m			
electrostatic discharg	e according to IEC 6100	0-4-2	6 kV contact dischar	rge / 8 kV air discharg	e	
Display						
display version for swite	ching status		Slide switch			
Approvals Certificates						
General Product App	roval					
	C C EG-Konf.	UK CA	<u>Confirm</u> :	ation (	Ĩ	EHC
EMV	For use in hazard- ous locations	Test Certificate	S	Marine	Shipping	
A		<u>Special Test Ce</u> <u>ate</u>	rtific- <u>Type Test</u> <u>ates/Test</u>		ι.Δ.	Houde
RCM	ATEX	_			DNV	LIRS
RCM	ATEX	other	Environme	nt		Lis

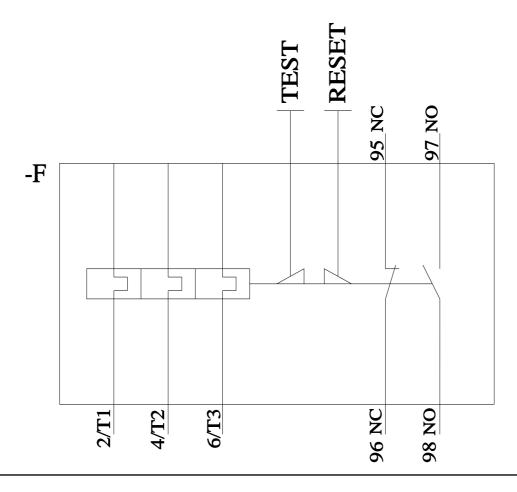
Further information
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information- and Downloadcenter (Catalogs, Brochures,)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3046-1UB0
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3046-1UB0
Service&Support (Manuals, Certificates, Characteristics, FAQs,)
https://support.industry.siemens.com/cs/ww/en/ps/3RB3046-1UB0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3046-1UB0⟨=en
Characteristic: Tripping characteristics, I <sup>2</sup> t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RB3046-1UB0/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3046-1UB0&objecttype=14&gridview=view1



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