SIEMENS

Data sheet

3RB3016-1RB0



Overload relay 0.1...0.4 A Electronic For motor protection Size S00, 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	S00			
size of contactor can be combined company-specific	S00			
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 protective separation in networks with grounded star point				
 between auxiliary and auxiliary circuit 	300 V			
 between auxiliary and auxiliary circuit 	300 V			
 between main and auxiliary circuit 	600 V			
 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": 9g / 11 ms			
thermal current	0.4 A			
reference code according to IEC 81346-2	F			
Substance Prohibitance (Date)	10/01/2009			
SVHC substance name	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			
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	0.1 0.4 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	0.4 A			
operational current at AC-3e at 400 V rated value	0.4 A			

operating power				
• for 3-phase motors at 400 V at 50 Hz	0.04 0.09 kW			
 for AC motors at 500 V at 50 Hz 	0.04 0.12 kW			
• for AC motors at 690 V at 50 Hz	0.06 0.18 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 10E			
design of the overload release	electronic			
UL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				
 at 480 V rated value 	0.4 A			
• at 600 V rated value	0.4 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 				
	gG: 35 A, RK5: 3 A			
 — with type of coordination 1 required 	0			
 — with type of coordination 1 required — with type of assignment 2 required 	gG: 4 A			
	-			
— with type of assignment 2 required	gG: 4 A			
— with type of assignment 2 requiredfor short-circuit protection of the auxiliary switch required	gG: 4 A			
 with type of assignment 2 required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions 	gG: 4 A fuse gG: 6 A			
 with type of assignment 2 required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position 	gG: 4 A fuse gG: 6 A any			
	gG: 4 A fuse gG: 6 A any Contactor mounting			
	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm			
with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm 45 mm			
with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm 45 mm			
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with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm 45 mm 73 mm			
with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm 45 mm 73 mm Yes			
with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit	gG: 4 A fuse gG: 6 A any Contactor mounting 79 mm 45 mm 73 mm Yes Screw-type terminals			
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tightening torque							
 for main contacts 	with screw-type terminals	C	0.8 1.2 N·m				
 for auxiliary containing 	acts with screw-type terminals	C	0.8 1.2 N·m				
design of screwdriver	shaft	[Diameter 5 to 6 mm				
size of the screwdrive	r tip	F	Pozidriv PZ 2				
design of the thread o	of the connection screw						
 for main contacts 	3	ľ	M3				
 of the auxiliary and 	nd control contacts	N	M3				
Electrical Safety							
protection class IP on	the front according to IEC 60	529 I	IP20				
touch protection on th	ne front according to IEC 6052	29 f	finger-safe, for vertical contact from the front				
Communication/ Protoc	ol						
type of voltage supply	via input/output link master	٦	٧o				
Electromagnetic compa	tibility						
conducted interference	ce						
 due to burst according 	ording to IEC 61000-4-4	2	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3				
 due to conductor 	-earth surge according to IEC 6		2 kV (line to earth) correspond				
	-conductor surge according to I		1 kV (line to line) corresponds to degree of severity 3				
	ency radiation according to IEC	61000- 1	10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz				
4-6	ce according to IEC 61000-4-3	2 1	10 V/m				
electrostatic discharge according to IEC 61000-4-2			6 kV contact discharge / 8 kV air discharge				
Display			in the contract discharge i on the	an alconargo			
display version for swite	ching status		Slide switch				
Approvals Certificates							
	UK CA	CE EG-Konf.	Confirmation				
General Product Approval	EMV		For use in hazard- ous locations	Test Certificates			
EHC		<u>KC</u>	ATEX ATEX	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>		
Marine / Shipping							
ABS	BUREAU VERITAS		Llovd's Register us	PRS	RINA		
other	Environment						
Confirmation	Environmental Con- firmations						
	<u></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=3RB3016-1RB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3016-1RB0

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

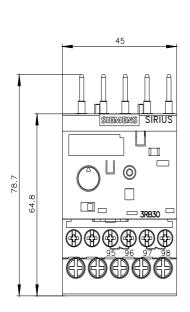
https://support.industry.siemens.com/cs/ww/en/ps/3RB3016-1RB0

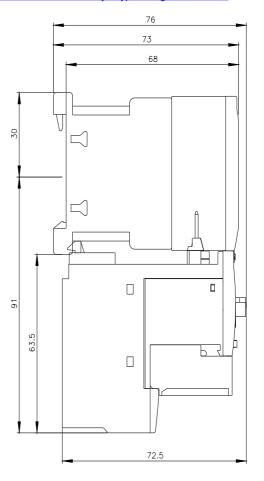
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3016-1RB0&lang=en

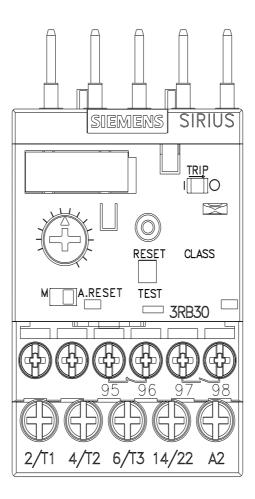
Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RB3016-1RB0/char

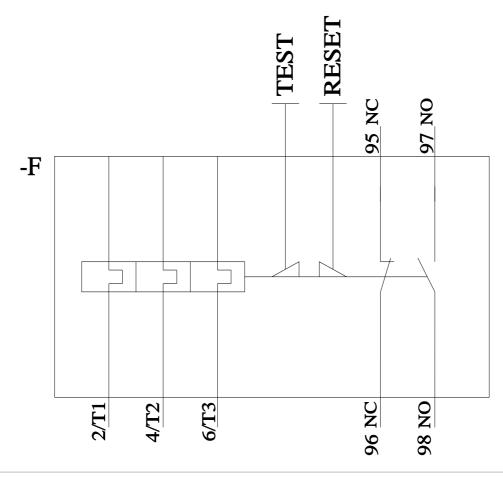
Further characteristics (e.g. electrical endurance, switching frequency)

earch&mlfb=3RB3016-1RB0&objecttype=14&gridview=view1 http://www.automation.siemens.com/bilddb/index.aspx?view=S









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