## **SIEMENS**

## Data sheet

## 3RB2163-4MC2



OVERLOAD RELAY 160...630 A FOR MOTOR PROTECTION SIZE S10/S12, CLASS 5...30 MOUNT. ONTO CONT./ STAND-ALONE MAIN CIRCUIT: BAR CONNECTION AUX. CIRCUIT: SCREW CONNECTION MANUAL-AUTOMATIC-RESET INT. EARTH FAULT DETECTION

product brand name		SIRIUS		
Product designation		solid-state overload relay		
General technical data:				
Active power loss total typical	W	0.05		
Insulation voltage	_			
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	1 000		
Shock resistance	_	15g / 11 ms		
Surge voltage resistance Rated value	kV	8		
Size of contactor can be combined company-specific	_	S10, S12		
Type of assignment	_	2		
Protection class IP	_			
• on the front		IP20		
Type of protection	_	PTB 06 ATEX 3001 Ex II (2) GD		
Equipment marking	_			
• acc. to DIN EN 61346-2		F		
• acc. to DIN EN 81346-2		F		
Main circuit:				
Number of poles for main current circuit		3		
Adjustable response value current of the current- dependent overload release	A	160 630		
Operating voltage				
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	1 000		
Auxiliary circuit:				
Number of NC contacts				

<ul> <li>for auxiliary contacts</li> </ul>		1
Number of NO contacts		1
for auxiliary contacts		1
Number of CO contacts		'
		0
• for auxiliary contacts		0
Operating current of the auxiliary contacts at AC-15	А	4
• at 24 V		
• at 110 V	A	4
• at 120 V	A	4
• at 125 V	A	4
• at 230 V	A	3
Operating current of the auxiliary contacts at DC-13		
• at 24 V	A	2
• at 60 V	A	0.55
• at 110 V	А	0.3
• at 125 V	А	0.3
• at 220 V	А	0.11
Protoctive and monitoring functions:		
Trip class Short-circuit:		CLASS 5, 10, 20 and 30 adjustable fuse gL/gG: 6 A
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required		
Trip class Short-circuit: Design of the fuse link • for short-circuit protection of the auxiliary switch required nstallation/ mounting/ dimensions:		fuse gL/gG: 6 A
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required nstallation/ mounting/ dimensions: mounting position		fuse gL/gG: 6 A any
Trip class Short-circuit: Design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position Mounting type		fuse gL/gG: 6 A any direct mounting / stand-alone installation
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required nstallation/ mounting/ dimensions: mounting position Mounting type Height	mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147
Trip class Short-circuit: Design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position Mounting type Height Width	mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth		fuse gL/gG: 6 A any direct mounting / stand-alone installation 147
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing	mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145
Trip class short-circuit: Design of the fuse link • for short-circuit protection of the auxiliary switch required nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing • with side-by-side mounting	mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting — forwards	mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  hstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0 0 0
Trip class Chort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions:  mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0
Trip class hort-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  hstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0 0 0
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0 0 0
Trip class Short-circuit: Design of the fuse link  • for short-circuit protection of the auxiliary switch required  nstallation/ mounting/ dimensions: mounting position Mounting type Height Width Depth Required spacing  • with side-by-side mounting	mm mm mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
required  nstallation/ mounting/ dimensions:  mounting position  Mounting type Height  Width Depth  Required spacing  • with side-by-side mounting	mm mm mm mm mm mm	fuse gL/gG: 6 A any direct mounting / stand-alone installation 147 145 156 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

— downwards	mm	0
<ul> <li>for live parts</li> </ul>		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6
Connections/ Terminals:		

Connections/ Terminals:				
Type of electrical connection				
<ul> <li>for main current circuit</li> </ul>	busbar connection			
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals			
Product function				
<ul> <li>removable terminal for auxiliary and control</li> </ul>		Yes		
Type of connectable conductor cross-section				
<ul> <li>for auxiliary contacts</li> </ul>				
— solid		0.5 4 mm², 2x (0.5 2.5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>		0.5 2.5 mm², 2x (0.5 1.5 mm²)		
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 14)		
Safety related data:				
Protection against electrical shock		finger-safe with cover		
Mechanical data:				
Size of overload relay		S10, S12		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
<ul> <li>during operation</li> </ul>	°C	-25 +60		
<ul> <li>during storage</li> </ul>	°C	-40 +80		
• during transport	°C	-40 +80		
Relative humidity during operation	%	100		
Electromagnetic compatibility:				
Conducted interference due to burst acc. to IEC		2 kV (power ports), 1 kV (signal ports) corresponds to		

Conducted interference due to burst acc. to IEC 61000-4-4	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5	2 kV (line to earth) corresponds to degree of severity 3
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV (line to line) corresponds to degree of severity 3
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge

Certificates/ approvals:

General Product	Approval			EMC	For use in hazardous locations
CCC	(SA)	EHC		C-TICK	ATEX
Declaration of Conformity	Test Certificates	\$		Shipping Appro	val
EG-Konf.	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>	Declaration of the Compliance with the order	Special Test Certificate	ABS	JÅ DNV DNV
Shipping Approval		other			
GL	Lloyd's Register LRS	RINA	<u>other</u>	Environmental Confirmations	

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

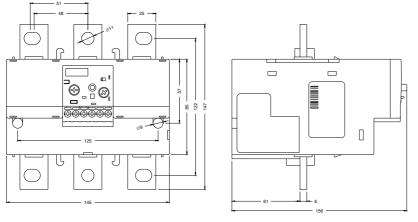
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB21634MC2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RB21634MC2/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB21634MC2&lang=en



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