



OVERLOAD RELAY 160...630 A FOR MOTOR  
PROTECTION SIZE S10/S12, CLASS 10 MOUNT.  
ONTO CONT./ STAND-ALONE MAIN CIRCUIT: BAR  
CONNECTION AUX. CIRCUIT: SCREW CONNECTION  
MANUAL-AUTOMATIC-RESET

product brand name		SIRIUS
Product designation		solid-state overload relay

### General technical data:

<b>Active power loss total typical</b>	W	0.05
<b>Insulation voltage</b>		
• with degree of pollution 3 Rated value	V	1 000
<b>Shock resistance</b>		15g / 11 ms
<b>Surge voltage resistance Rated value</b>	kV	8
<b>Size of contactor can be combined company-specific</b>		S10, S12
<b>Type of assignment</b>		2
<b>Protection class IP</b>		
• on the front		IP20
<b>Type of protection</b>		PTB 06 ATEX 3001 Ex II (2) GD
<b>Equipment marking</b>		
• acc. to DIN EN 61346-2		F
• acc. to DIN EN 81346-2		F

### Main circuit:

<b>Number of poles for main current circuit</b>		3
<b>Adjustable response value current of the current-dependent overload release</b>	A	160 ... 630
<b>Operating voltage</b>		
• at AC-3 Rated value maximum	V	1 000

### Auxiliary circuit:

<b>Number of NC contacts</b>		
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• for auxiliary contacts		1
<b>Number of NO contacts</b>		
• for auxiliary contacts		1
<b>Number of CO contacts</b>		
• for auxiliary contacts		0
<b>Operating current of the auxiliary contacts at AC-15</b>		
• at 24 V	A	4
• at 110 V	A	4
• at 120 V	A	4
• at 125 V	A	4
• at 230 V	A	3
<b>Operating current of the auxiliary contacts at DC-13</b>		
• at 24 V	A	2
• at 60 V	A	0.55
• at 110 V	A	0.3
• at 125 V	A	0.3
• at 220 V	A	0.11

#### Protective and monitoring functions:

<b>Trip class</b>		CLASS 10
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#### Short-circuit:

<b>Design of the fuse link</b>		
• for short-circuit protection of the auxiliary switch required		fuse gL/gG: 6 A

#### Installation/ mounting/ dimensions:

<b>mounting position</b>		any
<b>Mounting type</b>		direct mounting / stand-alone installation
<b>Height</b>	mm	147
<b>Width</b>	mm	145
<b>Depth</b>	mm	156
<b>Required spacing</b>		
• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	6

— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6

#### Connections/ Terminals:

<b>Type of electrical connection</b>		
• for main current circuit		busbar connection
• for auxiliary and control current circuit		screw-type terminals
<b>Product function</b>		
• removable terminal for auxiliary and control circuit		Yes
<b>Type of connectable conductor cross-section</b>		
• for auxiliary contacts		
— solid		0.5 ... 4 mm <sup>2</sup> , 2x (0.5 ... 2.5 mm <sup>2</sup> )
— finely stranded with core end processing		0.5 ... 2.5 mm <sup>2</sup> , 2x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG conductors for auxiliary contacts		2x (20 ... 14)

#### Safety related data:

<b>Protection against electrical shock</b>		finger-safe with cover
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#### Mechanical data:

<b>Size of overload relay</b>		S10, S12
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#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Ambient temperature</b>		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +80
• during transport	°C	-40 ... +80
<b>Relative humidity during operation</b>	%	100

#### Electromagnetic compatibility:

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

#### Certificates/ approvals:

General Product Approval	EMC	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Declaration of the Compliance with the order](#)



Shipping Approval	other
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[Environmental Confirmations](#)

[other](#)

#### 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**

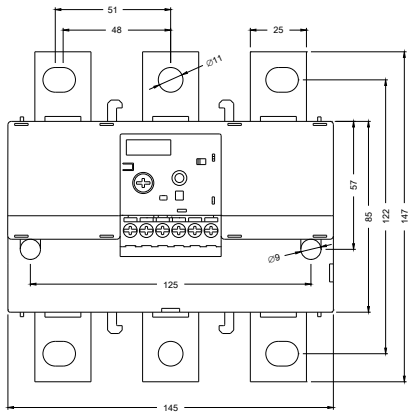
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB20661MC2>

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

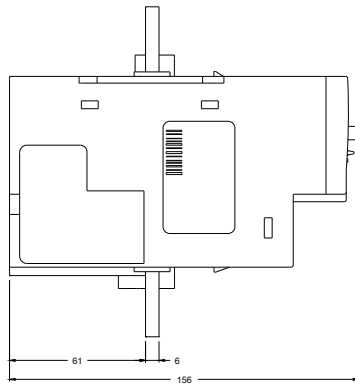
<http://support.automation.siemens.com/WW/view/en/3RB20661MC2/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RB20661MC2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB20661MC2&lang=en)



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