



CIRCUIT-BREAKER SIZE S2. FOR MOTOR PROTECTION,  
CLASS 10, A-REL. 28...40A, N-REL. 520A,  
SCREW TERMINAL,  
STANDARD SWITCHING CAPACITY

**General technical data:**

<b>Product brand name</b>		SIRIUS
<b>Product designation</b>		circuit breaker
<b>Size of the circuit-breaker</b>		S2
<b>Trip class</b>		CLASS 10
<b>Degree of pollution</b>		3
<b>Altitude of installation site / at a height over sea level / maximum</b>	m	2,000
<b>Protection class IP / frontal/front side</b>		IP20
<b>Ambient temperature</b>		
• during storage	°C	-50 ... 80
• during the operating phase	°C	-20 ... 70
• during transport	°C	80 ... -50
<b>Resistance against shock</b>		25g / 11 ms
<b>Insulation voltage / rated value</b>	V	690
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Real loss power / total / typical</b>	W	20
<b>Item designation</b>		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		Q
• according to DIN EN 61346-2		Q

<b>Mechanical switching cycle as operating period / of the main contacts / typical</b>		50,000
<b>Type of the driving mechanism / Motor drive</b>		No
<b>design of the operating mechanism</b>		selector switch
<b>Product function</b>		
• Overload protection		Yes
• Short-circuit to earth recognition		No
• Phase disturbance recognition		Yes
<b>Product component / auxiliary switch</b>		No
<b>Product component / Undervoltage release mechanism</b>		No
<b>Product component / trip indicator</b>		No
<b>Product extension / optional / Motor drive</b>		Yes

#### Main circuit:

<b>Number of poles / for main current circuit</b>		3
<b>Type of voltage</b>		AC/DC
<b>Operating voltage / at 3 AC / rated value / maximum</b>	V	690
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	40
<b>Service power / at AC-3</b>		
• at 400 V / rated value	kW	18.5
<b>Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum</b>	1/h	15
<b>Arrangement of electrical connectors / for main current circuit</b>		front side
<b>Adjustable response current</b>		
• of the non-delayed short-circuit release	A	520 ... 520
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	28 ... 40
<b>Continuous current / rated value</b>	A	40
<b>Product extension / auxiliary switch</b>		Yes

#### Auxiliary circuit:

<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of change-over switches / for auxiliary contact</b>		0

#### Inputs/ Outputs:

<b>Number of digital inputs</b>		0
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#### Short-circuit:

<b>Breaking capacity limit short-circuit current (I<sub>cu</sub>)</b>		
• at 400 V / rated value	kA	50

<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	kA	10
	kA	4
<b>Design of the overcurrent release and short-circuit release</b>		thermomagnetic

#### Installation/mounting/dimensions:

<b>built in orientation</b>		any
<b>Type of fixing/fixation</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<b>Width</b>	mm	55
<b>Height</b>	mm	140
<b>Depth</b>	mm	149
<b>distance, to be maintained, to the ranks assembly</b>		
<ul style="list-style-type: none"> <li>• backwards</li> </ul>	mm	0
<ul style="list-style-type: none"> <li>• sideways</li> </ul>	mm	0
<b>Product function / removable terminal for auxiliary and control circuit</b>		No

#### Connections:

<b>Design of the electrical connection</b>		
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>		screw-type terminals with box terminals
<b>Type of the connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>• unifilar</li> </ul> </li> <li>• stranded wire</li> <li>• stranded wire <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> <li>• at AWG-conductors / for main contacts</li> </ul>		2x (0.75 ... 16 mm <sup>2</sup> ) 2x (0.75 ... 25 mm <sup>2</sup> ), 0.75 ... 35 mm <sup>2</sup>  2x (0.75 ... 16 mm <sup>2</sup> ), 0.75 ... 25 mm <sup>2</sup> 2x (18 ... 2), 1x (18 ... 2)
<b>Conductor cross section that can be connected / for main contacts</b>		
<ul style="list-style-type: none"> <li>• unifilar</li> </ul>	mm <sup>2</sup>	0.75 ... 16
<ul style="list-style-type: none"> <li>• stranded wire</li> </ul>	mm <sup>2</sup>	0.75 ... 35
<ul style="list-style-type: none"> <li>• stranded wire <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> </ul>	mm <sup>2</sup>	0.75 ... 25
<b>AWG number / as coded connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for main contacts</li> </ul>		18 ... 2

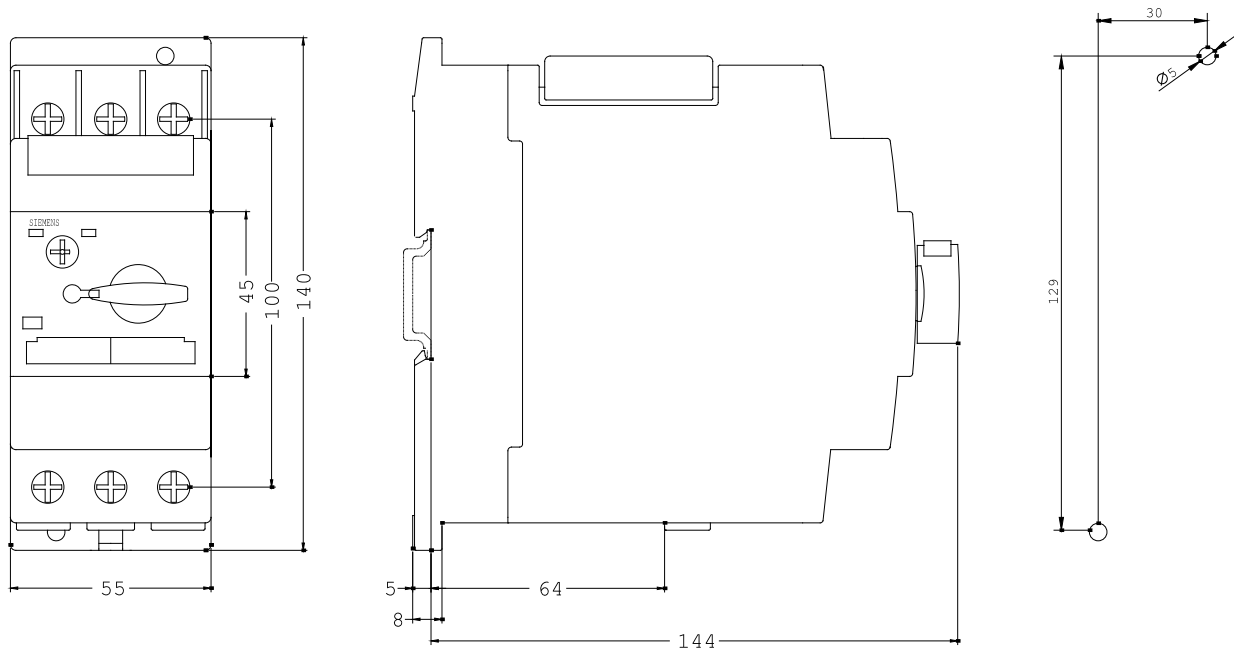
#### Safety:

<b>Protection against electrical shock</b>		finger-safe
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#### Further information:

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>



last change:

Apr 26, 2010