



SIRIUS SOFT STARTER, SIZE S2, 45A,  
22KW/400V, 40 DEGREES, 200-480V AC,  
24V AC/DC, SPRING-LOADED TERMINALS

General details:		
<b>product brand name</b>		SIRIUS
<b>Product feature</b>		
• integrated bypass contact system		Yes
• Thyristors		Yes
<b>Product function</b>		
• Intrinsic device protection		No
• motor overload protection		No
• Evaluation of thermistor motor protection		No
• External reset		No
• Adjustable current limitation		No
• inside-delta circuit		No
<b>Product component / Motor brake output</b>		No
<b>Reference code</b>		
• acc. to DIN EN 61346-2		Q
• acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		G
Power Electronics:		
<b>Product designation</b>		soft starters for standard applications
Operating current		

• at 40 °C / Rated value	A	45
• at 50 °C / Rated value	A	42
• at 60 °C / Rated value	A	39
<b>Mechanical power output / for three-phase motors</b>		
• at 230 V / at standard circuit / at 40 °C		
• Rated value	W	11,000
• at 400 V / at standard circuit / at 40 °C		
• Rated value	W	22,000
<b>yielded mechanical performance [hp] / for three-phase AC motor / at 200/208 V / at standard circuit / at 50 °C / Rated value</b>	hp	10
<b>Operating frequency</b>		
• Rated value	Hz	50 ... 60
<b>Relative negative tolerance / of the operating frequency</b>	%	-10
<b>Relative positive tolerance / of the operating frequency</b>	%	10
<b>Operating voltage / at standard circuit / Rated value</b>	V	200 ... 480
<b>Relative negative tolerance / of the operating voltage / at standard circuit</b>	%	-15
<b>Relative positive tolerance / of the operating voltage / at standard circuit</b>	%	10
<b>Minimum load in % of I<sub>M</sub></b>	%	10
<b>Continuous operating current in % of I<sub>e</sub> / at 40 °C</b>	%	115
<b>Active power loss / at operating current / at 40 °C / during operation / typical</b>	W	6

#### Control electronics:

<b>Type of voltage / of the control supply voltage</b>		AC/DC
<b>Control supply voltage frequency / 1 / Rated value</b>	Hz	50
<b>Control supply voltage frequency / 2 / Rated value</b>	Hz	60
<b>Relative negative tolerance / of the control supply voltage frequency</b>	%	-10
<b>Relative positive tolerance / of the control supply voltage frequency</b>	%	10
<b>Control supply voltage / 1</b>		
• with AC / at 50 Hz	V	24
• with AC / at 60 Hz	V	24
<b>Relative negative tolerance / of the control supply voltage / with AC / at 60 Hz</b>	%	-10
<b>Relative positive tolerance / of the control supply voltage / with AC / at 60 Hz</b>	%	10
<b>Control supply voltage / 1 / for DC / Rated value</b>	V	24
<b>Relative negative tolerance / of the control supply voltage / for DC</b>	%	-10

<b>Relative positive tolerance / of the control supply voltage / for DC</b>	%	10
<b>Display version / for fault signal</b>		red

#### Mechanical design:

<b>Size of engine control device</b>		S2
<b>Width</b>	mm	55
<b>Height</b>	mm	160
<b>Depth</b>	mm	170
<b>Mounting type</b>		screw and snap-on mounting
<b>mounting position</b>		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
<b>Spacing required</b>		
• with side-by-side mounting	mm	60
• with side-by-side mounting	mm	30
• with side-by-side mounting	mm	40
<b>Installation altitude / at height above sea level</b>	m	5,000
<b>Cable length / maximum</b>	m	300
<b>Number of poles / for main current circuit</b>		3

#### Electrical connections:

<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		spring-loaded terminals
<b>Number of NC contacts / for auxiliary contacts</b>		0
<b>Number of NO contacts / for auxiliary contacts</b>		1
<b>Number of CO contacts / for auxiliary contacts</b>		0
<b>Type of connectable conductor cross-section / for main contacts / for box terminal / using the front clamping point</b>		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		0.75 ... 25 mm <sup>2</sup>
• stranded		0.75 ... 35 mm <sup>2</sup>
<b>Type of connectable conductor cross-section / for main contacts / for box terminal / using the back clamping point</b>		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		1.5 ... 25 mm <sup>2</sup>
• stranded		1.5 ... 35 mm <sup>2</sup>
<b>Type of connectable conductor cross-section / for main contacts / for box terminal / using both clamping points</b>		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		2x (1.5 ... 16 mm <sup>2</sup> )

<ul style="list-style-type: none"> <li>• stranded</li> </ul>		2x (1.5 ... 25 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</b> <ul style="list-style-type: none"> <li>• using the back clamping point</li> <li>• using the front clamping point</li> <li>• using both clamping points</li> </ul>		16 ... 2 18 ... 2 2x (16 ... 2)
<b>Type of connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded / with core end processing</li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>		2x (0.25 ... 2.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (24 ... 14)

#### Ambient conditions:

<b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	°C	-25 ... +60
	°C	-40 ... +80
<b>Derating temperature</b>	°C	40
<b>Protection class IP</b>		IP00

#### Certificates/approvals:

##### General Product Approval



##### EMC

[Type Test Certificates/Test Report](#)

##### other

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

#### UL/CSA ratings

<b>yielded mechanical performance [hp] / for three-phase AC motor</b> <ul style="list-style-type: none"> <li>• at 220/230 V / at standard circuit <ul style="list-style-type: none"> <li>• at 50 °C / Rated value</li> </ul> </li> <li>• at 460/480 V / at standard circuit <ul style="list-style-type: none"> <li>• at 50 °C / Rated value</li> </ul> </li> </ul>	hp	15
	hp	30
<b>Contact rating / of the auxiliary contacts / acc. to UL</b>		B300 / R300

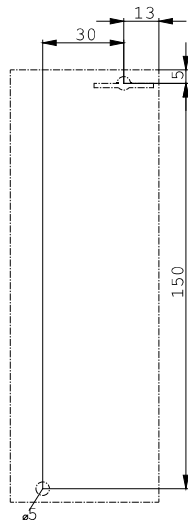
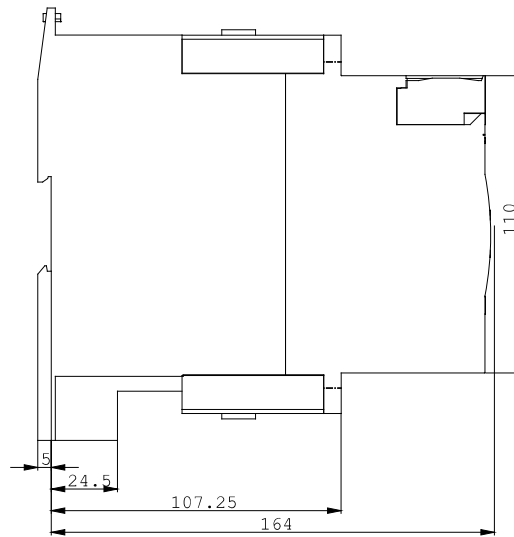
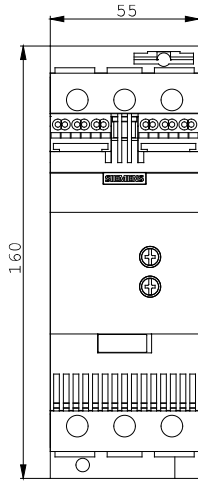
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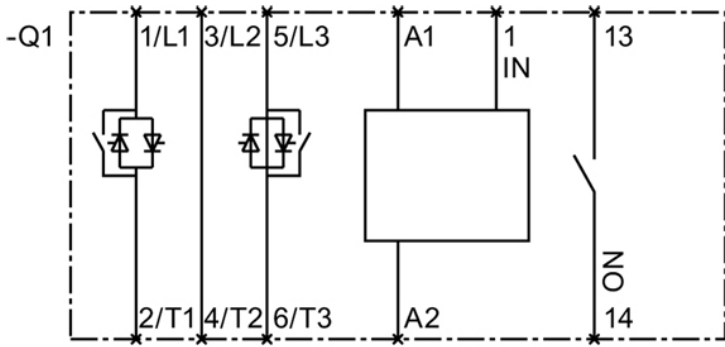
##### Information- and Downloadcenter (Catalogs, Brochures,...)

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

##### Industry Mall (Online ordering system)

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





last change:

Sep 29, 2014