



SIRIUS soft starter S00 12.5 A, 5.5 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC spring-type terminals

General technical data		
product brand name		SIRIUS
product feature		
• integrated bypass contact system		Yes
• thyristors		Yes
product function		
• 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
product component motor brake output		No
insulation voltage rated value	V	600
degree of pollution		3, acc. to IEC 60947-4-2
reference code according to EN 61346-2		Q
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750		G
Power Electronics		
product designation		Soft starter
operational current		
• at 40 °C rated value	A	12.5
• at 50 °C rated value	A	12
• at 60 °C rated value	A	11
yielded mechanical performance for 3-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	kW	3
• at 400 V		
— at standard circuit at 40 °C rated value	kW	5.5
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	3
operating frequency rated value	Hz	50 ... 60
relative negative tolerance of the operating frequency	%	-10
relative positive tolerance of the operating frequency	%	10
operating voltage at standard circuit rated value	V	200 ... 480
relative negative tolerance of the operating voltage at standard circuit	%	-15
relative positive tolerance of the operating voltage at standard circuit	%	10
minimum load [%]	%	10
continuous operating current [% of I <sub>e</sub> ] at 40 °C	%	115

power loss [W] at operational current at 40 °C during operation typical	W	2
<b>Control circuit/ Control</b>		
type of voltage of the control supply voltage		AC/DC
control supply voltage frequency 1 rated value	Hz	50
control supply voltage frequency 2 rated value	Hz	60
relative negative tolerance of the control supply voltage frequency	%	-10
relative positive tolerance of the control supply voltage frequency	%	10
control supply voltage 1 at AC at 50 Hz	V	110 ... 230
control supply voltage 1 at AC at 60 Hz	V	110 ... 230
relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-15
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	10
relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
control supply voltage 1 at DC	V	110 ... 230
relative negative tolerance of the control supply voltage at DC	%	-20
relative positive tolerance of the control supply voltage at DC	%	20
display version for fault signal		red
<b>Mechanical data</b>		
size of engine control device		S00
width	mm	45
height	mm	120
depth	mm	150
fastening method		screw and snap-on mounting
mounting position		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	15
• downwards	mm	40
wire length maximum	m	300
number of poles for main current circuit		3
<b>Connections/ Terminals</b>		
type of electrical connection		
• for main current circuit		spring-loaded terminals
• for auxiliary and control circuit		spring-loaded terminals
number of NC contacts for auxiliary contacts		0
number of NO contacts for auxiliary contacts		1
number of CO contacts for auxiliary contacts		0
type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )
• finely stranded with core end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )
type of connectable conductor cross-sections for AWG cables for main contacts for box terminal		
• using the front clamping point		2x (16 ... 10)
type of connectable conductor cross-sections for main contacts		
• solid		1 ... 4 mm <sup>2</sup>
• finely stranded with core end processing		1 ... 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.25 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing		2x (0.25 ... 1.5 mm <sup>2</sup> )
type of connectable conductor cross-sections for AWG cables		
• for main contacts		16 ... 12

- for auxiliary contacts

2x (24 ... 14)

#### Ambient conditions

<b>installation altitude at height above sea level</b>	m	5 000
<b>environmental category</b>		
<ul style="list-style-type: none"> <li>• during transport according to IEC 60721</li> <li>• during storage according to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
<ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> </ul>		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
<b>ambient temperature</b>		
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	°C	-25 ... +60
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	°C	-40 ... +80
<b>derating temperature</b>	°C	40
<b>protection class IP on the front according to IEC 60529</b>		IP20
<b>touch protection on the front according to IEC 60529</b>		finger-safe, for vertical contact from the front

#### Certificates/ approvals

General Product Approval

EMC



Confirmation



Declaration of Conformity

Test Certificates

other



Type Test Certificates/Test Report

Miscellaneous Confirmation

#### UL/CSA ratings

<b>yielded mechanical performance [hp] for 3-phase AC motor</b>		
<ul style="list-style-type: none"> <li>• at 220/230 V</li> <li>— at standard circuit at 50 °C rated value</li> </ul>	hp	3
<ul style="list-style-type: none"> <li>• at 460/480 V</li> <li>— at standard circuit at 50 °C rated value</li> </ul>	hp	7.5
<b>contact rating of auxiliary contacts according to UL</b>		B300 / R300

