



SIRIUS soft starter S3 106 A, 55 kW/400 V, 40 °C 200-480 V AC, 24 V AC/DC Screw terminals Thermistor motor protection

### General technical data

product brand name		SIRIUS
product feature		
• integrated bypass contact system		Yes
• thyristors		Yes
product function		
• intrinsic device protection		Yes
• motor overload protection		Yes
• evaluation of thermistor motor protection		Yes
• external reset		Yes
• adjustable current limitation		Yes
• 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	106
• at 50 °C rated value	A	98
• at 60 °C rated value	A	90
yielded mechanical performance for 3-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	kW	30
• at 400 V		
— at standard circuit at 40 °C rated value	kW	55
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	30
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 [%]	%	20
adjustable motor current for motor overload protection minimum rated value	A	46

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	21
<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 rated value	V	24
• at 60 Hz rated value	V	24
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 rated value	V	24
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		S3
width	mm	70
height	mm	170
depth	mm	190
fastening method		screw and snap-on mounting
mounting position		With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/- 10° rotatable, with vertical mounting surface +/- 10° t
required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	30
• 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		screw-type terminals
• for auxiliary and control circuit		screw-type terminals
number of NC contacts for auxiliary contacts		0
number of NO contacts for auxiliary contacts		2
number of CO contacts for auxiliary contacts		1
type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (2.5 ... 16 mm²)
• finely stranded with core end processing		2.5 ... 35 mm²
• stranded		4 ... 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (2.5 ... 16 mm²)
• finely stranded with core end processing		2.5 ... 50 mm²
• stranded		10 ... 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		

- solid
- finely stranded with core end processing
- stranded

**type of connectable conductor cross-sections at AWG cables for main contacts for box terminal**

- using the back clamping point
- using the front clamping point
- using both clamping points

**type of connectable conductor cross-sections for DIN cable lug for main contacts**

- finely stranded
- stranded

**type of connectable conductor cross-sections for auxiliary contacts**

- solid
- finely stranded with core end processing

**type of connectable conductor cross-sections at AWG cables**

- for main contacts
- for auxiliary contacts
- for auxiliary contacts finely stranded with core end processing

2x (2.5 ... 16 mm<sup>2</sup>)  
2x (2.5 ... 35 mm<sup>2</sup>)  
2x (10 ... 50 mm<sup>2</sup>)

2x (10 ... 1/0)  
2x (10 ... 1/0)  
10 ... 2/0

2 x (10 ... 50 mm<sup>2</sup>)  
2x (10 ... 70 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)  
2x (0.5 ... 1.5 mm<sup>2</sup>)

2x (7 ... 1/0)  
2x (20 ... 14)  
2x (20 ... 16)

**Ambient conditions**

**installation altitude at height above sea level**

m

5 000

**environmental category**

- during transport according to IEC 60721
- during storage according to IEC 60721

- during operation according to IEC 60721

**ambient temperature**

- during operation
- during storage

**derating temperature**

°C

-25 ... +60

°C

-40 ... +80

°C

40

**protection class IP on the front according to IEC 60529**

IP20

**touch protection on the front according to IEC 60529**

finger-safe, for vertical contact from the front

**Certificates/ approvals**

**General Product Approval**

**EMC**



[Confirmation](#)



**Test Certificates**

**Marine / Shipping**

**other**

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

**Railway**

[Vibration and Shock](#)

[Confirmation](#)

**UL/CSA ratings**

**yielded mechanical performance [hp] for 3-phase AC**

motor

- at 220/230 V
  - at standard circuit at 50 °C rated value
- at 460/480 V
  - at standard circuit at 50 °C rated value

contact rating of auxiliary contacts according to UL

hp	30
hp	75
	B300 / R300

Further information

Simulation Tool for Soft Starters (STS)

<https://support.industry.siemens.com/cs/ww/en/view/101494917>

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4047-1TB04>

Cax online generator

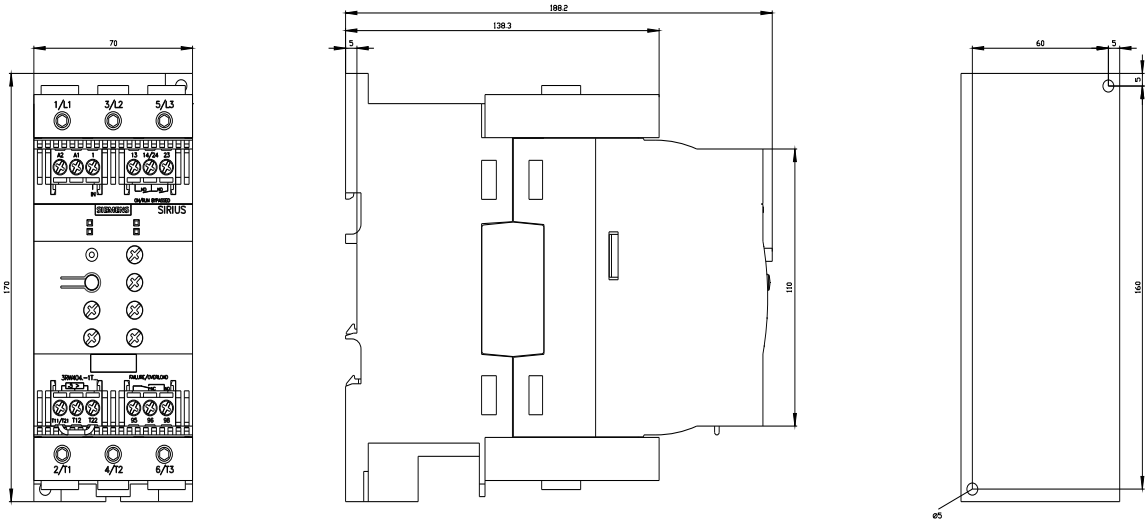
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4047-1TB04>

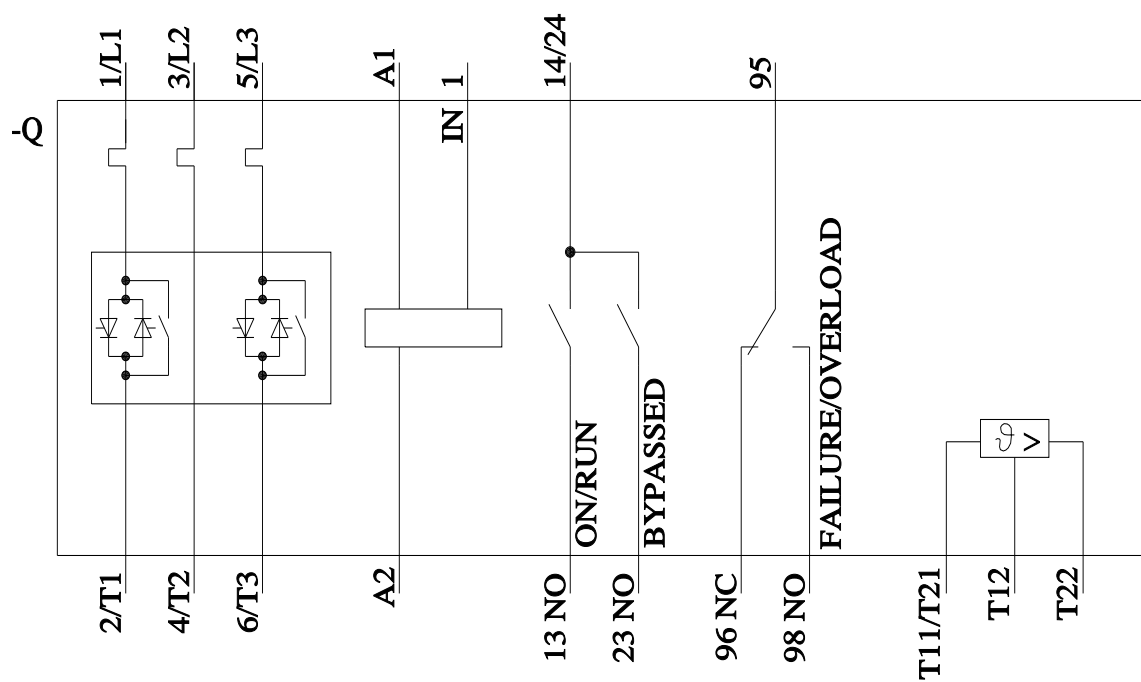
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4047-1TB04>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW4047-1TB04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4047-1TB04&lang=en)





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