



SIRIUS soft starter S12 248 A, 200 hp/460 V, 50 °C 200-460 V AC, 115 V AC Screw terminals !!! Phased-out product !!!  
Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5074-6AB14<<

### General technical data

<b>product brand name</b>		SIRIUS
<b>product feature</b>		
• integrated bypass contact system		Yes
• thyristors		Yes
<b>product function</b>		
• intrinsic device protection		Yes
• motor overload protection		Yes
• evaluation of thermistor motor protection		No
• external reset		Yes
• adjustable current limitation		Yes
• inside-delta circuit		No
<b>product component motor brake output</b>		No
<b>insulation voltage rated value</b>	V	600
<b>degree of pollution</b>		3, acc. to IEC 60947-4-2
<b>reference code according to EN 61346-2</b>		Q
<b>reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750</b>		G

### Power Electronics

<b>product designation</b>		Soft starter
<b>operational current</b>		
• at 40 °C rated value	A	280
• at 50 °C rated value	A	248
• at 60 °C rated value	A	215
<b>yielded mechanical performance for 3-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C rated value	kW	90
• at 400 V		
— at standard circuit at 40 °C rated value	kW	160
<b>yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b>	hp	75
<b>operating frequency rated value</b>	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 ... 460
<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 [%]</b>	%	20
<b>adjustable motor current for motor overload protection minimum rated value</b>	A	130

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	90
<b>Control circuit/ Control</b>		
type of voltage of the control supply voltage		AC
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	115
• at 60 Hz rated value	V	115
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
display version for fault signal		red
<b>Mechanical data</b>		
size of engine control device		S12
width	mm	160
height	mm	230
depth	mm	278
fastening method		screw fixing
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	100
• at the side	mm	5
• downwards	mm	75
wire length maximum	m	300
number of poles for main current circuit		3
<b>Connections/ Terminals</b>		
type of electrical connection		busbar connection screw-type terminals
• for main current circuit		
• for auxiliary and control circuit		
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		
• finely stranded with core end processing		70 ... 240 mm²
• finely stranded without core end processing		70 ... 240 mm²
• stranded		95 ... 300 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• finely stranded with core end processing		120 ... 185 mm²
• finely stranded without core end processing		120 ... 185 mm²
• stranded		120 ... 240 mm²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• finely stranded with core end processing		min. 2x 50 mm², max. 2x 185 mm²
• finely stranded without core end processing		min. 2x 50 mm², max. 2x 185 mm²
• stranded		max. 2x 70 mm², max. 2x 240 mm²
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

250 ... 500 kcmil  
3/0 ... 600 kcmil  
min. 2x 2/0, max. 2x 500 kcmil

50 ... 240 mm<sup>2</sup>  
70 ... 240 mm<sup>2</sup>

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

2/0 ... 500 kcmil  
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

2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)  
1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4  
3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6

##### ambient temperature

- during operation
- during storage

°C

-25 ... +60

°C

-40 ... +80

°C

40

##### derating temperature

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

IP00; IP20 with cover

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

finger-safe, for vertical contact from the front with cover

#### Certificates/ approvals

##### General Product Approval

##### EMC



[Confirmation](#)



##### Declaration of Conformity

##### Test Certificates

##### Marine / Shipping

##### other



[Special Test Certificate](#)



[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

hp

100

hp

200

##### contact rating of auxiliary contacts according to UL

B300 / R300

#### Further information

##### Simulation Tool for Soft Starters (STS)

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

##### 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?mfb=3RW4074-6BB34>

## Cax online generator

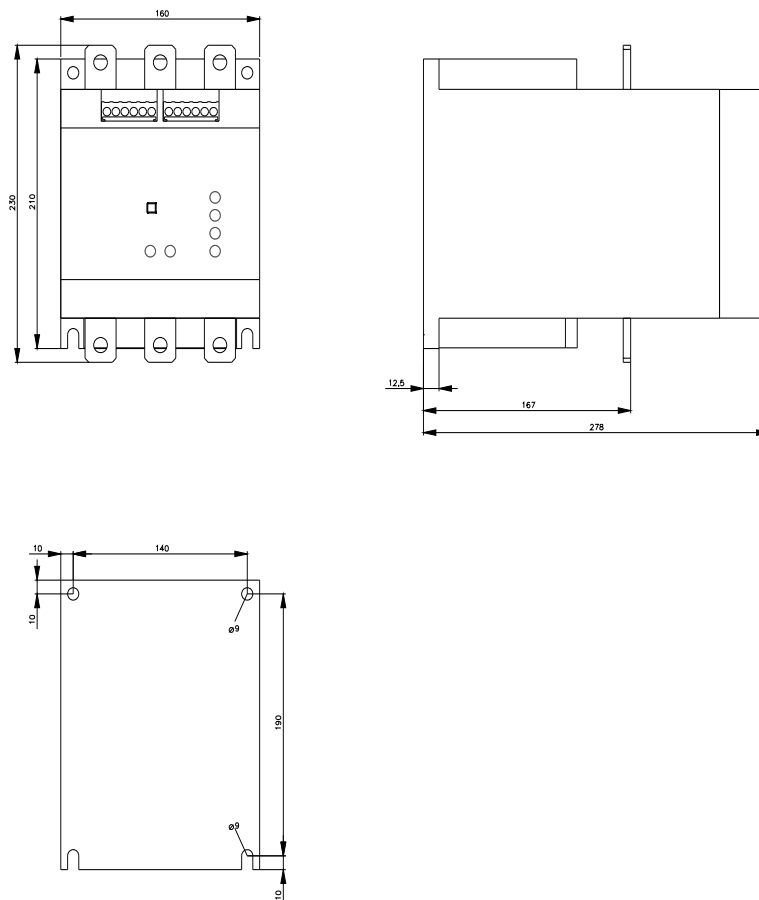
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4074-6BB34>

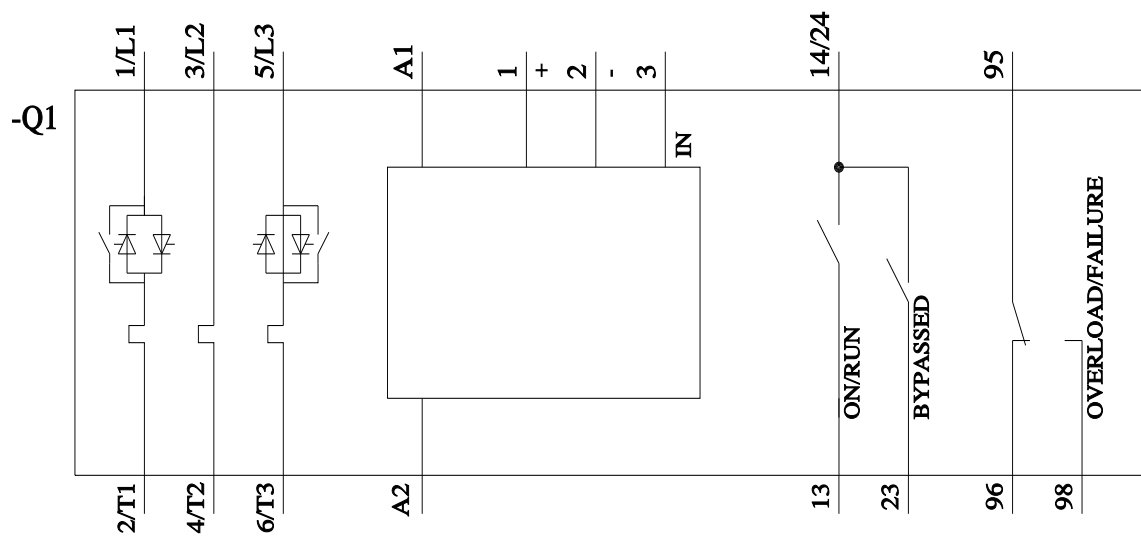
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4074-6BB34>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW4074-6BB34&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4074-6BB34&lang=en)





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