## **SIEMENS**

Data sheet 3RW4055-6BB45



SIRIUS soft starter S6 134 A, 90 kW/500 V, 40 °C 400-600 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5055-6AB15<<

General technical data		
product brand name		SIRIUS
product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
• thyristors		Yes
product function		
<ul> <li>intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>evaluation of thermistor motor protection</li> </ul>		No
<ul> <li>external reset</li> </ul>		Yes
<ul> <li>adjustable current limitation</li> </ul>		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 acc. to DIN EN 61346-2		Q
reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G
Power Electronics		
product designation		Soft starter
operational current		
<ul> <li>at 40 °C rated value</li> </ul>	Α	134
<ul> <li>at 50 °C rated value</li> </ul>	Α	117
at 60 °C rated value	А	100
yielded mechanical performance for 3-phase motors		
• at 400 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	W	75 000
• at 500 V		
— at standard circuit at 40 °C rated value	W	90 000
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	400 600
relative negative tolerance of the operating voltage at	%	-15
standard circuit		
relative positive tolerance of the operating voltage at standard circuit	%	10

adjustable motor current for motor overload		
protection minimum rated value	Α	59
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	60
Control circuit/ Control		
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	230
at 60 Hz rated value	V	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
display version for fault signal		red
Mechanical data		
size of engine control device		S6
width	mm	120
height	mm	198
depth	mm	250
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	_	surface +/- 10° t
required spacing with side-by-side mounting  • upwards	mm	surface +/- 10° t
	mm mm	
• upwards		100
<ul><li>upwards</li><li>at the side</li></ul>	mm	100 5
<ul><li>upwards</li><li>at the side</li><li>downwards</li></ul>	mm mm	100 5 75
<ul> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> wire length maximum	mm mm	100 5 75 300
<ul> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> wire length maximum number of poles for main current circuit	mm mm	100 5 75 300
upwards at the side downwards wire length maximum number of poles for main current circuit Connections/ Terminals	mm mm	100 5 75 300
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection	mm mm	100 5 75 300 3
upwards     at the side     downwards  wire length maximum  number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit	mm mm	100 5 75 300 3 busbar connection
upwards at the side downwards wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection for main current circuit for auxiliary and control circuit	mm mm	100 5 75 300 3 busbar connection screw-type terminals
upwards at the side downwards wire length maximum number of poles for main current circuit  Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit number of NC contacts for auxiliary contacts	mm mm	100 5 75 300 3 busbar connection screw-type terminals 0
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	mm mm	100 5 75 300 3 busbar connection screw-type terminals 0 2
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front	mm mm	100 5 75 300 3 busbar connection screw-type terminals 0 2
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point	mm mm	100 5 75 300 3  busbar connection screw-type terminals 0 2 1
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point     finely stranded with core end processing	mm mm	100 5 75 300 3  busbar connection screw-type terminals 0 2 1
upwards at the side downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection for main current circuit for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point finely stranded with core end processing finely stranded without core end processing	mm mm	100 5 75 300 3  busbar connection screw-type terminals 0 2 1 16 70 mm² 16 70 mm²
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point     finely stranded with core end processing     finely stranded without core end processing     stranded  type of connectable conductor cross-sections for main contacts for box terminal using the back	mm mm	100 5 75 300 3  busbar connection screw-type terminals 0 2 1 16 70 mm² 16 70 mm²
upwards     at the side     downwards  wire length maximum number of poles for main current circuit  Connections/ Terminals  type of electrical connection     for main current circuit     for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point     finely stranded with core end processing     finely stranded without core end processing     stranded  type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point	mm mm	100 5 75 300 3  busbar connection screw-type terminals 0 2 1  16 70 mm² 16 70 mm² 16 70 mm²

main contacts for box terminal using both clamping points		
finely stranded with core end processing		max. 1x 50 mm², 1x 70 mm²
finely stranded without core end processing		max. 1x 50 mm², 1x 70 mm²
• stranded		max. 2x 70 mm <sup>2</sup>
type of connectable conductor cross-sections at AWG cables for main contacts for box terminal		
using the back clamping point		6 2/0
using the front clamping point		6 2/0
using both clamping points		max. 2x 1/0
type of connectable conductor cross-sections for DIN cable lug for main contacts		
finely stranded		2x (16 95 mm²)
• stranded		2x (25 120 mm²)
type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²)
type of connectable conductor cross-sections at AWG cables		
• for main contacts		4 250 kcmil
for auxiliary contacts		2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>		2x (20 16)
mbient conditions		
nstallation altitude at height above sea level	m	5 000
environmental category		
<ul> <li>during transport acc. to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
• during operation acc. to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front acc. to IEC 60529		IP00; IP20 with cover

**General Product Approval** 

**EMC** 

For use in hazardous locations













Declaration of Conformity

**Test Certificates** 

Marine / Shipping

other

CE

Special Test Certificate

Lloyd's Register



Confirmation

UL/CSA ratings

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

• at 460/480 V

<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	75
• at 575/600 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	100
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?mlfb=3RW4055-6BB45

Cax online generator

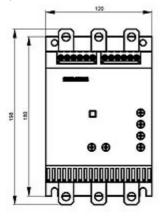
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4055-6BB45

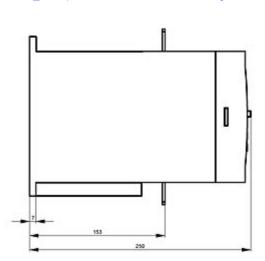
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

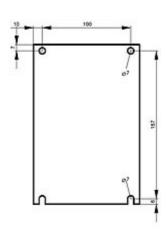
https://support.industry.siemens.com/cs/ww/en/ps/3RW4055-6BB45

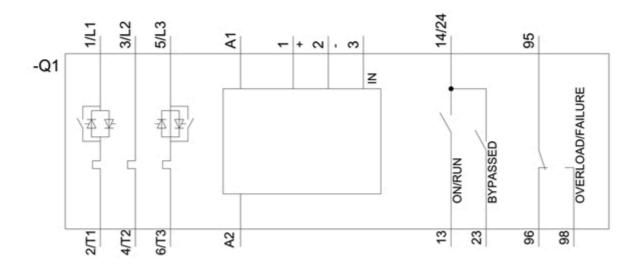
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4055-6BB45&lang=en









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