3RW4444-6BC35

# SIEMENS



#### Data sheet



SIRIUS soft starter Values at 575 V, 50 °C standard: 215 A, 200 hp Inside-delta: 372 A, 350 hp 400-600 V AC, 115 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5544-6HA16<<

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>		Yes
<ul> <li>external reset</li> </ul>		Yes
<ul> <li>adjustable current limitation</li> </ul>		Yes
inside-delta circuit		Yes
product component motor brake output		Yes
insulation voltage rated value	V	690
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		
<ul> <li>at 40 °C rated value</li> </ul>	А	250
<ul> <li>at 50 °C rated value</li> </ul>	А	215
• at 60 °C rated value	А	185
operational current for 3-phase motors at inside-delta circuit		
<ul> <li>at 40 °C rated value</li> </ul>	А	433
<ul> <li>at 50 °C rated value</li> </ul>	А	372
• at 60 °C rated value	А	320
yielded mechanical performance for 3-phase motors		
• at 400 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	kW	132
- at inside-delta circuit at 40 °C rated value	kW	250
• at 500 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	kW	160
- at inside-delta circuit at 40 °C rated value	kW	315
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

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relative negative tolerance of the operating voltage at standard circuit	%	<sup>-15</sup> ( ) dientudong
relative positive tolerance of the operating voltage at standard circuit	%	
operating voltage at inside-delta circuit rated value	V	400 600
relative negative tolerance of the operating voltage at inside-delta circuit	%	-15
relative positive tolerance of the operating voltage at inside-delta circuit	%	10
minimum load [%]	%	8
adjustable motor current for motor overload protection minimum rated value	A	50
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	110
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	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		Display
Mechanical data		
width	mm	210
height	mm	230
depth	mm	298
fastening method	-	screw fixing
mounting position		with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
required spacing with side-by-side mounting		
• upwards	mm	100
• at the side	mm	5
downwards	mm	75
wire length maximum	m	500
number of poles for main current circuit		3
Connections/ Terminals	-	
type of electrical connection		
for main current circuit		busbar connection
for auxiliary and control circuit		screw-type terminals 0
number of NC contacts for auxiliary contacts	-	3
number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts		3
type of connectable conductor cross-sections for		1
main contacts for box terminal using the front clamping point		
<ul> <li>finely stranded with core end processing</li> </ul>		70 240 mm²
<ul> <li>finely stranded without core end processing</li> </ul>		70 240 mm²
stranded		95 300 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back		

clamping point		diantudana
<ul> <li>finely stranded with core end processing</li> </ul>		120 mm ) dientudong
<ul> <li>finely stranded without core end processing</li> </ul>		
• stranded		120 2 m <sup>2</sup>
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
<ul> <li>finely stranded with core end processing</li> </ul>		min. 2x 50 mm², max. 2x 185 mm²
<ul> <li>finely stranded without core end processing</li> </ul>		min. 2x 50 mm², max. 2x 185 mm²
stranded	-	max. 2x 70 mm <sup>2</sup> , max. 2x 240 mm <sup>2</sup>
type of connectable conductor cross-sections at AWG cables for main contacts for box terminal		
<ul> <li>using the back clamping point</li> </ul>		250 500 kcmil
<ul> <li>using the front clamping point</li> </ul>		3/0 600 kcmil
using both clamping points		min. 2x 2/0, max. 2x 500 kcmil
type of connectable conductor cross-sections for DIN cable lug for main contacts		50 040 2
finely stranded		50 240 mm <sup>2</sup>
• stranded		70 240 mm²
type of connectable conductor cross-sections for auxiliary contacts		0 /0.5
solid     finally stranded with core and processing		2x (0.5 2.5 mm <sup>2</sup> )
finely stranded with core end processing     type of connectable conductor cross-sections at AWG	-	2x (0.5 1.5 mm²)
cables		
<ul> <li>for main contacts</li> </ul>		2/0 500 kcmil
<ul> <li>for auxiliary contacts</li> </ul>		2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end</li> </ul>		2x (20 16)
processing		
Ambient conditions		
installation altitude at height above sea level	m	5 000
environmental category		
<ul> <li>during transport according to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
<ul> <li>during storage according to IEC 60721</li> </ul>		1K6 (only occasional condensation), 1C2 (no salt mist),
e during operation according to IEC 60721		1S2 (sand must not get inside the devices), 1M4
<ul> <li>during operation according to IEC 60721</li> </ul>		
		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature <ul> <li>during operation</li> </ul>	°C	
·	⊃°C ⊃°	mist), 3S2 (sand must not get into the devices), 3M6
during operation		mist), 3S2 (sand must not get into the devices), 3M6 60
<ul> <li>during operation</li> <li>during storage</li> </ul>	°C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80
during operation     during storage  derating temperature  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529	°C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40
during operation     during storage  derating temperature  protection class IP on the front according to IEC 60529	°C	<ul> <li>mist), 3S2 (sand must not get into the devices), 3M6</li> <li>60 <ul> <li>-25 +80</li> </ul> </li> <li>40 <ul> <li>IP00; IP20 with box terminal/cover</li> <li>finger-safe, for vertical contact from the front with box</li> </ul> </li> </ul>
during operation     during storage  derating temperature  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529	°C	<ul> <li>mist), 3S2 (sand must not get into the devices), 3M6</li> <li>60 <ul> <li>-25 +80</li> </ul> </li> <li>40 <ul> <li>IP00; IP20 with box terminal/cover</li> <li>finger-safe, for vertical contact from the front with box</li> </ul> </li> </ul>
• during operation     • during storage  derating temperature  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Certificates/ approvals	°C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover
• during operation     • during storage  derating temperature  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Certificates/ approvals	°C °C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover
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<ul> <li>during operation</li> <li>during storage</li> <li>derating temperature         protection class IP on the front according to IEC 60529     </li> <li>touch protection on the front according to IEC 60529</li> <li>Certificates/ approvals</li> <li>General Product Approval</li> <li>Confirmation</li> </ul>	°C °C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover
e during operation     e during storage  derating temperature protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval General Product Approval Confirmation Confirmation Declaration of Test Certificates	°C °C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover
<ul> <li>during operation</li> <li>during storage</li> <li>derating temperature</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> <li>Certificates/ approvals</li> <li>General Product Approval</li> <li>Confirmation</li> </ul>	°C °C	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover EMC EMC EMC
<ul> <li>during operation</li> <li>during storage</li> <li>derating temperature         protection class IP on the front according to IEC 60529     </li> <li>touch protection on the front according to IEC 60529</li> <li>Certificates/ approvals</li> <li>General Product Approval</li> <li>General Product Approval</li> <li>Confirmation</li> <li>Confirmation</li> <li>Certificates</li> </ul>	on Ma	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover EMC EMC EMC
<ul> <li>during operation</li> <li>during storage</li> <li>derating temperature</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> <li>Certificates/ approvals</li> <li>General Product Approval</li> <li>General Product Approval</li> <li>Confirmation</li> <li>Confirmation</li> <li>Certificates of Conformity</li> </ul>	on Ma	mist), 3S2 (sand must not get into the devices), 3M6 60 -25 +80 40 IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box terminal/cover EMC EMC EMC
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yielded mechanical performance [hp] for 3-phase AC motor		
• at 460/480 V		
— at standard circuit at 50 °C rated value	hp	150
<ul> <li>— at inside-delta circuit at 50 °C rated value</li> </ul>	hp	300
• at 575/600 V		
— at standard circuit at 50 °C rated value	hp	200
- at inside-delta circuit at 50 °C rated value	hp	350
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=3RW4444-6BC35

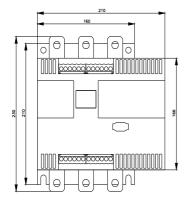
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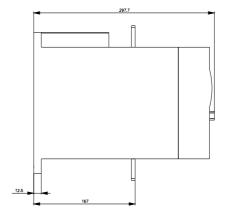
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4444-6BC35

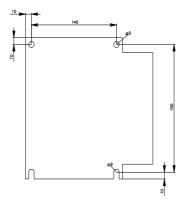
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RW4444-6BC35

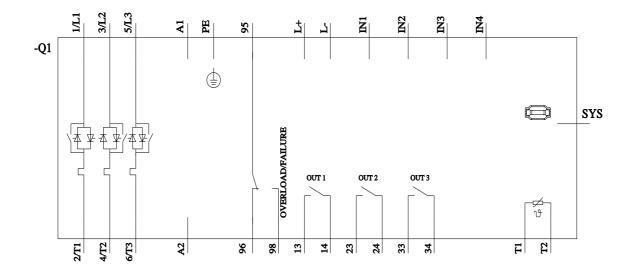
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4444-6BC35&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4444-6BC35&lang=en</a>











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