## **SIEMENS**

Data sheet 3RW4445-6BC34



SIRIUS soft starter Values at 460 V, 50 °C standard: 280 A, 200 hp Inside-delta: 485 A, 400 hp 200-460 V AC, 115 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5545-6HA14<<

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 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	313
<ul> <li>at 50 °C rated value</li> </ul>	Α	280
<ul> <li>at 60 °C rated value</li> </ul>	Α	250
operational current for 3-phase motors at inside-delta circuit		
<ul> <li>at 40 °C rated value</li> </ul>	А	542
<ul> <li>at 50 °C rated value</li> </ul>	Α	485
<ul> <li>at 60 °C rated value</li> </ul>	Α	433
yielded mechanical performance for 3-phase motors		
● at 230 V		
<ul> <li>at standard circuit at 40 °C rated value</li> </ul>	W	90 000
— at inside-delta circuit at 40 °C rated value	W	160 000
● at 400 V		
<ul> <li>at standard circuit at 40 °C rated value</li> </ul>	W	160 000
— at inside-delta circuit at 40 °C rated value	W	315 000
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	75

	-		
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	200 460	
relative negative tolerance of the operating voltage at standard circuit	%	-15	
relative positive tolerance of the operating voltage at standard circuit	%	10	
operating voltage at inside-delta circuit rated value	V	200 460	
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	Α	62	
continuous operating current [% of le] at 40 °C	%	115	
power loss [W] at operational current at 40 °C during operation typical	W	145	
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			
<ul> <li>at 50 Hz rated value</li> </ul>	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	<b>%</b>	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	
<ul><li>downwards</li></ul>	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	
<ul> <li>for auxiliary and control circuit</li> </ul>		screw-type terminals	
number of NC contacts for auxiliary contacts		0	
number of NO contacts for auxiliary contacts		3	
number of CO contacts for auxiliary contacts		1	
type of connectable conductor cross-sections for			
main contacts for box terminal using the front			

General Product Approval			EMC	Declaration of Conformity
Certificates/ approvals		terminal/cover		
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front with box		
protection class IP on the front acc. to IEC 60529		IP00; IP20 with box terminal/cover		
derating temperature	°C	40		
during storage	°C	-25 +80		
during operation	°C	60		
ambient temperature		mist), 3S2 (sai	nd must not get into the	e devices), 3M6
during storage acc. to IEC 60721     during operation acc. to IEC 60721		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		
during transport acc. to IEC 60721     during storage acc. to IEC 60721			,	
o during transport acc. to IEC 60721		2K2 2C1 2S1	, 2M2 (max. fall height	0.3 m)
installation altitude at height above sea level	m	5 000		
	m	5,000		
processing Ambient conditions				
for auxiliary contacts finely stranded with core end     processing		2x (20 16)		
<ul> <li>for auxiliary contacts</li> </ul>		2x (20 14)		
for main contacts		2/0 500 kcm	nil	
type of connectable conductor cross-sections at AWG cables				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 r	mm²)	
• solid		2x (0.5 2.5 r	mm²)	
auxiliary contacts				
type of connectable conductor cross-sections for		70 240 111111		
stranded		70 240 mm <sup>2</sup>		
cable lug for main contacts  ● finely stranded		50 240 mm²		
type of connectable conductor cross-sections for DIN				
using both clamping points		min. 2x 2/0, m	ax. 2x 500 kcmil	
<ul> <li>using the front clamping point</li> </ul>		3/0 600 kcm		
<ul> <li>using the back clamping point</li> </ul>		250 500 kcr	nil	
cables for main contacts for box terminal				
• stranded  type of connectable conductor cross-sections at AWG		max. 2x 70 mr	m², max. 2x 240 mm²	
finely stranded without core end processing			1 <sup>2</sup> , max. 2x 185 mm <sup>2</sup>	
finely stranded with core end processing			1 <sup>2</sup> , max. 2x 185 mm <sup>2</sup>	
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points				
• stranded		120 240 mn	1 <sup>2</sup>	
<ul> <li>finely stranded without core end processing</li> </ul>		120 185 mn		
<ul> <li>finely stranded with core end processing</li> </ul>		120 185 mn	1 <sup>2</sup>	
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point				
stranded		95 300 mm²	2	
<ul> <li>finely stranded without core end processing</li> </ul>		70 240 mm²	!	
<ul> <li>finely stranded with core end processing</li> </ul>		70 240 mm <sup>2</sup>	!	













**Test Certificates** 

Marine / Shipping









Marine / Shipping

other



## Confirmation

UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 200/208 V		
<ul> <li>at inside-delta circuit at 50 °C rated value</li> </ul>	hp	150
• at 220/230 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	100
<ul> <li>at inside-delta circuit at 50 °C rated value</li> </ul>	hp	200
• at 460/480 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	200
<ul> <li>at inside-delta circuit at 50 °C rated value</li> </ul>	hp	400
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=3RW4445-6BC34

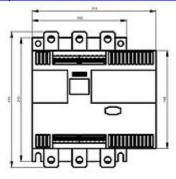
Cax online generator

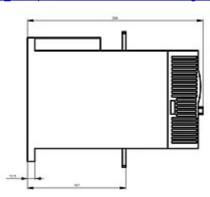
 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW4445-6BC34}$ 

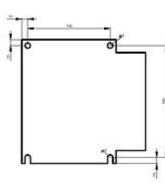
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

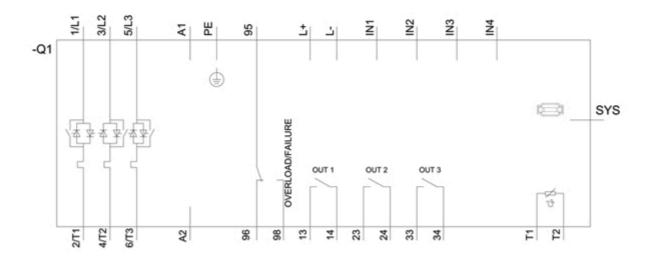
https://support.industry.siemens.com/cs/ww/en/ps/3RW4445-6BC34

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=3RW4445-6BC34&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4445-6BC34&lang=en</a>









last modified: 12/15/2020 ☑