SIEMENS

Data sheet 3RW4436-6BC44



SIRIUS soft starter Values at 400 V, 40 °C standard: 162 A, 90 kW Inside-delta: 281 A, 160 kW 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5536-6HA14<<

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 		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				
 at 40 °C rated value 	Α	162		
 at 50 °C rated value 	Α	145		
 at 60 °C rated value 	Α	125		
operational current for 3-phase motors at inside-delta circuit				
 at 40 °C rated value 	Α	281		
 at 50 °C rated value 	Α	251		
 at 60 °C rated value 	Α	217		
yielded mechanical performance for 3-phase motors • at 230 ∨				
 — at standard circuit at 40 °C rated value 	kW	45		
 — at inside-delta circuit at 40 °C rated value 	kW	90		
• at 400 V				
 — at standard circuit at 40 °C rated value 	kW	90		
 — at inside-delta circuit at 40 °C rated value 	kW	160		
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	40		
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 relative negative tolerance of the operating voltage at	V %	200 460 -15
standard circuit relative positive tolerance of the operating voltage at	%	10
standard circuit	V	
operating voltage at inside-delta circuit rated value	-	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	32
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during	W	95
operation typical		
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	%	-10
voltage frequency		
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	%	-15
voltage at AC at 50 Hz	%	
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	%	10
voltage at AC at 60 Hz		
display version for fault signal		Display
display version for fault signal Mechanical data		
display version for fault signal	mm	Display 170
display version for fault signal Mechanical data	mm mm	
display version for fault signal Mechanical data width		170
display version for fault signal Mechanical data width height	mm	170 200
display version for fault signal Mechanical data width height depth	mm	170 200 270
display version for fault signal Mechanical data width height depth fastening method mounting position	mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting	mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards	mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0
Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3 1
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3
Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3 1
Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3 1
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting • 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 mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3 1 16 70 mm² 16 70 mm²
display version for fault signal Mechanical data width height depth fastening method mounting position required spacing with side-by-side mounting	mm mm mm mm	170 200 270 screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back 100 5 75 500 3 busbar connection screw-type terminals 0 3 1 16 70 mm² 16 70 mm²

 finely stranded without core end processing 		16 70 mm²	
stranded		16 70 mm²	
type of connectable conductor cross-sections for 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 ²	
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 		16 95 mm²	
• stranded		25 120 mm²	
type of connectable conductor cross-sections for auxiliary contacts			
• solid		2x (0.5 2.5 mm²)	
 finely stranded with core end processing 		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)	
 for auxiliary contacts finely stranded with core end processing 		2x (20 16)	
Ambient conditions			
installation altitude at height above sea level	m	5 000	
environmental category			
 during transport according to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height	0.3 m)
 during storage according to IEC 60721 		1K6 (only occasional condensation), 1S2 (sand must not get inside the de	
 during operation according to IEC 60721 		3K6 (no formation of ice, no condense mist), 3S2 (sand must not get into the	
ambient temperature			
 during operation 	°C	60	
 during storage 	°C	-25 +80	
derating temperature	°C	40	
protection class IP on the front according to IEC 60529		IP00; IP20 with box terminal/cover	
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the terminal/cover	ne front with box
Certificates/ approvals			
General Product Approval			EMC







Confirmation







Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report

SIEMENS KALA





Marine / Shipping

other







UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 200/208 V		
 — at inside-delta circuit at 50 °C rated value 	hp	75
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	50
 at inside-delta circuit at 50 °C rated value 	hp	100
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	100
 at inside-delta circuit at 50 °C rated value 	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?mlfb=3RW4436-6BC44

Cax online generator

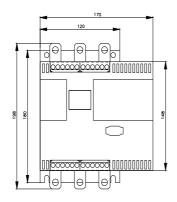
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4436-6BC44

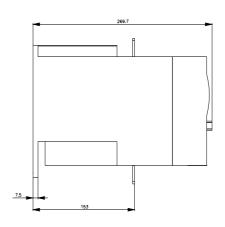
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

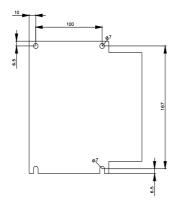
https://support.industry.siemens.com/cs/ww/en/ps/3RW4436-6BC44

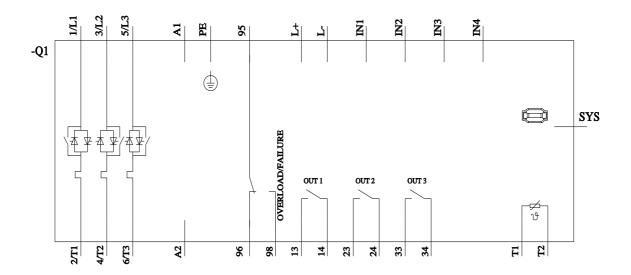
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4436-6BC44&lang=en









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