SIEMENS

Data sheet 3RW4447-6BC44



SIRIUS soft starter Values at 400 V, 40 °C standard: 432 A, 250 kW Inside-delta: 748 A, 400 kW 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5547-6HA14<<

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 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				
 at 40 °C rated value 	Α	432		
 at 50 °C rated value 	Α	385		
at 60 °C rated value	Α	335		
operational current for 3-phase motors at inside-delta circuit				
 at 40 °C rated value 	Α	748		
 at 50 °C rated value 	Α	667		
at 60 °C rated value	Α	580		
yielded mechanical performance for 3-phase motors				
• at 230 V				
 at standard circuit at 40 °C rated value 	W	132 000		
 at inside-delta circuit at 40 °C rated value 	W	250 000		
● at 400 V				
 at standard circuit at 40 °C rated value 	W	250 000		
 at inside-delta circuit at 40 °C rated value 	W	400 000		
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	125		

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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	86
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	232
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		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
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		

clamping point				
clamping point		70 240 mm²		
finely stranded with core end processing finely stranded without core and processing		70 240 mm ²		
finely stranded without core end processing stranded		70 240 mm ² 95 300 mm ²		
• stranded	_	95 300 mm		
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		250 500 kcmil		
 using the front clamping point 		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				
finely stranded		50 240 mm²		
stranded		70 240 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		2/0 500 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 acc. to IEC 60721 		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	60		
during storage	°C	-25 +80		
derating temperature	°C	40		
protection class IP		IP00		
Pertificates/ approvals				
General Product Approval		FMC		

General Product Approval

EMC













Declaration of Conformity Test Certificates Marine / Shipping



Special Test Certificate Type Test
Certificates/Test
Report





Marine / Shipping

other







Confirmation

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	200
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	150
 at inside-delta circuit at 50 °C rated value 	hp	250
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	300
— at inside-delta circuit at 50 °C rated value	hp	600
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=3RW4447-6BC44

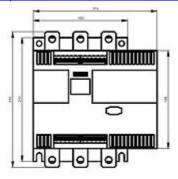
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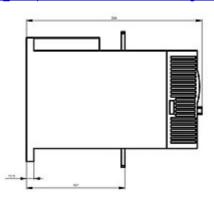
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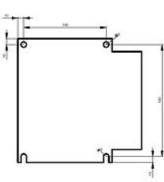
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

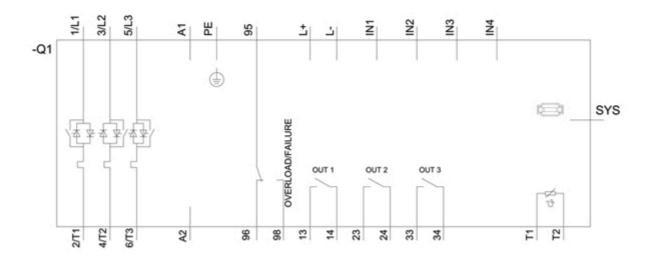
https://support.industry.siemens.com/cs/ww/en/ps/3RW4447-6BC44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4447-6BC44&lang=en









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