SIEMENS

Data sheet 3RW4446-2BC44



SIRIUS soft starter Values at 400 V, 40 °C standard: 356 A, 200 kW Inside-delta: 617 A, 355 kW 200-460 V AC, 230 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5546-2HA14<<

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	356
 at 50 °C rated value 	Α	315
at 60 °C rated value	Α	280
operational current for 3-phase motors at inside-delta circuit		
 at 40 °C rated value 	Α	617
 at 50 °C rated value 	Α	546
 at 60 °C rated value 	Α	485
yielded mechanical performance for 3-phase motors		
● at 230 V		
 at standard circuit at 40 °C rated value 	W	110 000
— at inside-delta circuit at 40 °C rated value	W	200 000
● at 400 V		
 at standard circuit at 40 °C rated value 	W	200 000
— at inside-delta circuit at 40 °C rated value	W	355 000
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	100

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	71
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	174
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 		spring-loaded 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				
finely stranded with core end processing		70 240 mm²	!	
		70 240 mm ²		
 finely stranded without core end processing stranded 		95 300 mm ²		
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		95 300 11111		
finely stranded with core end processing		120 185 mm	n ²	
finely stranded without core end processing		120 185 mm		
stranded stranded		120 240 mm		
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 mm	n², max. 2x 185 mm²	
 finely stranded without core end processing 		min. 2x 50 mm	n², max. 2x 185 mm²	
• stranded		max. 2x 70 mr	n², 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 kcm	nil	
 using the front clamping point 		3/0 600 kcm	nil	
 using both clamping points 		min. 2x 2/0, ma	ax. 2x 500 kcmil	
type of connectable conductor cross-sections for DIN cable lug for main contacts				
finely stranded		50 240 mm ²	!	
• stranded		70 240 mm²	:	
type of connectable conductor cross-sections for auxiliary contacts				
• solid		2x (0.25 1.5		
finely stranded with core end processing		2x (0.25 1.5	mm²)	
type of connectable conductor cross-sections at AWG cables				
for main contacts		2/0 500 kcm	nil	
for auxiliary contacts		2x (24 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 		1S2 (sand mus	asional condensation), st not get inside the de	vices), 1M4
during operation acc. to IEC 60721			tion of ice, no condense and 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 acc. to IEC 60529		IP00; IP20 with box terminal/cover		
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front with box terminal/cover		
Certificates/ approvals				
General Product Approval			EMC	Declaration of Conformity













Test Certificates Marine / Shipping









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	150
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	125
 at inside-delta circuit at 50 °C rated value 	hp	200
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	250
— at inside-delta circuit at 50 °C rated value	hp	450
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=3RW4446-2BC44

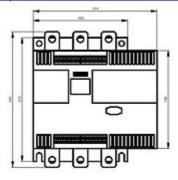
Cax online generator

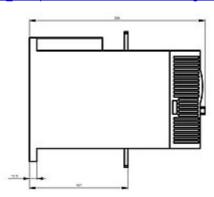
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4446-2BC44

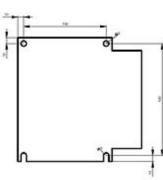
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

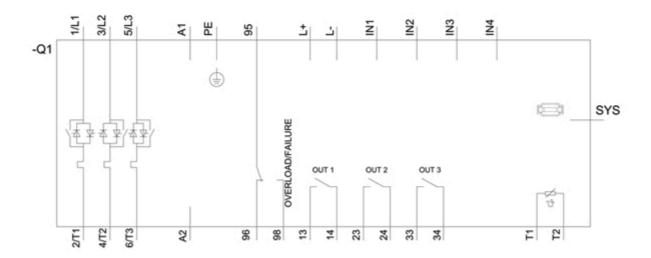
https://support.industry.siemens.com/cs/ww/en/ps/3RW4446-2BC44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4446-2BC44&lang=en









last modified: 12/15/2020 ☑