SIEMENS

Data sheet 3RW4423-3BC45



SIRIUS soft starter Values at 500 V, 40 °C standard: 36 A, 22 kW Inside-delta: 62 A, 37 kW 400-600 V AC, 230 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5517-3HA15<<

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	36
 at 50 °C rated value 	Α	32.2
at 60 °C rated value	А	29
operational current for 3-phase motors at inside-delta circuit		
 at 40 °C rated value 	Α	62
 at 50 °C rated value 	Α	55
at 60 °C rated value	Α	50
yielded mechanical performance for 3-phase motors		
• at 400 V		
 at standard circuit at 40 °C rated value 	W	18 500
 — at inside-delta circuit at 40 °C rated value 	W	30 000
● at 500 V		
 at standard circuit at 40 °C rated value 	W	22 000
— at inside-delta circuit at 40 °C rated value	W	37 000
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
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	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	Α	7
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	10
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	170
height	mm	192
depth	mm	270
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		box terminal
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		
• solid		2.5 16 mm²

- finally attracted with some and pressering		0.5 0.5
finely stranded with core end processing		2.5 35 mm ²
finely stranded without core end processing		4 50 mm ²
• stranded		4 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2,5 16 mm²
 finely stranded with core end processing 		2.5 50 mm²
 finely stranded without core end processing 		10 50 mm²
• stranded		10 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (2.5 16 mm²)
 finely stranded with core end processing 		2x (2.5 35 mm²)
 finely stranded without core end processing 		2x (4 35 mm²)
• stranded		2x (4 50 mm²)
type of connectable conductor cross-sections at AWG cables for main contacts for box terminal		
 using the back clamping point 		10 2/0
 using the front clamping point 		10 2/0
 using both clamping points 		2x (10 1/0)
type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.25 1.5 mm²)
 finely stranded with core end processing 		2x (0.25 1.5 mm²)
type of connectable conductor cross-sections at AWG cables		
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 		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 on the front acc. to IEC 60529		IP20
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front
Certificates/ approvals		

General Product Approval

EMC

Declaration of Conformity













Test Certificates

Marine / Shipping

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

Type Test Certificates/Test Report











Confirmation

UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	20
 at inside-delta circuit at 50 °C rated value 	hp	40
• at 575/600 V		
 at standard circuit at 50 °C rated value 	hp	25
— at inside-delta circuit at 50 °C rated value	hp	50
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=3RW4423-3BC45

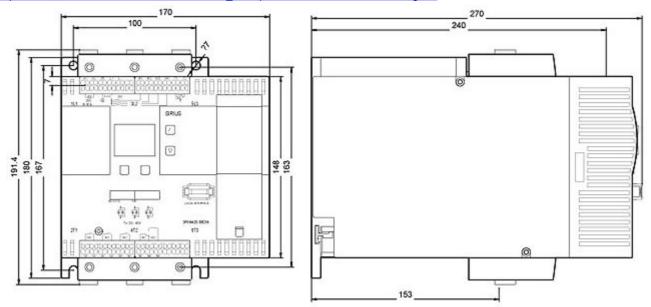
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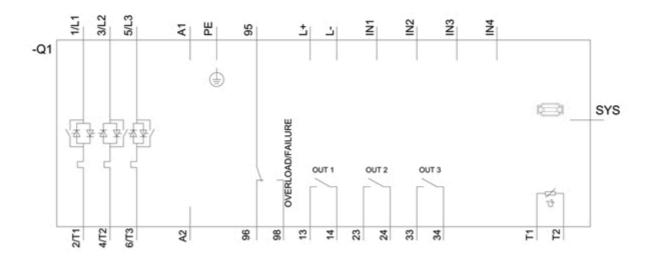
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4423-3BC45

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW4423-3BC45

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4423-3BC45&lang=en





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