SIEMENS

Data sheet

3RW4422-3BC35



SIRIUS soft starter Values at 575 V, 50 °C standard: 26 A, 20 hp Inside-delta: 45 A, 40 hp 400-600 V AC, 115 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5516-3HA15<<

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 	А	29
 at 50 °C rated value 	А	26
 at 60 °C rated value 	А	23
operational current for 3-phase motors at inside-delta circuit		
• at 40 °C rated value	А	50
 at 50 °C rated value 	А	45
 at 60 °C rated value 	А	40
yielded mechanical performance for 3-phase motors		
• at 400 V		
- at standard circuit at 40 °C rated value	W	15 000
- at inside-delta circuit at 40 °C rated value	W	22 000
• at 500 V		
— at standard circuit at 40 °C rated value	W	18 500
— at inside-delta circuit at 40 °C rated value	W	30 000
operating frequency rated value	Hz	50 60
relative negative tolerance of the operating frequency	%	-10

	-	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	А	5
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	8
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	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	%	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

 solid 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 both clamping points solid finely stranded with core end processing finely stranded without core end processing 		2,5 16 mm ² 2.5 50 mm ² 10 50 mm ² 10 70 mm ²	
 finely stranded without core end processing stranded type of connectable conductor cross-sections for main contacts for box terminal using both clamping points solid finely stranded with core end processing 		10 50 mm² 10 70 mm²	
stranded type of connectable conductor cross-sections for main contacts for box terminal using both clamping points solid finely stranded with core end processing		10 70 mm²	
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing			
 main contacts for box terminal using both clamping points solid finely stranded with core end processing 			
• finely stranded with core end processing			
		2x (2.5 16 mm²)	
finely stranded without core and processing		2x (2.5 35 mm²)	
		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 mm ²)	
finely stranded with core end processing type of connectable conductor cross-sections at AWG		2x (0.25 1.5 mm²)	
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



Confirmation

other

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	15
- at inside-delta circuit at 50 °C rated value	hp	30
• at 575/600 V		
 — at standard circuit at 50 °C rated value 	hp	20
- at inside-delta circuit at 50 °C rated value	hp	40
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=3RW4422-3BC35

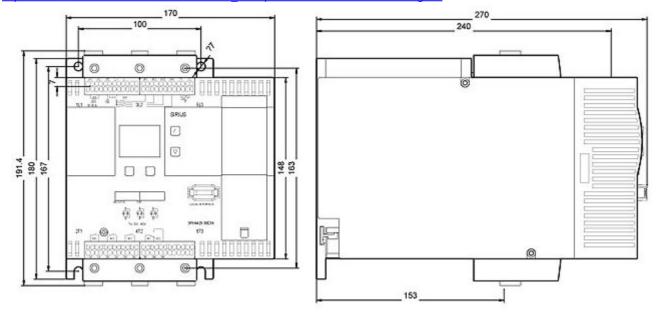
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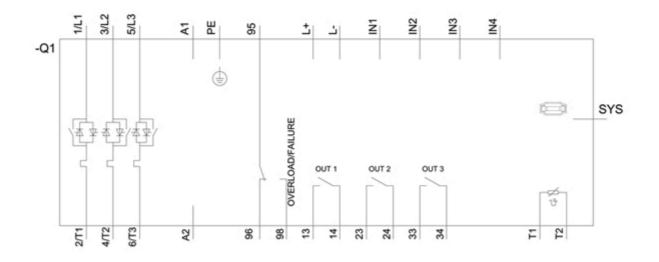
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4422-3BC35

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW4422-3BC35

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4422-3BC35&lang=en





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