SIEMENS

Data sheet 3RW4436-2BC46



SIRIUS soft starter Values at 690 V, 40 °C standard: 162 A, 160 kW Inside-delta: only up to 600 V 400-690 V AC, 230 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5536-2HA16<<

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	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 400 V				
 at standard circuit at 40 °C rated value 	W	90 000		
 at inside-delta circuit at 40 °C rated value 	W	160 000		
• at 500 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 690 V at standard circuit at 40 °C rated value	W	160 000		
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	400 690		
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	32		
continuous operating current [% of le] at 40 °C	%	115		
power loss [W] at operational current at 40 °C during operation typical	W	95		
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	200		
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		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				

General Product Approval			EMC	Declaration of Conformity
Certificates/ approvals				
touch protection on the front acc. to IEC 60529		terminal/cover	vertical contact from the	IE HOHL WILH DOX
protection class IP on the front acc. to IEC 60529		IP00; IP20 with box terminal/cover finger-safe, for vertical contact from the front with box		
derating temperature	°C	40		
during storage	°C	-25 +80		
during operation	°C	60		
ambient temperature	0.5			
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		
 during storage acc. to IEC 60721 			asional condensation), st not get inside the dev	
 during transport acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)		
environmental category				
installation altitude at height above sea level	m	5 000		
Ambient conditions				
for auxiliary contacts		2x (24 16)		
for main contacts		4 250 kcmil		
type of connectable conductor cross-sections at AWG cables				
finely stranded with core end processing		2x (0.25 1.5 mm²)		
• solid		2x (0.25 1.5	mm²)	
auxiliary contacts				
stranded type of connectable conductor cross-sections for		25 120 IIIM²		
stranded stranded		16 95 mm ² 25 120 mm ²		
cable lug for main contacts		46 05		
using both clamping points type of connectable conductor cross-sections for DIN		111ax. 2X 1/U		
using the front clamping point using both clamping points		6 2/0 max. 2x 1/0		
using the back clamping point using the front clamping point		6 2/0 6 2/0		
cables for main contacts for box terminal		6 2/0		
stranded type of connectable conductor cross-sections at AWG		max. 2x 70 mn	n -	
finely stranded without core end processing		max. 1x 50 mn		
finely stranded with core end processing		max. 1x 50 mn		
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points				
• stranded		16 70 mm²		
 finely stranded without core end processing 		16 70 mm²		
 finely stranded with core end processing 		16 70 mm²		
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point				
stranded		16 70 mm²		
 finely stranded without core end processing 		16 70 mm²		
 finely stranded with core end processing 				













Test Certificates

Marine / Shipping









Marine / Shipping

other



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	100		
 at inside-delta circuit at 50 °C rated value 	hp	200		
● at 575/600 V				
 at standard circuit at 50 °C rated value 	hp	125		
 at inside-delta circuit at 50 °C rated value 	hp	250		
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=3RW4436-2BC46

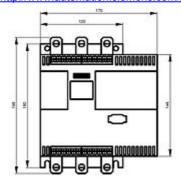
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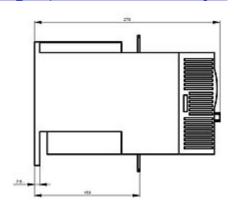
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4436-2BC46

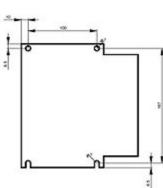
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

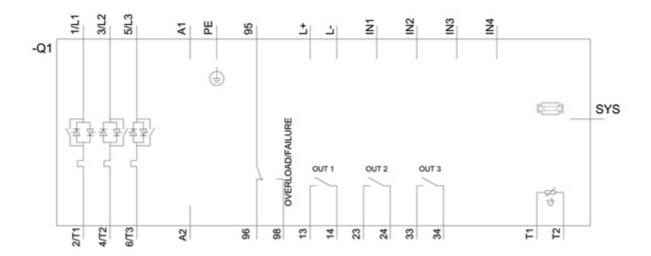
https://support.industry.siemens.com/cs/ww/en/ps/3RW4436-2BC46

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RW4436-2BC46&lang=en









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