SIEMENS

Data sheet 3RW4074-2BB44



SIRIUS soft starter S12 280 A, 160 kW/400 V, 40 °C 200-460 V AC, 230 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5074-2AB14<<

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 		No
 external reset 		Yes
 adjustable current limitation 		Yes
inside-delta circuit		No
product component motor brake output		No
insulation voltage rated value	V	600
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	280
 at 50 °C rated value 	Α	248
at 60 °C rated value	Α	215
yielded mechanical performance for 3-phase motors ● at 230 V		
 at standard circuit at 40 °C rated value 	W	90 000
● at 400 V		
 at standard circuit at 40 °C rated value 	W	160 000
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	75
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
minimum load [%]	%	20

adjustable motor current for motor overload protection minimum rated value continuous operating current [% of le] at 40 °C % 115 power loss [W] at operational current at 40 °C during operation typical Control circuit/ Control type of voltage of the control supply voltage 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 relative positive tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency control supply voltage 1 at AC • at 50 Hz rated value V 230 relative negative tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at AC at 60 Hz relative positive tolerance of the control supply woltage at A	
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required spacing with side-by-side mounting	e al
• upwards mm 100	
• at the side mm 5	
• downwards mm 75	
wire length maximum m 300	
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 2	
number of CO contacts for auxiliary contacts	
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	
• finely stranded without core end processing 70 240 mm²	
• stranded 95 300 mm²	
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 stranded 120 185 mm² 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 (0.25 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 main contacts 		2/0 500 kcmil
 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
a during energtion and to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt
during operation acc. to IEC 60721		mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		mist), 3S2 (sand must not get into the devices), 3M6
	°C	mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature	°C °C	
ambient temperature • during operation	_	-25 +60
ambient temperature • during operation • during storage	°C	-25 +60 -40 +80
ambient temperature	°C	-25 +60 -40 +80 40

General Product Approval

EMC

For use in hazardous locations













Declaration of Conformity

Test Certificates

Marine / Shipping

other



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



Confirmation

UL/CSA ratings				
yielded mechanical performance [hp] for 3-phase AC motor				
• at 220/230 V				
 at standard circuit at 50 °C rated value 	hp	100		
• at 460/480 V				
 at standard circuit at 50 °C rated value 	hp	200		
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=3RW4074-2BB44

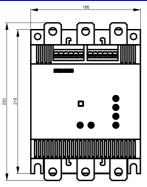
Cax online generator

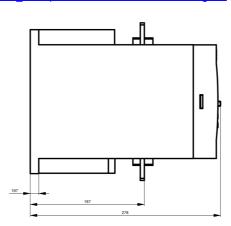
 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW4074-2BB44}$

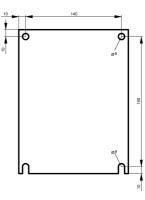
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

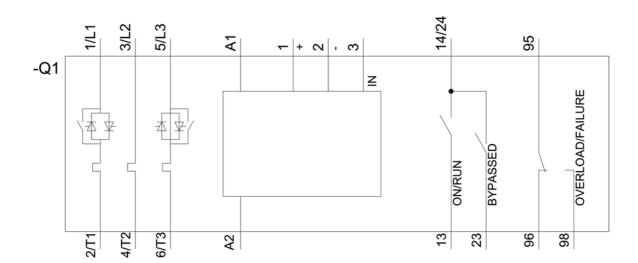
https://support.industry.siemens.com/cs/ww/en/ps/3RW4074-2BB44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4074-2BB44&lang=en









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