# **SIEMENS**

## Data sheet

#### 3RW44 47-2BC34

SIRIUS SOFT STARTER, VALUES WITH 460 V, 50 DEG., STANDARD: 385A, 300HP, INSIDE-DELTA CIRCUIT 3: 667A, 600HP, 200-460 V AC, 115 V AC, CAGE CLAMP TERMINALS



product brand name	SIRIUS	
Product feature		
<ul> <li>integrated bypass contact system</li> </ul>	Yes	
• Thyristors	Yes	
Product function		
<ul> <li>Intrinsic device protection</li> </ul>	Yes	
<ul> <li>motor overload protection</li> </ul>	Yes	
<ul> <li>Evaluation of thermistor motor protection</li> </ul>	Yes	
• External reset	Yes	
<ul> <li>Adjustable current limitation</li> </ul>	Yes	
• inside-delta circuit	Yes	
Product component Motor brake output	Yes	
Equipment marking acc. to DIN EN 61346-2	Q	
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	G	

Power Electronics:

Product designation

soft starters for high feature applications

Operating current		
• at 40 °C rated value	А	432
• at 50 °C rated value	А	385
● at 60 °C rated value	А	335
Operating current for three-phase motors at inside-		
delta circuit		
• at 40 °C rated value	А	748
• at 50 °C rated value	А	667
• at 60 °C rated value	А	580
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	132 000
— at inside-delta circuit at 40 °C rated value	W	250 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	250 000
— at inside-delta circuit at 40 °C rated value	W	400 000
Yielded mechanical performance [hp] for three-phase	hp	125
AC motor at 200/208 V at standard circuit at 50 °C		
rated value		50
Operating frequency rated value	Hz %	50 60 -10
Relative negative tolerance of the operating frequency	70	-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	%	-15
at standard circuit		
Relative positive tolerance of the operating voltage at	%	10
standard circuit		
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 [% of IM]	%	8
Adjustable motor current for motor overload	А	86
protection minimum rated value		
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	232
Control electronics:		
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 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
Mounting type		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
Installation altitude at height above sea level	m	5 000
Wire length maximum	m	500
Number of poles for main current circuit		3

### Connections/ Terminals:

Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	busbar connection
<ul> <li>for auxiliary and control current circuit</li> </ul>	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	
<ul> <li>finely stranded with core end processing</li> </ul>	70 240 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	70 240 mm²
• stranded	95 300 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point	

<ul> <li>finely stranded with core end processing</li> </ul>		120 185 mm²
<ul> <li>finely stranded without core end processing</li> </ul>		120 185 mm²
• stranded		120 240 mm²
Type of connectable conductor cross-sections for		
main contacts for box terminal using both clamping		
points		
<ul> <li>finely stranded with core end processing</li> </ul>		min. 2x 50 mm², max. 2x 185 mm²
<ul> <li>finely stranded without core end processing</li> </ul>		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 conductors for main contacts for box terminal		
<ul> <li>using the back clamping point</li> </ul>		250 500 kcmil
<ul> <li>using the front clamping point</li> </ul>		3/0 600 kcmil
<ul> <li>using both clamping points</li> </ul>		min. 2x 2/0, max. 2x 500 kcmil
Type of connectable conductor cross-sections for		
DIN cable lug for main contacts		
<ul> <li>finely stranded</li> </ul>		50 240 mm²
• stranded		70 240 mm²
Type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.25 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.25 1.5 mm²)
Type of connectable conductor cross-sections at AWG conductors		
• for main contacts		2/0 500 kcmil
<ul> <li>for auxiliary contacts</li> </ul>		2x (24 16)
Ambient conditions:		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	60
• during storage	°C	-25 +80
Derating temperature	°C	40
Protection class IP		IP00
Certificates/ approvals:		

General Produ	uct Approval			EMC	Declaration of Conformity	
	(SA)		EHC	С-тіск	EG-Konf.	
Test Certificate	es	Shipping Ap	Shipping Approval			
Typprüfbescheinig ng/Werkszeugnis		ABS	B U R E A U VERITAS		GL	

Shipping App	oroval	other		
Lloyd's Register		Umweltbestätigung	Bestätigungen	
LRS	PRS			

UL/CSA ratings:				
Yielded mechanical performance [hp] for three-phase				
AC motor				
● at 200/208 V				
— at inside-delta circuit at 50 °C rated value	hp	200		
● at 220/230 V				
— at standard circuit at 50 °C rated value	hp	150		
— at inside-delta circuit at 50 °C rated value	hp	250		
● at 460/480 V				
— at standard circuit at 50 °C rated value	hp	300		
— at inside-delta circuit at 50 °C rated value	hp	600		
Contact rating of auxiliary contacts according to UL		B300 / R300		

#### urther information

Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494917

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44472BC34

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW44472BC34

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW44472BC34&lang=en







