## SIEMENS

## Data sheet

## 3RW4457-6BC36



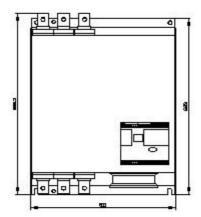
SIRIUS soft starter Values at 575 V, 50 °C standard: 780 A, 850 hp Inside-delta: 1351 A, 1500 hp 400-690 V AC, 115 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5556-6HA16<<

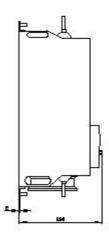
General technical data		
product brand name		SIRIUS
product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
thyristors		Yes
product function		
<ul> <li>intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>evaluation of thermistor 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
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		
<ul> <li>at 40 °C rated value</li> </ul>	А	880
<ul> <li>at 50 °C rated value</li> </ul>	А	780
<ul> <li>at 60 °C rated value</li> </ul>	А	693
operational current for 3-phase motors at inside-delta circuit		
<ul> <li>at 40 °C rated value</li> </ul>	А	1 524
<ul> <li>at 50 °C rated value</li> </ul>	А	1 351
<ul> <li>at 60 °C rated value</li> </ul>	А	1 200
yielded mechanical performance for 3-phase motors		
• at 400 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	VV	500 000
- at inside-delta circuit at 40 °C rated value	W	900 000
• at 500 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	W	630 000
- at inside-delta circuit at 40 °C rated value	W	1 000 000
<ul> <li>at 690 V at standard circuit at 40 °C rated value</li> </ul>	W	900 000

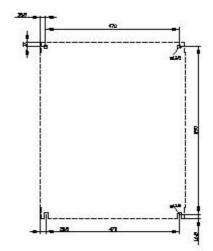
	- 0/	40
relative negative tolerance of the operating frequency	%	-10
relative positive tolerance of the operating frequency	%	10
operating voltage at standard circuit rated value	V	400 690
relative negative tolerance of the operating voltage at standard circuit	%	-15
relative positive tolerance of the operating voltage atstandard 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	176
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during	W	250
operation typical		
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	%	-10
voltage frequency	-	
relative positive tolerance of the control supply voltage frequency	%	10
control supply voltage 1 at AC		
<ul> <li>at 50 Hz rated value</li> </ul>	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	510
height	mm	640
depth	mm	290
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		screw-type 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 DIN		
cable lug for main contacts		50 240 mm²
<ul> <li>finely stranded</li> </ul>		50 240 IIIII

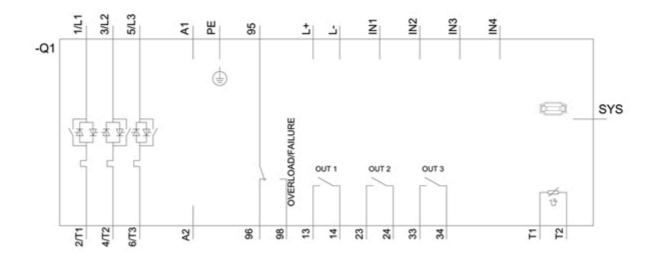
• stranded type of connectable conductor cross-sections for auxiliary contacts		70 240 mm	2	
		70 240 1111		
auxiliary contacts				
• solid		2x (0.5 2.5	·	
finely stranded with core end processing		2x (0.5 1.5	mm²)	
type of connectable conductor cross-sections at AWG				
cables				
<ul> <li>for main contacts</li> </ul>		2/0 500 kcm	nil	
<ul> <li>for auxiliary contacts</li> </ul>		2x (20 14)		
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>		2x (20 16)		
Ambient conditions				
installation altitude at height above sea level	m	5 000		
environmental category				
during transport acc. to IEC 60721		2K2, 2C1, 2S	1, 2M2 (max. fall heigh	nt 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 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
during operation acc. to IEC 60721				
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		IP00		
Certificates/ approvals				
	_			Declaration of
General Product Approval			EMC	Declaration of Conformity
CSA CCC UL		LIIL	RCM	EG-Konf.
CSA CCC UL		LIIL	RCM	EG-Konf.
Test Certificates Marine / Shipping			RCM	EG-Konf.
Test Certificates     Marine / Shipping       Special Test Certificates     Marine / Shipping		Llovd's Register UIS	RCM other Confirmation	EG-Konf.
Special Test Certific- ate		Lloyd's Register Uts		EG-Konf.
Special Test Certific- ate		Llovd's Register us		EG-Konf.
Special Test Certific- ate       Image: Certific- Image: Certific- ABS       Image: Certific- Image: Certifice		Lloyds Register uts		EG-Konf.
Special Test Certific- ate       Image: Certific- Image: Certific- I		Llovds Register urs		EG-Konf.
Special Test Certific- ate       Image: Certific- ate       Image: Certific- ate         JL/CSA ratings       Image: Certific- yielded mechanical performance [hp] for 3-phase AC motor         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V	hn	Lloyds		EG-Konf.
Special Test Certific- ate       Image: Constraints         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         — at standard circuit at 50 °C rated value	hp	LINS		EG-Konf.
Special Test Certific- ate       Image: Constraints         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         — at standard circuit at 50 °C rated value         — at inside-delta circuit at 50 °C rated value	hp hp	LINS		EG-Konf.
Special Test Certific- ate       Image: Constraints         JL/CSA ratings       Image: Constraints         yielded mechanical performance [hp] for 3-phase AC motor       Image: Constraints         • at 460/480 V	hp	1 200		EG-Konf.
Special Test Certific- ate       Image: Constraints         Special Test Certific- ate       Image: Constraints         JL/CSA ratings       Image: Constraints         yielded mechanical performance [hp] for 3-phase AC motor       Image: Constraints         Image: Image: Constraints       Image: Constraints         yielded mechanical performance [hp] for 3-phase AC motor       Image: Constraints         Image: Image: Constraints       Image: Constraints         Image: Image: Constraints       Image: Constraints         Image: Image: Constraints       Image: Constraints	hp hp	1 200 850		EG-Konf.
Special Test Certific- ate       Image: Constraints         JL/CSA ratings       Image: Constraints         yielded mechanical performance [hp] for 3-phase AC motor       Image: Constraints         • at 460/480 V	hp	1 200 850 1 500		EG-Konf.
Special Test Certific- ate       Image: Special Test Certific- ate         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value	hp hp	1 200 850		EG-Konf.
Special Test Certific- ate       Image: Special Test Certific- ate         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value	hp hp	1 200 850 1 500		EG-Konf.
Special Test Certific- ate       Image: Special Test Certific- ate         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at standard circuit at 50 °C rated value         • at standard circuit at 50 °C rated value         • at standard circuit at 50 °C rated value         • at standard circuit at 50 °C rated value         • at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         Turber information         Simulation Tool for Soft Starters (STS)	hp hp hp	1 200 850 1 500		EG-Konf.
Special Test Certific- ate         Special Test Certific- ate         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         Contact rating of auxiliary contacts according to UL         Further information         Simulation Tool for Soft Starters (STS)         https://support.industry.siemens.com/cs/ww/en/view/101494917	hp hp hp	1 200 850 1 500		EG-Konf.
Special Test Certific- ate         Special Test Certific- ate         JL/CSA ratings         yielded mechanical performance [hp] for 3-phase AC motor         • at 460/480 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at standard circuit at 50 °C rated value         - at inside-delta circuit at 50 °C rated value         • at 575/600 V         - at inside-delta circuit at 50 °C rated value         contact rating of auxiliary contacts according to UL         Further information         Simulation Tool for Soft Starters (STS)         https://support.industry.siemens.com/cs/ww/en/view/101494917         Information- and Downloadcenter (Catalogs, Brochures,)	hp hp hp	1 200 850 1 500		EG-Konf.
Special Test Certific- ate       Image:	hp hp hp	1 200 850 1 500 B300 / R300		EG-Konf.
Special Test Certific- ate       Image:	hp hp hp	1 200 850 1 500 B300 / R300		EG-Konf.

## Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW4457-6BC36 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4457-6BC36&lang=en









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