## SIEMENS

## Data sheet

## 3RW4457-6BC45



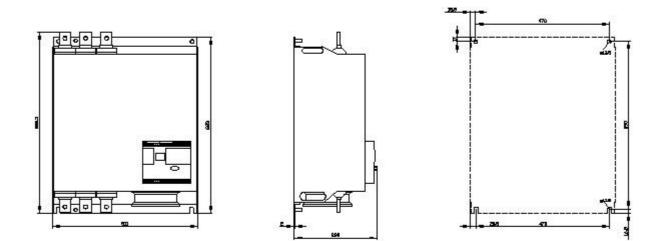
SIRIUS soft starter Values at 500 V, 40 °C standard: 880 A, 630 kW Inside-delta: 1524 A, 1000 kW 400-600 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5556-6HA16<<

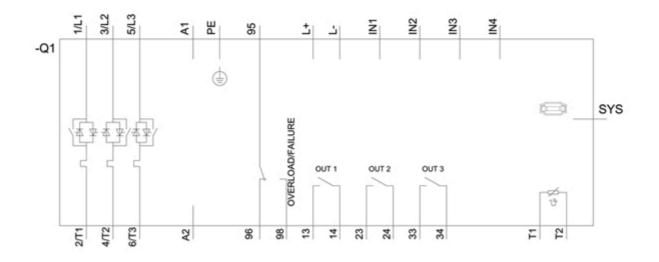
General technical data		
product brand name		SIRIUS
product feature	-	
<ul> <li>integrated bypass contact system</li> </ul>		Yes
thyristors		Yes
product function		
<ul> <li>intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>evaluation of thermistor 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
• at 60 °C rated value	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
• at 60 °C rated value	А	1 200
yielded mechanical performance for 3-phase motors		
● at 400 V		
- at standard circuit at 40 °C rated value	W	500 000
- at inside-delta circuit at 40 °C rated value	W	900 000
• at 500 V		
- at standard circuit at 40 °C rated value	W	630 000
— at inside-delta circuit at 40 °C rated value	W	1 000 000
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	400 600		
relative negative tolerance of the operating voltage atstandard 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	176		
continuous operating current [% of le] at 40 °C	%	115		
power loss [W] at operational current at 40 °C during operation typical	W	250		
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	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		
<ul> <li>for auxiliary and control circuit</li> </ul>		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				
<ul> <li>finely stranded</li> </ul>		50 240 mm²		
stranded		70 240 mm²		

type of connectable conductor cross-sections for					
auxiliary contacts					
• solid		2x (0.5 2.5 mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>	-	2x (0.5 1.5 mm²)			
type of connectable conductor cross-sections at AWG					
cables • for main contacts		2/0 500 kom	2/0 = 500 kemil		
			2/0 500 kcmil		
<ul> <li>for auxiliary contacts</li> <li>for auxiliary contacts finely stranded with core end</li> </ul>		2x (20 14)			
processing		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, 2S1, 2M2 (max. fall height 0.3 m)			
<ul> <li>during storage acc. to IEC 60721</li> </ul>		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	-		0	<i>,</i> .	
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	Conformity	
Test Certificates Marine / Shipping			other		
Special Test Certific- ate		Llovd's	Confirmation		
		Kegister			
ABS B U R E A L	J	LRS			
VERITAS	3				
UL/CSA ratings					
yielded mechanical performance [hp] for 3-phase AC motor					
• at 460/480 V					
<ul> <li>— at standard circuit at 50 °C rated value</li> </ul>	hp	700			
<ul> <li>— at inside-delta circuit at 50 °C rated value</li> <li>at 575/600 V</li> </ul>	hp	1 200			
— at standard circuit at 50 °C rated value					
— at inside-delta circuit at 50 °C rated value	hp	850			
contact rating of auxiliary contacts according to UL	hp hp	850 1 500			
J J J					
Further information		1 500			
Further information		1 500			
Further information Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494 Information- and Downloadcenter (Catalogs, Brochures,	hp	1 500	_		
Further information Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494 Information- and Downloadcenter (Catalogs, Brochures, https://www.siemens.com/ic10 Industry Mall (Online ordering system)	917 )	1 500 B300 / R300			
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Further information Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494 Information- and Downloadcenter (Catalogs, Brochures, https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/produc	hp 917 ) xt?mlfb=3RW	1 500 B300 / R300	<u>57-6BC45</u>		

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4457-6BC45&lang=en





last modified:

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