



SIRIUS soft starter Values at 460 V, 50 °C standard: 51 A, 30 hp Inside-delta: 88 A, 60 hp 200-460 V AC, 115 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5525-1HA14<<

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 according to EN 61346-2		Q
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750		G

Power Electronics

product designation		Soft starter
operational current		
• at 40 °C rated value	A	57
• at 50 °C rated value	A	51
• at 60 °C rated value	A	45
operational current for 3-phase motors at inside-delta circuit		
• at 40 °C rated value	A	99
• at 50 °C rated value	A	88
• at 60 °C rated value	A	78
yielded mechanical performance for 3-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	kW	15
— at inside-delta circuit at 40 °C rated value	kW	30
• at 400 V		
— at standard circuit at 40 °C rated value	kW	30
— at inside-delta circuit at 40 °C rated value	kW	55
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	15
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
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 [%]	%	8
adjustable motor current for motor overload protection minimum rated value	A	11
continuous operating current [% of I _e] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	36

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	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	170
height	mm	192
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		box terminal
• 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 main contacts for box terminal using the front clamping point		
• solid		2.5 ... 16 mm²
• finely stranded with core end processing		2.5 ... 35 mm²
• finely stranded without core end processing		4 ... 50 mm²
• stranded		4 ... 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		

<ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing • stranded 	2,5 ... 16 mm ² 2.5 ... 50 mm ² 10 ... 50 mm ² 10 ... 70 mm ²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing • stranded 	2x (2.5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) 2x (4 ... 35 mm ²) 2x (4 ... 50 mm ²)
type of connectable conductor cross-sections at AWG cables for main contacts for box terminal <ul style="list-style-type: none"> • using the back clamping point • using the front clamping point • using both clamping points 	10 ... 2/0 10 ... 2/0 2x (10 ... 1/0)
type of connectable conductor cross-sections for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded with core end processing 	2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²)
type of connectable conductor cross-sections at AWG cables <ul style="list-style-type: none"> • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing 	2x (20 ... 14) 2x (20 ... 16)

Ambient conditions		
installation altitude at height above sea level environmental category <ul style="list-style-type: none"> • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 	m	5 000
ambient temperature <ul style="list-style-type: none"> • during operation • during storage 	°C	60
derating temperature	°C	-25 ... +80
protection class IP on the front according to IEC 60529	°C	40
touch protection on the front according to IEC 60529		IP20
		finger-safe, for vertical contact from the front

Certificates/ approvals	
General Product Approval	EMC



[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
	Special Test Certificate	
	Type Test Certificates/Test Report	
Marine / Shipping	other	
		Confirmation

UL/CSA ratings

yielded mechanical performance [hp] for 3-phase AC motor

- at 200/208 V
 - at inside-delta circuit at 50 °C rated value
- at 220/230 V
 - at standard circuit at 50 °C rated value
 - at inside-delta circuit at 50 °C rated value
- at 460/480 V
 - at standard circuit at 50 °C rated value
 - at inside-delta circuit at 50 °C rated value

hp	25
hp	15
hp	30
hp	30
hp	60
	B300 / R300

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,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4425-1BC34>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4425-1BC34>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4425-1BC34>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4425-1BC34&lang=en



