



SIRIUS soft starter Values at 400 V, 40 °C standard: 970 A, 560 kW Inside-delta: 1680 A, 1000 kW 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5556-6HA14<<

General technical data		
product brand name		SIRIUS
product feature		
<ul style="list-style-type: none"> integrated bypass contact system thyristors 		Yes Yes
product function		
<ul style="list-style-type: none"> intrinsic device protection motor overload protection evaluation of thermistor motor protection external reset adjustable current limitation inside-delta circuit 		Yes Yes Yes Yes Yes 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 style="list-style-type: none"> at 40 °C rated value at 50 °C rated value at 60 °C rated value 	A A A	970 850 760
operational current for 3-phase motors at inside-delta circuit		
<ul style="list-style-type: none"> at 40 °C rated value at 50 °C rated value at 60 °C rated value 	A A A	1 680 1 472 1 316
yielded mechanical performance for 3-phase motors		
<ul style="list-style-type: none"> at 230 V <ul style="list-style-type: none"> at standard circuit at 40 °C rated value at inside-delta circuit at 40 °C rated value at 400 V <ul style="list-style-type: none"> at standard circuit at 40 °C rated value at inside-delta circuit at 40 °C rated value 	W W W W	315 000 560 000 560 000 1 000 000
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	300
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	194
continuous operating current [% of I _e] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	270
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
• 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		
• finely stranded		50 ... 240 mm ²
• stranded		70 ... 240 mm ²

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 main contacts • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing 		2/0 ... 500 kcmil 2x (20 ... 14) 2x (20 ... 16)

Ambient conditions

installation altitude at height above sea level	m	5 000
environmental category <ul style="list-style-type: none"> • during transport acc. to IEC 60721 • during storage acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
	<ul style="list-style-type: none"> • during operation acc. to IEC 60721 	
ambient temperature <ul style="list-style-type: none"> • during operation • during storage 	°C	60
	°C	-25 ... +80
derating temperature	°C	40
protection class IP on the front acc. to IEC 60529		IP00

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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Test Certificates Marine / Shipping

[Special Test Certificate](#)



other

[Confirmation](#)

UL/CSA ratings

yielded mechanical performance [hp] for 3-phase AC motor		
<ul style="list-style-type: none"> • at 200/208 V <ul style="list-style-type: none"> — at inside-delta circuit at 50 °C rated value • at 220/230 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value • at 460/480 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value 	hp	550 350 650 750 1 300
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=3RW4458-6BC44>

Cax online generator

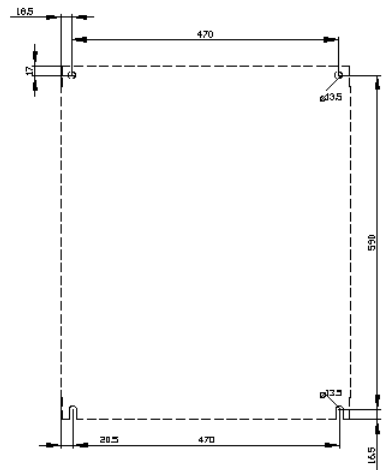
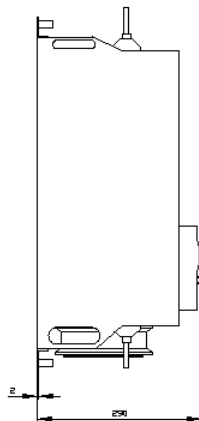
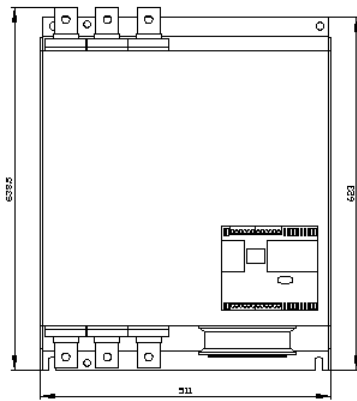
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4458-6BC44>

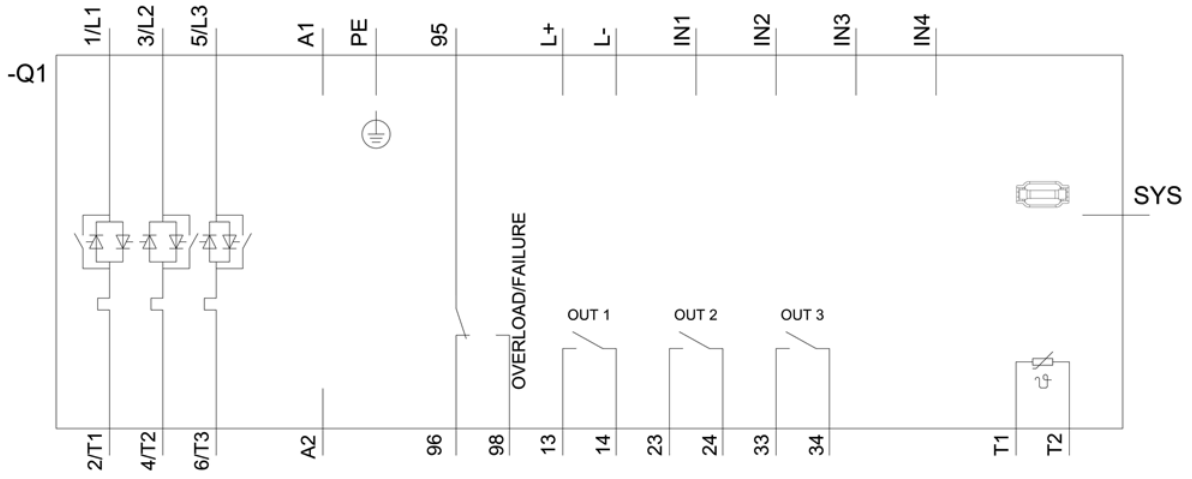
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4458-6BC44>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4458-6BC44&lang=en





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