SIEMENS

Data sheet 3RW4454-6BC35

SIRIUS soft starter Values at 575 V, 50 °C standard: 551 A, 600 hp Inside-delta: 954 A, 1050 hp 400-600 V AC, 115 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5552-6HA16<<

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	615
● at 50 °C rated value	A	551
● at 60 °C rated value	A	489
operational current for 3-phase motors at inside-delta circuit		
● at 40 °C rated value	A	1 065
● at 50 °C rated value	A	954
● at 60 °C rated value	A	847
yielded mechanical performance for 3-phase motors		
● at 400 V		
— at standard circuit at 40 °C rated value	kW	355
— at inside-delta circuit at 40 °C rated value	kW	630
● at 500 V		
— at standard circuit at 40 °C rated value	kW	400
— at inside-delta circuit at 40 °C rated value	kW	710
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 at	%	-15

standard circuit		
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	A	123
continuous operating current [% of Ie] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	186
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	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 mm²
● stranded		70 ... 240 mm²
type of connectable conductor cross-sections for auxiliary contacts		
● solid		2x (0.5 ... 2.5 mm²)
● finely stranded with core end processing		2x (0.5 ... 1.5 mm²)
type of connectable conductor cross-sections for AWG cables		
● for main contacts		2/0 ... 500 kcmil

● for auxiliary contacts		2x (20 ... 14)
● for auxiliary contacts finely stranded with core end processing		2x (20 ... 16)
Ambient conditions		
installation altitude at height above sea level	m	5 000
environmental category		
● during transport according to IEC 60721		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
● during storage according to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
● during operation according 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		
● during operation	°C	60
● during storage	°C	-25 ... +80
derating temperature	°C	40
protection class IP on the front according to IEC 60529		IP00

Certificates/ approvals

General Product Approval | **EMC**

Confirmation

Declaration of Conformity | **Test Certificates** | **Marine / Shipping**

Special Test Certificate

other

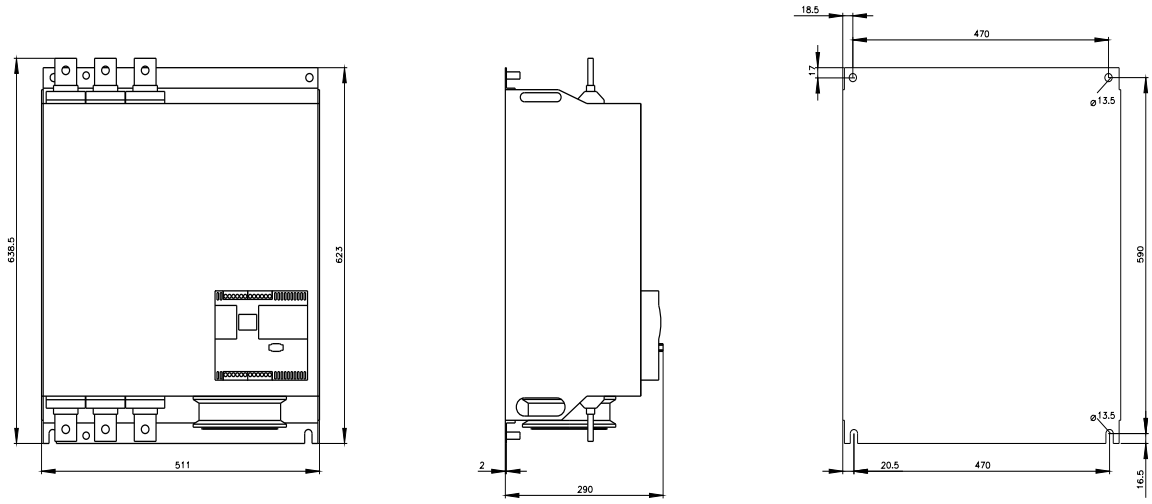
Confirmation

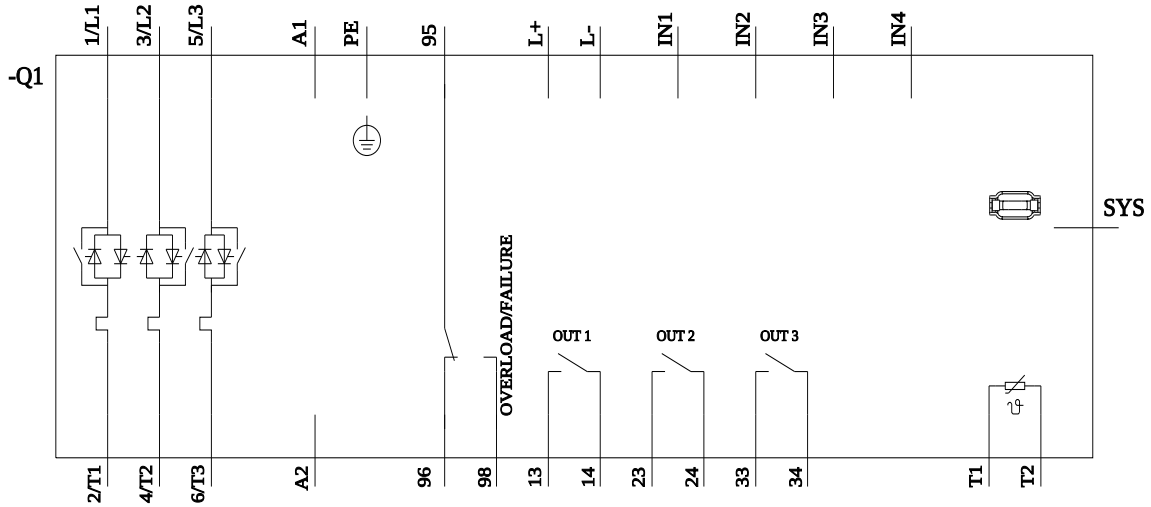
UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
● at 460/480 V		
— at standard circuit at 50 °C rated value	hp	450
— at inside-delta circuit at 50 °C rated value	hp	850
● at 575/600 V		
— at standard circuit at 50 °C rated value	hp	600
— at inside-delta circuit at 50 °C rated value	hp	1 050
contact rating of auxiliary contacts according to UL		B300 / R300

Further information

Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Simulation Tool for Soft Starters (STS)
https://support.industry.siemens.com/cs/ww/en/view/101494917
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
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=3RW4454-6BC35
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4454-6BC35
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RW4454-6BC35

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4454-6BC35&lang=en





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