SIEMENS

Data sheet 3RW30 46-1BB14

SIRIUS soft starter S3 80 A, 45 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC Screw terminals

General technical data		
Product brand name		SIRIUS
Product feature		
• integrated bypass contact system		Yes
• Thyristors		Yes
Product function		
• Intrinsic device protection		No
• motor overload protection		No
• Evaluation of thermistor motor protection		No
• External reset		No
• Adjustable current limitation		No
• inside-delta circuit		No
Product component Motor brake output		No
Reference identifier acc. to DIN EN 61346-2		Q
Reference indentifier acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics		
Product designation		Soft starter

Operating current		
• at 40 °C rated value	A	80
• at 50 °C rated value	A	73
• at 60 °C rated value	A	66
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	22 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	45 000
Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	20
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 ... 480
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [%]	%	10
Continuous operating current [% of Ie] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	12

Control electronics		
Type of voltage of the control supply voltage		AC/DC
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	V	110 ... 230
Control supply voltage 1 at AC at 60 Hz	V	110 ... 230
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
Control supply voltage 1 at DC	V	110 ... 230
Relative negative tolerance of the control supply voltage at DC	%	-15
Relative positive tolerance of the control supply voltage at DC	%	10

Display version for fault signal		red

Mechanical data

Size of engine control device		S3
Width	mm	70
Height	mm	170
Depth	mm	190
Mounting type		screw and snap-on mounting
Mounting position		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
Required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	30
• downwards	mm	40
Wire length maximum	m	300
Number of poles for main current circuit		3

Connections/Terminals

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		1
Number of CO contacts for auxiliary contacts		0
Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (2.5 ... 16 mm²)
• finely stranded with core end processing		2.5 ... 35 mm²
• stranded		4 ... 70 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (2.5 ... 16 mm²)
• finely stranded with core end processing		2.5 ... 50 mm²
• stranded		10 ... 70 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (2.5 ... 16 mm²)
• finely stranded with core end processing		2x (2.5 ... 35 mm²)
• stranded		2x (10 ... 50 mm²)
Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal		

• using the back clamping point		10 ... 2/0
• using the front clamping point		10 ... 2/0
• using both clamping points		2x (10 ... 1/0)
Type of connectable conductor cross-sections for DIN cable lug for main contacts		
• finely stranded		2 x (10 ... 50 mm²)
• stranded		2x (10 ... 70 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 at AWG conductors		
• for main contacts		2x (7 ... 1/0)
• for auxiliary contacts		2x (20 ... 14)

Ambient conditions

Installation altitude at height above sea level	m	5 000
Environmental category		
• during transport acc. to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
• during storage acc. to IEC 60721		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		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	-25 ... +60
• during storage	°C	-40 ... +80
Derating temperature	°C	40
Protection class IP		IP00

Certificates/approvals

General Product Approval				EMC	Declaration of Conformity
CCC	CSA	UL		C-Tick	EG-Konf.

Test Certificates		other		Railway
Type Test Certificates/Test Report	Special Test Certificate	Miscellaneous	Confirmation	Vibration and Shock

UL/CSA ratings

Yielded mechanical performance [hp] for three-phase AC motor		
• **at 220/230 V**		
— at standard circuit at 50 °C rated value	hp	25
• **at 460/480 V**		
— at standard circuit at 50 °C rated value	hp	50
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

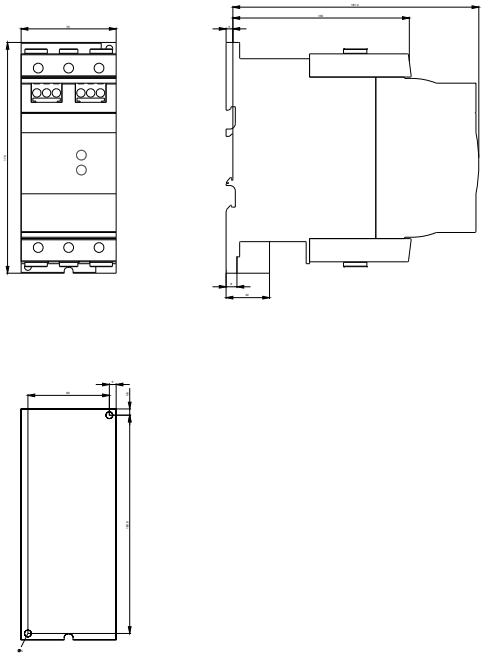
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

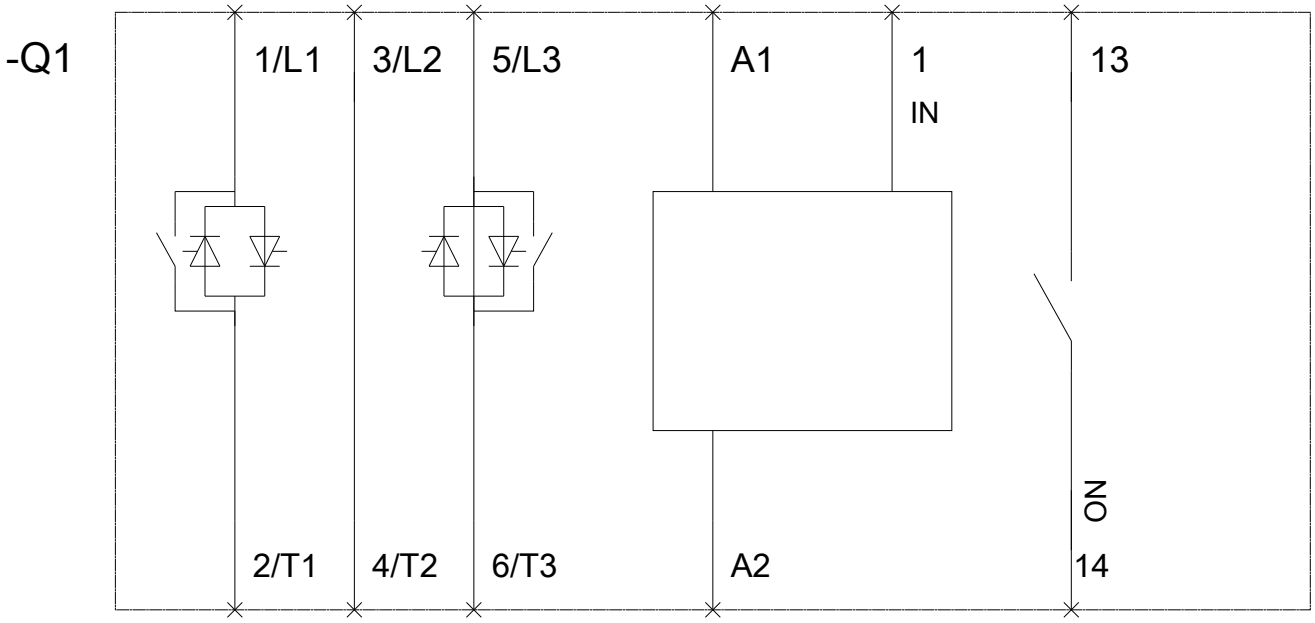
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW3046-1BB14

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3046-1BB14

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RW3046-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3046-1BB14&lang=en





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