SIEMENS

Data sheet 3RW4047-1BB14



SIRIUS soft starter S3 106 A, 55 kW/400 V, 40 $^{\circ}\text{C}$ 200-480 V AC, 110-230 V AC/DC Screw terminals

product brand name		SIRIUS
product designation		Soft starter
product feature		
integrated bypass contact system		Yes
• thyristors		Yes
product function		
intrinsic device protection		Yes
motor overload protection		Yes
evaluation of thermistor motor protection		No
external reset		Yes
adjustable current limitation		Yes
inside-delta circuit		No
product component motor brake output		No
insulation voltage rated value	V	600
degree of pollution		3, acc. to IEC 60947-4-2
blocking voltage of the thyristor maximum	V	1 600
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
ower Electronics		
operational current		
• at 40 °C rated value	Α	106
at 50 °C rated value	Α	98
• at 60 °C rated value	Α	90
yielded mechanical performance for 3-phase motors		
• at 230 V		
 at standard circuit at 40 °C rated value 	kW	30
• at 400 V		
— at standard 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	30
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	%	10
standard circuit		

adjustable motor current for motor overload protection minimum rated value	Α	46
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	21
Control circuit/ Control		
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 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
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		\$3
width	mm	70
height	mm	170
depth	mm	190
fastening method		screw and snap-on mounting
mounting position		With additional fan: With vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t
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	_	0
type of electrical connection		
for main current circuit for applications and control circuit		screw-type terminals
• for auxiliary and control circuit		screw-type terminals
number of NC contacts for auxiliary contacts		0
number of NO contacts for auxiliary contacts		2
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		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 processingstranded		2.5 50 mm ² 10 70 mm ²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (2.5 16 mm²)

		0 (0 5 05 3)
finely stranded with core end processing		2x (2.5 35 mm²)
• stranded	_	2x (10 50 mm²)
type of connectable conductor cross-sections for AWG cables for main contacts for box terminal		
 using the back clamping point 		2x (10 1/0)
 using the front clamping point 		2x (10 1/0)
using both clamping points		10 2/0
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 for AWG cables		
• for main contacts		2x (7 1/0)
 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	-25 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front according to IEC 60529		IP20
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front
Environmental footprint		
Global Warming Potential [CO2 eq] total	kg	175
Global Warming Potential [CO2 eq] during manufacturing	kg	23.7
global warming potential [CO2 eq] during sales	kg	0.471
Global Warming Potential [CO2 eq] during operation	kg	158
Global Warming Potential [CO2 eq] after end of life	kg	-6.65
UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	30
• at 460/480 V		
— at standard circuit at 50 °C rated value	hp	75
contact rating of auxiliary contacts according to UL		B300 / R300
Approvals Certificates		

General Product Approval







Confirmation





EMV For use in hazardous locations

Test Certificates



<u>KC</u>





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping other Railway







Confirmation

Special Test Certificate

Confirmation

Environment







Environmental Confirmations

Further information

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=3RW4047-1BB14

Cax online generator

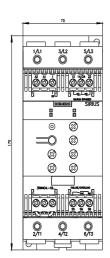
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4047-1BB14

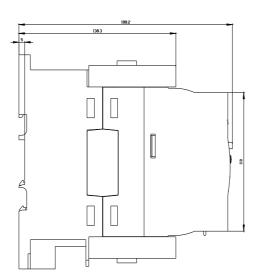
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

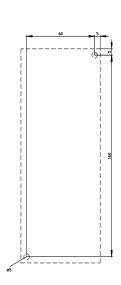
https://support.industry.siemens.com/cs/ww/en/ps/3RW4047-1BB14

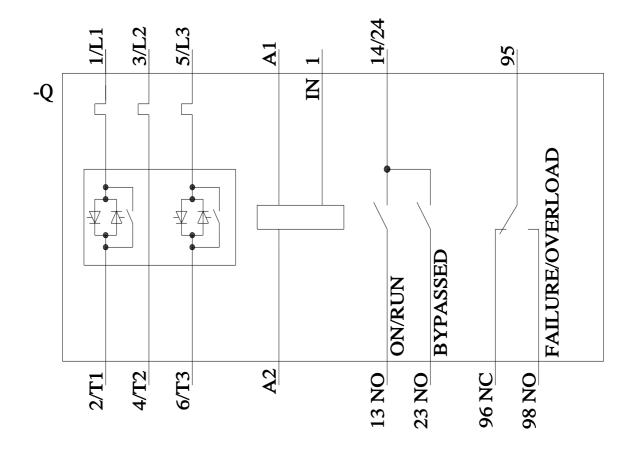
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4047-1BB14&lang=en









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