SIEMENS

Data sheet 3RW4047-2BB04



SIRIUS soft starter S3 106 A, 55 kW/400 V, 40 $^{\circ}\text{C}$ 200-480 V AC, 24 V AC/DC spring-type terminals

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 		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
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		
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 	W	30 000
● at 400 V		
 at standard circuit at 40 °C rated value 	W	55 000
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 standard circuit	%	10
minimum load [%]	%	20

adjustable motor current for motor overload protection minimum rated value	А	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	%	-10
voltage frequency relative positive tolerance of the control supply	%	10
voltage frequency		
control supply voltage 1 at AC		
 at 50 Hz rated value 	V	24
at 60 Hz rated value	. V	24
relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	20
relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 60 Hz	%	20
control supply voltage 1 at DC rated value	V	24
relative negative tolerance of the control supply voltage at DC	%	-20
relative positive tolerance of the control supply voltage at DC	%	20
display version for fault signal		red
Mechanical data		
size of engine control device		S3
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		
type of electrical connection		
for main current circuit		screw-type terminals
for auxiliary and control circuit		spring-loaded 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 mm ²
stranded stranded		4 70 mm ²
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 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 (0.25 2.5 mm²)
finely stranded with core end processing		2x (0.25 1.5 mm²)
type of connectable conductor cross-sections at AWG cables		
 for main contacts 		2x (7 1/0)
 for auxiliary contacts 		2x (24 14)
Ambient conditions		
installation altitude at height above sea level	m	5 000
environmental category		
 during transport acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
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 on the front acc. to IEC 60529		IP20
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front
Certificates/ approvals		

Certificates/ approvals

General Product Approval

EMC

For use in hazardous locations













Declaration of Conformity

Test Certificates

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







other Railway

<u>Confirmation</u> <u>Vibration and Shock</u> <u>Confirmation</u>

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		

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=3RW4047-2BB04

Cax online generator

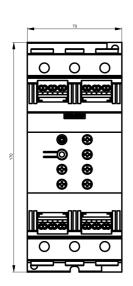
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4047-2BB04

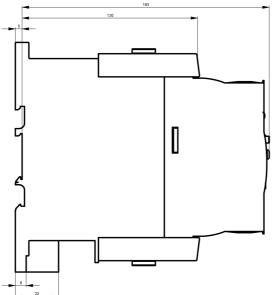
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

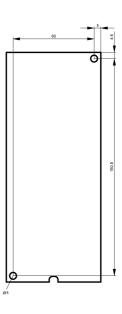
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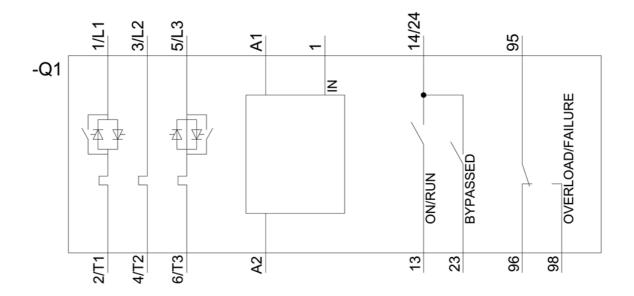
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4047-2BB04&lang=en









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