Siemens □□□ Series Service Manual

3RW4076-6BB44

1. Description

3RW4076-6BB44

2. Specifications

Specification	Value
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 A 432
●	at 50 °C rated value A 385
●	at 60 °C rated value A 335
yielded	mechanical performance for 3-phase motors
●	at 230 V
—	at standard circuit at 40 °C rated value W 132 000
●	at 400 V
—	at standard circuit at 40 °C rated value W 250 000
yielded	mechanical performance [hp] for 3-phase AC
motor	at 200/208 V at standard circuit at 50 °C rated
val	

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3. Product Information

3RW4076-6BB44

SIRIUS soft starter S12 432 A, 250 kW/400 V, 40 °C 200-460

V AC, 230 V AC Screw terminals !!! Phased-out product !!!

Successor is SIRIUS 3RW5, Preferred successor type is

>>3RW5076-6AB14<<

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 A 432

● at 50 °C rated value A 385

● at 60 °C rated value A 335

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yielded mechanical performance for 3-phase motors

● at 230 V

— at standard circuit at 40 °C rated value W 132 000

● at 400 V

— at standard circuit at 40 °C rated value W 250 000

yielded mechanical performance [hp] for 3-phase AC

motor at 200/208 V at standard circuit at 50 °C rated

value

hp 125

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 % 10

standard circuit

minimum load [%] % 20

adjustable motor current for motor overload

protection minimum rated value

A 207

continuous operating current [% of Ie] at 40 °C % 115

power loss [W] at operational current at 40 °C during

operation typical

W 165

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 red

Mechanical data

size of engine control device S12

width mm 160

height mm 230

depth mm 278

fastening method screw fixing

mounting position With additional fan: With vertical mounting surface +/-90

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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 100

● at the side mm 5

● downwards mm 75

wire length maximum m 300

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 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

● finely stranded with core end processing 70 ... 240 mm²

● finely stranded without core end processing 70 ... 240 mm²

● stranded 95 ... 300 mm²

type of connectable conductor cross-sections for

main contacts for box terminal using the back

clamping point

● finely stranded with core end processing 120 ... 185 mm²

● finely stranded without core end processing 120 ... 185 mm²

stranded 120 ... 240 mm²

type of connectable conductor cross-sections for
main contacts for box terminal using both clamping
points
● finely stranded with core end processing min. 2x 50 mm², max. 2x 185 mm²
● finely stranded without core end processing min. 2x 50 mm², max. 2x 185 mm²
● stranded max. 2x 70 mm², max. 2x 240 mm²
type of connectable conductor cross-sections at AWG
cables for main contacts for box terminal
● using the back clamping point 250 ... 500 kcmil
● using the front clamping point 3/0 ... 600 kcmil
● using both clamping points min. 2x 2/0, max. 2x 500 kcmil
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 at 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 acc. to IEC 60721 2K2, ACC 7S, 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 IP00
Certificates/ approvals
General Product Approval EMC

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