

# Siemens 3RW4454-6BC44 Manual

|                |                                                  |
|----------------|--------------------------------------------------|
| Brand          | Siemens                                          |
| Product Series | Siemens                                          |
| Product Type   | of voltage / of the controlled supply voltage AC |

## Description

3RW4454-6BC44

SIRIUS SOFT STARTER, VALUES AT 400V,  
40DEG., STANDARD: 615A, 355KW,  
INSIDE-DELTA CIRCUIT 3: 1065A, 630KW,  
200-460V AC, 230V AC, SCREW TERMINALS

General details:

product brand name SIRIUS

Product equipment

integrated bridging contact system Yes

thyristors Yes

Product function

intrinsic device protection Yes

motor overload protection Yes

evaluation of thermal resistor motor protection Yes

reset external Yes

adjustable current limitation Yes

inside-delta circuit Yes

Product component / outlet for engine brake Yes

Item designation

according to DIN EN 61346-2 Q

according to DIN 40719 extendable after IEC 204-2 / according  
to IEC 750

G

Power Electronics:

Product designation soft starters for high feature applications

Operating current

at 40 °C / rated value A 615

at 50 °C / rated value A 551

at 60 °C / rated value A 489

for three-phase servomotors / at 3-phase root switching

at 40 °C / rated value A 1,065

at 50 °C / rated value A 954

at 60 °C / rated value A 847

Emitted mechanical power / for three-phase servomotors

at 230 V / at standard switching / at 40 °C

rated value W 200,000

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at 400 V / at standard switching / at 40 °C

rated value W 355,000

at 230 V / at 3-phase root switching / at 40 °C

rated value W 355,000

at 400 V / at 3-phase root switching / at 40 °C

rated value W 630,000

yielded mechanical performance (hp) / for three-phase squirrel  
cage motors / at 200/208 V / at standard circuit / at 50 °C / rated  
value

hp 150

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 / with standard circuit / rated value V 200 ... 460

Relative negative tolerance / of the operating voltage / with  
standard circuit

% -15

Relative positive tolerance / of the operating voltage / with  
standard circuit

% 10

Operating voltage / at 3-phase root switching / rated value V 200 ... 460

Relative negative tolerance / of the operating voltage / with  
inside-delta circuit

% -15

Relative positive tolerance / of the operating voltage / with  
inside-delta circuit

% 10

Minimum load in % of  $I_M$  % 8

Adjustable rated current / of the motor / for motor overload  
protection / minimum

A 123

Continuous operating current in % of  $I_e$  / at 40°C % 115

Active power loss / at operating current / at 40°C / during  
operating phase / typical

W 186

Control electronics:

Type of voltage / of the controlled 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 50 Hz / for AC V 230

at 60 Hz / for AC V 230

Relative negative tolerance / of the control supply voltage / at 60

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Hz / for AC

% -15

Relative positive tolerance / of the control supply voltage / at 60

Hz / for AC

% 10

Type of display / for fault signal Display

Mechanical design:

Width mm 510

Height mm 640

Depth mm 290

Type of mounting screw fixing

mounting position bei senkrechter Montageebene +/-90° drehbar, bei

senkrechter Montageebene +/- 22,5° nach vorne und

hinten kippbar

Distance, to be maintained, to the ranks assembly

upwards mm 100

sideways mm 5

downwards mm 75

Installation altitude / at a height over sea level m 5,000

Cable length / maximum m 500

Number of poles / for main current circuit 3

Electrical connections:

Design of the electrical connection

for main current circuit busbar connection

for auxiliary and control current circuits screw type terminals

Number of NC contacts / for auxiliary contacts 0

Number of NO contacts / for auxiliary contacts 3

Number of changeover contacts / for auxiliary contacts 1

Type of the connectable conductor cross-section / for DIN cable

lug / for main contacts

finely stranded 50 ... 240 mm<sup>2</sup>

stranded 70 ... 240 mm<sup>2</sup>

Type of the connectable conductor cross-section

for AWG conductors / for main contacts 2/0 ... 500 kcmil

Type of the connectable conductor cross-section

for auxiliary contacts

solid 2x (0.5 ... 2.5 mm<sup>2</sup>)

finely stranded / with conductor end processing 2x (0.5 ... 1.5 mm<sup>2</sup>)

for AWG conductors / for auxiliary contacts 2x (20 ... 14)

finely stranded / with wire end proc 2x (20 ... 16)

Ambient conditions:

Ambient temperature

during operating / °C 60

during storage °C -25 ... +80

Derating temperature °C 40

Protection class IP IP00

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