# **SIEMENS**

Product data sheet 3RW3037-2BB04



SIRIUS SOFT STARTER, SIZE S2, 63A, 30KW/400V, 40 DEGREES, 200-480V AC, 24V AC/DC, SPRING-LOADED TERMINALS

General details:		
Product brand name		SIRIUS
Product equipment		
• integrated bridging contact system		Yes
• thyristors		Yes
Product function		
• intrinsic device protection		No
motor overload protection		No
• evaluation of thermal resistor motor protection		No
• reset external		No
adjustable current limitation		No
• inside-delta circuit		No
Product component / outlet for enine brake		No
Item designation		
• according to DIN EN 61346-2		Q
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		G

Operating current

Power Electronics: product designation

soft starters for standard applications

at 40 °C / rated value at 50 °C / rated value at 60 °C / rated value  at 60 °C / rated value  A 58  Emitted mechanical power / for three-phase servomotors at 230 V / at standard switching / at 40 °C arated value  at 400 V / at standard switching / at 40 °C arated value  w 30,000  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value  Operating frequency arated value  Hz 50 60  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of LM  Continuous operating current in % of Le / at 40°C  Active power loss / at operating current / at 40°C / during operating phase / typical			
e at 60 °C / rated value  Emitted mechanical power / for three-phase servomotors  • at 230 V / at standard switching / at 40 °C  • rated value  • at 400 V / at standard switching / at 40 °C  • rated value  • rated value  W 30,000  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v v alue  Operating frequency  • rated value  Hz 50 60  Relative negative tolerance / of the operating frequency  Pelative positive tolerance / of the operating frequency  Pelative negative tolerance / of the operating frequency  Pelative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  W 10  Continuous operating current in % of I_e / at 40°C  % 115	• at 40 °C / rated value	Α	63
Emitted mechanical power / for three-phase servomotors  • at 230 V / at standard switching / at 40 °C  • rated value  • at 400 V / at standard switching / at 40 °C  • rated value  W 30,000  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v alue  Operating frequency  • rated value  Hz 50 60  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating frequency  Poperating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of Le / at 40°C / during  W 12	• at 50 °C / rated value	Α	58
at 230 V / at standard switching / at 40 °C  in rated value  at 400 V / at standard switching / at 40 °C  in rated value  W 30,000  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value  Operating frequency  in rated value  At 50 60  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating frequency  Relative negative tolerance / of the operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	• at 60 °C / rated value	Α	53
• rated value  • at 400 V / at standard switching / at 40 °C  • rated value  W 30,000  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v alue  Operating frequency  • rated value  Hz 50 60  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  W 10  Continuous operating current in % of Le / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	Emitted mechanical power / for three-phase servomotors		
* at 400 V / at standard switching / at 40 °C     * rated value  Vielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v lue  Operating frequency     * rated value  Hz 50 60  Relative negative tolerance / of the operating frequency  Pelative positive tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  V 200 480  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit  No in the operating voltage / with standard circuit / rated value  V 200 480  10  10  Continuous operating current in % of I_e / at 40°C  No in the operating voltage / with standard circuit / rated value  V 200 480  10  10  11  12	• at 230 V / at standard switching / at 40 °C		
• rated value  yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v alue  Operating frequency • rated value  Relative negative tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C / during  W 12	• rated value	W	18,500
yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v alue  Operating frequency  • rated value  Relative negative tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	$\bullet$ at 400 V / at standard switching / at 40 °C		
cage motors / at 200/208 V / at standard circuit / at 50 °C / rated V alue  Operating frequency  • rated value  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  V 200 480  Relative negative tolerance / of the operating voltage / with standard circuit  Relative negative tolerance / of the operating voltage / with standard circuit  Winimum load in % of I_M  Continuous operating current in % of I_e / at 40°C / during  W 12	• rated value	W	30,000
• rated value  Relative negative tolerance / of the operating frequency  Relative positive tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  V 200 480  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	cage motors / at 200/208 V / at standard circuit / at 50 °C / rated v	hp	15
Relative negative tolerance / of the operating frequency % -10  Relative positive tolerance / of the operating frequency % 10  Operating voltage / with standard circuit / rated value V 200 480  Relative negative tolerance / of the operating voltage / with standard circuit % -15  Relative positive tolerance / of the operating voltage / with standard circuit % 10  Minimum load in % of I_M % 10  Continuous operating current in % of I_e / at 40°C % 115  Active power loss / at operating current / at 40°C / during W 12	Operating frequency		
Relative positive tolerance / of the operating frequency  Operating voltage / with standard circuit / rated value  V 200 480  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 10	• rated value	Hz	50 60
Operating voltage / with standard circuit / rated value  Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  V 200 480  -15  10  10  V 200 480  -15  -15  -15  -15  -15  -15  -10  -15  -10  -10	Relative negative tolerance / of the operating frequency	%	-10
Relative negative tolerance / of the operating voltage / with standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	Relative positive tolerance / of the operating frequency	%	10
standard circuit  Relative positive tolerance / of the operating voltage / with standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W 12	Operating voltage / with standard circuit / rated value	V	200 480
standard circuit  Minimum load in % of I_M  Continuous operating current in % of I_e / at 40°C  Active power loss / at operating current / at 40°C / during  W  10  115  W  12		%	-15
Continuous operating current in % of I_e / at 40°C  % 115  Active power loss / at operating current / at 40°C / during  W 12	· · · · · · · · · · · · · · · · · · ·	%	10
Active power loss / at operating current / at 40°C / during W 12	Minimum load in % of I_M	%	10
	Continuous operating current in % of I_e / at 40°C	%	115
		W	12

Control electronics:		
Type of voltage / of the controlled 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 50 Hz / for AC	V	24
• at 60 Hz / for AC	V	24
Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC	%	-10
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	10
Control supply voltage / 1 / for DC / rated value	V	24
Relative negative tolerance / of the control supply voltage / for DC	%	-10

Relative positive tolerance / of the control supply voltage / for DC	%	10
Type of display / for fault signal		red

Mechanical design:		
Size of the engine control device		S2
Width	mm	55
Height	mm	160
Depth	mm	170
Type of mounting		screw and snap-on mounting
Built in orientation		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
Distance, to be maintained, to the ranks assembly		
• upwards	mm	60
• sidewards	mm	30
• downwards	mm	40
Altitude of installation site / at a height over sea level	m	5,000
Cable length / maximum	m	300
Number of poles / for main current circuit		3

Electrical connections:	
Design of the electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	1
Number of change-over switches / for auxiliary contacts	0
Type of the connectable conductor cross section / for main contacts / for box terminal / when using the front clamping point	
• solid	2x (1.5 16 mm²)
• finely stranded / with conductor end processing	0.75 25 mm²
• stranded	0.75 35 mm²
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point	
• solid	2x (1.5 16 mm²)
<ul> <li>finely stranded / with conductor end processing</li> </ul>	1.5 25 mm²
• stranded	1.5 35 mm²
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points	
• solid	2x (1.5 16 mm²)
• finely stranded / with conductor end processing	2x (1.5 16 mm²)

• stranded	2x (1.5 25 mm²)
Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal	
when using the back cl amping point	16 2
when using the front c lamping point	18 2
when using both clampi ng points	2x (16 2)
Type of the connectable conductor cross-section	
for auxiliary contacts	
• solid	2x (0.25 2.5 mm²)
• finely stranded / with conductor end processing	2x (0.25 1.5 mm²)
for AWG conductors / for auxiliary contacts	2x (24 14)

Ambient conditions:		
Ambient temperature		
during operating	°C	-25 60
during storage	°C	-40 80
Derating temperature	°C	40
Protection class IP		IP00

## Certificates/approvals:

### **General Product Approval**

CQC

**ROSTEST** 

other

Manufacturer

Manufacturer

**Test Certificates** 





GL

# **UL/CSA** ratings

### yielded mechanical performance (hp) / for three-phase squirrel cage motors

- at 220/230 V / at standard circuit
  - at 50 °C / rated v alue
- at 460/480 V / at standard circuit
  - at 50 °C / rated v alue

20 hp

40 hp

## Further information:

#### Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

#### **CAx-Online-Generator**

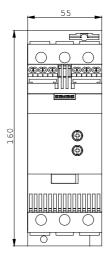
http://www.siemens.com/cax

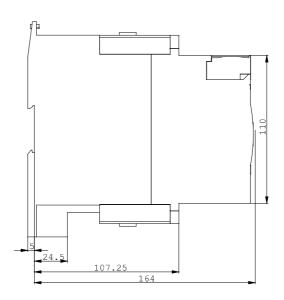
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

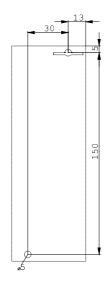
http://support.automation.siemens.com/WW/view/en/3RW3037-2BB04/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RW3037-2BB04







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