## **SIEMENS**

Product data sheet 3RW4038-1BB05

SIRIUS SOFT STARTER, S2, 72A, 45KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, 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	
<ul> <li>evaluation of thermal resistor motor protection</li> </ul>	No	
• reset external	Yes	
adjustable current limitation	Yes	
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	

Power Electronics:		
product designation		soft starters for standard applications
Operating current		
• at 40 °C / rated value	Α	72
• at 50 °C / rated value	Α	62
• at 60 °C / rated value	Α	60
Emitted mechanical power / for three-phase servomotors		
• at 400 V / at standard switching / at 40 °C		
• rated value	W	37,000
• at 500 V / at standard switching / at 40 °C		
• rated value	W	45,000
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	400 600
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	%	20
Adjustable rated current / of the motor / for motor overload protection / minimum	А	35
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	15

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 $$ Hz / for AC $$	%	-20
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	20
Control supply voltage / 1 / for DC / rated value	V	24
Relative negative tolerance / of the control supply voltage / for DC	%	-20
Relative positive tolerance / of the control supply voltage / for DC	%	20
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
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

Distance, to be maintained, to the ranks assembly		
• upwards	mm	60
• sidewards	mm	30
• downwards	mm	40
Installation altitude / at a height over sea level	m	5,000
Cable length / maximum	m	300
Number of poles / for main current circuit		3

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Electrical connections:	
Design of the electrical connection	
• for main current circuit	screw-type terminals
for auxiliary and control current circuit	screw-type terminals
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	2
Number of change-over switches / for auxiliary contacts	1
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 mm <sup>2</sup>
• 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)
• finely stranded / with conductor end processing	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	16 2
when using the front c	18 2
when using both clampi	2x (16 2)
Type of the connectable conductor cross-section	
for auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
• finely stranded / with conductor end processing	2x (0.5 1.5 mm²)
• for AWG conductors / for auxiliary contacts	2x (20 14)
• finely stranded / with wire end proc	2x (20 16)
tinely stranded / with wire end proc	2x (20 16)

Ambient conditions:		
Ambient temperature		
during operating	°C	-25 +60
during storage	°C	-40 <b>+</b> 80
Derating temperature	°C	40
Protection class IP		IP00

## Certificates/approvals:

**General Product Approval** 

**EMC** 

For use in hazardous locations













**Test Certificates** 

**Shipping Approval** 

other

r

Type Test
Certificates/Test
Report



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LRS



Declaration of Conformity

Environmental Confirmations

## **UL/CSA** ratings

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

• at 460/480 V / at standard circuit

• at 50 °C / rated v alue

• at 575/600 V / at standard circuit

• at 50 °C / rated v

aiue

hp

40

hp 60

Contact rating designation / for auxiliary contacts / according to UL

B300 / R300

## 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** 

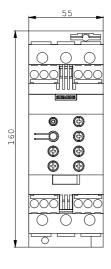
http://www.siemens.com/cax

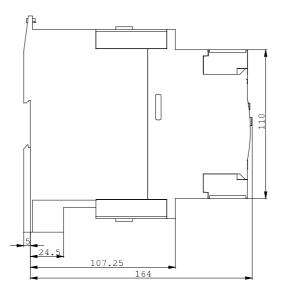
 ${\bf Service \& Support\ (Manuals,\ Certificates,\ Characteristics,\ FAQs,...)}$ 

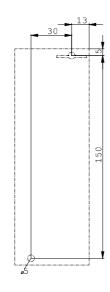
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RW4038-1BB05/all}}$ 

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RW4038-1BB05







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