# **SIEMENS**

Data sheet 3RW40 28-2BB04



SIRIUS SOFT STARTER, S0, 38A, 18.5KW/400V, 40 DEGR., AC 200-480V, AC/DC 24V, SPRING-LOADED TERMINALS

General technical data:		
product brand name		SIRIUS
Product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
Thyristors		Yes
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>Evaluation of thermistor motor protection</li> </ul>		No
External reset		Yes
<ul> <li>Adjustable current limitation</li> </ul>		Yes
• inside-delta circuit		No
Product component Motor brake output		No
Equipment marking acc. to DIN EN 61346-2		Q
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics:		
Product designation		soft starters for standard applications
Operating current		
● at 40 °C Rated value	Α	38
● at 50 °C Rated value	Α	34
• at 60 °C Rated value	Α	31
Mechanical power output for three-phase motors		
● at 230 V		

	W	11 000
<ul> <li>— at standard circuit at 40 °C Rated value</li> </ul>	VV	11 000
● at 400 V		
<ul> <li>— at standard circuit at 40 °C Rated value</li> </ul>	W	18 500
yielded mechanical performance [hp] for three-phase	metric	10
AC motor at 200/208 V at standard circuit at 50 °C	hp	
Rated value		
Operating frequency Rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency		
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	%	-15
at standard circuit		
Relative positive tolerance of the operating voltage at	%	10
standard circuit		
Minimum load in % of I_M	%	20
Adjustable motor current for motor overload	Α	23
protection minimum rated value		
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	19
operation typical		
Control electronics:		

Control electronics:		
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 voltage frequency	%	-10
Relative positive tolerance of the control supply voltage frequency	%	10
Control supply voltage 1 with AC		
● at 50 Hz Rated value	V	24
• at 60 Hz Rated value	V	24
Relative negative tolerance of the control supply voltage with AC at 60 Hz	%	-20
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	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
Display version for fault signal		red

Mechanical data:		
Size of engine control device	S0	

Width	mm	45
Height	mm	150
Depth	mm	155
Mounting type	_	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	15
• downwards	mm	40
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	300
Number of poles for main current circuit		3
Connections/ Terminals:		
Type of electrical connection		
for main current circuit		spring-loaded 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		2
Number of CO contacts for auxiliary contacts		1
Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
<ul><li>using the front clamping point</li></ul>		1x 8, 2x (16 10)
Type of connectable conductor cross-section for main contacts		
• solid		1 10 mm²
• finely stranded with core end processing		1 6 mm²
Type of connectable conductor cross-section for auxiliary contacts		

• solid

**AWG** conductors

• for main contacts

• for auxiliary contacts

• finely stranded with core end processing

Type of connectable conductor cross-section for

2x (0.25 ... 2.5 mm²)

2x (0.25 ... 1.5 mm²)

16 ... 10, 1x 8

2x (24 ... 14)

Ambient conditions:		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
during storage	°C	-40 +80
Derating temperature	°C	40
Protection class IP		IP20

### Certificates/ approvals:

General Product Approval EMC For use in hazardous locations













## **Test Certificates**

# **Shipping Approval**

Type Test
Certificates/Test
Report

Special Test Certificate









GL

## other

Declaration of<br/>ConformityEnvironmental<br/>Confirmations

UL/CSA ratings:		
yielded mechanical performance [hp] for three-phase		
AC motor		
● at 220/230 V		
— at standard circuit at 50 °C Rated value	metric hp	10
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	25
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

### Further information

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

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

Industry Mall (Online ordering system)

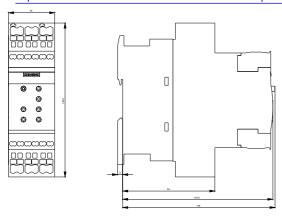
http://www.siemens.com/industrymall

## Cax online generator

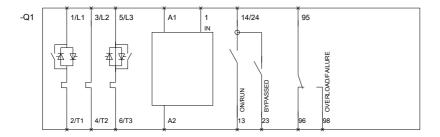
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40282BB04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="http://support.automation.siemens.com/WW/view/en/3RW40282BB04/all">http://support.automation.siemens.com/WW/view/en/3RW40282BB04/all</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40282BB04&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40282BB04&lang=en</a>







**last modified:** 15.01.2015