SIEMENS

3RW40 28-1BB14 Data sheet



SIRIUS SOFT STARTER, S0, 38A, 18.5KW/400V, 40 DEGR., AC 200-480V, AC/DC 110-230V, SCREW **TERMINALS**

General technical data		
product brandname	SIRIUS	
 Product equipment Integrated bypass contact system 	Yes	
 Product feature 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	
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 starter

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		
— at standard circuit at 40 °C rated value	W	11 000
● at 400 V		
— at standard circuit at 40 °C rated value	W	18 500
Yielded mechanical performance [hp] for three-phase	hp	10
AC motor at 200/208 V at standard circuit at 50 °C		
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 at standard circuit	%	-15
Relative positive tolerance of the operating voltage at	%	10
standard circuit		
Minimum load [% of IM]	%	20
Adjustable motor current for motor overload	Α	23
protection minimum rated value	0/	445
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	19
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 at AC at 50 Hz	V	110 230
Control supply voltage 1 at AC at 60 Hz	V	110 230
Relative negative tolerance of the control supply	%	-15
voltage at AC at 60 Hz		
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Control supply voltage 1 at DC	V	110 230
Relative negative tolerance of the control supply voltage at DC	%	-15

Relative positive tolerance of the control supply	%	10
voltage at DC		
Display version for fault signal		red

Mechanical data		
Size of engine control device		S0
Width	mm	45
Height	mm	125
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
Wire length maximum	m	300
Number of poles for main current circuit		3

Connections/Terminals	
Type of 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 CO contacts for auxiliary contacts	1
Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point	
• solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²)
Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal	
 using the front clamping point 	1x 8, 2x (16 10)
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 conductors	
• 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 		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
 during storage acc. to IEC 60721 		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
 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		IP20		

Certificates/approvals

General Product Approval	EMC	For use in
		hazardous
		locations













Declaration of Conformity	Test Certificates		Shipping App	proval	
ϵ	Special Test Certificate	Type Test Certificates/Test Report		Lloyd's Register	
EG-Konf.			GL	LRS	PRS

other

 $\frac{\text{Environmental}}{\text{Confirmations}}$

Confirmation

UL/CSA ratings

Yielded mechanical performance [hp] for three-phase		
AC motor		
● at 220/230 V		
— at standard circuit at 50 °C rated value	hp	10
● at 460/480 V		
— at standard circuit at 50 °C rated value	hp	25
Contact rating of auxiliary contacts according to UL		B300 / R300

Further information

Simulation Tool for Soft Starters (STS)

https://support.industry.siemens.com/cs/ww/en/view/101494917

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4028-1BB14

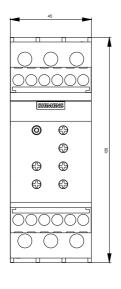
Cax online generator

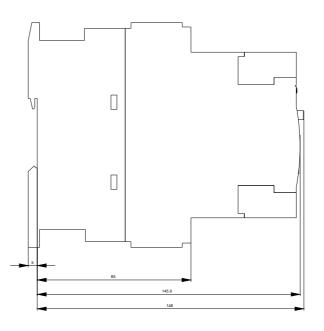
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4028-1BB14

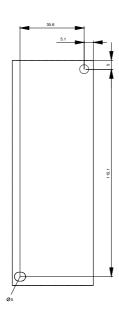
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

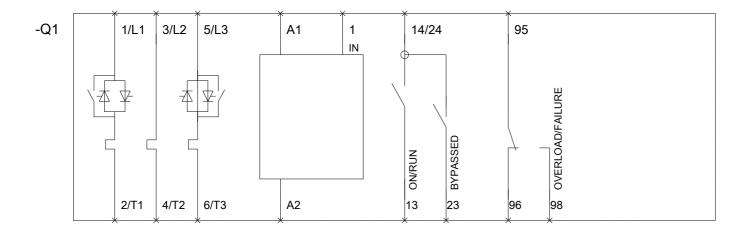
https://support.industry.siemens.com/cs/ww/en/ps/3RW4028-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4028-1BB14&lang=en









last modified: 07/20/2017