SIEMENS

Data sheet 3RW4028-1BB05



SIRIUS soft starter S0 38 A, 22 kW/500 V, 40 $^{\circ}\text{C}$ 400-600 V AC, 24 V AC/DC Screw terminals

General technical data					
product brand name		SIRIUS			
product feature					
 integrated bypass contact system 		Yes			
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			
insulation voltage rated value	V	600			
degree of pollution		3, acc. to IEC 60947-4-2			
reference code acc. to DIN EN 61346-2		Q			
reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G			
Power Electronics	Power Electronics				
product designation		Soft starter			
operational current					
 at 40 °C rated value 	Α	38			
 at 50 °C rated value 	Α	34			
• at 60 °C rated value	Α	31			
yielded mechanical performance for 3-phase motors					
• at 400 V					
 at standard circuit at 40 °C rated value 	kW	18.5			
● at 500 V					
 at standard circuit at 40 °C rated value 	kW	22			
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 at standard circuit rated value	V	400 600			
relative negative tolerance of the operating voltage at standard circuit	%	-15			
relative positive tolerance of the operating voltage at standard circuit	%	10			
minimum load [%]	%	20			
adjustable motor current for motor overload protection minimum rated value	А	23			

continuous operating current [0/ sf la] at 40 90	0/	115
continuous operating current [% of le] at 40 °C power loss [W] at operational current at 40 °C during	- % W	115 19
operation typical	VV	13
Control circuit/ Control		
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 rated value 	V	24
at 60 Hz rated value	V	24
relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	20
relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 60 Hz	%	20
control supply voltage 1 at DC rated value	V	24
relative negative tolerance of the control supply voltage at DC	%	-20
relative positive tolerance of the control supply voltage at DC	%	20
display version for fault signal		red
Mechanical data		
size of engine control device		S0
width	mm	45
height	mm	125
depth	mm	155
fastening method		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 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 cables 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)
		2x (0.5 1.5 mm²)

type of connectable conductor cross-sections at AWG cables		
 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 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
 during storage acc. to IEC 60721 		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 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 on the front acc. to IEC 60529		IP20
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front

Certificates/ approvals

General Product Approval

ЕМС

For use in hazardous locations













Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







other Railway

<u>Confirmation</u> <u>Confirmation</u>

UL/CSA ratings				
yielded mechanical performance [hp] for 3-phase AC motor				
• at 460/480 V				
 at standard circuit at 50 °C rated value 	hp	25		
● at 575/600 V				
 at standard circuit at 50 °C rated value 	hp	30		
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,...)

https://www.siemens.com/ic10

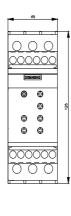
Industry Mall (Online ordering system)

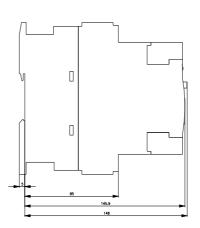
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4028-1BB05

Cax online generator

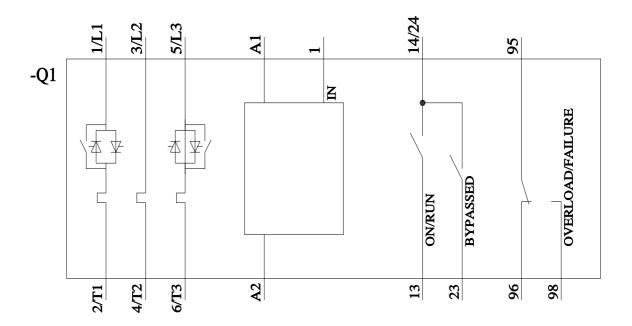
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4028-1BB05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4028-1BB05&lang=en









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