SIEMENS

Data sheet

3RT1036-1BB40



Power contactor, AC-3 50 A, 22 kW / 400 V 24 V DC, 3-pole, Size S2, screw terminal ! Phased-out product! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2036-1KB40<<

product brand name	SIRIUS			
product designation	power contactor			
General technical data				
size of contactor	S2			
insulation voltage rated value	690 V			
degree of pollution	3			
surge voltage resistance rated value	6 kV			
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V			
protection class IP				
 on the front 	IP20			
 of the terminal 	IP00			
shock resistance at rectangular impulse				
• at DC	10g / 5 ms, 5g / 10 ms			
shock resistance with sine pulse				
● at DC	15g / 5 ms, 8g / 10 ms			
mechanical service life (switching cycles)				
 of contactor typical 	10 000 000			
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000			
 of the contactor with added auxiliary switch block typical 	10 000 000			
reference code according to IEC 81346-2	Q			
Substance Prohibitance (Date)	05/01/2012			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
 during operation 	-25 +60 °C			
 during storage 	-55 +80 °C			
Main circuit				
number of poles for main current circuit	3			
number of NO contacts for main contacts	3			
number of NC contacts for main contacts	0			
operational current				
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	60 A			
• at AC-1				
— up to 690 V at ambient temperature 40 °C rated value	60 A			
 — up to 690 V at ambient temperature 60 °C rated value 	55 A			
• at AC-3				
— at 400 V rated value	50 A			

— at 690 V rated value	24 A
at AC-4 at 400 V rated value	41 A
connectable conductor cross-section in main circuit at AC-1	
	16 mm ²
• at 60 °C minimum permissible	
at 40 °C minimum permissible	16 mm ²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	24 A
at 690 V rated value	12.6 A
operating power	
• at AC-1	
— at 230 V at 60 °C rated value	22 kW
— at 400 V rated value	38 kW
— at 690 V rated value	66 kW
— at 690 V at 60 °C rated value	66 kW
• at AC-2 at 400 V rated value	22 kW
• at AC-3	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles	
at AC-4	
• at 400 V rated value	12.6 kW
 at 690 V rated value 	11.4 kW
thermal short-time current limited to 10 s	400 A
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
 at AC-1 maximum 	1 000 1/h
 at AC-2 maximum 	400 1/h
 at AC-3 maximum 	800 1/h
• at AC-4 maximum	300 1/h
• at AC-4 maximum	
at AC-4 maximum Control circuit/ Control	300 1/h
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage	300 1/h
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated	300 1/h DC
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC orated value operating range factor control supply voltage rated value of magnet coil at DC	300 1/h DC 24 V
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC 	300 1/h DC 24 V 0.8
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tat AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC 	300 1/h DC 24 V 0.8 1.1 13.3 W
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 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms
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 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC holding power of magnet coil at DC closing delay at DC at DC opening delay at DC Mumber of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value 	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 10 A 6 A
 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC holding power of magnet coil at DC closing delay at DC at DC opening delay at DC hold of the control supply coltage rated to the coll at DC number of nagnet coil at DC opening delay 	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 10 A 6 A
 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 0 10 A 6 A 3 A
 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC 	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 0 10 A 6 A 3 A 6 A
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 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-15 at 230 V rated value at 400 V rated value at 110 V rated value at 220 V rated value 	300 1/h DC 24 V 0.8 1.1 13.3 W 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 0 10 A 6 A 3 A 6 A 3 A
 at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value closing power of magnet coil at DC holding power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC arcing time Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 400 V rated value at 110 V rated value at 110 V rated value at 220 V rated value 	300 1/h DC 24 V 0.8 1.1 13.3 W 60 100 ms 20 25 ms 10 15 ms 0 0 10 A 6 A 3 A 6 A 3 A 1 A

		4 4					
 at 110 V rated value at 220 V rated value 		1 A 0.3 A					
contact reliability of auxiliary contacts			ty switching per 100 r	million (17 V. 1 mA)			
UL/CSA ratings			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·			
contact rating of auxiliary contacts accordi	ng to UL	A600	/ Q600				
Short-circuit protection							
design of the fuse link							
 for short-circuit protection of the main cir 	rcuit						
 — with type of coordination 1 required 	l	fuse gL/gG: 160 A					
 — with type of assignment 2 required 		fuse gL/gG: 80 A					
 for short-circuit protection of the auxiliary required 	y switch	fuse gL/gG: 10 A					
Installation/ mounting/ dimensions	required						
fastening method		screw	and snap-on mounti	ng onto 35 mm standard	d mounting rail		
laotonnig monou			screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022				
 side-by-side mounting 		Yes					
height		112 n					
width		55 mr					
depth		130 m					
required spacing for grounded parts at the side	9	6 mm	1				
Connections/ Terminals		_					
type of electrical connection • for main current circuit							
 for main current circuit for auxiliary and control circuit 			<i>i</i> -type terminals				
type of connectable conductor cross-section	ne	SCIEW	-type terminals				
for main contacts	5115						
— solid		2x (0.75 16 mm²)					
— stranded			75 25 mm²)				
— solid or stranded			, 75 16 mm²)				
 finely stranded with core end proce 	ssing	2x (0.	75 16 mm²)				
- finely stranded without core end pro	ocessing	2x (0.	75 16 mm²)				
 at AWG cables for main contacts 		2x (18	3 2)				
type of connectable conductor cross-section	ons						
 for auxiliary contacts 							
— solid			2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)				
— finely stranded with core end proce	ssing		5 1.5 mm²), 2x (0.7	,			
at AWG cables for auxiliary contacts		2x (20	0 16), 2x (18 14)	, 1x 12			
Certificates/ approvals	_						
General Product Approval					EMC		
	Confirmatio	חר	~		^		
(SP) (CC)	oommate	211	(U)	COF			
			U	CUL	ي		
CSA CCC			UL		RCM		
Declaration of Conformity	Test Certifica	ates					
	Special Test Ce	ortific	Miscellaneous	Type Test Certific-	Miscellaneous		
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EG-Konf.							
Marine / Shipping other							
			Miscellaneous	Confirmation	Miscellaneous		
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	DNV-GL						
ABS RINA	DAVOLICISION						

Special Test Certificate

Further information

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=3RT1036-1BB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1036-1BB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-1BB40

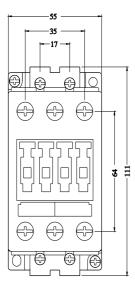
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

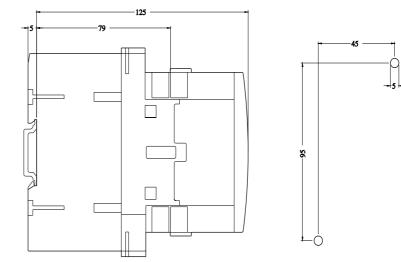
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1036-1BB40&lang=en

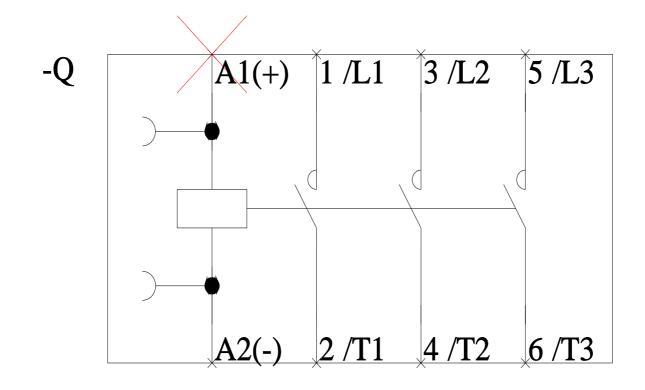
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-1BB40/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1036-1BB40&objecttype=14&gridview=view1







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