SIEMENS

Data sheet 3RT2646-1AP03

Capacitor contactor, AC-6b 100 kVAr, / 400 V 1 NO + 1 NC, 230 V AC, 50 Hz 3-pole, Size S3 screw terminal



Product brand name	SIRIUS		
Product designation	capacitor contactors		
Product type designation	3RT26		

General technical data	
Size of contactor	S3
Product extension	
Auxiliary switch	Yes
Surge voltage resistance	
of main circuit rated value	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 60947-1 	400 V
Protection class IP	
• on the front	IP00
of the terminal	IP00
Shock resistance at rectangular impulse	
• at AC	6,8g / 5 ms, 4g / 10 ms
Shock resistance with sine pulse	

• at AC	10,6g / 5 ms, 6,2g / 10 ms	
Mechanical service life (switching cycles)		
 of the contactor with added auxiliary switch block typical 	3 000 000	
Electrical endurance (switching cycles)	120 000	
Reference code acc. to DIN EN 81346-2	Q	
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 NO contacts for main contacts	3	
Number of NC contacts for main contacts	0	
Operating current		
 at AC-6b at 690 V at ambient temperature 60 °C rated value 	144 A	
Operational reactive power at AC-6b		
 at 230 V at 50/60 Hz at ambient temperature 60 °C rated value 	19 57 kvar	
 at 400 V at 50/60 Hz at ambient temperature 60 °C rated value 	33 100 kvar	
 at 500 V at 50/60 Hz at ambient temperature 60 °C rated value 	41 125 kvar	
 at 690 V at 50/60 Hz at ambient temperature 60 °C rated value 	57 172 kvar	
No-load switching frequency		
• at AC	500 1/h	
Operating frequency at AC-6b		
• at 230 V maximum	150 1/h	
• at 240 V maximum	150 1/h	
• at 400 V maximum	80 1/h	
• at 480 V maximum	53 1/h	
• at 500 V maximum	53 1/h	
• at 600 V maximum	32 1/h	
• at 690 V maximum	30 1/h	
Control circuit/ Control		
Type of voltage	AC	
Type of voltage of the control supply voltage	AC	
Control supply voltage at AC		
• at 50 Hz rated value	230 V	

Control supply voltage frequency				
• 1 rated value	50 Hz			
Operating range factor control supply voltage rated				
value of magnet coil at AC				
● at 50 Hz	0.8 1.1			
Apparent pick-up power of magnet coil at AC	296 V·A			
Inductive power factor with closing power of the coil	0.61			
Apparent holding power of magnet coil at AC	19 V·A			
Inductive power factor with the holding power of the coil	0.38			
Closing delay				
• at AC	15 25 ms			
Arcing time	10 15 ms			
Auxiliary circuit				
Number of NC contacts for auxiliary contacts	1			
• attachable	1			
• instantaneous contact	1			
Number of NO contacts for auxiliary contacts	1			
• attachable	1			
• instantaneous contact	1			
Operating current of auxiliary contacts at AC-12	10 A			
maximum				
Operating current of auxiliary contacts at AC-15				
• at 230 V	6 A			
• at 400 V	3 A			
Operating current of auxiliary contacts at DC-13				
• at 24 V	6 A			
• at 60 V	2 A			
• at 110 V	1 A			
• at 125 V	0.9 A			
• at 220 V	0.3 A			
Contact reliability of auxiliary contacts	0.00000001			
UL/CSA ratings				
Contact rating of auxiliary contacts according to UL	A600 / Q600			
Short-circuit protection				
Design of the fuse link				
• for short-circuit protection of the main circuit				
— with type of coordination 1 required	gG: 250 A (690 V, 50 kA)			
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)			
Installation/ mounting/ dimensions				

Mounting position	+/-180° rotation possible on vertical mounting surface; can be		
	tilted forward and backward by +/- 22.5° on vertical mounting surface		
Manuative to ma			
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 140 mm		
Height			
Width	80 mm		
Depth	152 mm		
Required spacing			
with side-by-side mounting			
— at the side	10 mm		
for grounded parts			
— at the side	10 mm		
Connections/ Terminals			
Type of electrical connection			
for main current circuit	screw-type terminals		
for auxiliary and control current circuit	screw-type terminals		
Type of connectable conductor cross-sections			
• for main contacts			
— solid	2x (10 16 mm²)		
— stranded	2x (10 70 mm²), 1x (10 70 mm²)		
— single or multi-stranded	2x (10 70 mm²), 1x (10 70 mm²)		
 finely stranded with core end processing 	2x (10 50 mm²)		
 at AWG conductors for main contacts 	2x (8 3/0), 1x (6 3/0)		
Type of connectable conductor cross-sections			
for auxiliary contacts			
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²		
single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²		
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 at AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12		
Type of minimum connectable cross-section for main contacts at AC-6b			
• at 40 °C	1x 70 mm²		
• at 60 °C	2x 50 mm²		
AWG number as coded connectable conductor cross	8		
section for main contacts			
Safety related data			
Product function			
 Mirror contact acc. to IEC 60947-4-1 	No		
positively driven operation acc. to IEC 60947-5-	No		
Protection against electrical shock	Not finger-safe		

Certificates/ approvals

General Product Approval

EMC

Declaration of Conformity





KC







Declaration of	Test Certific-	Marine / Ship-	other
Conformity	ates	ping	

Miscellaneous

Type Test Certificates/Test Report



Confirmation

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=3RT2646-1AP03

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2646-1AP03

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2646-1AP03

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

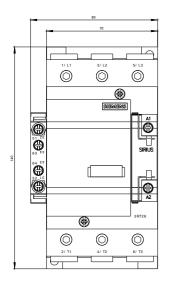
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2646-1AP03&lang=en

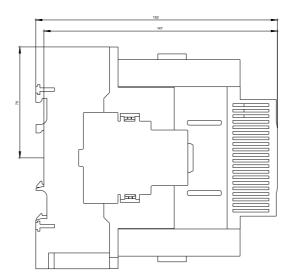
Characteristic: Tripping characteristics, I2t, Let-through current

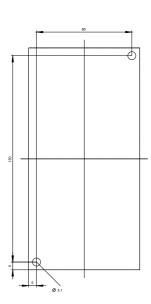
https://support.industry.siemens.com/cs/ww/en/ps/3RT2646-1AP03/char

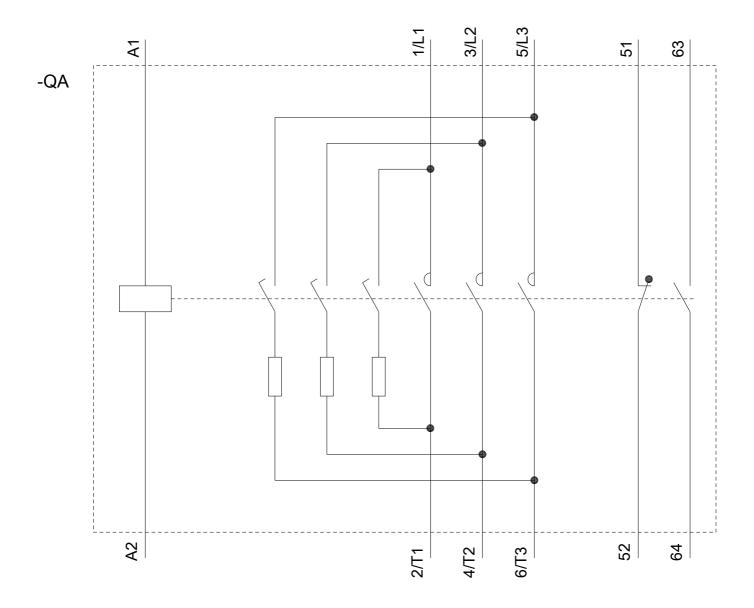
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2646-1AP03&objecttype=14&gridview=view1









last modified: 08/07/2020