SIEMENS

Data sheet

3MT7010-0JA12-6AU0



100 kvar Capacitor duty contactor 1NO + 2NC aux contact 240 V AC, 50 Hz coil

product brand name	SINOVA
product designation	Capacitor contactor
product type designation	3MT7
General technical data	
size of contactor	7
product extension auxiliary switch	No
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
protection class IP	
• on the front	IP20
of the terminal	IP00
mechanical service life (operating cycles)	
 of the contactor with added auxiliary switch block typical 	100 000
electrical endurance (operating cycles)	100 000
reference code according to IEC 81346-2	Q
Weight	3 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-5 +40 °C
during storage	-60 +80 °C
Main circuit	
number of poles	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operational current	
 at AC-6b at 440 V at ambient temperature 40 °C rated value 	144 A
operating reactive power	
\bullet at 240 V at 50 Hz 3 phase at ambient temperature 40 $^\circ\text{C}$ rated value	60 kvar
• at 400/415 V at 50 Hz 3 phase at ambient temperature 40 °C rated value	100 kvar
 at 440 V at 50/60 Hz 3 phase at ambient temperature 40 °C rated value 	109 kvar
 at 600 V at 60 Hz 3 phase at ambient temperature 40 °C rated value 	120 kvar
no-load switching frequency	
• at AC	1 800 1/h
operating frequency at AC-6b	
• at 240 V maximum	100 1/b

• at 400 V maximum	100 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	240 V
• at 50 Hz rated value	240 240 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	0.85 1.1
apparent pick-up power of magnet coil at AC	250 VA
apparent holding power of magnet coil at AC	37 VA
closing delay at AC	14 25 ms
opening delay at AC	4 15 ms
arcing time	4 15 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
attachable	0
 instantaneous contact 	2
number of NO contacts for auxiliary contacts	1
attachable	0
 instantaneous contact 	1
operational current of auxiliary contacts at AC-15	
• at 230 V	2.09 A
● at 400 V	1.25 A
operational current of auxiliary contacts at DC-13	
• at 24 V	5 A
● at 110 V	0.59 A
• at 125 V	0.59 A
• at 220 V	0.28 A
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
for short-circuit protection of the main circuit — with type of coordination 1 required	gG: 200 A (440 V, 50 kA)
 for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required 	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA)
 for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position 	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
 for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method 	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm
 for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side 	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm 12 mm
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/Terminals	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm 12 mm
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/Terminals type of electrical connection	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm 12 mm
 for short-circuit protection of the main circuit with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/ Terminals type of electrical connection for main current circuit for main current circuit 	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm 12 mm screw-type terminals
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/ Terminals type of electrical connection e for main current circuit e for auxiliary and control circuit	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 120 mm 154 mm 12 mm screw-type terminals screw-type terminals
for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/ Terminals type of electrical connection e for main current circuit e for auxiliary and control circuit type of connectable conductor cross-sections for main contacts c acting a strended	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 154 mm 12 mm screw-type terminals screw-type terminals
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for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the auxiliary switch required mounting position fastening method height width depth required spacing for grounded parts at the side Connections/ Terminals type of electrical connection e for auxiliary and control circuit type of connectable conductor cross-sections for main contacts e solid or stranded connectable conductor cross-section for main contacts e solid or stranded	gG: 200 A (440 V, 50 kA) gG: 10 A (500 V, 1 kA) +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting to two 35 mm DIN rails 186 mm 120 mm 120 mm 154 mm 12 mm screw-type terminals screw-type terminals 1x (4 95 mm ²), 2x (4 50 mm ²)
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— solid or stranded		1x (1	4mm²), 2x (1 4mm²)		
 finely stranded with core end proce 	essing	1x (1	4 mm²), 2x (1 4 mm²)		
 finely stranded without core end pr 	ocessing	1x (1	4 mm²), 2x (1 2.5 mm²)		
 for AWG cables for auxiliary contacts 		14			
AWG number as coded connectable condu section	ctor cross				
for main contacts		31			
 for auxiliary contacts 		14	14 14		
tightening torque					
 for main contacts with screw-type terminals 		9 N∙m	9 N·m		
 for auxiliary contacts with screw-type terminals 		1.2 N	1.2 N·m		
design of the thread of the connection scre	w				
• for main contacts		M8	M8		
 of the auxiliary and control contacts 		M3.5	M3.5		
Safety related data					
product function					
 mirror contact according to IEC 60947-4-1 		No			
 positively driven operation according to IEC 60947-5-1 		No			
Electrical Safety					
protection class IP on the front according t	o IEC 60529	IP20			
Approvals Certificates					
General Product Approval	other		Environment		
CE መ	Confirmatic	n	Environmental Con- firmations		

Further information	
Information on the packaging	
https://support.industry.siemens.com/cs/ww/en/view/109813875	
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=3MT7010-0JA12-6AU0	
Cax online generator	
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MT7010-0JA12-6AU0	
Service&Support (Manuals, Certificates, Characteristics, FAQs,)	
https://aupport.industry.sigmons.com/co/www/cn/ps/2MTZ010.01012.60110	

https //support.industry <u>emens.com/c</u> <u>s/ww/en/ps/3MT7010-0JA1</u> <u>-6AU0</u>

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MT7010-0JA12-6AU0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3MT7010-0JA12-6AU0/char

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

3MT7010-0JA12-6AU0&objecttype=14&gridview=view1 http://www.automation.siemens.com/bilddb/index.aspx?view=S amlfb

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