# SIEMENS

### Data sheet

## 3RT2628-1AC25



capacitor contactor, AC-6b 33 kVAr, / 400 V, 3-pole, 24 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 2 NC, screw terminal, size: S0

product brand name	SIRIUS
product designation	capacitor contactors
product type designation	3RT26
General technical data	
size of contactor	SO
product extension auxiliary switch	No
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	3 000 000
electrical endurance (operating cycles)	150 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
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-6b at 690 V at ambient temperature 60 $^\circ\mathrm{C}$ rated value	47.6 A
operating reactive power at AC-6b	
<ul> <li>at 230 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	6 19 kvar
<ul> <li>at 400 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	11 33 kvar

<ul> <li>at 500 V at 50/60 Hz at ambient temperature 60 °C rated</li> </ul>	14 41 kvar
value	19 57 kvar
<ul> <li>at 690 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	19 57 KVal
no-load switching frequency	
• at AC	500 1/h
operating frequency at AC-6b	
• at 230 V maximum	100 1/h
• at 240 V maximum	100 1/h
• at 400 V maximum	100 1/h
• at 480 V maximum	70 1/h
• at 500 V maximum	65 1/h
• at 600 V maximum	45 1/h
• at 690 V maximum	36 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	24 V
• at 60 Hz rated value	24 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	77 VA
inductive power factor with closing power of the coil	0.82
apparent holding power of magnet coil at AC	9.8 VA
inductive power factor with the holding power of the coil	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
at AC arcing time	4 16 ms 10 10 ms
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal	10 10 ms
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0>	10 10 ms Standard A1 - A2
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible	10 10 ms
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit	10 10 ms Standard A1 - A2 7 mA
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible	10 10 ms Standard A1 - A2
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arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable	10 10 ms Standard A1 - A2 7 mA 2 0
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact	10 10 ms Standard A1 - A2 7 mA 2 0 2
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal         <0>         • at AC at 230 V maximum permissible         Auxiliary circuit         number of NC contacts for auxiliary contacts         • attachable         • instantaneous contact         number of NO contacts for auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2 0 2 1
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal         <0>         • at AC at 230 V maximum permissible         Auxiliary circuit         number of NC contacts for auxiliary contacts         • attachable         • instantaneous contact         number of NO contacts for auxiliary contacts         • attachable         • attachable	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 2
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> <li>Auxiliary circuit</li> <li>number of NC contacts for auxiliary contacts         <ul> <li>attachable</li> <li>instantaneous contact</li> </ul> </li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>instantaneous contact</li> <li>attachable</li> <li>instantaneous contact</li>	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 1 0 1
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> <li>Auxiliary circuit</li> <li>number of NC contacts for auxiliary contacts         <ul> <li>attachable</li> <li>instantaneous contact</li> <li>attachable</li> <li>instantaneous contact</li> <li>attachable</li> <li>instantaneous contact</li> <li>operational current of auxiliary contacts at AC-12 maximum</li> </ul> </li>	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 1 0 1
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-15	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 0 1 1 0 1 1 0 4
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-15 • at 230 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 1 10 A 6 A
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-15 • at 230 V • at 400 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 2 1 1 0 1 1 10 A 6 A 3 A
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-15 • at 230 V • at 400 V • at 690 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 2 1 1 0 1 1 10 A 6 A 3 A
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0> • at AC at 230 V maximum permissible Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-15 • at 230 V • at 400 V • at 690 V operational current of auxiliary contacts at DC-13	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 10 A 6 A 3 A 1 A
arcing time control version of the switch operating mechanism residual current of the electronics for control with signal <0>	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts         attachable         instantaneous contact         number of NO contacts for auxiliary contacts         attachable         instantaneous contact         operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 400 V         at 690 V         operational current of auxiliary contacts at DC-13         at 24 V         at 60 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts <ul> <li>attachable</li> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> </ul> operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 230 V         at 400 V         at 690 V          operational current of auxiliary contacts at DC-13         at 24 V         at 60 V         at 60 V         at 110 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts <ul> <li>attachable</li> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> </ul> operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 400 V         at 690 V         operational current of auxiliary contacts at DC-13         at 24 V         at 60 V         at 110 V         at 125 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0>       <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> <li>Auxiliary circuit</li> <li>number of NC contacts for auxiliary contacts       <ul> <li>attachable</li> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>operational current of auxiliary contacts at AC-12 maximum</li> <li>operational current of auxiliary contacts at AC-15</li> <li>at 230 V</li> <li>at 400 V</li> <li>at 690 V</li> <li>operational current of auxiliary contacts at DC-13</li> <li>at 24 V</li> <li>at 60 V</li> <li>at 110 V</li> <li>at 125 V</li> <li>at 220 V</li> <li>contact reliability of auxiliary contacts</li> </ul> </li>	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts <ul> <li>attachable</li> <li>instantaneous contact</li> </ul> number of NO contacts for auxiliary contacts         attachable         instantaneous contact         number of NO contacts for auxiliary contacts         attachable         instantaneous contact         operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 230 V         at 400 V         at 690 V         operational current of auxiliary contacts at DC-13         at 24 V         at 60 V         at 110 V         at 220 V         contact reliability of auxiliary contacts         UL/CSA ratings	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A 0.00000001
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts <ul> <li>attachable</li> <li>instantaneous contact</li> </ul> number of NO contacts for auxiliary contacts         attachable         instantaneous contact         number of NO contacts for auxiliary contacts         attachable         instantaneous contact         operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 230 V         at 400 V         at 690 V         operational current of auxiliary contacts at DC-13         at 24 V         at 60 V         at 110 V         at 220 V         contact reliability of auxiliary contacts         UL/CSA ratings         contact rating of auxiliary contacts according to UL	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> <li>Auxiliary circuit</li> <li>number of NC contacts for auxiliary contacts       <ul> <li>attachable</li> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>operational current of auxiliary contacts at AC-12 maximum</li> <li>operational current of auxiliary contacts at AC-15</li> <li>at 230 V</li> <li>at 400 V</li> <li>at 690 V</li> <li>operational current of auxiliary contacts at DC-13</li> <li>at 24 V</li> <li>at 60 V</li> <li>at 110 V</li> <li>at 125 V</li> <li>at 220 V</li> <li>contact reliability of auxiliary contacts</li> <li>UL/CSA ratings</li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> </ul> </li>	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A 0.00000001
arcing time         control version of the switch operating mechanism         residual current of the electronics for control with signal <0> <ul> <li>at AC at 230 V maximum permissible</li> </ul> Auxiliary circuit         number of NC contacts for auxiliary contacts <ul> <li>attachable</li> <li>instantaneous contact</li> </ul> number of NO contacts for auxiliary contacts         attachable         instantaneous contact         number of NO contacts for auxiliary contacts         attachable         instantaneous contact         operational current of auxiliary contacts at AC-12 maximum         operational current of auxiliary contacts at AC-15         at 230 V         at 400 V         at 690 V         operational current of auxiliary contacts at DC-13         at 24 V         at 60 V         at 110 V         at 220 V         contact reliability of auxiliary contacts         UL/CSA ratings         contact rating of auxiliary contacts according to UL	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 1 0 1 10 A 6 A 3 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A 0.00000001

coordination	1	required
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• for short-circuit protection of the auxiliary switch required

gG: 10 A (500 V, 1 kA)

<ul> <li>for short-circuit protection of the auxiliary s</li> </ul>	witch required	gG: 10 A (500 V, 1 kA)			
stallation/ mounting/ dimensions					
mounting position		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface			
astening method	screw and snap-on mounting	onto 35 mm DIN rail acco	rding to DIN EN 50022		
neight		150 mm			
width		45 mm			
depth		155 mm			
required spacing					
<ul> <li>with side-by-side mounting at the side</li> </ul>		10 mm			
<ul> <li>for grounded parts at the side</li> </ul>		10 mm			
onnections/ Terminals					
type of electrical connection					
for main current circuit		screw-type terminals			
<ul> <li>for auxiliary and control circuit</li> </ul>		screw-type terminals			
at contactor for auxiliary contacts		Screw-type terminals			
of magnet coil		Screw-type terminals			
ype of connectable conductor cross-sections for	main contacts	coron type terminate			
solid	main contacto	1x (2.5 25 mm²)			
stranded		2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 1)	$(1 \text{ mm}^2)$		
solid or stranded     finally stranded with some and processing		1x (2,5 25 mm <sup>2</sup> )			
• finely stranded with core end processing		1x (2.5 16 mm²)			
ype of connectable conductor cross-sections	j.				
for auxiliary contacts			0.5		
— solid	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>				
— solid or stranded		2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>			
— finely stranded with core end process	ing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
for AWG cables for auxiliary contacts	-	2x (20 16), 2x (18 14), 2x	(12		
ype of minimum connectable cross-sections contacts at AC-6b	for main				
● at 40 °C		1x 16 mm <sup>2</sup>			
● at 60 °C		1x 25 mm²			
AWG number as coded connectable conductor cross section for main contacts		10 4			
afety related data					
product function					
• mirror contact according to IEC 60947-4-1		No			
positively driven operation according to IEC	C 60947-5-1	No			
protection class IP on the front according to I	EC 60529	IP20			
ouch protection on the front according to IEC	60529	finger-safe, for vertical contact	t from the front		
ertificates/ approvals					
General Product Approval				EMC	
				_	
Confirmation			EHC	RCM	
Declaration of Conformity	Test Certificate	es Marine / Shipping			
	<u>Type Test Cert</u> ates/Test Rep		Lloyds Register uxs	RINA	
		TENTING			



#### Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT2628-1AC25

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2628-1AC25

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1AC25

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

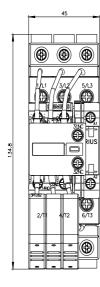
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2628-1AC25&lang=en

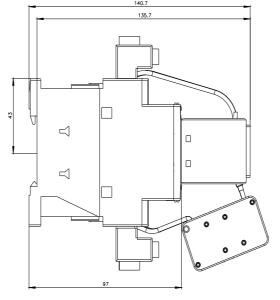
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

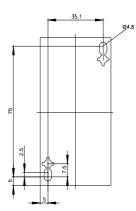
https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1AC25/char

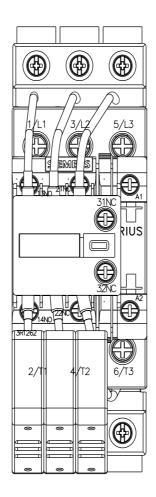
Further characteristics (e.g. electrical endurance, switching frequency)

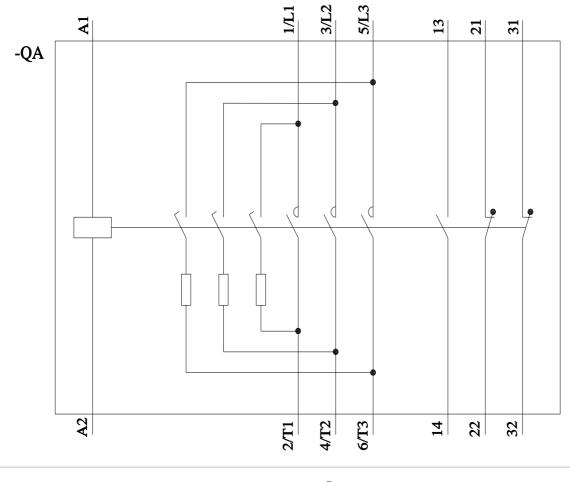
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2628-1AC25&objecttype=14&gridview=view1











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