## SIEMENS

## Data sheet

## 3RT2627-1AP05



capacitor contactor, AC-6b 25 kVAr, / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 1 NO + 2 NC, screw terminal

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 safe isolation 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)	200 000
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
<ul> <li>during storage</li> </ul>	-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 °C rated value	36 A
operating reactive power at AC-6b	
• at 230 V at 50/60 Hz at ambient temperature 60 °C rated value	5 14 kvar
● at 400 V at 50/60 Hz at ambient temperature 60 °C	8 25 kvar

rated value	
<ul> <li>at 500 V at 50/60 Hz at ambient temperature 60 °C</li> </ul>	10 31 kvar
rated value	44 40 laves
<ul> <li>at 690 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	14 43 kvar
no-load switching frequency • at AC	500 1/h
	500 1/1
operating frequency at AC-6b	400.4%
• at 230 V maximum	100 1/h
• at 240 V maximum	100 1/h
• at 400 V maximum	100 1/h
<ul> <li>at 480 V maximum</li> </ul>	100 1/h
<ul> <li>at 500 V maximum</li> </ul>	100 1/h
<ul> <li>at 600 V maximum</li> </ul>	100 1/h
<ul> <li>at 690 V maximum</li> </ul>	72 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
	250 V
control supply voltage frequency	50.11-
• 1 rated value	50 Hz
operating range factor control supply voltage rated	
value of magnet coil at AC	0.0 1.1
• 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	0.25
coil	
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	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>	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 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 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 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 • attachable • attachable • instantaneous contact	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 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 number of NO contacts for auxiliary contacts • attachable • attachable	10 10 ms Standard A1 - A2 7 mA 2 0 2 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 • attachable • instantaneous contact operational current of auxiliary contacts at AC-12	10 10 ms Standard A1 - A2 7 mA 2 0 2 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 • attachable • instantaneous contact operational current of auxiliary contacts at AC-12 maximum	10 10 ms Standard A1 - A2 7 mA 2 0 2 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 • 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 1 0 1 1 0 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 • 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 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 • 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 1 1 0 1 1 0 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 • 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 1 0 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> • 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 • at 400 V • at 690 V operational current of auxiliary contacts at DC-13 • at 24 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 1 0 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> • 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 • at 24 V • at 60 V	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 6 A 2 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 • at 24 V • at 60 V • at 110 V	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 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> • 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 • 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 1 0 4 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 1 0 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V contact reliability of auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 4 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 1 0 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V contact reliability of auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 1 1 0 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V contact reliability of auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 4 6 A 3 A 1 A 6 A 2 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V contact reliability of auxiliary contacts	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 4 6 A 3 A 1 A 6 A 2 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> • 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 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V contact reliability of auxiliary contacts UL/CSA ratings contact rating of auxiliary contacts according to UL Short-circuit protection	10 10 ms Standard A1 - A2 7 mA 2 0 2 1 0 1 1 0 4 6 A 3 A 1 A 6 A 2 A 1 A 6 A 2 A 1 A 0 9 A 0.3 A 0.00000001

ture of operation 1 required	
<ul><li>type of coordination 1 required</li><li>for short-circuit protection of the auxiliary switch</li></ul>	gG: 10 A (500 V, 1 kA)
required	go. 10 A (300 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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
height	135 mm
width	45 mm
depth	155 mm
required spacing	
with side-by-side mounting at the side	10 mm
<ul> <li>for grounded parts at the side</li> </ul>	10 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
<ul> <li>of magnet coil</li> </ul>	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
• stranded	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )
solid or stranded	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )
finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> <li>— solid</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
<ul> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (0.0 1.6 mm), 2x (0.1 6 2.6 mm) 2x (20 16), 2x (18 14), 2x 12
type of minimum connectable cross-section for main contacts at AC-6b	
• at 40 °C	1x 10 mm <sup>2</sup>
• at 60 °C	2x 10 mm <sup>2</sup>
AWG number as coded connectable conductor cross section for main contacts	16 8
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	No
<ul> <li>positively driven operation according to IEC 60947-</li> </ul>	No
5-1	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Certificates/ approvals	
General Product Approval	EMC
	-
Confirmation (m	
CSA CCC	
Declaration of Conformity Test Certific	cates Marine / Shipping
CE UK Type Test C ates/Test R	
	eport (Tegrister (TEGR)
EG-Konf.	
	VERITAS

other

Dangerous Good

2/17/2023

Subject to change without notice © Copyright Siemens



## **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=3RT2627-1AP05

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2627-1AP05

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2627-1AP05

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

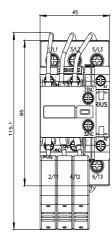
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2627-1AP05&lang=en

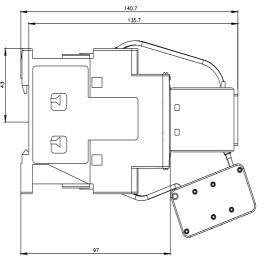
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

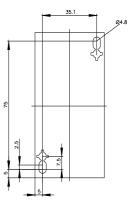
https://support.industry.siemens.com/cs/ww/en/ps/3RT2627-1AP05/char

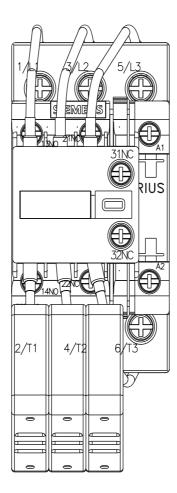
Further characteristics (e.g. electrical endurance, switching frequency)

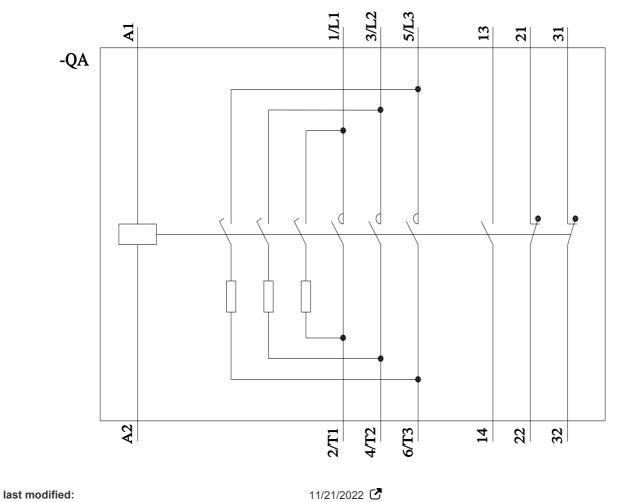
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2627-1AP05&objecttype=14&gridview=view1











Subject to change without notice © Copyright Siemens