## **SIEMENS**

Data sheet 3RT2636-1NP35



capacitor contactor, AC-6b 50 kVAr, / 400 V, 3-pole, 175-280 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 2 NC, screw terminal, size: S2  $\,$ 

product brand name	SIRIUS
product designation	capacitor contactors
product type designation	3RT26
General technical data	
size of contactor	S2
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
at AC in hot operating state per pole	4 W
without load current share typical	2.4 W
type of calculation of power loss depending on pole	quadratic
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
of auxiliary circuit rated value	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	6.8g / 5 ms, 4g / 10 ms
• at DC	6,8g / 5 ms, 4g / 10 ms
shock resistance with sine pulse	
• at AC	10.6g / 5 ms, 6.2g / 10 ms
• at DC	10,6g / 5 ms, 6,2g / 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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	1.094 kg
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
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	

Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	106 kg
global warming potential [CO2 eq] during manufacturing	2.47 kg
global warming potential [CO2 eq] during operation	104 kg
global warming potential [CO2 eq] after end of life	-0.226 kg
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	72.2 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>	10 29 kvar
<ul> <li>at 400 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	17 50 kvar
<ul> <li>at 500 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	21 63 kvar
<ul> <li>at 690 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	29 86 kvar
no-load switching frequency	
• at AC	500 1/h
• at DC	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	60 1/h
• at 500 V maximum	55 1/h
• at 600 V maximum	40 1/h
• at 690 V maximum	30 1/h
Control circuit/ Control	
type of voltage	AC/DC
type of voltage type of voltage of the control supply voltage	AC/DC AC/DC
type of voltage of the control supply voltage	
type of voltage of the control supply voltage control supply voltage at AC	AC/DC
type of voltage of the control supply voltage control supply voltage at AC  • at 50 Hz rated value	AC/DC 175 280 V
type of voltage of the control supply voltage control supply voltage at AC  • at 50 Hz rated value • at 60 Hz rated value	AC/DC 175 280 V
type of voltage of the control supply voltage control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value control supply voltage frequency	AC/DC 175 280 V 175 280 V
type of voltage of the control supply voltage control supply voltage at AC	AC/DC  175 280 V  175 280 V  50 Hz  60 Hz
type of voltage of the control supply voltage control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value	AC/DC 175 280 V 175 280 V 50 Hz
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  control supply voltage at DC rated value  operating range factor control supply voltage rated value of	AC/DC  175 280 V  175 280 V  50 Hz  60 Hz
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  control supply voltage at DC rated value  operating range factor control supply voltage rated value of magnet coil at DC	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  control supply voltage at DC rated value  operating range factor control supply voltage rated value of magnet coil at DC  • initial value	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  control supply voltage at DC rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs 0.58 A
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current peak	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs 0.58 A 1.5 A
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current peak  duration of locked-rotor current	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs 0.58 A 1.5 A 230 ms
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1  0.8 1.1  25 A  10 μs 0.58 A  1.5 A  230 ms 10 mA
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz  175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs 0.58 A 1.5 A 230 ms 10 mA 110 VA
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC  inductive power factor with closing power of the coil	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz  175 280 V  0.8  1.1  0.8 1.1  0.8 1.1  25 A  10 μs  0.58 A  1.5 A  230 ms  10 mA  110 VA  0.95
type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency  1 rated value  2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz  at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC  inductive power factor with closing power of the coil  apparent holding power of magnet coil at AC	AC/DC  175 280 V  175 280 V  50 Hz 60 Hz 175 280 V  0.8 1.1  0.8 1.1 0.8 1.1 25 A 10 μs 0.58 A 1.5 A 230 ms 10 mA 110 VA 0.95 2.5 VA
type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency  1 rated value  2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz  at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC  inductive power factor with closing power of the coil  apparent holding power of magnet coil at AC  inductive power factor with the holding power of the coil	AC/DC  175 280 V  175 280 V  50 Hz  60 Hz  175 280 V  0.8  1.1  0.8 1.1  0.8 1.1  25 A  10 μs  0.58 A  1.5 A  230 ms  10 mA  110 VA  0.95
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency  • 1 rated value  • 2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC  inductive power factor with closing power of the coil  apparent holding power of magnet coil at AC  inductive power factor with the holding power of the coil  closing power of magnet coil at DC	AC/DC  175 280 V  175 280 V  50 Hz  60 Hz  175 280 V  0.8  1.1  0.8 1.1  0.8 1.1  25 A  10 µs  0.58 A  1.5 A  230 ms  10 mA  110 VA  0.95  2.5 VA  0.95  70 W
type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency  1 rated value  2 rated value  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  operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz  at 60 Hz  inrush current peak  duration of inrush current peak  locked-rotor current mean value  locked-rotor current mean value  apparent pick-up power of magnet coil at AC  inductive power factor with closing power of the coil  apparent holding power of magnet coil at AC  inductive power factor with the holding power of the coil  closing power of magnet coil at DC  holding power of magnet coil at DC	AC/DC  175 280 V  175 280 V  50 Hz  60 Hz  175 280 V  0.8  1.1  0.8 1.1  0.8 1.1  25 A  10 µs  0.58 A  1.5 A  230 ms  10 mA  110 VA  0.95  2.5 VA  0.95  70 W

• at DC	30 110 ms
opening delay	
• at AC	30 55 ms
• at DC	30 55 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
attachable	1
instantaneous contact	2
number of NO contacts for auxiliary contacts	0
attachable	1
instantaneous contact	0
operational current of auxiliary contacts at AC-12 maximum	10 A
operational current of auxiliary contacts at AC-15	
• at 230 V	6 A
• at 400 V	3 A
• at 690 V	0 A
operational 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	0.0000001
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit with type of coordination 1 required</li> </ul>	gG: 160 A (690 V, 50 kA)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
height	114 mm
width	65 mm
depth	130 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
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
• of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	·
• solid	2x (1 16 mm²)
stranded	2x (10 35 mm²), 1x (10 50 mm²)
solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
type of connectable conductor cross-sections	(
• for auxiliary contacts	
- 101 duninary contacts	
•	2y (0.5
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
<ul><li>— solid</li><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
<ul><li>— solid</li><li>— solid or stranded</li><li>— finely stranded with core end processing</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>• for AWG cables for auxiliary contacts</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
<ul><li>— solid</li><li>— solid or stranded</li><li>— finely stranded with core end processing</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

• at 40 °C	1x 35 mm²
• at 60 °C	1x 50 mm²
AWG number as coded connectable conductor cross section for main contacts	18 0
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 60947-5-1</li> </ul>	No
Electrical Safety	
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
Approvals Certificates	
General Product Approval	







Confirmation



<u>KC</u>

General Product Approval

**EMV** 

**Test Certificates** 

Marine / Shipping

other





Type Test Certificates/Test Report





Confirmation

Dangerous goods

**Environment** 

**Transport Information** 



Environmental Confirmations

## 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=3RT2636-1NP35

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2636-1NP35}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2636-1NP35

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

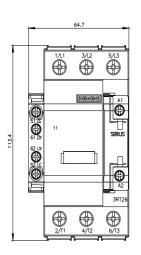
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2636-1NP35&lang=en

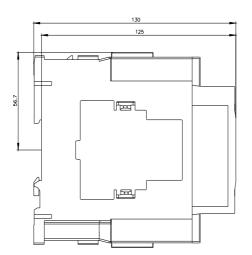
Characteristic: Tripping characteristics, I²t, Let-through current

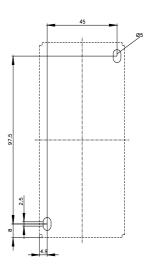
https://support.industry.siemens.com/cs/ww/en/ps/3RT2636-1NP35/char

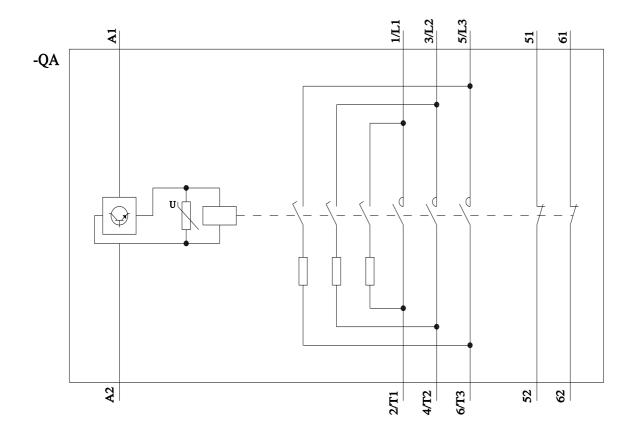
Further characteristics (e.g. electrical endurance, switching frequency)

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RT2636-1NP35\&objecttype=14\&gridview=view1}$ 









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