## SIEMENS

## Data sheet

## 3RT2628-1NP35



Capacitor contactor, AC-6b 33 kVAr, / 400 V 1 NO + 2 NC, 50-60 Hz AC 200-280 V DC 3-pole, Size S0 screw terminal

product brand name	SIRIUS
product designation	capacitor contactors
product type designation	3RT26
General technical data	
size of contactor	S0
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
• at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (switching cycles)	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	3 000 000
electrical endurance (switching 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 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	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 value</li> </ul>	14 41 kvar
<ul> <li>at 690 V at 50/60 Hz at ambient temperature 60 °C rated value</li> </ul>	19 57 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
<ul> <li>at 240 V maximum</li> </ul>	100 1/h
<ul> <li>at 400 V maximum</li> </ul>	100 1/h
<ul> <li>at 480 V maximum</li> </ul>	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/DC
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
• at 50 Hz rated value	200 280 V
• at 60 Hz rated value	200 280 V
control supply voltage frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
control supply voltage at DC	
rated value	200 280 V
operating range factor control supply voltage rated	
value of magnet coil at DC <ul> <li>initial value</li> </ul>	0.7
full-scale value	1.3
operating range factor control supply voltage rated	
value of magnet coil at AC	
• at 50 Hz	0.7 1.3
• at 60 Hz	0.7 1.3
inrush current peak	25 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.1 A
locked-rotor current peak	0.13 A
duration of locked-rotor current	180 ms
holding current mean value	17 mA
apparent pick-up power of magnet coil at AC	14.7 VA
inductive power factor with closing power of the coil	0.98
apparent holding power of magnet coil at AC	4.3 VA
inductive power factor with the holding power of the coil	0.56
closing power of magnet coil at DC	14.3 W
holding power of magnet coil at DC	1.9 W
closing delay	
• at AC	50 70 ms
• at DC	50 70 ms
opening delay	
• at AC	30 50 ms
• at DC	30 50 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
residual current of the electronics for control with signal <0>	
orginal tor	

• at AC at 230 V maximum permissible       7 mA         Auxiliary circuit <ul> <li>number of NC contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>attachable</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 400 V</li> <li>at 212 V</li> <li>at 110 V</li> <li>at 125 V</li> <li>at 220 V</li> <li>bit contacts according to UL</li> <li>A600 / Q600</li> <li>Short-circuit protection</li> <li>gG: 100 A (690 V, 50 kA)</li> <li>bit contact and the main circuit with type of coordination 1 required</li> <li>gG: 100 A (690 V, 50 kA)</li> </ul>	
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-12 maximum       10 A         operational current of auxiliary contacts at AC-15       6 A         • at 230 V       6 A         • at 400 V       3 A         operational current of auxiliary contacts at DC-13       6 A         • at 400 V       3 A         operational current of auxiliary contacts at DC-13       6 A         • at 22 V       6 A         • at 20 V       0.9 A         • at 20 V       0.9 A         • at 20 V       0.3 A         contact reliability of auxiliary contacts       0.00000001         UL/CSA ratings       0.00000001         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       gG: 100 A (690 V, 50 kA)	
• 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-12 maximum         10 A           operational current of auxiliary contacts at AC-15         6 A           • at 230 V         6 A           • at 400 V         3 A           operational current of auxiliary contacts at DC-13         6 A           • at 24 V         6 A           • at 60 V         2 A           • at 110 V         1 A           • at 220 V         0.3 A           contact reliability of auxiliary contacts         0.00000001           UL/CSA ratings         0.00000001           Short-circuit protection         4600 / Q600	
• instantaneous contact       2         number of NO contacts for auxiliary contacts       1         • attachable       0         • instantaneous contact       1         operational current of auxiliary contacts at AC-12 maximum       10 A         operational current of auxiliary contacts at AC-15       6 A         • at 230 V       6 A         • at 400 V       3 A         operational current of auxiliary contacts at DC-13       6 A         • at 24 V       6 A         • at 25 V       0.9 A         • at 100 V       1A         • at 220 V       0.3 A         contact reliability of auxiliary contacts       0.00000001         UL/CSA ratings       0.00000001         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       gG: 100 A (690 V, 50 kA)	
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<ul> <li>at 230 V</li> <li>at 400 V</li> <li>3 A</li> <li>operational current of auxiliary contacts at DC-13         <ul> <li>at 24 V</li> <li>at 60 V</li> <li>at 110 V</li> <li>at 125 V</li> <li>0.9 A</li> <li>at 220 V</li> <li>0.3 A</li> </ul> </li> <li>contact reliability of auxiliary contacts</li> <li>0.00000001</li> <li>UL/CSA ratings</li> <li>contact rating of auxiliary contacts according to UL</li> <li>A600 / Q600</li> <li>Short-circuit protection</li> <li>design of the fuse link             <ul> <li>for short-circuit protection of the main circuit with</li> <li>gG: 100 A (690 V, 50 kA)</li> </ul> </li> </ul>	
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operational current of auxiliary contacts at DC-13     6 A       • 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	
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<ul> <li>at 60 V</li> <li>at 110 V</li> <li>at 110 V</li> <li>1 A</li> <li>at 125 V</li> <li>0.9 A</li> <li>at 220 V</li> <li>0.3 A</li> <li>contact reliability of auxiliary contacts</li> <li>0.00000001</li> <li>UL/CSA ratings</li> <li>contact rating of auxiliary contacts according to UL</li> <li>A600 / Q600</li> <li>Short-circuit protection</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit with</li> <li>gG: 100 A (690 V, 50 kA)</li> </ul>	
• at 125 V         0.9 A           • at 220 V         0.3 A           contact reliability of auxiliary contacts         0.00000001           UL/CSA ratings         0.00000001           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         gG: 100 A (690 V, 50 kA)	
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Short-circuit protection         design of the fuse link         • for short-circuit protection of the main circuit with         gG: 100 A (690 V, 50 kA)	
design of the fuse link       • for short-circuit protection of the main circuit with       gG: 100 A (690 V, 50 kA)	
• for short-circuit protection of the main circuit with gG: 100 A (690 V, 50 kA)	
• for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA)	
required	
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 standard mounting	ail
according to DIN EN 50022	
height 150 mm	
width 45 mm	
depth 165 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 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 1x (2.5 25 mm <sup>2</sup> )	
$\begin{array}{c} - \text{ solut} \\ - \text{ stranded} \\ \end{array} \qquad \qquad$	
- finely stranded with core end processing 1x (2.5 16 mm <sup>2</sup> )	
at AWG cables for main contacts     1x (10 4)	
type of connectable conductor cross-sections	
• for auxiliary contacts	
- 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 processing $2x (0.5 \dots 1.5 \text{ mm}^2), 2x (0.75 \dots 2.5 \text{ mm}^2)$	
• at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 2x 12	
ture of minimum comportable areas postion for main	
type of minimum connectable cross-section for main	
type of minimum connectable cross-section for main contacts at AC-6b • at 40 °C 1x 16 mm <sup>2</sup>	

● at 60 °C			1x 25	o mm²		
AWG number as coded connectable conductor cross section for main contacts			10 4			
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				
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/ approv	vals					
General Product	Approval					EMC
S.	<u>Confirmation</u>		)		EHC	RCM
Declaration of Co	nformity	Test Certifica	ates	Marine / Shipping		other
CE EG-Konf.		Type Test Certific ates/Test Report		BUREAU VERITAS	RINA	<u>Confirmation</u>
other	Dangerous Good					
	<u>Transport Informa-</u> tion					
Further information						
Information- and Downloadcenter (Catalogs, Brochures,) <u>https://www.siemens.com/ic10</u> Industry Mall (Online ordering system) https://well.is.ductar.sign.com/icat//order/icatalog/and/order/icatalog/						
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2628-1NP35 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2628-1NP35						
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1NP35						
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) <u>http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2628-1NP35⟨=en</u>						
Characteristic: Tripping characteristics, I <sup>2</sup> t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2628-1NP35/char Further characteristics (e.g. electrical endurance, switching frequency)						
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2628-1NP35&objecttype=14&gridview=view1						
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