SIEMENS

Data sheet 3RT2645-1AF03



capacitor contactor, AC-6b 75 kVAr, / 400 V, 3-pole, 110 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S3 $\,$

product brand name	SIRIUS
product designation	capacitor contactors
product type designation	3RT26
General technical data	
size of contactor	S3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state per pole 	5.3 W
 without load current share typical 	7.3 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
of main circuit rated value	8 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	10.3g / 5 ms, 6,.g / 10 ms
shock resistance with sine pulse	
• at AC	16.3g / 5 ms, 10.g / 10 ms
mechanical service life (operating cycles)	
 of the contactor with added auxiliary switch block typical 	3 000 000
electrical endurance (operating cycles)	200 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	06/26/2017
Weight	1.787 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

alabal warming natarital ICCO and after and of life	0.000 km
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	108 A
 operating reactive power at AC-6b at 230 V at 50/60 Hz at ambient temperature 60 °C rated 	14 43 kvar
value	14 40 NVQI
\bullet at 400 V at 50/60 Hz at ambient temperature 60 $^{\circ}\text{C}$ rated value	25 75 kvar
 at 500 V at 50/60 Hz at ambient temperature 60 °C rated value 	31 94 kvar
• at 690 V at 50/60 Hz at ambient temperature 60 °C rated value	43 129 kvar
no-load switching frequency	
• at AC	500 1/h
operating frequency at AC-6b	
• at 230 V maximum	200 1/h
• at 240 V maximum	200 1/h
• at 400 V maximum	100 1/h
• at 480 V maximum	60 1/h
• at 500 V maximum	60 1/h
• at 600 V maximum	40 1/h
• at 690 V maximum	40 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	110 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	296 VA
inductive power factor with closing power of the coil	0.61
apparent holding power of magnet coil at AC	19 VA
inductive power factor with the holding power of the coil	0.38
closing delay	
• at AC	13 50 ms
opening delay	
• at AC	10 21 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	1
attachable	1
• instantaneous contact	1
number of NO contacts for auxiliary contacts	1
attachable	1
• instantaneous contact	1
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

General Product Approval	
<u>···</u>	
Approvals Certificates	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
protection class IP on the front according to IEC 60529	IP20
Electrical Safety	
 positively driven operation according to IEC 60947-5-1 	No
 mirror contact according to IEC 60947-4-1 	No
product function	
main contacts Safety related data	
AWG number as coded connectable conductor cross section for	8
• at 60 °C	2x 35 mm ²
• at 40 °C	1x 50 mm²
type of minimum connectable cross-sections for main contacts at AC-6b	
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 for auxiliary contacts 	
type of connectable conductor cross-sections	
 finely stranded with core end processing 	2x (10 50 mm²)
solid or stranded	2x (10 70 mm²), 1x (10 70 mm²)
• stranded	2x (10 70 mm²), 1x (10 70 mm²)
• solid	2x (10 16 mm²)
type of connectable conductor cross-sections for main contacts	
• of magnet coil	Screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
for auxiliary and control circuit	screw-type terminals
for main current circuit	screw-type terminals
type of electrical connection	
onnections/ Terminals	
• for grounded parts at the side	10 mm
• with side-by-side mounting at the side	10 mm
required spacing	
depth	152 mm
width	80 mm
height	140 mm
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward an backward by +/- 22.5° on vertical mounting surface
nstallation/ mounting/ dimensions	
for short-circuit protection of the main circuit with type of coordination 1 required	gG: 250 A (690 V, 50 kA)
of the auxiliary circuit up to 230 V	
design of the miniature circuit breaker for short-circuit protection	C characteristic: 10 A; 0.4 kA
hort-circuit protection	1,660, 4,660
contact rating of auxiliary contacts according to UL	A600 / Q600
L/CSA ratings	
contact reliability of auxiliary contacts	0.00000001
• at 220 V	0.3 A
● at 125 V	0.9 A









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EMV Test Certificates Maritime application other











Confirmation

Dangerous goods

Environment

Transport Information



Environmental Confirmations

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=3RT2645-1AF03

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2645-1AF03

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2645-1AF03

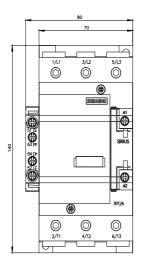
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

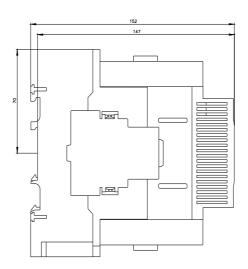
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2645-1AF03&lang=en

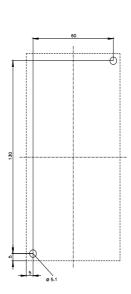
Characteristic: Tripping characteristics, I2t, Let-through current

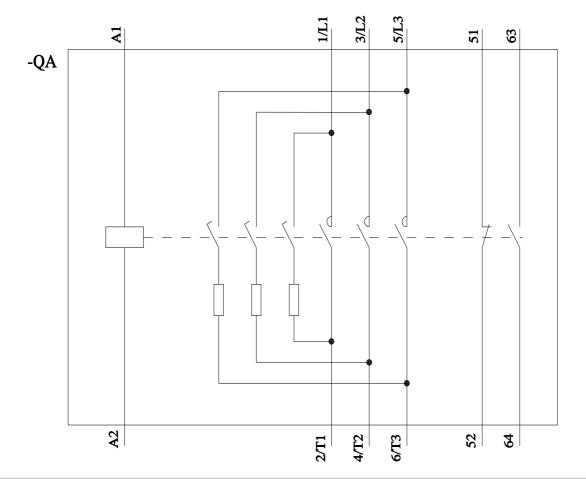
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2645-1AF03&objecttype=14&gridview=view1









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