SIEMENS

Data sheet 3RT1065-6LA06



power contactor, AC-3e/AC-3 265 A, 132 kW / 400 V without operating mechanism 3-pole, auxiliary contacts 2 NO + 2 NC main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT1	
Seneral technical data		
size of contactor	S10	
product extension		
 function module for communication 	No	
auxiliary switch	Yes	
power loss [W] for rated value of the current		
 at AC in hot operating state 	54 W	
 at AC in hot operating state per pole 	18 W	
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 	500 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	690 V	
shock resistance at rectangular impulse		
• at AC	8,5g / 5 ms, 4,2g / 10 ms	
• at DC	8,5g / 5 ms, 4,2g / 10 ms	
shock resistance with sine pulse		
• at AC	13,4g / 5 ms, 6,5g / 10 ms	
• at DC	13,4g / 5 ms, 6,5g / 10 ms	
mechanical service life (operating cycles)		
of contactor typical	10 000 000	
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000	
 of the contactor with added auxiliary switch block typical 	10 000 000	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	05/01/2012	
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 %	
Main circuit		

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	1 000 V
 at AC-3e rated value maximum 	1 000 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	330 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	330 A
value	200 4
 up to 690 V at ambient temperature 60 °C rated value 	300 A
— up to 1000 V at ambient temperature 40 °C rated	150 A
value	
 up to 1000 V at ambient temperature 60 °C rated 	150 A
value	
• at AC-3	
— at 400 V rated value	265 A
— at 500 V rated value	265 A
— at 690 V rated value	265 A
— at 1000 V rated value	95 A
• at AC-3e	
— at 400 V rated value	265 A
— at 500 V rated value	265 A
— at 690 V rated value	265 A
— at 1000 V rated value	95 A
 at AC-4 at 400 V rated value 	230 A
 at AC-5a up to 690 V rated value 	290 A
 at AC-5b up to 400 V rated value 	219 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	265 A
— up to 400 V for current peak value n=20 rated value	265 A
— up to 500 V for current peak value n=20 rated value	265 A
— up to 690 V for current peak value n=20 rated value	265 A
— up to 1000 V for current peak value n=20 rated	95 A
value	
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	184 A
— up to 400 V for current peak value n=30 rated value	184 A
— up to 500 V for current peak value n=30 rated value	184 A
— up to 690 V for current peak value n=30 rated value	184 A
— up to 1000 V for current peak value n=30 rated	95 A
value	
minimum cross-section in main circuit at maximum AC-1 rated	185 mm²
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	117 A
at 690 V rated value	105 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	33 A
— at 110 V rated value — at 220 V rated value	3.8 A
— at 440 V rated value	0.9 A
— at 600 V rated value	0.6 A
with 2 current paths in series at DC-1 at 24 V standyplus.	200 A
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	300 A

at 440 V rated value	4 A
— at 440 V rated value	
— at 600 V rated value	2 A
with 3 current paths in series at DC-1	000 4
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	300 A
— at 440 V rated value	11 A
— at 600 V rated value	5.2 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	300 A
— at 60 V rated value	11 A
— at 110 V rated value	3 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.18 A
— at 600 V rated value	0.125 A
with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	300 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-3	
— at 230 V rated value	75 kW
— at 400 V rated value	132 kW
— at 500 V rated value	160 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	132 kW
• at AC-3e	
— at 230 V rated value	75 kW
— at 400 V rated value	132 kW
— at 500 V rated value	160 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	132 kW
operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	66 kW
• at 690 V rated value	102 kW
operating apparent power at AC-6a	IOZ NVV
• up to 230 V for current peak value n=20 rated value	100 000 k\/A
up to 400 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value	100 000 kVA 180 000 VA
• up to 500 V for current peak value n=20 rated value	220 000 VA
up to 690 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value	310 000 VA
• up to 1000 V for current peak value n=20 rated value	160 000 VA
operating apparent power at AC-6a	70 000 \/\
up to 230 V for current peak value n=30 rated value	70 000 VA
up to 400 V for current peak value n=30 rated value	120 000 VA
up to 500 V for current peak value n=30 rated value	150 000 VA
• up to 690 V for current peak value n=30 rated value	220 000 VA
up to 1000 V for current peak value n=30 rated value short time withstand current in cold operating state up to	160 000 VA
short-time withstand current in cold operating state up to 40 °C	

limited to 1 s switching at zero current maximum	4 880 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	4 045 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	2 785 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	1 664 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	1 276 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	250 1/h
• at AC-3 maximum	500 1/h
• at AC-3e maximum	500 1/h
• at AC-4 maximum	130 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
closing delay	7.6.50
• at AC	30 95 ms
• at DC	30 95 ms
opening delay	
• at AC	40 80 ms
• at DC	40 80 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Without operating mechanism
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	6 A
at 400 V rated value	3 A
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	6 A
at 40 V rated value at 60 V rated value	6 A
at 110 V rated value	3 A
at 125 V rated value at 230 V rated value	2 A
at 220 V rated value	1 A
at 600 V rated value	0.15 A
operational current at DC-13	40.4
at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
at 110 V rated value	1 A
• at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	240 A
at 600 V rated value	242 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 200/208 V rated value	75 hp
— at 220/230 V rated value	100 hp
— at 460/480 V rated value	200 hp

— at 575/600 V rated value	250 hp
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 type of coordination 1 required	gG: 500 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50
With type of deelignment 2 required	kA)
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface
	+/- 22.5° tiltable to the front and back
fastening method	screw fixing
side-by-side mounting	Yes
height	210 mm
width	145 mm
depth	202 mm
required spacing	
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
for live parts	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	Connection bar
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
width of connection bar	25 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
connectable conductor cross-section for main contacts	70 240 mm²
stranded	70 240 mm²
connectable conductor cross-section for auxiliary contacts	0.5 4 mm²
solid or stranded finally stranded with core and presenting	0.5 4 mm ²
finely stranded with core end processing two of connectable conductor cross sections	0.5 2.5 mm ²
type of connectable conductor cross-sections	
for auxiliary contacts	2v (0.5
— solid — solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
Solid of stranded finely stranded with core end processing	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	2x (20 16), 2x (18 14), 1x 12
AWG number as coded connectable conductor cross section	
for auxiliary contacts	18 14
Safety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes
positively driven operation according to IEC 60947-5-1	No
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B10 value with high demand rate according to SN 31920	1 000 000
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
suitability for use	
 safety-related switching OFF 	No

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping









Confirmation

other

Miscellaneous

other

Railway

Miscellaneous

Special Test Certific-

Vibration and Shock

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=3RT1065-6LA06

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1065-6LA06

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1065-6LA06

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

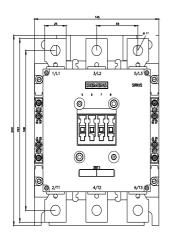
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1065-6LA06&lang=en

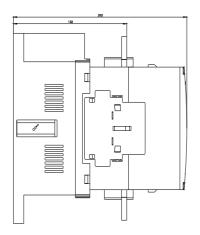
Characteristic: Tripping characteristics, I2t, Let-through current

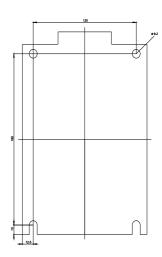
https://support.industry.siemens.com/cs/ww/en/ps/3RT1065-6LA06/char

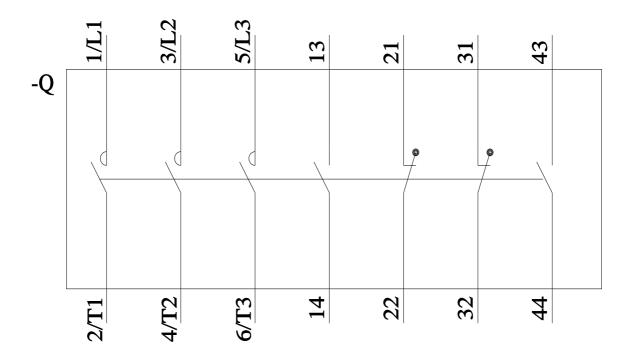
Further characteristics (e.g. electrical endurance, switching frequency)

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RT1065-6LA06\&objecttype=14\&gridview=view1}$









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