

Power contactor, AC-3 265 A, 132 kW / 400 V without coil Auxiliary contacts 2 NO + 2 NC 3-pole, Size S10 Main conductor: Busbar connections Drive: conventional Auxiliary conductor: Screw terminals

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1

General technical data

size of contactor	S10
product extension	
<ul style="list-style-type: none"> function module for communication auxiliary switch 	No Yes
power loss [W] for rated value of the current	
<ul style="list-style-type: none"> at AC in hot operating state at AC in hot operating state per pole 	54 W 18 W
surge voltage resistance	
<ul style="list-style-type: none"> of main circuit rated value of auxiliary circuit rated value 	8 kV 6 kV
maximum permissible voltage for safe isolation	
<ul style="list-style-type: none"> between coil and main contacts acc. to EN 60947-1 	690 V
protection class IP	
<ul style="list-style-type: none"> on the front of the terminal 	IP00; IP20 on the front with cover / box terminal IP00
shock resistance at rectangular impulse	
<ul style="list-style-type: none"> at AC at DC 	8,5g / 5 ms, 4,2g / 10 ms 8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
<ul style="list-style-type: none"> at AC at DC 	13,4g / 5 ms, 6,5g / 10 ms 13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (switching cycles)	
<ul style="list-style-type: none"> of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical 	10 000 000 5 000 000 10 000 000
reference code acc. to IEC 81346-2	Q

Ambient conditions

<ul style="list-style-type: none"> • installation altitude at height above sea level maximum 	2 000 m
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-55 ... +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	1 000 V
operational current	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value 	330 A
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value 	330 A
<ul style="list-style-type: none"> — up to 690 V at ambient temperature 60 °C rated value 	300 A
<ul style="list-style-type: none"> — up to 1000 V at ambient temperature 40 °C rated value 	150 A
<ul style="list-style-type: none"> — up to 1000 V at ambient temperature 60 °C rated value 	150 A
<ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	265 A
<ul style="list-style-type: none"> — at 500 V rated value 	265 A
<ul style="list-style-type: none"> — at 690 V rated value 	265 A
<ul style="list-style-type: none"> — at 1000 V rated value 	95 A
<ul style="list-style-type: none"> • at AC-4 at 400 V rated value 	230 A
<ul style="list-style-type: none"> • at AC-5a up to 690 V rated value 	290 A
<ul style="list-style-type: none"> • at AC-5b up to 400 V rated value 	219 A
<ul style="list-style-type: none"> • at AC-6a <ul style="list-style-type: none"> — up to 230 V for current peak value n=20 rated value 	265 A
<ul style="list-style-type: none"> — up to 400 V for current peak value n=20 rated value 	265 A
<ul style="list-style-type: none"> — up to 500 V for current peak value n=20 rated value 	265 A
<ul style="list-style-type: none"> — up to 690 V for current peak value n=20 rated value 	265 A
<ul style="list-style-type: none"> — up to 1000 V for current peak value n=20 rated value 	95 A
<ul style="list-style-type: none"> • 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 value	95 A
minimum cross-section in main circuit	
• at maximum AC-1 rated value	185 mm ²
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 110 V rated value	33 A
— 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 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 600 V rated value	2 A
• with 3 current paths in series at DC-1	
— at 24 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
operational current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	300 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

<ul style="list-style-type: none"> • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value 	300 A 300 A 2.5 A 0.65 A 0.37 A 300 A 300 A 300 A 1.4 A 0.75 A
operating power <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 1000 V rated value 	75 kW 132 kW 160 kW 250 kW 132 kW
operating power for approx. 200000 operating cycles at AC-4 <ul style="list-style-type: none"> • at 400 V rated value • at 690 V rated value 	66 kW 102 kW
operating apparent power at AC-6a <ul style="list-style-type: none"> • up to 230 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value 	100 000 kV·A 180 000 V·A 220 000 V·A 310 000 V·A 160 000 V·A
operating apparent power at AC-6a <ul style="list-style-type: none"> • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value 	70 000 V·A 120 000 V·A 150 000 V·A 220 000 V·A

<ul style="list-style-type: none"> • up to 1000 V for current peak value n=30 rated value 	160 000 V·A
short-time withstand current in cold operating state up to 40 °C	
<ul style="list-style-type: none"> • limited to 1 s switching at zero current maximum 	4 880 A; Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> • limited to 5 s switching at zero current maximum 	4 045 A; Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> • limited to 10 s switching at zero current maximum 	2 785 A; Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> • limited to 30 s switching at zero current maximum 	1 664 A; Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at AC 	2 000 1/h
<ul style="list-style-type: none"> • at DC 	2 000 1/h
operating frequency	
<ul style="list-style-type: none"> • at AC-1 maximum 	800 1/h
<ul style="list-style-type: none"> • at AC-2 maximum 	300 1/h
<ul style="list-style-type: none"> • at AC-3 maximum 	700 1/h
<ul style="list-style-type: none"> • at AC-4 maximum 	130 1/h

Control circuit/ Control

type of voltage of the control supply voltage	AC/DC
closing delay	
<ul style="list-style-type: none"> • at AC 	30 ... 95 ms
<ul style="list-style-type: none"> • at DC 	30 ... 95 ms
opening delay	
<ul style="list-style-type: none"> • at AC 	40 ... 80 ms
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • instantaneous contact 	2
number of NO contacts for auxiliary contacts	
<ul style="list-style-type: none"> • instantaneous contact 	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> • at 230 V rated value 	6 A
<ul style="list-style-type: none"> • at 400 V rated value 	3 A
<ul style="list-style-type: none"> • 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 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 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	
• 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 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	
width of connection bar	25 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
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
type of connectable conductor cross-sections	
• at AWG cables for main contacts	2/0 ... 500 kcmil
connectable conductor cross-section for main contacts	
• stranded	70 ... 240 mm ²
connectable conductor cross-section for auxiliary contacts	
• solid or stranded	0.5 ... 4 mm ²
• finely stranded with core end processing	0.5 ... 2.5 mm ²
• type of connectable conductor cross-sections for auxiliary contacts	
— solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)

— solid or stranded	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), max. 2x (0,75 ... 4 mm ²)
— finely stranded with core end processing	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
• type of connectable conductor cross-sections at AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
AWG number as coded connectable conductor cross section	
• for auxiliary contacts	18 ... 14

Safety related data	
B10 value	
• with high demand rate acc. to SN 31920	1 000 000
product function	
• mirror contact acc. to IEC 60947-4-1	Yes
• positively driven operation acc. to IEC 60947-5-1	No
touch protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
suitability for use safety-related switching OFF	No

Certificates/ approvals

General Product Approval	EMC
 CSA  CCC  UL	KC  EAC  RCM

Declaration of Conformity	Test Certificates	Marine / Shipping
 EG-Konf. Miscellaneous	Special Test Certificate Type Test Certificates/Test Report	 ABS  RMRS

other	Railway
Confirmation Miscellaneous	Special Test Certificate

Further information

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, ...)

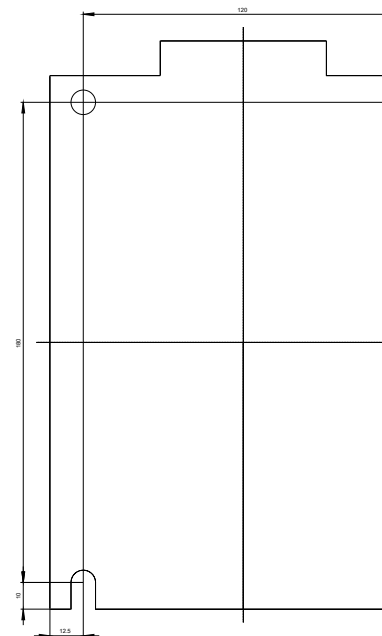
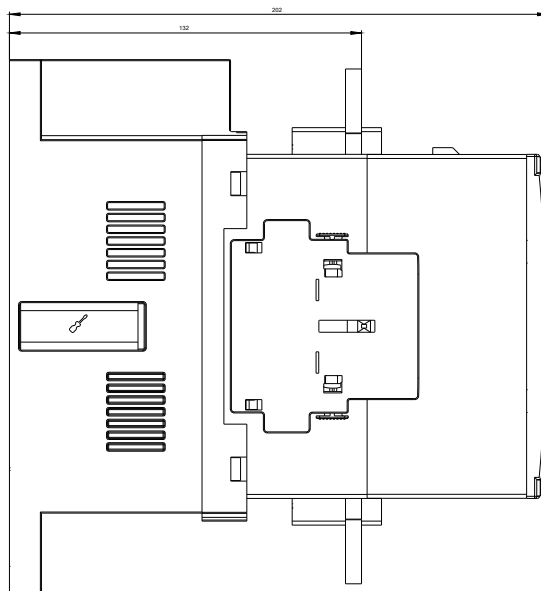
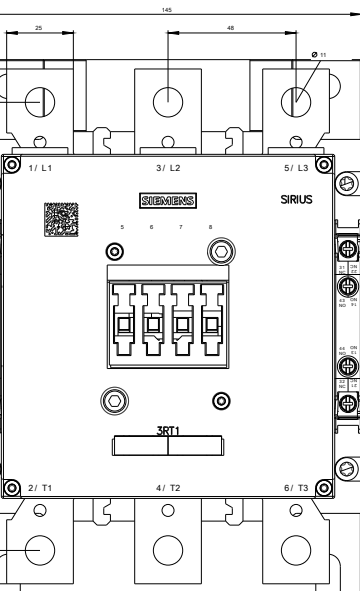
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1065-6LA06&lang=en

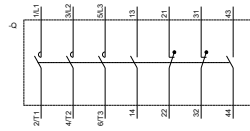
Characteristic: Tripping characteristics, I^2t , Let-through current

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

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1065-6LA06&objecttype=14&gridview=view1>





3RT106-1...A...B...C...D...E...F...G...H...I...J...K...L...M...N...O...P...Q...R...S...T...U...V...W...X...Y...Z...AA...AB...AC...AD...AE...AF...AG...AH...AI...AJ...AK...AL...AM...AN...AO...AP...AQ...AR...AS...AT...AU...AV...AW...AX...AY...AZ...BA...BB...BC...BD...BE...BF...BG...BH...BI...BJ...BK...BL...BM...BN...BO...BP...BQ...BR...BS...BT...BU...BV...BW...BX...BY...BZ...CA...CB...CC...CD...CE...CF...CG...CH...CI...CJ...CK...CL...CM...CN...CO...CP...CQ...CR...CS...CT...CU...CV...CW...CX...CY...CZ...DA...DB...DC...DD...DE...DF...DG...DH...DI...DJ...DK...DL...DM...DN...DO...DP...DQ...DR...DS...DT...DU...DV...DW...DX...DY...DZ...EA...EB...EC...ED...EE...EF...EG...EH...EI...EJ...EK...EL...EM...EN...EO...EP...EQ...ER...ES...ET...EU...EV...EW...EX...EY...EZ...FA...FB...FC...FD...FE...FF...FG...FH...FI...FJ...FK...FL...FM...FN...FO...FP...FQ...FR...FS...FT...FU...FV...FW...FX...FY...FZ...GA...GB...GC...GD...GE...GF...GG...GH...GI...GJ...GK...GL...GM...GN...GO...GP...GQ...GR...GS...GT...GU...GV...GW...GX...GY...GZ...HA...HB...HC...HD...HE...HF...HG...HH...HI...HJ...HK...HL...HM...HN...HO...HP...HQ...HR...HS...HT...HU...HV...HW...HX...HY...HZ...IA...IB...IC...ID...IE...IF...IG...IH...II...IJ...IK...IL...IM...IN...IO...IP...IQ...IR...IS...IT...IU...IV...IW...IX...IY...IZ...JA...JB...JC...JD...JE...JF...JG...JH...JI...JJ...JK...JL...JM...JN...JO...JP...JQ...JR...JS...JT...JU...JV...JW...JX...JY...JZ...KA...KB...KC...KD...KE...KF...KG...KH...KI...KJ...KK...KL...KM...KN...KO...KP...KQ...KR...KS...KT...KU...KV...KW...KX...KY...KZ...LA...LB...LC...LD...LE...LF...LG...LH...LI...LJ...LK...LL...LM...LN...LO...LP...LQ...LR...LS...LT...LU...LV...LW...LX...LY...LZ...MA...MB...MC...MD...ME...MF...MG...MH...MI...MJ...MK...ML...MM...MN...MO...MP...MQ...MR...MS...MT...MU...MV...MW...MX...MY...MZ...NA...NB...NC...ND...NE...NF...NG...NH...NI...NJ...NK...NL...NM...NN...NO...NP...NQ...NR...NS...NT...NU...NV...NW...NX...NY...NZ...OA...OB...OC...OD...OE...OF...OG...OH...OI...OJ...OK...OL...OM...ON...OO...OP...OQ...OR...OS...OT...OU...OV...OW...OX...OY...OZ...PA...PB...PC...PD...PE...PF...PG...PH...PI...PJ...PK...PL...PM...PN...PO...PP...PQ...PR...PS...PT...PU...PV...PW...PX...PY...PZ...QA...QB...QC...QD...QE...QF...QG...QH...QI...QJ...QK...QL...QM...QN...QO...QP...QQ...QR...QS...QT...QU...QV...QW...QX...QY...QZ...RA...RB...RC...RD...RE...RF...RG...RH...RI...RJ...RK...RL...RM...RN...RO...RP...RQ...RR...RS...RT...RU...RV...RW...RX...RY...RZ...SA...SB...SC...SD...SE...SF...SG...SH...SI...SJ...SK...SL...SM...SN...SO...SP...SQ...SR...SS...ST...SU...SV...SW...SX...SY...SZ...TA...TB...TC...TD...TE...TF...TG...TH...TI...TJ...TK...TL...TM...TN...TO...TP...TQ...TR...TS...TT...TU...TV...TW...TX...TY...TZ...UA...UB...UC...UD...UE...UF...UG...UH...UI...UJ...UK...UL...UM...UN...UO...UP...UQ...UR...US...UT...UU...UV...UW...UX...UY...UZ...VA...VB...VC...VD...VE...VF...VG...VH...VI...VJ...VK...VL...VM...VN...VO...VP...VQ...VR...VS...VT...VU...VV...VW...VX...VY...VZ...WA...WB...WC...WD...WE...WF...WG...WH...WI...WJ...WK...WL...WM...WN...WO...WP...WQ...WR...WS...WT...WU...WV...WW...WX...WY...WZ...XA...XB...XC...XD...XE...XF...XG...XH...XI...XJ...XK...XL...XM...XN...XO...XP...XQ...XR...XS...XT...XU...XV...XW...XX...XY...XZ...YA...YB...YC...YD...YE...YF...YG...YH...YI...YJ...YK...YL...YM...YN...YO...YP...YQ...YR...YS...YT...YU...YV...YW...YX...YY...YZ...ZA...ZB...ZC...ZD...ZE...ZF...ZG...ZH...ZI...ZJ...ZK...ZL...ZM...ZN...ZO...ZP...ZQ...ZR...ZS...ZT...ZU...ZV...ZW...ZX...ZY...ZZ

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