## SIEMENS

## Data sheet

## 3RT1065-6AP36



Power contactor, AC-3 265 A, 132 kW / 400 V AC (50-60 Hz) / DC operation 220-240 V UC Auxiliary contacts 2 NO + 2 NC 3-pole, Size S10 Busbar connections Drive: conventional screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1
General technical data	
size of contactor	S10
product extension	
<ul> <li>function module for communication</li> </ul>	No
<ul> <li>auxiliary switch</li> </ul>	Yes
power loss [W] for rated value of the current at AC in hot operating state	54 W
per pole	18 W
power loss [W] for rated value of the current without load current share typical	7.4 W
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	8 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for safe isolation between coil and main contacts acc. 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 (switching cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code acc. to IEC 81346-2	Q
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
<ul> <li>ambient temperature during operation</li> </ul>	-25 +60 °C
ambient temperature during storage	-55 +80 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3



	4 000 1/
operating voltage at AC-3 rated value maximum	1 000 V
operational current	330 A
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	330 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	330 A
— up to 690 V at ambient temperature 60 °C rated value	300 A
— up to 1000 V at ambient temperature 40 °C rated value	150 A
— up to 1000 V at ambient temperature 60 °C rated value	150 A
● 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
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	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	
<ul> <li>— up to 230 V for current peak value n=20 rated value</li> </ul>	265 A
<ul> <li>— up to 400 V for current peak value n=20 rated value</li> </ul>	265 A
<ul> <li>— up to 500 V for current peak value n=20 rated value</li> </ul>	265 A
— up to 690 V for current peak value n=20 rated value	265 A
<ul> <li>— up to 1000 V for current peak value n=20 rated value</li> </ul>	95 A
● at AC-6a	
<ul> <li>— up to 230 V for current peak value n=30 rated value</li> </ul>	184 A
<ul> <li>— up to 400 V for current peak value n=30 rated value</li> </ul>	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
<ul> <li>— up to 1000 V for current peak value n=30 rated value</li> </ul>	95 A
minimum cross-section in main circuit at maximum AC-1 rated value	185 mm²
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	000 4
— 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

<ul> <li>with 3 current paths in series at DC-1</li> </ul>			
- at 24 V rated value	300 A		
— at 24 V lated value — at 110 V rated value	300 A		
— at 220 V rated value	300 A		
	11 A		
— at 440 V rated value	5.2 A		
at 600 V rated value operational current	5.2 A		
at 1 current path at DC-3 at DC-5			
•	200 A		
— at 24 V rated value	300 A 3 A		
— at 110 V rated value	0.6 A		
- at 220 V rated value			
— at 440 V rated value — at 600 V rated value	0.18 A 0.125 A		
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	0.125 A		
	200 A		
— at 24 V rated value	300 A 300 A		
— at 110 V rated value	2.5 A		
- at 220 V rated value			
— 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	200 A		
— 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	1.4 A		
— at 600 V rated value	0.75 A		
operating power			
• at AC-3	75.114		
— 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-4			
at 400 V rated value	66 kW		
at 690 V rated value	102 kW		
operating apparent power at AC-6a			
• up to 230 V for current peak value n=20 rated value	100 000 kV·A		
• up to 400 V for current peak value n=20 rated value	180 000 V·A		
• up to 500 V for current peak value n=20 rated value	220 000 V·A		
• up to 690 V for current peak value n=20 rated value	310 000 V·A		
• up to 1000 V for current peak value n=20 rated	160 000 V·A		
value			
operating apparent power at AC-6a			
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	70 000 V·A		
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	120 000 V·A		
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	150 000 V·A		
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	220 000 V·A		
<ul> <li>up to 1000 V for current peak value n=30 rated</li> </ul>	160 000 V·A		
value			
short-time withstand current in cold operating state up to 40 °C			
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	4 880 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	4 045 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	2 785 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	1 664 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	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	300 1/h
• at AC-3 maximum	700 1/h
• at AC-4 maximum	130 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	Acide
at 50 Hz rated value	220 240 V
• at 60 Hz rated value	220 240 V
control supply voltage at DC	
rated value	220 240 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
• initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
• at 50 Hz	590 V·A
inductive power factor with closing power of the coil	
• at 50 Hz	0.9
apparent holding power of magnet coil at AC	
• at 50 Hz	6.7 V·A
inductive power factor with the holding power of the	
o at 50 Hz	0.0
	0.9
closing power of magnet coil at DC	650 W
holding power of magnet coil at DC closing delay	7.4 W
• at AC	30 95 ms
• at DC	30 95 ms
opening delay	30 93 115
• at AC	40 80 ms
• at DC	40 80 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
instantaneous contacts	2
number of NO contacts for auxiliary contacts	2
instantaneous contact	
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 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	1A		
at 125 V rated value			
at 125 V rated value	0.9 A 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	240 A 242 A		
yielded mechanical performance [hp]	242 A		
• for 3-phase AC motor			
at 200/208 V rated value	75 hr		
	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			
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 500 A (690 V, 100 kA)		
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 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			
Installation/ mounting/ dimensions	with vertical mounting surface $\pm -90^{\circ}$ rotatable with vertical mounting		
Installation/ mounting/ dimensions mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back		
mounting position	surface +/- 22.5° tiltable to the front and back		
mounting position fastening method	surface +/- 22.5° tiltable to the front and back screw fixing		
mounting position fastening method • side-by-side mounting	surface +/- 22.5° tiltable to the front and back screw fixing Yes		
mounting position fastening method • side-by-side mounting height	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm		
mounting position fastening method o side-by-side mounting height width	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm		
mounting position fastening method o side-by-side mounting height width depth	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 10 mm 0 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — at the side         • for grounded parts         — forwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 10 mm 0 mm 20 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — upwards         — upwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — upwards         — at the side         — forwards         — upwards         — downwards         — at the side         — forwards         — upwards         — downwards         — at the side         — downwards         — at the side         — downwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — at the side         • for grounded parts         — upwards         — at the side         — forwards         — upwards         — at the side         — forwards         — upwards         — at the side	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — oforwards         — at the side         — forwards         — at the side         — forwards         — ownwards         — ownwards         — for live parts         — forwards         • for live parts         — forwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for grounded parts         — forwards         — at the side         — forwards         — at the side         — forwards         — at the side         — downwards         • for live parts         — forwards         • for live parts         — upwards         — upwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 20 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — oforwards         — at the side         — forwards         — at the side         — forwards         — ownwards         — ownwards         — for live parts         — forwards         • for live parts         — forwards	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 10 mm 20 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         - downwards         - for live parts         - forwards         - upwards         - forwards         - a the side         - downwards         - forwards         - at the side	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 20 mm 10 mm 20 mm 10 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         • for grounded parts         - forwards         - at the side         - downwards         - forwards         - upwards         - at the side         - downwards         - at the side         Connections/ Terminals	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         - forwards         - at the side         - downwards         - at the side         Connections/ Terminals         width of connection bar	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 20 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         — forwards         — upwards         — downwards         — at the side         • for grounded parts         — forwards         — at the side         • for live parts         — forwards         — upwards         — at the side         — downwards         • for live parts         — forwards         — upwards         — at the side         — downwards         — at the side         Connections/ Terminals         width of connection bar         thickness of connection bar	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 20 mm 10 mm 10 mm		
mounting position         fastening method         • side-by-side mounting         height         width         depth         required spacing         • with side-by-side mounting         - forwards         - upwards         - downwards         - at the side         • for grounded parts         - forwards         - at the side         - forwards         - at the side         - downwards         - at the side         Connections/ Terminals         width of connection bar	surface +/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm 20 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 20 mm		

type of electrical connec						
<ul> <li>for main current circ</li> </ul>			Connection bar			
<ul> <li>for auxiliary and control circuit</li> </ul>			screw-type terminals			
<ul> <li>at contactor for auxiliary contacts</li> </ul>		Screw-type terminals				
of magnet coil		Screw-type terminals				
type of connectable conductor cross-sections						
<ul> <li>at AWG cables for r</li> </ul>			2/0 500 kcmil			
connectable conductor contacts	connectable conductor cross-section for main contacts					
<ul> <li>stranded</li> </ul>			70 240 mm²			
connectable conductor contacts	cross-section for	auxiliary				
<ul> <li>solid or stranded</li> </ul>			0.5 4 mm²			
<ul> <li>finely stranded with</li> </ul>	core end processi	ing	0.5 2.5 mm²			
type of connectable con	ductor cross-sec	tions				
<ul> <li>for auxiliary contacts</li> </ul>						
— solid			2x (0.5 1.5 mm²), 2x (0.7	5 2.5 mm²), max. 2x	(0.75 4 mm²)	
- solid or strande	ed		2x (0,5 1,5 mm²), 2x (0,7			
	l with core end pro	cessina	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.7	,	( )	
<ul> <li>at AWG cables for a</li> </ul>			2x (20 16), 2x (18 14),			
<ul> <li>AWG number as co</li> </ul>	ded connectable of	conductor	18 14			
cross section for auxil						
Safety related data		24020	1 000 000			
B10 value with high dema	ind rate acc. to SN	31920	1 000 000			
product function			N/			
<ul> <li>mirror contact acc. t</li> </ul>		000455	Yes			
positively driven ope			No			
protection class IP on th			IP00; IP20 with box terminal/cover			
touch protection on the			finger-safe, for vertical cont	act from the front		
suitability for use safety-re	elated switching O	FF	Yes			
Certificates/ approvals						
General Product Approv	val				EMC	
SF CM	CCC CCC	UL UL	KC	EHC	RCM	
Declaration of Conform	ity	Test Certifica	tes		Marine / Shipping	
Miscellaneous	~ ~	Special Tes		Miscellaneous		
	EG-Konf.	<u>Certificate</u>	<u>Certificates/Test</u> <u>Report</u>		ABS	
Marine / Shipping		other				
RMRS	DIVISILIZIES	<u>Confirmatio</u>	n <u>Miscellaneous</u>	<u>Miscellaneous</u>	<u>Confirmation</u>	
Railway						
<u>Special Test</u>						

-

## **Further information**

Information- and Downloadcenter (Catalogs, Brochures,...) siemens .com/ic10

Industry Mall (Online ordering system)

mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1065-6AP36

Cax online generator

support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1065-6AP36

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

/support.industry.siemens.com/cs/ww/en/ps/3RT1065-6AP36

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

automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1065-6AP36&lang=en

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

support.industry.siemens.com/cs/ww/en/ps/3RT1065-6AP36/char

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

automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1065-6AP36&objecttype=14&gridview=view1







