## **SIEMENS**

Data sheet 3RT1065-6AT36

SIRIUS





power contactor, AC-3e/AC-3 265 A, 132 kW / 400 V AC (50-60 Hz) / DC Uc: 575-600 V 3-pole, auxiliary contacts 2 NO + 2 NC drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal



product brand name	SINIUS
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
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	54 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	18 W
<ul> <li>without load current share typical</li> </ul>	7.4 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	500 V
surge voltage resistance	
of main circuit rated value	8 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	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)	
<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 according to IEC 81346-2	Q
Substance Prohibitance (Date)	
SVHC substance name	Lead - 7439-92-1
Weight	6.579 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	
	Yes
Environmental Product Declaration(EPD)	
Global Warming Potential [CO2 eq] total	580 kg
Global Warming Potential [CO2 eq] during manufacturing	26.3 kg
Global Warming Potential [CO2 eq] during operation	559 kg
Global Warming Potential [CO2 eq] after end of life	-4.89 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
<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
<ul> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>at AC-3</li> </ul>	150 A
— at 400 V rated value	265 A
— at 500 V rated value	265 A
— at 690 V rated value  — 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
<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	
— 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 value  value	95 A
• 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 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	
— at 24 V rated value	300 A
— at 60 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
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— 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 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 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	000 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	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-3	75 1/1/1
— at 230 V rated value	75 kW 132 kW
— at 400 V rated value — at 500 V rated value	132 KW 160 kW
— at 690 V rated value  — at 690 V rated value	250 kW
— at 1000 V rated value  — at 1000 V rated value	132 kW
at AC-3e	194 (188
— at 230 V rated value	75 kW
— at 400 V rated value	132 kW
— at 500 V rated value  — at 500 V rated value	160 kW
— at 690 V rated value  — at 690 V rated value	250 kW
— at 1000 V rated value  — at 1000 V rated value	132 kW
operating power for approx. 200000 operating cycles at AC-	IVE IVV
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	
• up to 230 V for current peak value n=20 rated value	100 000 kVA

• up to 460 V for current peak value n=20 rated value • up to 600 V for current peak value n=20 rated value • up to 1600 V for current peak value n=20 rated value • up to 1600 V for current peak value n=20 rated value • up to 1600 V for current peak value n=20 rated value • up to 400 V for current peak value n=30 rated value • up to 1600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 1600 V for current peak value n=30 rated value • up to 1600 V for current peak value n=30 rated value • up to 1600 V for current peak value n=30 rated value • up to 1600 V for current peak value n=30 rated value • while do 1 a switching at zero current maximum • limited to 10 a switching at zero current maximum • limited to 10 a switching at zero current maximum • limited to 10 a switching at zero current maximum • limited to 10 a switching at zero current maximum • limited to 30 a switching at zero		
	• up to 400 V for current peak value n=20 rated value	180 000 VA
### Up to 1000 V for current peak value n=30 rated value operating appearent power at A.C.\$-8	<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	220 000 VA
Operating apparent power at AC-6a   up to 230 V for current peak value ==30 rated value   120 000 VA   120	<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	310 000 VA
10 to 200 V for current peak value m=30 rated value   10 to 500 V for current peak value m=30 rated value   150 000 V   150	<ul> <li>up to 1000 V for current peak value n=20 rated value</li> </ul>	160 000 VA
up to 400 V for current peak value n=30 rated value	operating apparent power at AC-6a	
• up to 500 V for current peak value n=30 rated value   • up to 1000 V for current peak value n=30 rated value   • up to 1000 V for current peak value n=30 rated value   • up to 1000 V for current peak value n=30 rated value   • 0 for declar the withstand current in cold operating state up to   • 0 for declar the withstand current in cold operating state up to   • 0 for declar the withstand current in cold operating state up to   • 0 for declar the withstand current in cold operating state up to   • 0 for declar the without   • 0 for declar the withstand current in cold operating state up to   • 0 for declar the withstand current in aximum   • 0 finited to 10 s switching at zero current maximum   • 0 finited to 10 s switching at zero current maximum   • 0 finited to 10 s switching at zero current maximum   • 0 finited to 10 s switching at zero current maximum   • 0 finited to 10 s switching at zero current maximum   • 0 for declar the without   • 0 for dec	<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	70 000 VA
• up to 690 V for current peak value m-30 rated value ahort-time withstand current in cold operating state up to 40 °C  • limited to 1 s awitching at zero current maximum • limited to 1 s awitching at zero current maximum • limited to 10 s awitching at zero current maximum • l	<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	120 000 VA
• up to 1000 V for current peak value m-30 rated value  abort-time withstand current in cold operating state up to  4 °C  • limited to 1s switching at zero current maximum  • limited to 1s switching at zero current maximum  • limited to 1s switching at zero current maximum  • limited to 1s switching at zero current maximum  • limited to 3s switching at zero current maximum  • at AC-1 maximum  • at AC-1 maximum  • at AC-3 maximum  • at BC-3 maximum  • at BC-3 maximum  • at BC-3 maximum  • at IC-3 maximum  • at AC-4 maximum rated control supply voltage at AC  • at 60 Hz  • at To Ditz  • at To Ditz  • at maximum maximum at AC-4 maximum  • at MC-3 maximum  • at AC-4 maximum  •	<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	150 000 VA
abort-time withstand current in cold operating state up to 40°C   • Ilmitled to 1 s switching at zero current maximum	<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	220 000 VA
** limited to 1 s avairching at zero current maximum ** limited to 1 s avairching at zero current maximum ** limited to 3 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 30 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maximum ** limited to 10 s avairching at zero current maxim	• up to 1000 V for current peak value n=30 rated value	160 000 VA
Ilimited to 1 s switching at zero current maximum   4880 A: Use minimum cross-section acc. to AC-1 rated value   4045 A; Use minimum cross-section acc. to AC-1 rated value   4045 A; Use minimum cross-section acc. to AC-1 rated value   1684 A; Use minimum cross-section acc.		
Firmined to 5 & switching at zero current maximum   4.05 Å, Use minimum cross-section acc. to AC-1 rated value		4 880 A: Use minimum cross-section acc to AC-1 rated value
minited to 10 s switching at zero current maximum   1664 A: Use minimum cross-section acc. to AC-1 rated value	-	
Mimited to 30 s witching at zero current maximum	-	
Initial to 60 s switching at zero current maximum  Incload switching frequency  Incload Switching freq	-	
no-load switching frequency	· ·	
at ACC     at DC     at AC-1 maximum     at AC-2 maximum     at AC-3 maximum     at AC-3 maximum     at AC-3 maximum     at AC-3 maximum     at AC-4 maximum     at CC     at 50 Hz rated value     at 50 Hz rated value     575 600 V     at 60 Hz rated value     575 600 V     at 60 Hz rated value     at 50 Hz rated value     at 60 Hz	·	,
		2 000 1/h
AC-1 maximum		
• at AC-1 maximum		
• at AC-3 maximum 500 1/h • at AC-3 emaximum 500 1/h • at AC-4 maximum 500 1/h  Control circuit/ Control  type of voltage of the control supply voltage AC  ontrol supply voltage at AC • at 50 Hz rated value 575 600 V • at 60 Hz rated value 575 600 V  ontrol supply voltage at DC rated value of magnet coil at DC  onitial value 0.8 • initial value 0.8 • initi		800 1/h
	at AC-2 maximum	250 1/h
• at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  • or at 50 Hz rated value  • full-scale value  • full-scale value  • full-scale value  • full-scale value  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at maximum rated control supply voltage at AC  — at 50 Hz  — at 50 Hz  — at 60 Hz  • at maximum rated control supply voltage at AC  — at 50 Hz  • at 60 Hz  • apparent pick-up power of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 60 Hz  • apparent pick-up power of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 60 Hz  • apparent pick-up power of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at minimum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at AC  — at 50 Hz  • at 60 Hz  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control sup	• at AC-3 maximum	500 1/h
Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  * at 60 Hz rated value  * on to 1 supply voltage at DC rated value  control supply voltage at DC rated value  575 600 V  control supply voltage at DC rated value  575 600 V  operating range factor control supply voltage rated value of magnet coil at DC  * initial value  * on to 1 the surge suppressor supply voltage rated value of magnet coil at AC  * at 50 Hz  * at 60 Hz  * at 80 Hz  *	at AC-3e maximum	500 1/h
type of voltage of the control supply voltage at AC  at 50 Hz rated value at 60 Hz rated value 575 600 V  control supply voltage at DC rated value 575 600 V  control supply voltage at DC rated value 575 600 V  operating range factor control supply voltage rated value of magnet coil at DC  initial value 61 subscript range factor control supply voltage rated value of magnet coil at AC  at 50 Hz at 60 Hz at 60 Hz  at 60 Hz  at 60 Hz  at 80 Hz  but at 80 Hz  but at 80 Hz  at 80 Hz  at 80 Hz  but at 80 Hz  at 80 Hz  at 80 Hz  but at 80 Hz  at 80 Hz  at 80 Hz  but at 80 Hz  580 VA  at 80 Hz  580 VA  at 80 Hz  580 VA  at 80 Hz  580 VA  at 80 Hz  at 80 H		
control supply voltage at AC  at 50 Hz rated value 575 600 V  control supply voltage at DC rated value 575 600 V  operating range factor control supply voltage rated value of magnet coil at DC  initial value initial value  operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz at 60 Hz at 60 Hz at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at maximum rated control supply voltage at AC  at 60 Hz at 50 Hz at 50 Hz at 60 Hz by 0VA apparent pick-up power of magnet coil at AC  at 50 Hz at 50 Hz at 50 Hz at 50 Hz at 60 Hz by 0VA at 60 Hz by 0VA apparent pick-up power of magnet coil at AC  at 50 Hz at 60 Hz by 0VA apparent holding power at minimum rated control supply voltage at DC at maximum rated control supply voltage at DC at maximum rated control supply voltage at DC at maximum rated control supply voltage at DC at minimum rated control supply voltage a	Control circuit/ Control	
at 50 Hz rated value at 60 Hz rated value 575 600 V  control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC  initial value operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz at 60 Hz  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  by VA  at 60 Hz  at 50 Hz  at 50 Hz  at 60 Hz  by VA  at 60 Hz  by	type of voltage of the control supply voltage	AC/DC
e at 60 Hz rated value  control supply voltage at DC rated value  operating range factor control supply voltage rated value of magnet coil at DC  e initial value  full-scale value  operating range factor control supply voltage rated value of magnet coil at AC  e at 50 Hz  e at 60 Hz  e at 60 Hz  e at minimum rated control supply voltage at AC  e at 50 Hz  e at maximum rated control supply voltage at AC  e at 60 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at 60 Hz  full Scale value  e at maximum rated control supply voltage at AC  e at 50 Hz  e at 60 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at 60 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at 60 Hz  e at maximum rated control supply voltage at AC  e at 50 Hz  e at 60 Hz  e at minimum rated control supply voltage at DC  e at maximum rated control supply voltage at DC  e at maximum rated control supply voltage at DC  e at minimum rated control supply voltage at DC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at minimum rated control supply voltage at AC  e at 60 Hz  e at minim	control supply voltage at AC	
control supply voltage at DC rated value  operating range factor control supply voltage rated value of magnet coil at DC  e initial value  operating range factor control supply voltage rated value of magnet coil at AC  e at 50 Hz  e at 60 Hz  o at minimum rated control supply voltage at AC  — at 50 Hz  e at maximum power of magnet coil at AC  e at 50 Hz  e at maximum rated control supply voltage at AC  — at 50 Hz  e at 60 Hz  sopoval  e at maximum rated control supply voltage at AC  — at 50 Hz  e at 60 Hz  sopoval  apparent pick-up power of magnet coil at AC  e at 50 Hz  e at 60 Hz  sopoval  apparent pick-up power of magnet coil at AC  e at 50 Hz  e at 60 Hz  sopoval  apparent pick-up power of magnet coil at AC  e at 50 Hz  e at 60 Hz  o .9  apparent holding power  e at minimum rated control supply voltage at DC  e at maximum rated control supply voltage at DC  e at maximum rated control supply voltage at DC  e at maximum rated control supply voltage at DC  e at minimum rated control supply voltage at DC  e at minimum rated control supply voltage at DC  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at DC  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at 50 Hz  e at minimum rated control supply voltage at AC  — at 50 Hz  e at 60 Hz  sopoval A  sopo	at 50 Hz rated value	575 600 V
operating range factor control supply voltage rated value of magnet coil at DC  • initial value • full-scale value  operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz • at 60 Hz • at minimum rated control supply voltage at AC  - at 50 Hz - at 60 Hz  • at maximum rated control supply voltage at AC  - at 50 Hz - at 60 Hz  • at maximum rated control supply voltage at AC  - at 50 Hz - at 60 Hz - at 50 Hz - at 60 Hz - at minimum rated control supply voltage at AC - at minimum rated control supply voltage at AC - at minimum rated control supply voltage at AC - at minimum rated control supply voltage at AC - at minimum rated control supply voltage at AC - at 60 Hz	at 60 Hz rated value	575 600 V
magnet coil at DC  • initial value • full-scale value  0.8 • full-scale value  operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz • at 60 Hz  design of the surge suppressor  apparent pick-up power • at minimum rated control supply voltage at AC — at 50 Hz — at 60 Hz — at 60 Hz — at 60 Hz — at 50 Hz  spaparent pick-up power of magnet coil at AC  apparent pick-up power of magnet coil at AC • at 50 Hz • at 60 Hz  apparent holding power • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at AC — at 50 Hz • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at AC — at 50 Hz • at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at 60 Hz  5.6 VA — at 60 Hz	control supply voltage at DC rated value	575 600 V
operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz • at 60 Hz • at 60 Hz  obesign of the surge suppressor  apparent pick-up power • at minimum rated control supply voltage at AC — at 50 Hz — at 60 Hz — at 60 Hz — at 60 Hz — at 50 Hz — at 60 Hz — at 50 Hz — at 60 Hz  • at find the control supply voltage at AC  • at 60 Hz • at 60 Hz • at 60 Hz  • at 60 Hz  apparent pick-up power of the coil • at 50 Hz • at 60 Hz  apparent holding power • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC — at minimum rated control supply voltage at DC — at minimum rated control supply voltage at DC — at minimum rated control supply voltage at DC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at 60 Hz  5.6 VA		
operating range factor control supply voltage rated value of magnet coil at AC  • at 50 Hz  • at 60 Hz  design of the surge suppressor  apparent pick-up power  • at minimum rated control supply voltage at AC  — at 50 Hz  — at 60 Hz  • at maximum rated control supply voltage at AC  — at 60 Hz  • at maximum rated control supply voltage at AC  — at 50 Hz  • at 60 Hz  inductive power factor with closing power of the coil  • at 60 Hz  apparent holding power  • at minimum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at AC  — at 60 Hz  5.6 VA	• initial value	0.8
magnet coil at AC  at 50 Hz  at 60 Hz  design of the surge suppressor  apparent pick-up power  at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz — at 60 Hz — at 60 Hz — at 50 Hz  spaparent pick-up power of magnet coil at AC  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  apparent holding power  at minimum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at minimum rated control supply voltage at DC  at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at minimum rated control supply voltage at AC — at 50 Hz — at minimum rated control supply voltage at AC — at 50 Hz — at 60 Hz  5.6 VA	full-scale value	1.1
• at 60 Hz  design of the surge suppressor  apparent pick-up power      • at minimum rated control supply voltage at AC     — at 50 Hz     — at 60 Hz  at maximum rated control supply voltage at AC  - at 60 Hz  - at 60 Hz  - at 60 Hz  590 VA  apparent pick-up power of magnet coil at AC  • at 50 Hz  • at 50 Hz  • at 60 Hz  590 VA  inductive power factor with closing power of the coil  • at 50 Hz  • at 60 Hz  0.9  apparent holding power  • at minimum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at maximum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at AC  — at 50 Hz  • at minimum rated control supply voltage at AC  — at 50 Hz  — at 50 Hz  — at 50 Hz  — at 60 Hz  5.6 VA		
design of the surge suppressor  apparent pick-up power  • at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz  • at maximum rated control supply voltage at AC  — at 60 Hz — at 50 Hz — at 50 Hz  — at 50 Hz  — at 50 Hz  spparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  • at 60 Hz  inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz  apparent holding power  • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at minimum rated control supply voltage at AC — at 50 Hz • at minimum rated control supply voltage at AC — at 50 Hz • at minimum rated control supply voltage at AC — at 50 Hz — at 60 Hz  5.6 VA	● at 50 Hz	0.8 1.1
apparent pick-up power  • at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz — at 60 Hz — at 50 Hz  spaparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  apparent holding power  • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at 50 Hz — at 60 Hz  5.6 VA	• at 60 Hz	0.8 1.1
at minimum rated control supply voltage at AC  - at 50 Hz  - at 60 Hz  490 VA  590 VA  590 VA  590 VA  40 VA  4	design of the surge suppressor	with varistor
- at 50 Hz - at 60 Hz 490 VA  • at maximum rated control supply voltage at AC  - at 60 Hz - at 50 Hz 590 VA  apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz 590 VA  inductive power factor with closing power of the coil • at 50 Hz • at 60 Hz  0.9  at 60 Hz  0.9  apparent holding power • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC  - at 50 Hz • at minimum rated control supply voltage at DC  - at maximum rated control supply voltage at DC  - at 50 Hz - at minimum rated control supply voltage at DC  - at 50 Hz - at 60 Hz  5.6 VA  - at 60 Hz		
- at 60 Hz  • at maximum rated control supply voltage at AC  - at 60 Hz  - at 50 Hz  590 VA  apparent pick-up power of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 50 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at minimum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at AC  - at 50 Hz  - at 60 Hz  5.6 VA		
at maximum rated control supply voltage at AC  — at 60 Hz — at 50 Hz  apparent pick-up power of magnet coil at AC  at 50 Hz at 60 Hz  at 60 Hz  590 VA  590 VA  inductive power factor with closing power of the coil  at 50 Hz  at 60 Hz  0.9  at 60 Hz  0.9  apparent holding power  at minimum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at minimum rated control supply voltage at DC  at minimum rated control supply voltage at DC  5.6 VA  - at 60 Hz  590 VA  590 VA  590 VA  6.1 VA  6.1 VA  5.6 VA  5.6 VA  - at 60 Hz  5.6 VA		
- at 50 Hz - at 50 Hz  apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  • at 60 Hz  • at 50 Hz • at 60 Hz  • at 50 Hz • at 60 Hz  • at 60 Hz  • at maximum rated control supply voltage at DC • at maximum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at 50 Hz - at 50 Hz - at 60 Hz  550 VA		490 VA
- at 50 Hz  apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  inductive power factor with closing power of the coil  • at 50 Hz • at 60 Hz  0.9  apparent holding power  • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  - at 50 Hz  - at 60 Hz  5.6 VA  5.6 VA		
apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  inductive power factor with closing power of the coil  • at 50 Hz • at 60 Hz  • at 60 Hz  0.9  apparent holding power  • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  • at minimum rated control supply voltage at DC  - at 50 Hz - at 60 Hz  590 VA  590 VA  0.9  6.1 VA  7.4 VA  5.6 VA  5.6 VA  5.6 VA		
<ul> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>inductive power factor with closing power of the coil</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at minimum rated control supply voltage at DC</li> <li>at maximum rated control supply voltage at DC</li> <li>at maximum rated control supply voltage at DC</li> <li>at minimum rated control supply voltage at AC</li> <li>at minimum rated control supply voltage at AC</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>5.6 VA</li> <li>5.6 VA</li> </ul>		990 VA
at 60 Hz  inductive power factor with closing power of the coil  at 50 Hz  at 60 Hz  0.9  at 60 Hz  o at minimum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at minimum rated control supply voltage at AC  at minimum rated control supply voltage at AC  at 50 Hz  at 60 Hz  5.6 VA		500 VA
inductive power factor with closing power of the coil  • at 50 Hz • at 60 Hz  apparent holding power  • at minimum rated control supply voltage at DC • at maximum rated control supply voltage at DC  apparent holding power  • at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz  5.6 VA		
<ul> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>apparent holding power</li> <li>at minimum rated control supply voltage at DC</li> <li>at maximum rated control supply voltage at DC</li> <li>at maximum rated control supply voltage at DC</li> <li>7.4 VA</li> </ul> apparent holding power <ul> <li>at minimum rated control supply voltage at AC</li> <li>at 50 Hz</li> <li>at 50 Hz</li> <li>5.6 VA</li> </ul> 5.6 VA <ul> <li>5.6 VA</li> </ul>		090 VA
apparent holding power  at minimum rated control supply voltage at DC  at maximum rated control supply voltage at DC  at maximum rated control supply voltage at DC  apparent holding power  at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz  5.6 VA		0.0
apparent holding power  • at minimum rated control supply voltage at DC  • at maximum rated control supply voltage at DC  apparent holding power  • at minimum rated control supply voltage at AC  — at 50 Hz  — at 60 Hz  5.6 VA		
at minimum rated control supply voltage at DC at maximum rated control supply voltage at DC  apparent holding power  at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz  5.6 VA  5.6 VA		
apparent holding power  at minimum rated control supply voltage at AC  — at 50 Hz — at 60 Hz  5.6 VA  5.6 VA		6.1 VA
apparent holding power		
at minimum rated control supply voltage at AC  at 50 Hz  at 60 Hz  5.6 VA  5.6 VA		
— at 50 Hz 5.6 VA 5.6 VA		
— at 60 Hz 5.6 VA		5.6 VA
• at maximum rated control supply voltage at AC	at maximum rated control supply voltage at AC	

ot 50 Hz	671//
— at 50 Hz	6.7 VA
— at 60 Hz	6.7 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.9
at 60 Hz	0.9
closing power of magnet coil at DC	650 W
holding power of magnet coil at DC	7.4 W
closing delay	
• 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	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	2
contact	
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 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	0.1071
• 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	1.4
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)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (500 V, 1 kA)

nstallation/ 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
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
- at the side	IV IIIII
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
type of connectable conductor cross-sections	
for AWG cables for main contacts	2/0 500 kcmil
connectable conductor cross-section for main contacts	
stranded	70 240 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for 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
afety related data	IV 17
<u> </u>	
product function	Voc
mirror contact according to IEC 60947-4-1      manifest to deliver according to IEC 60947-5-4.	Yes
positively driven operation according to IEC 60947-5-1	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %

failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
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
Approvals Certificates	

**General Product Approval** 



Confirmation







<u>KC</u>

**General Product Ap-**

EMV

**Functional Saftey** 

**Test Certificates** 

Marine / Shipping





Type Examination Certificate

Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>



Marine / Shipping









Confirmation

other

**Miscellaneous** 

other

Railway

**Environment** 

Confirmation

**Special Test Certific-**<u>ate</u>



Siemens EcoTech



**Environmental Confirmations** 

## Further information

Information on the packaging

com/cs/ww/en/view/109813875 https://support.industry.siemens.

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=3RT1065-6AT36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1065-6AT36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1065-6AT36

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

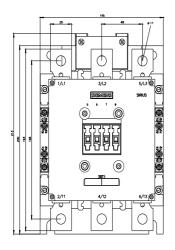
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1065-6AT36&lang=en

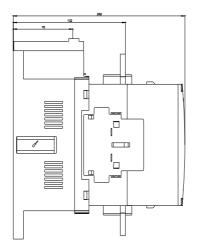
Characteristic: Tripping characteristics, I2t, Let-through current

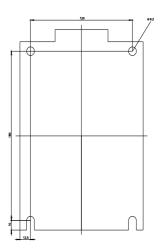
https://support.industry.siemens.com/cs/ww/en/ps/3RT1065-6AT36/char

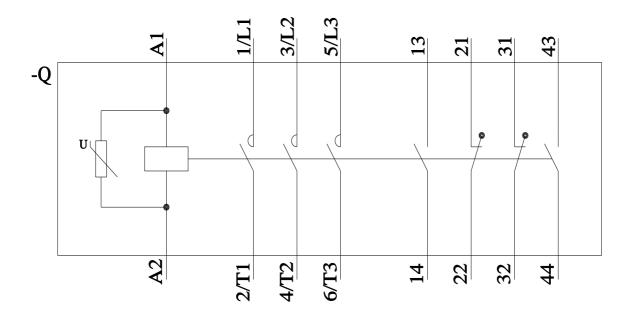
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1065-6AT36&objecttype=14&gridview=view1









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