## **SIEMENS**

Data sheet 3RT1066-6NB36



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC Uc: 21-27, 3 V PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC drive: electronic main circuit: busbar control and auxiliary circuit: 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
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	66 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	22 W
without load current share typical	3.4 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	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)	
<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
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 value	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 $^{\circ}\text{C}$ 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	200.4
— at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
— at 1000 V rated value	95 A
• at AC-3e	
— at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
— at 1000 V rated value	95 A
• at AC-4 at 400 V rated value	280 A
• at AC-5a up to 690 V rated value	290 A
• at AC-5b up to 400 V rated value	249 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	292 A
— up to 400 V for current peak value n=20 rated value	292 A
— up to 500 V for current peak value n=20 rated value	292 A
— up to 690 V for current peak value n=20 rated value	280 A
— up to 1000 V for current peak value n=20 rated value	95 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	195 A
— up to 400 V for current peak value n=30 rated value	195 A
— up to 500 V for current peak value n=30 rated value	195 A
— up to 690 V for current peak value n=30 rated value	195 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 <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	125 A
at 690 V rated value	115 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
a with 2 august noths in sovies at DC 1	
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	300 A
·	300 A 300 A

at 220 V rated value	200 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	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 220 V rated value	0.6 A
— at 440 V rated value	0.18 A
— at 600 V rated value	0.125 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</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	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</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	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-3	
— at 230 V rated value	90 kW
— at 400 V rated value	160 kW
— at 500 V rated value	200 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	132 kW
• at AC-3e	
— at 230 V rated value	90 kW
— at 400 V rated value	160 kW
— at 500 V rated value	200 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	71 kW
at 690 V rated value	112 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	110 000 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	200 000 VA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	250 000 VA
up to 690 V for current peak value n=20 rated value	330 000 VA
up to 1000 V for current peak value n=20 rated value	160 000 VA
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	70 000 VA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	130 000 VA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	160 000 VA
• up to 690 V for current peak value n=30 rated value	230 000 VA
up to 1000 V for current peak value n=30 rated value	160 000 VA
short-time withstand current in cold operating state up to 40 °C	

# limited to 15 switching at zero current maximum # limited to 15 switching at zero current maximum # limited to 10 s switching at zero current maximum # limited to 10 switching at zero current maximum # limited to 20 switching at zero current ma				
Initiated to 10 a switching at zero current maximum   188 A. Use minimum cross-section acc. to AC-1 rated value   188 A. Us	limited to 1 s switching at zero current maximum	5 524 A; Use minimum cross-section acc. to AC-1 rated value		
# limited to 30 switching at zero current maximum # limited to 30 switching at zero current maximum # limited to 30 switching at zero current maximum # limited to 30 switching at zero current maximum # at AC	<u> </u>			
■   milmed to 80 & switching at zero current maximum	-			
no-load switching frequency	<u> </u>			
		1 445 A; Use minimum cross-section acc. to AC-1 rated value		
## ACC operating requency ## AC-1 maximum ## A AC-2 maximum ## A AC-3 maximum ## AC-3				
operating frequency  at AC-3 maximum  by of Voltage and Centrol supply voltage  control supply voltage at AC  at 60 Hz rated value  at 60 Hz  at 60				
		1 000 1/h		
	• at AC-1 maximum			
	• at AC-2 maximum	250 1/h		
** AK-C4 maximum	• at AC-3 maximum	500 1/h		
Control circuit/ Control         ACIDC           control supply voltage at AC         at 50 Hz rated value         21 27.3 V           e at 60 Hz rated value         21 27.3 V           control supply voltage at DC         at 60 Hz rated value           e rated value         21 27.3 V           operating range factor control supply voltage rated value of magnet coil at DC         0.8           e infillal value         0.8           e infillal value         0.8           e infillal value         0.8           e for 0 Hz         0.8 1.1           e for 0 Hz         0.8 1.1           value of PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to IEC 60947-1         Type 2           consumed current at PLC-control input according to	• at AC-3e maximum	500 1/h		
type of voltage of the control supply voltage at AC  - at 60 Hz rated value  - at 60 Hz rated value  - at 60 Hz rated value  21 27,3 V  control supply voltage at DC  - (rated value  - (r		130 1/h		
control supply voltage at AC  at 50 Hz rated value 21 27.3 V  control supply voltage at DC crated value 0 rated value 0 rated value 0 perating range factor control supply voltage rated value of magnet coil at DC control supply voltage at DC crated value 0 perating range factor control supply voltage rated value of magnet coil at DC control supply voltage rated value 0 .8  at 11  control value at 12 27.3 V  0 .8  at 14  at 160 Hz at 160 Hz at 160 Hz bypo of PLC-control input according to IEC 69947-1 consumed current at PLC-control input according to IEC 69947-1 consumed current at PLC-control input according to IEC 69947-1 consumed current at PLC-control input according to IEC 69947-1 consumed current at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 maximum voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to IEC 69947-1 with variator voltage at PLC-control input according to	Control circuit/ Control			
• at 50 Hz rated value 21 27.3 V at 60 Hz rated value 6 each graph voltage at 60 Hz each graph voltage at 60 Hz each graph voltage at 60 Hz each graph voltage at 70 Hz each gr	type of voltage of the control supply voltage	AC/DC		
• at 80 Hz rated value  control supply voltage at DC  - rated value  21 27.3 V  poperating range factor control supply voltage rated value of magnet coil at DC  - initial value  - illul-scale value  - value scale value  - illul-scale value  - at 80 Hz  -	control supply voltage at AC			
control supply voltage at DC	at 50 Hz rated value	21 27.3 V		
	at 60 Hz rated value	21 27.3 V		
operating range factor control supply voltage rated value of magnet coil at DC initial value 0.8 1.1 0.8 1.1 0.8 1.1 0.8 1.1 0.8 1.1 0.8 1.1 0.8 1.1 0.8 1.1 1.1 0.8 1.1 0.8 1.1 1	control supply voltage at DC			
minglet coll at DC     • initial value   0.8     • intil-scale value   0.1.1     operating range factor control supply voltage rated value of magnet coll at AC     • at 50 Hz   0.8 1.1     • yee of PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     consumed current at PLC-control input according to IEC 60947-1     type 2     type 2     type 4 PLC-control input according to IEC 60947-1     type 2     type 2     type 4 PLC-control input according to IEC 60947-1     type 2     type 4 PLC-control input according to IEC 60947-1     type 2     type 2     type 4 PLC-control input according to IEC 60947-1     type 2     type	rated value	21 27.3 V		
■ full-scale value      Operating range factor control supply voltage rated value of magnet coil at AC     ■ at 50 Hz     ■ at 60 Hz     Summed current at PLC-control input according to IEC 60947-1     Type 2      consumed current at PLC-control input according to IEC 60947-1 maximum      voltage at PLC-control input rated value     Operating range factor of the voltage at PLC-control input     design of the surge suppressor     with varistor     apparent pick-up power of magnet coil at AC     ■ at 50 Hz     ■ at 60 Hz				
operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz  at 60 Hz  type of PLC-control input according to IEC 60947-1  type 2  consumed current at PLC-control input according to IEC 60947-1  rype 2  20 mA  voltage at PLC-control input rated value  operating range factor of the voltage at PLC-control input  design of the surge suppressor  apparent pick-up power of magnet coil at AC  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  ball ball ball ball ball ball ball bal	• initial value	0.8		
magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  type of PLC-control input according to IEC 60947-1  type of PLC-control input according to IEC 60947-1  consumed current at PLC-control input according to IEC 60947-1 maximum  voltage at PLC-control input rated value  operating range factor of the voltage at PLC-control input design of the surge suppressor  supparent pick-up power of magnet coil at AC  • at 50 Hz  • at 60 Hz  at 60 Hz  at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz  • at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz  • at 60 Hz  alt 60 Hz  blick of the surge suppressor  apparent holding power of magnet coil at AC  • at 50 Hz  • at 60 Hz  alt 60 Hz  blick of the surge suppressor  alt 50 Hz  • at 60 Hz  blick of the surge suppressor  alt 50 Hz  • at 60 Hz  blick of the surge suppressor  alt 50 Hz  • at 60 Hz  closing power of magnet coil at AC  • at 60 Hz  closing power of magnet coil at DC  bliding power of magnet coil at DC  sat DC  • at	full-scale value	1.1		
type of PLC-control input according to IEC 60947-1  consumed current at PLC-control input according to IEC 80947-1  voltage at PLC-control input rated value  voltage at PLC-control input according to IEC  voltage at Corollar value  vith varistor  apparent pick-up power of magnet coil at AC  val 50 Hz  val 60 Hz	● at 50 Hz	0.8 1.1		
consumed current at PLC-control input according to IEC 60947-1 maximum voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC • at 50 Hz • at 60	● at 60 Hz	0.8 1.1		
voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC  • at 50 Hz • at 60 Hz  at 60 Hz  at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz  • at 60 Hz  closing power of magnet coil at DC  closing power of magnet coil at DC  sat AC • at DC • at AC • at DC  arcing time control version of the switch operating mechanism  Auxiliary direvit  number of NC contacts for auxiliary contacts instantaneous  2  contact  number of NC contacts for auxiliary contacts instantaneous  2  contact  number of NC contacts for auxiliary contacts instantaneous  2	type of PLC-control input according to IEC 60947-1	Type 2		
operating range factor of the voltage at PLC-control input design of the surge suppressor 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  apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz  apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz  inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz  closing power of magnet coil at DC  blolding power of magnet coil at DC  closing delay • at AC • at DC • at CC •		20 mA		
design of the surge suppressor  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  apparent holding power of magnet coil at AC  • at 50 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  inductive power factor with the holding power of the coil  • at 50 Hz  • at 60 Hz  • at 60 Hz  Closing power of magnet coil at DC  bloiding power of magnet coil at DC  closing power of magnet coil at DC  sat AC  • at AC  • at DC  • at DC	voltage at PLC-control input rated value	24 V		
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  apparent holding power of magnet coil at AC  • at 60 Hz  • at 60 Hz  inductive power factor with the holding power of the coil  • at 50 Hz  • at 60 Hz  inductive power factor with the holding power of the coil  • at 50 Hz  • at 60 Hz  closing power of magnet coil at DC  tolding power of magnet coil at DC  sat AC  • at AC  • at AC  • at AC  • at DC  sat SDV  sat SDV  sat SDV  sat SDV  sat SDV  sat SDV  s	operating range factor of the voltage at PLC-control input	0.8 1.1		
at 50 Hz at 60 Hz at 50 Hz binductive power factor with closing power of the coil at 50 Hz at 50 Hz binductive power of magnet coil at AC at 60 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power of magnet coil at DC binductive power of magnet coil at DC binding	design of the surge suppressor	with varistor		
at 60 Hz  inductive power factor with closing power of the coil  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  but at 50 Hz  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  but at 60 Hz  closing power of magnet coil at DC  bolding power of magnet coil at DC  closing power of magnet coil at DC  at AC  bound on ms  at AC  at AC  at AC  at AC  at AC  bound on ms  at AC  at AC  at AC  at AC  bound on ms  at AC  at AC  at AC  at AC  bound on ms  at AC  at AC  at AC  bound on ms  bound on ms  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous  contact  number of NC contacts for auxiliary contacts instantaneous  2	apparent pick-up power of magnet coil at AC			
inductive power factor with closing power of the coil  at 50 Hz  at 60 Hz  apparent holding power of magnet coil at AC  at 50 Hz  at 60 Hz  at 60 Hz  at 60 Hz  but 60 Hz  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  closing power of magnet coil at DC  bolding power of magnet coil at DC  bolding power of magnet coil at DC  closing delay  at AC  at A	• at 50 Hz	530 VA		
at 50 Hz at 60 Hz  apparent holding power of magnet coil at AC  at 50 Hz at 60 Hz  at 60 Hz  at 60 Hz  but for Hz at 60 Hz  closing power of magnet coil at DC but folding power of magnet coil at DC  but folding power of magnet coil at DC  closing delay at AC at A	• at 60 Hz	530 VA		
apparent holding power of magnet coil at AC  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  build at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  at 50 Hz  at 60 Hz  build at 50 Hz  at 60 Hz  build at 50 Hz  at 60 Hz  closing power of magnet coil at DC  building power of magnet coil at DC  closing delay  at AC  build at AC  at AC  at AC  at AC  at AC  build at AC  at AC  at AC  at AC  at AC  at AC  build at AC  at AC  at AC  at AC  build at AC  at AC  at AC  at AC  build at AC  build at AC  build at AC  contact for auxiliary contacts instantaneous  contact  number of NC contacts for auxiliary contacts instantaneous  contact  number of NO contacts for auxiliary contacts instantaneous  2	inductive power factor with closing power of the coil			
apparent holding power of magnet coil at AC  • at 50 Hz • at 60 Hz  inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz  • at 60 Hz  • at 60 Hz  • at 60 Hz  Closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay • at AC • at DC • at DC • at DC  at DC  st. 80 ms  opening delay • at AC • at DC • at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous 2	● at 50 Hz	0.8		
at 50 Hz at 60 Hz at 60 Hz at 50 Hz at 50 Hz at 60 Hz but 60 Hz at 50 Hz at 60 Hz at 60 Hz but 60 Hz closing power of magnet coil at DC but 60 Hg magnet coil at DC but 6		0.8		
at 60 Hz  inductive power factor with the holding power of the coil  at 50 Hz  at 60 Hz  0.4  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at AC  at DC  at DC  45 80 ms  opening delay  at AC  at DC  at DC  80 100 ms  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous  contact  number of NO contacts for auxiliary contacts instantaneous  2	apparent holding power of magnet coil at AC			
inductive power factor with the holding power of the coil  • at 50 Hz • at 60 Hz  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay • at AC • at DC • at DC • at AC • at DC • at D	● at 50 Hz	8.5 VA		
at 50 Hz at 60 Hz  closing power of magnet coil at DC  bolding power of magnet coil at DC  closing delay at AC at DC at AC at AC at AC at AC bolding delay at AC at AC at AC at AC at AC bolding delay bolding delay at AC bolding delay at AC bolding delay bolding delay at AC bolding delay bolding delay bolding delay at AC bolding delay bolding de	● at 60 Hz	8.5 VA		
otosing power of magnet coil at DC      holding power of magnet coil at DC      closing delay     ot AC     ot DC     otening delay     ot AC     oth AC	inductive power factor with the holding power of the coil			
closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  • at AC  • at DC  45 80 ms  opening delay  • at AC  • at DC  80 100 ms  • at DC  arcing time  10 15 ms  control version of the switch operating mechanism  PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous 2	● at 50 Hz	0.4		
holding power of magnet coil at DC  closing delay  at AC  at DC  45 80 ms  opening delay  at AC  at AC  at DC  80 100 ms  arcing time  10 15 ms  control version of the switch operating mechanism  PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous 2	• at 60 Hz	0.4		
closing delay  • at AC  • at DC  • at AC  • at DC  • at AC  • at DC  • at D	closing power of magnet coil at DC	580 W		
<ul> <li>at AC</li> <li>at DC</li> <li>45 80 ms</li> <li>opening delay</li> <li>at AC</li> <li>at DC</li> <li>at DC</li> <li>at DC</li> <li>at DC</li> <li>at DC</li> <li>arcing time</li> <li>control version of the switch operating mechanism</li> <li>PLC-IN or Standard A1 - A2 (adjustable)</li> <li>Auxiliary circuit</li> <li>number of NC contacts for auxiliary contacts instantaneous contact</li> <li>number of NO contacts for auxiliary contacts instantaneous</li> <li>2</li> </ul>	holding power of magnet coil at DC	3.4 W		
at DC     opening delay     at AC     at DC     at	closing delay			
opening delay	• at AC	45 80 ms		
at AC at DC at DC acring time 10 15 ms control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous 2	• at DC	45 80 ms		
● at DC  arcing time  10 15 ms  control version of the switch operating mechanism  PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous  2	opening delay			
arcing time  10 15 ms  control version of the switch operating mechanism  PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous  2	• at AC	80 100 ms		
control version of the switch operating mechanism  PLC-IN or Standard A1 - A2 (adjustable)  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous  2	• at DC	80 100 ms		
Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous 2	arcing time	10 15 ms		
number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous 2	control version of the switch operating mechanism	PLC-IN or Standard A1 - A2 (adjustable)		
contact 2 number of NO contacts for auxiliary contacts instantaneous 2	Auxiliary circuit			
		2		
		2		

operational current at AC-12 maximum	10 A		
operational current at AC-12 maximum	IVA		
at 230 V rated value	6.4		
	6 A		
<ul> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul>	3 A		
	2 A		
at 690 V rated value	1 A		
operational current at DC-12	40.4		
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		
<ul> <li>at 48 V rated value</li> </ul>	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	302 A		
<ul> <li>at 600 V rated value</li> </ul>	289 A		
yielded mechanical performance [hp]			
• for 3-phase AC motor			
— at 200/208 V rated value	100 hp		
— at 220/230 V rated value	125 hp		
— at 460/480 V rated value	250 hp		
— at 575/600 V rated value	300 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		
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	kA)		
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)		
Installation/ mounting/ dimensions			
mstanation/ mounting/ unitensions			
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back		
mounting position	+/- 22.5° tiltable to the front and back		
mounting position fastening method	+/- 22.5° tiltable to the front and back screw fixing		
mounting position  fastening method  • side-by-side mounting	+/- 22.5° tiltable to the front and back screw fixing Yes		
mounting position  fastening method  • side-by-side mounting height	+/- 22.5° tiltable to the front and back screw fixing Yes 210 mm		
mounting position  fastening method  • side-by-side mounting height width	+/- 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	+/- 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	+/- 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	+/- 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	+/- 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     — upwards	+/- 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     — upwards     — downwards	+/- 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  — at the side	+/- 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     — at the side     • for grounded parts	+/- 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  — downwards  — at the side  • for grounded parts  — forwards	+/- 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  — downwards  — at the side  • for grounded parts  — forwards  — upwards  — upwards	+/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 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     — in forwards     — upwards     — at the side     • for drounded parts     — at the side     — at the side	+/- 22.5° tiltable to the front and back screw fixing Yes 210 mm 145 mm 202 mm  20 mm 10 mm 0 mm 0 mm 10 mm 10 mm		

— forwards	20 mm		
— upwards	10 mm		
•	10 mm		
— downwards			
— at the side	10 mm		
Connections/ Terminals			
type of electrical connection			
for main current circuit	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		
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			
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)		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	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		
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No		
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	Yes		
Certificates/ approvals			
General Product Approval			

## General Product Approval



Confirmation





<u>KC</u>



Functional

EMC Safety/Safety of Machinery

Declaration of Conformity
Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping other













other			Railway	
Confirmation	Confirmation	<u>Miscellaneous</u>	Vibration and Shock	Special Test Certificate

## **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=3RT1066-6NB36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1066-6NB36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6NB36

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

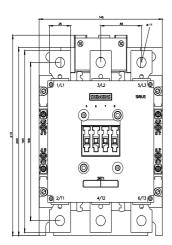
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1066-6NB36&lang=en

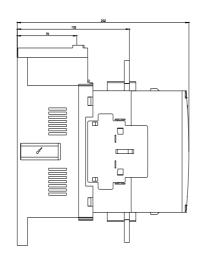
Characteristic: Tripping characteristics, I2t, Let-through current

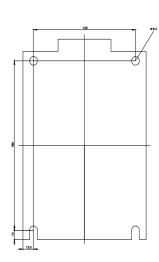
https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6NB36/char

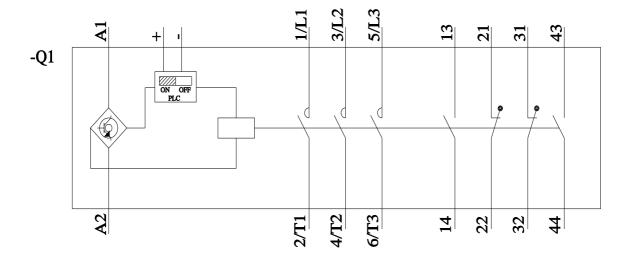
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1066-6NB36&objecttype=14&gridview=view1









last modified: 5/8/2023 🖸