# **SIEMENS**

## **Data sheet**

3RT2037-3NB30-0CC0



Power contactor, AC-3 65 A, 30 kW / 400 V 1 NO + 1 NC, 20-33 V AC/DC communication-capable, with varistor, 3-pole, Size S2, Spring-type terminals

product type designation product type designation general technical data  size of contactor product extension  • function module for communication • auxillary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • without load current share typical insulation voltage • of main circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit rated value  shock resistance a rectangular impulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical  installation altitude at height above sea level maximum  ambient conditions  installation altitude at height above sea level maximum  auxiliary sinch added auxillary switch block typical • during storage  -55 +80 °C	product brand name	SIRIUS
Size of contactor	product designation	Power contactor
size of contactor product extension • function module for communication • function module for communication • auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical  insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary switch totage for safe isolation between coli and main contacts according to EN 60947-1  shock resistance at rectangular impulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Questance Prohibitance (Date)  Ambient emperature • during operation  2000 m  ambient emperature • during operation	product type designation	3RT2
product extension • function module for communication • auxillary switch  power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit tated value • of auxiliary circuit rated value • of main circuit rated value • of auxiliary circuit rated value • of x, 7g / 5 ms, 4.5g / 10 ms • at AC • at DC  shock resistance at rectangular impulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block pipcal  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date) • during operation  vegeta  2 000 m  ambient temperature • during operation	General technical data	
• function module for communication     • auxiliary switch     power loss [W] for rated value of the current     • at AC in hot operating state	size of contactor	S2
auxiliary switch     power loss [W] for rated value of the current     at AC in hot operating state per pole     at AC in hot operating state per pole     without load current share typical     of main circuit with degree of pollution 3 rated value     of auxiliary circuit with degree of pollution 3 rated value     of auxiliary circuit with degree of pollution 3 rated value     of main circuit rated value     of main circuit rated value     of main circuit rated value     of auxiliary switch block typical     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical	product extension	
power loss [W] for rated value of the current  at AC in hot operating state at AC in hot operating state per pole without load current share typical of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of tax covering to EN 60947-1  shock resistance at rectangular impulse of at AC of 27,7g / 5 ms, 4.5g / 10 ms of at DC  shock resistance with sine pulse of AC of Contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quut auxiliary switch block typical reference code according to IEC 81346-2 Quut auxiliary switch block typical reference code according to IEC 81346-2 Quut auxiliary switch block typical reference code according to IEC 81346-2 Quut auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Quut auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical	<ul> <li>function module for communication</li> </ul>	Yes
at AC in hot operating state e at AC in hot operating state per pole  without load current share typical  insulation voltage  of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value  surge voltage resistance  of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value  of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of at AC of the contacts according to EN 60947-1  shock resistance at rectangular impulse of at AC of the contactor with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of contactor with added of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Question of contactor with added of the contactor with added of the contactor with added of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical	auxiliary switch	Yes
at AC in hot operating state per pole  without load current share typical  insulation voltage  of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of avxiliary circuit rated value of auxiliary circuit rated value of at AC of contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum of during operation  3.8 W 2. W  2. W  3.8 W 690 V  400 V  500 M  400 V  500 M  500 M  500 M  690 V  680 V  690 V  6	power loss [W] for rated value of the current	
insulation voltage  of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of main circuit rated value of auxiliary circuit rated value of the contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical	<ul> <li>at AC in hot operating state</li> </ul>	11.4 W
insulation voltage  • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value  • of auxiliary circuit with degree of pollution 3 rated value  surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value  maximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1  shock resistance at rectangular impulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  reference life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added aux	<ul> <li>at AC in hot operating state per pole</li> </ul>	3.8 W
of main circuit with degree of pollution 3 rated value     of auxiliary circuit with degree of pollution 3 rated value  surge voltage resistance     of main circuit rated value     of auxiliary circuit rated value     active of auxiliary circuit rated value     of auxiliary circuit rated value     of auxiliary circuit rated value     of auxiliary sible voltage for safe isolation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     of at AC     of contactor with sine pulse     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added a	<ul> <li>without load current share typical</li> </ul>	2 W
of auxiliary circuit with degree of pollution 3 rated value  surge voltage resistance     of main circuit rated value     of auxiliary conditions      of contactor according to EN 60947-1      shock resistance with sine pulse     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2     Q  Substance Prohibitance (Date)  installation altitude at height above sea level maximum  ambient temperature     oduring operation  -25 +60 °C	insulation voltage	
surge voltage resistance  of main circuit rated value  of auxiliary circuit rated value  of auxiliary circuit rated value  maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  ot at AC  at DC  7.7g / 5 ms, 4.5g / 10 ms  shock resistance with sine pulse  ot at AC  at DC  12g / 5 ms, 7g / 10 ms  at DC  12g / 5 ms, 7g / 10 ms  mechanical service life (switching cycles)  of contactor typical  of the contactor typical  of the contactor with added electronically optimized auxiliary switch block typical  of the contactor with added auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  installation altitude at height above sea level maximum  ambient temperature  of during operation  -25 +60 °C	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
of main circuit rated value     of auxiliary circuit rated value     amaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1      shock resistance at rectangular impulse     o at AC     o at DC     shock resistance with sine pulse     o at AC     o at DC     shock resistance with sine pulse     o at AC     o at DC     or contactor typical     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with ad		690 V
of auxiliary circuit rated value     maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     oat AC     oat DC     at DC     at DC     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)     installation altitude at height above sea level maximum     ambient temperature     oduring operation      od the contactor with added auxiliary aux	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  • at AC • at DC  shock resistance with sine pulse • at AC • at DC  shock resistance with sine pulse • at AC • at DC  at AC • at DC  12g / 5 ms, 4.5g / 10 ms  12g / 5 ms, 7g / 10 ms  12g / 5 ms, 7g / 10 ms  mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature • during operation  400 V  7.7g / 5 ms, 4.5g / 10 ms  12g / 5 ms, 7g / 10 ms	<ul> <li>of main circuit rated value</li> </ul>	6 kV
shock resistance at rectangular impulse  • at AC  • at DC  shock resistance with sine pulse  • at AC  • at DC  shock resistance with sine pulse  • at AC  • at DC  mechanical service life (switching cycles)  • of contactor typical  • of the contactor with added electronically optimized auxiliary switch block typical  • of the contactor with added auxiliary swit	of auxiliary circuit rated value	6 kV
<ul> <li>at AC</li> <li>at DC</li> <li>7.7g / 5 ms, 4.5g / 10 ms</li> <li>shock resistance with sine pulse</li> <li>at AC</li> <li>at DC</li> <li>12g / 5 ms, 7g / 10 ms</li> <li>at DC</li> <li>12g / 5 ms, 7g / 10 ms</li> <li>of contactor typical (switching cycles)</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>reference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2014</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>2 000 m</li> <li>ambient temperature</li> <li>during operation</li> <li>-25 +60 °C</li> </ul>		400 V
at DC      shock resistance with sine pulse     at AC     at DC      at	shock resistance at rectangular impulse	
shock resistance with sine pulse  • at AC  • at DC  12g / 5 ms, 7g / 10 ms  mechanical service life (switching cycles)  • of contactor typical  • of the contactor with added electronically optimized auxiliary switch block typical  • of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  12g / 5 ms, 7g / 10 ms  10 000 000  10 000 000  10 000 000  10 000 00	• at AC	7.7g / 5 ms, 4.5g / 10 ms
<ul> <li>at AC</li> <li>at DC</li> <li>12g / 5 ms, 7g / 10 ms</li> <li>mechanical service life (switching cycles)</li> <li>of contactor typical</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>-25 +60 °C</li> </ul>	• at DC	7.7g / 5 ms, 4.5g / 10 ms
at DC     mechanical service life (switching cycles)     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical      reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature     oduring operation  12g / 5 ms, 7g / 10 ms  10 000 000  5 000 000  10 000 000  10 000 000  10 000 00	shock resistance with sine pulse	
mechanical service life (switching cycles)  of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation  10 000 000 10 000	• at AC	12g / 5 ms, 7g / 10 ms
<ul> <li>of contactor typical</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>10 000 000</li> <li>2 000 000</li> </ul>	• at DC	12g / 5 ms, 7g / 10 ms
of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical      reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature     oduring operation  5 000 000  10 000 000  10 000 000  10 000 00	mechanical service life (switching cycles)	
auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions installation altitude at height above sea level maximum  ambient temperature of during operation  10 000 000  10/001/2014  2 000 m  2 000 m	<ul> <li>of contactor typical</li> </ul>	10 000 000
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014  Ambient conditions installation altitude at height above sea level maximum 2 000 m  ambient temperature  • during operation -25 +60 °C		5 000 000
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  10/01/2014  2 000 m  -25 +60 °C		10 000 000
Ambient conditions  installation altitude at height above sea level maximum 2 000 m  ambient temperature  • during operation -25 +60 °C	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation  -25 +60 °C	Substance Prohibitance (Date)	10/01/2014
ambient temperature         ● during operation         -25 +60 °C	Ambient conditions	
• during operation -25 +60 °C	installation altitude at height above sea level maximum	2 000 m
	ambient temperature	
• during storage -55 +80 °C	<ul> <li>during operation</li> </ul>	-25 +60 °C
	during storage	-55 +80 °C

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	
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>	690 V
at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C	80 A
rated value	
• at AC-1	00.4
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	80 A
— up to 690 V at ambient temperature 60 °C	70 A
rated value	IVA
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
at AC-4 at 400 V rated value	55 A
at AC-5a up to 690 V rated value	70.4 A
at AC-5b up to 400 V rated value	53.9 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated	56.9 A
value	
<ul> <li>up to 400 V for current peak value n=20 rated</li> </ul>	56.9 A
value	
— up to 500 V for current peak value n=20 rated	56.9 A
value	47.0
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	47 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated	38 A
value	
— up to 400 V for current peak value n=30 rated	38 A
value	
— up to 500 V for current peak value n=30 rated	38 A
value	20 A
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	38 A
minimum cross-section in main circuit at maximum AC-1	25 mm²
rated value	
operational current for approx. 200000 operating	
cycles at AC-4	00.4
at 400 V rated value	28 A
at 690 V rated value	22 A
operational current	
• at 1 current path at DC-1	55.4
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A

— at 440 V rated value	1 A		
— at 600 V rated value	0.8 A		
<ul> <li>with 3 current paths in series at DC-1</li> </ul>			
— at 24 V rated value	55 A		
— at 110 V rated value	55 A		
— at 220 V rated value	45 A		
— at 440 V rated value	2.9 A		
— at 600 V rated value	1.4 A		
• at 1 current path at DC-3 at DC-5			
— at 24 V rated value	35 A		
— at 110 V rated value	2.5 A		
— at 220 V rated value	1 A		
— at 440 V rated value	0.1 A		
— at 600 V rated value	0.06 A		
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>			
— at 24 V rated value	55 A		
— at 110 V rated value	25 A		
— at 220 V rated value	5 A		
— at 440 V rated value	0.27 A		
— at 600 V rated value	0.16 A		
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>			
— at 24 V rated value	55 A		
— at 110 V rated value	55 A		
— at 220 V rated value	25 A		
— at 440 V rated value	0.6 A		
— at 600 V rated value	0.35 A		
operating power			
<ul> <li>at AC-2 at 400 V rated value</li> </ul>	30 kW		
• at AC-3			
— at 230 V rated value	18.5 kW		
— at 400 V rated value	30 kW		
— at 500 V rated value	37 kW		
— at 690 V rated value	37 kW		
• at AC-3e			
— at 230 V rated value	18.5 kW		
— at 400 V rated value	30 kW		
— at 500 V rated value	37 kW		
— at 690 V rated value	37 kW		
operating power for approx. 200000 operating cycles			
at AC-4			
<ul> <li>at 400 V rated value</li> </ul>	14.7 kW		
at 690 V rated value	20 kW		
operating apparent power at AC-6a			
• up to 230 V for current peak value n=20 rated value	22.6 kVA		
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	39.4 kVA		
• up to 500 V for current peak value n=20 rated value	49.2 kVA		
• up to 690 V for current peak value n=20 rated value	56.1 kVA		
operating apparent power at AC-6a			
• up to 230 V for current peak value n=30 rated value	15.1 kVA		
• up to 400 V for current peak value n=30 rated value	26.2 kVA		
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	32.8 kVA		
• up to 690 V for current peak value n=30 rated value	45.3 kVA		
short-time withstand current in cold operating state up to 40 $^{\circ}\text{C}$			
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	1 055 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	730 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	520 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	336 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	272 A; Use minimum cross-section acc. to AC-1 rated value		
no-load switching frequency			
• at AC	1 500 1/h		

• at DC	1 500 1/h		
operating frequency	. 000 .///		
• at AC-1 maximum	800 1/h		
• at AC-2 maximum	400 1/h		
• at AC-3 maximum			
at AC-3 maximum     at AC-3e maximum	700 1/h 700 1/h		
at AC-3e maximum     at AC-4 maximum			
	200 1/h		
Control circuit/ Control			
type of voltage of the control supply voltage	AC/DC		
control supply voltage at AC			
<ul> <li>at 50 Hz rated value</li> </ul>	20 33 V		
at 60 Hz rated value	20 33 V		
control supply voltage at DC			
rated value	20 33 V		
operating range factor control supply voltage rated value of magnet coil at DC			
<ul><li>initial value</li></ul>	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		
inrush current peak	3 A		
duration of inrush current peak	50 μs		
locked-rotor current mean value	1 A		
locked-rotor current peak	2.6 A		
duration of locked-rotor current	230 ms		
holding current mean value	40 mA		
apparent pick-up power of magnet coil at AC	10 11 11 11		
• at 50 Hz	40 VA		
• at 60 Hz	40 VA		
apparent holding power of magnet coil at AC	40 V/A		
• at 50 Hz	2 VA		
• at 60 Hz	2 VA		
closing power of magnet coil at DC	23 W		
holding power of magnet coil at DC	1 W		
closing delay	1 **		
• at AC	35 110 ms		
• at DC	35 110 ms		
opening delay	00 110 1110		
at AC	30 55 ms		
• at DC	30 55 ms		
arcing time	10 20 ms		
control version of the switch operating mechanism	Standard A1 - A2, optionally via function module		
Auxiliary circuit	Glandard AT - AZ, optionally via full culon module		
	1		
number of NC contacts for auxiliary contacts instantaneous contact	1		
number of NO contacts for auxiliary contacts instantaneous contact	1		
operational current at AC-12 maximum	10 A		
operational current at AC-15			
• at 230 V rated value	10 A		
• at 400 V rated value	3 A		
<ul> <li>at 500 V rated value</li> </ul>	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		

<ul> <li>at 125 V rated value</li> </ul>	2 A		
<ul> <li>at 220 V rated value</li> </ul>	1 A		
<ul> <li>at 600 V rated value</li> </ul>	0.15 A		
operational current at DC-13			
at 24 V rated value	10 A		
at 48 V rated value	2 A		
● at 60 V rated value	2 A		
at 110 V rated value	1 A		
at 125 V rated value	0.9 A		
at 220 V rated value	0.3 A		
at 600 V rated value	0.1 A		
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)		
UL/CSA ratings	The state of the s		
full-load current (FLA) for 3-phase AC motor			
at 480 V rated value	65 A		
at 600 V rated value     at 600 V rated value	52 A		
	52 A		
yielded mechanical performance [hp]			
• for single-phase AC motor	E ha		
— at 110/120 V rated value	5 hp		
— at 230 V rated value	10 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	20 hp		
— at 220/230 V rated value	20 hp		
— at 460/480 V rated value	50 hp		
— at 575/600 V rated value	50 hp		
contact rating of auxiliary contacts according to UL	A600 / P600		
Short-circuit protection			
design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit</li> </ul>			
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A		
— with type of assignment 2 required	(415 V, 80 kA) gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A		
	(415V,80kA)		
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (500 V, 1 kA)		
Installation/ mounting/ dimensions			
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted		
fastening method	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail		
gg	according to DIN EN 60715		
• side-by-side mounting	Yes		
height	114 mm		
width	55 mm		
depth	130 mm		
required spacing			
with side-by-side mounting			
— forwards			
— upwards	10 mm		
aptraide	10 mm		
— downwards	10 mm		
— downwards — at the side	10 mm 10 mm		
— at the side	10 mm		
<ul><li>— at the side</li><li>for grounded parts</li></ul>	10 mm 10 mm 0 mm		
<ul><li>at the side</li><li>for grounded parts</li><li>forwards</li></ul>	10 mm 10 mm 0 mm		
<ul><li>— at the side</li><li>• for grounded parts</li><li>— forwards</li><li>— upwards</li></ul>	10 mm 10 mm 10 mm 10 mm		
<ul> <li>— at the side</li> <li>• for grounded parts</li> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> </ul>	10 mm 10 mm 10 mm 10 mm 6 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul>	10 mm 10 mm 10 mm 10 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> </ul>	10 mm 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> </ul>	10 mm 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> </ul>	10 mm 10 mm 0 mm  10 mm 10 mm 10 mm 10 mm 10 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>downwards</li> <li>downwards</li> </ul>	10 mm 10 mm 0 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> </ul>	10 mm 10 mm 0 mm  10 mm 10 mm 10 mm 10 mm 10 mm		

type of electrical connection			
<ul> <li>for main current circuit</li> </ul>	screw-type terminals		
<ul> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals		
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Spring-type terminals		
of magnet coil	Spring-type terminals		
type of connectable conductor cross-sections			
<ul> <li>for main contacts</li> </ul>			
<ul><li>— solid or stranded</li></ul>	2x (1 35 mm²), 1x (1 50 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²)		
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (18 2), 1x (18 1)		
connectable conductor cross-section for main contacts			
<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²		
connectable conductor cross-section for auxiliary contacts			
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²		
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 1.5 mm²		
finely stranded without core end processing	0.5 2.5 mm²		
type of connectable conductor cross-sections			
<ul> <li>for auxiliary contacts</li> </ul>			
<ul><li>— solid or stranded</li></ul>	2x (0.5 2.5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)		
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)		
at AWG cables for auxiliary contacts	2x (20 14)		
AWG number as coded connectable conductor cross section			
<ul> <li>for main contacts</li> </ul>	18 1		
<ul> <li>for auxiliary contacts</li> </ul>	20 14		
Safety related data			
product function			
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes		
<ul> <li>positively driven operation according to IEC 60947-</li> <li>5-1</li> </ul>	No		
B10 value with high demand rate according to SN 31920	1 000 000		
proportion of dangerous failures			
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %		
with high demand rate according to SN 31920	73 %		
failure rate [FIT] with low demand rate according to SN 31920	100 FIT		
T1 value for proof test interval or service life according to IEC 61508	20 y		
protection class IP on the front according to IEC 60529	IP20		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front		
suitability for use			
safety-related switching OFF	Yes		
Certificates/ approvals			

## Certificates/ approvals

# **General Product Approval**



Confirmation





<u>KC</u>



Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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### Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

## Marine / Shipping













Marine / Shipping

other

Railway

**Dangerous Good** 



Confirmation

**Confirmation** 

Vibration and Shock

<u>Transport Information</u>

### **Further information**

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2037-3NB30-0CC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3NB30-0CC0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30-0CC0

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

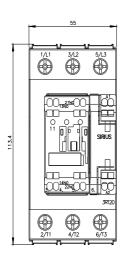
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2037-3NB30-0CC0&lang=en

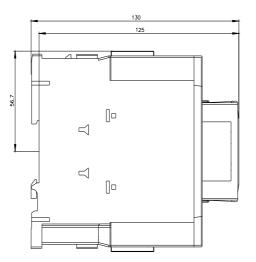
Characteristic: Tripping characteristics, I2t, Let-through current

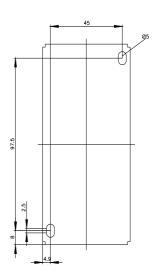
https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30-0CC0/char

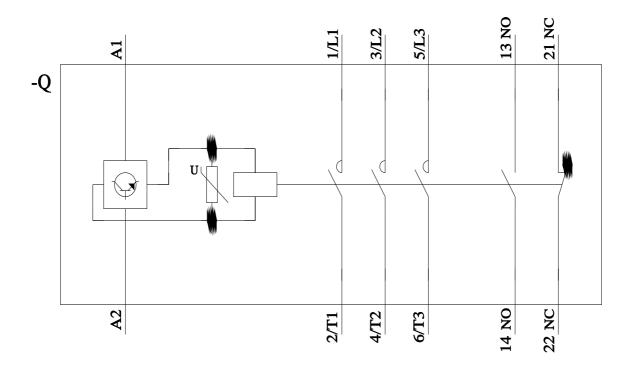
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3NB30-0CC0&objecttype=14&gridview=view1









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