## **SIEMENS**

Data sheet 3RT2025-2BG40



power contactor, AC-3e/AC-3, 17 A, 7.5 kW / 400 V, 3-pole, 125 V DC, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0  $\,$ 

product designation   Power contactor   SRT2   SRT2	product brand name	SIRIUS
product type designation 3RT2  Since It chinical clais  Size of contactor Size of contactor  • function module for communication • function that operating state • 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 auxiliary circuit val		
Size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • 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 rated value • of auxiliary switch • of ordina circuit rated value • of auxiliary switch • of ordina circuit rated value • of auxiliary switch such goods • at DC • at DC • at DC • of contactor typical • of ordinactor typical • of the contactor with added auxiliary switch block typical • of th	. •	3RT2
product extension  • function module for communication • auxiliary switch  power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • at AC in hot operating state per pole • of 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 main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of outsides according to EN 60947-1  shock resistance at rectangular impulse • at DC  shock resistance with sine pulse • at DC  shock resistance with sine pulse • at DC  of contactor life (operating cycles) • of orthactor life (operating cycles) • 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	General technical data	
• function module for communication • auxiliary switch • auxiliary switch • auxiliary switch • 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 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 with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • at DC •	size of contactor	SO
• auxillary switch  • auxillary switch  • 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 main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit rated value • of auxillary circuit rated value  • at DC  10g / 5 ms, 7,5g / 10 ms  **Shock resistance at rectangular impulse • at DC  10g / 5 ms, 7,5g / 10 ms  **Shock resistance at rectangular impulse • at DC  15g / 5 ms, 10g / 10 ms  **mechanical service life (operating 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 • 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 switc	product extension	
power loss [W] for rated value of the current  at AC in hot operating state 1.8 W  at AC in hot operating state per pole 0.6 W  without load current share typical 5.9 W  Insulation voltage  of main circuit with degree of pollution 3 rated value 690 V  of auxiliary circuit with degree of pollution 3 rated value 690 V  surge voltage resistance  of main circuit rated value 6 kV  of auxiliary circuit rated value 6 kV  of auxiliary circuit rated value 6 kV  of auxiliary control trated value 700 V  axing worth trated value 100 V  of auxiliary control trated value 100 V  of auxiliary control trated value 100 V  of auxiliary control trated value 100 V  of of auxiliary control trated value 100 V  of contactor trated value 100 V  shock resistance at rectangular impulse 100 V  at DC 100 V  shock resistance with sine pulse 100 V  of contactor typical 100 V  of the contactor with added electronically optimized 100 V  of the contactor with added electronically optimized 100 V  of the contactor with added auxiliary switch block typical 100 V  of the contactor with added auxiliary switch block typical 100 V  of the contactor with added auxiliary switch block typical 100 V  of the contactor with added auxiliary switch block typical 200 V  substance Prohibitance (Date) 100 V  volutions  installation altitude at height above sea level maximum 200 V  of uning operation 25 +60 °C  of uning storage 55 +80 °C  relative humidity at 55 °C according to IEC 60068-2-30 85 %  Main circuit	• function module for communication	No
at AC in hot operating state per pole   at AC in hot operating state per pole   of without load current share typical   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 rated value   of auxillary settle value   of auxillary circuit rated value   of auxillary circuit rated value   of auxillary circuit rated value   of auxill	auxiliary switch	Yes
• at AC in hot operating state per pole • without load current share typical • 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 main circuit rated value • of main circuit rated value • of maxiliary circuit rated value • of auxiliary circuit rated value • of bkV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse • at DC • of protective separation between coil and main contacts according to EN 60947-1  shock resistance with sine pulse • at DC • of contactor with sine pulse • 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 • 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 electronically optimized auxiliary switch block typical • of the contactor with added electronically optimized auxiliary switch block typical • of	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 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 auxiliary switch sine pulse of the contactor with sine pulse of the contactor vith added electronically optimized auxiliary switch block typical of the contactor with added auxili	<ul> <li>at AC in hot operating state</li> </ul>	1.8 W
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value 690 V  surge voltage resistance of main circuit rated value 6 kV of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse ot DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating 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 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  reference code according to IEC 81346-2 Q  Substance Prohibitance (Date) 10/00/2009  Ambient temperature of during operation 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 ty	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.6 W
of main circuit with degree of pollution 3 rated value     of auxiliary circuit with degree of pollution 3 rated value     of auxiliary circuit rated value     of kV      maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1      shock resistance at rectangular impulse     oat DC     10g / 5 ms, 7,5g / 10 ms      shock resistance with sine pulse     of contactor 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     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 bl	<ul> <li>without load current share typical</li> </ul>	5.9 W
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 to auxiliary circuit rated value      of to value      auxiliary circuit rated value      of au	insulation voltage	
surge voltage resistance  of main circuit rated value of auxiliary circuit rated value of kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse of at DC 10g / 5 ms, 7,5g / 10 ms  shock resistance with sine pulse 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	<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     of auxiliary circuit rated value     of auxiliary circuit rated value     of kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     of tDC     10g / 5 ms, 7.5g / 10 ms  shock resistance with sine pulse     of tDC     15g / 5 ms, 10g / 10 ms  mechanical service life (operating 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 w	<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
of auxiliary circuit rated value     maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     o at DC     10g / 5 ms, 7,5g / 10 ms  shock resistance with sine pulse     o at DC     15g / 5 ms, 10g / 10 ms  mechanical service life (operating 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	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  • at DC  10g / 5 ms, 7,5g / 10 ms  shock resistance with sine pulse  • at DC  15g / 5 ms, 10g / 10 ms  mechanical service life (operating 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 a	of main circuit rated value	6 kV
shock resistance at rectangular impulse	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
* at DC     * shock resistance with sine pulse     * at DC     * 15g / 5 ms, 10g / 10 ms  mechanical service life (operating 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     * 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 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 au		400 V
shock resistance with sine pulse	shock resistance at rectangular impulse	
• at DC  mechanical service life (operating 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  • 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 electronically optimized  5 000 000  • 10 000 000	• at DC	10g / 5 ms, 7,5g / 10 ms
mechanical service life (operating 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  • of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  2 000 m  ambient temperature  • during operation  • during storage  -55 +60 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	shock resistance 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     10 000 000  reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum 2 000 m  ambient temperature     oduring operation     oduring storage     during storage     relative humidity minimum 10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  10 000 000  10 000 000  10 000 000  10 000 00	• at DC	15g / 5 ms, 10g / 10 ms
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     10 000 000  reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature     oduring operation     during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  5 000 000  10 000  10 000  Q  2 000  0 000  10 000  10 000  0 000  0 000  10 000  0 00	mechanical service life (operating cycles)	
auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  of during operation  during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  10 000 000  10	<ul> <li>of contactor typical</li> </ul>	10 000 000
reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit		5 000 000
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  2 000 m  -25 +60 °C  -55 +80 °C  10 %  95 %	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  2 000 m  -25 +60 °C  -55 +80 °C  10 %  95 %	Substance Prohibitance (Date)	10/01/2009
ambient temperature  • during operation • during storage  • during storage  -25 +60 °C  -55 +80 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	Ambient conditions	
during operation     during storage     during storage     -55 +80 °C  relative humidity minimum     10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	installation altitude at height above sea level maximum	2 000 m
● during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	ambient temperature	
relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	<ul> <li>during operation</li> </ul>	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum  Main circuit	during storage	-55 +80 °C
maximum Main circuit	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	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	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated</li> </ul>	40 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	40 A
value	25.4
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	35 A
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
at AC-4 at 400 V rated value	15.5 A
• at AC-5a up to 690 V rated value	35.2 A
• at AC-5a up to 690 V rated value • at AC-5b up to 400 V rated value	14.1 A
•	14.1 A
• at AC-6a	44.4.0
— up to 230 V for current peak value n=20 rated value	11.4 A
— up to 400 V for current peak value n=20 rated value	11.4 A
— up to 500 V for current peak value n=20 rated value	11.4 A
— up to 690 V for current peak value n=20 rated value	11.3 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	7.6 A
— up to 690 V for current peak value n=30 rated value	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm²
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	7.7 A
at 690 V rated value	7.7 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.4 A
— at 440 V rated value  — at 600 V rated value	0.25 A
	0.25 A
with 2 current paths in series at DC-1     at 24 V roted value.	25 A
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 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	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 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	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 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	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
at AC-2 at 400 V rated value	7.5 kW
• at AC-3	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
• at AC-3e	
— at 230 V rated value	4 kW
— at 400 V rated value	4.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	3.5 kW
at 690 V rated value	6 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	4.5 kVA
• up to 400 V for current peak value n=20 rated value	7.8 kVA
• up to 500 V for current peak value n=20 rated value	9.9 kVA
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	13.6 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	3 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	5.2 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	6.6 kVA
• up to 690 V for current peak value n=30 rated value	9.1 kVA
short-time withstand current in cold operating state up to	
40 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	225 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	225 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	189 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	140 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	115 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 1/h
• at AC-4 maximum	300 1/h

type of voltage of the control supply voltage control supply voltage at DC * lated value poparating range factor control supply voltage rated value of eight coll of DC * initial volue * 0.8 * full-cacle value * 1.1 * closing power of magnet coll at DC * bolding power of magnet coll at DC * 59 W * bolding power of magnet coll at DC * 59 W * closing delay * at DC * opening delay * at DC * arcing time * 10 _ 10 ms * control version of the switch operating mechanism * Standard A1 - A2 * Assumers of NC contacts for auxiliary contacts instantaneous * number of NC contacts for auxiliary contacts instantaneous * number of NC contacts for auxiliary contacts instantaneous * number of NC contacts for auxiliary contacts instantaneous * operational current at AC-12 * and a CC-12 * at 230 V rated value * at 600 V rated value * at	Control circuit/ Control	
Control supply voltage at DC		DC
- intard value   125 V   125		
Operation   Current   AC-12   maximum   10 A   Operational current   AC-12   maximum   10 A   Operational current   AC-12   maximum   10 A   Operational current   AC-13   A		125 V
• full-scale value     Indiding power of magnet coil at DC     Indiding power of		
Closing power of magnet coil at DC	• initial value	0.8
holdring power of magnet coil at DC   5.9 W	• full-scale value	1.1
at DC	closing power of magnet coil at DC	5.9 W
• at DC opening delay • at DC arcing time control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-18 at 400 V rated value 110 A 1400 V rated value 12 A 1400 V rated value 13 A 1400 V rated value 14 SV rated value 15 A 16 A 16 A 17 A rated value 16 A 17 A rated value 18 A 18 OV rated value 19 A 18 A 18 OV rated value 10 A 18 A 18 OV rated value 19 OV rated value 19 A 18 OV rated value	holding power of magnet coil at DC	5.9 W
opening delay	closing delay	
# at DC   15 18 ms   10 10 m	• at DC	50 170 ms
arcing time	opening delay	
Control version of the switch operating mechanism	• at DC	15 18 ms
Auxiliary circuit   number of NC contacts for auxiliary contacts instantaneous contact   number of NC contacts for auxiliary contacts instantaneous contact   number of NC contacts for auxiliary contacts instantaneous   1		
number of NC contacts for auxiliary contacts instantaneous		Standard A1 - A2
contact   contact   contacts for auxiliary contacts instantaneous   contact   contac		
Deprational current at AC-12 maximum   10 A	contact	
a ta 230 V rated value	contact	
	·	10 A
	-	
• at 690 V rated value		
operational current at DC-12  • at 24 V rated value		
		1 A
• at 48 V rated value	·	10.4
at 110 V rated value     at 125 V rated value     at 220 V rated value     at 220 V rated value     at 600 V rated value     operational current at DC-13     operational current at DC-13     at 48 V rated value     at 48 V rated value     at 600 V rated value     at 110 V rated value     at 110 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 220 V rated value     at 200 V rated value     at 600 V rated value     at 700 V rated value     at 200 V rated value     at 400 V rated value     at 200 V rated value     at 500 V rated value     at 575/600 V rated value		
at 125 V rated value     at 220 V rated value     at 600 V rated value     operational current at DC-13     ot 24 V rated value     at 48 V rated value     at 60 V rated value     at 60 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 125 V rated value     at 220 V rated value     at 220 V rated value     at 200 V rated value     at 80 V rated value     at 100 V rated value     at 100 V rated value     at 600 V rated value     at 600 V rated value     at 600 V rated value     at 100 V rated value     at 100 V rated value     at 148 V rated value     at 148 V rated value     at 149 V rated value     at 100 V rated value     at 200 V rated value     at 200 V rated value     at 200 V rated value     at 480 V rated value     at 200 V rated value     at 480 V rated value     at 500 V rated value     at 480 V rated value     at 500 V rated value     at 600 V rated value     at 500 V rated		
at 220 V rated value     at 600 V rated value     operational current at DC-13     at 24 V rated value     at 48 V rated value     at 60 V rated value     at 60 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 220 V rated value     at 220 V rated value     at 220 V rated value     at 200 V rated value     at 600 V rated value     at 480 V rated value     at 480 V rated value     at 600 V rated value     at 400 V rated value     at 700 V rated value     at 230 V rated value     at 2400/208 V rated value     at 2400/208 V rated value     at 480 V rated value     at 2400/208 V rated value     at 250 V rated value		
operational current at DC-13		
	at 600 V rated value	0.15 A
<ul> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 480 V rated value</li> <li>at 7 A</li> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>bp</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>bp</li> <li>at 575/600 V rated value</li> <li>at 575/600 V rated value</li> <li>at 575/600 V rated value</li> <li>at 500 / P600</li> </ul>	operational current at DC-13	
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>0.9 A</li> <li>at 220 V rated value</li> <li>0.3 A</li> <li>at 600 V rated value</li> <li>0.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>for 500 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for single-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 2575/600 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>for 3-phase AC motor</li> <li>for 5-phase AC motor</li></ul>	at 24 V rated value	10 A
<ul> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 480 V rated value</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>bp</li> <li>at 575/600 V rated value</li> <li>A600 / P600</li> </ul>	• at 48 V rated value	2 A
<ul> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor         <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>hp</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> </ul> </li> <li>at 200/208 V rated value</li> <li>for phase AC motor</li> <li>at 250/200 V rated value</li> <li>for phase AC motor</li> <li>at 250/200 V rated value</li> <li>for phase AC motor</li> </ul> <li>at 250/200 V rated value</li> <li>for phase AC motor</li> <li>at 460/480 V rated value</li> <li>for phase AC motor</li> <li>at 450/480 V rated value</li> <li>for phase AC motor</li> <li>for 3-phase AC motor</li>	• at 60 V rated value	2 A
<ul> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>0.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>17 A</li> </ul> </li> <li>yielded mechanical performance [hp] <ul> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>hp</li> <li>at 230 V rated value</li> <li>shp</li> </ul> </li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>3 hp</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>5 hp</li> <li>at 460/480 V rated value</li> <li>5 hp</li> <li>at 460/480 V rated value</li> <li>10 hp</li> <li>at 575/600 V rated value</li> <li>15 hp</li> </ul> <li>contact rating of auxiliary contacts according to UL</li>	• at 110 V rated value	1 A
at 600 V rated value  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  14 A  at 600 V rated value  17 A  yielded mechanical performance [hp]  for single-phase AC motor  at 110/120 V rated value  1 hp  at 230 V rated value  3 hp  for 3-phase AC motor  at 200/208 V rated value  3 hp  at 220/230 V rated value  5 hp  at 460/480 V rated value  10 hp  at 575/600 V rated value  15 hp  contact rating of auxiliary contacts according to UL  A600 / P600	• at 125 V rated value	0.9 A
contact reliability of auxiliary contacts  1 faulty switching per 100 million (17 V, 1 mA)  LL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  17 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  1 hp  — at 230 V rated value  • for 3-phase AC motor  — at 200/208 V rated value  3 hp  • at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  15 hp  contact rating of auxiliary contacts according to UL  A600 / P600	• at 220 V rated value	0.3 A
UL/CSA ratings   full-load current (FLA) for 3-phase AC motor   • at 480 V rated value 14 A   • at 600 V rated value 17 A     yielded mechanical performance [hp]  • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — A600 / P600 A600 / P600		
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value 14 A  • at 600 V rated value 17 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 1 hp — at 230 V rated value 3 hp  • for 3-phase AC motor  — at 200/208 V rated value 3 hp — at 220/230 V rated value 5 hp — at 460/480 V rated value 10 hp — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		1 faulty switching per 100 million (17 V, 1 mA)
<ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>17 A</li> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor  — at 110/120 V rated value</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>— at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>5 hp</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> <li>to hp</li> <li>— at 575/600 V rated value</li> <li>A600 / P600</li> </ul>		
■ at 600 V rated value  yielded mechanical performance [hp]      ● for single-phase AC motor      — at 110/120 V rated value     — at 230 V rated value     ● for 3-phase AC motor      — at 200/208 V rated value     3 hp      — at 220/230 V rated value     5 hp      — at 460/480 V rated value     — at 575/600 V rated value  contact rating of auxiliary contacts according to UL  17 A  17 A  17 A  18 A  19 A  10 hp  10 hp  11 hp  12 A  13 hp  14 A  15 hp  15 hp  15 hp		
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value 1 hp — at 230 V rated value 3 hp  • for 3-phase AC motor  — at 200/208 V rated value 3 hp — at 220/230 V rated value 5 hp — at 460/480 V rated value 10 hp — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		
<ul> <li>for single-phase AC motor  — at 110/120 V rated value 1 hp  — at 230 V rated value 3 hp  • for 3-phase AC motor  — at 200/208 V rated value 3 hp  — at 220/230 V rated value 5 hp  — at 460/480 V rated value 10 hp  — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600</li> </ul>		1/ A
— at 110/120 V rated value 1 hp — at 230 V rated value 3 hp  ● for 3-phase AC motor — at 200/208 V rated value 3 hp — at 220/230 V rated value 5 hp — at 460/480 V rated value 10 hp — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		
— at 230 V rated value 3 hp  ● for 3-phase AC motor  — at 200/208 V rated value 3 hp  — at 220/230 V rated value 5 hp  — at 460/480 V rated value 10 hp  — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600	- 1	1 hn
● for 3-phase AC motor  — at 200/208 V rated value 3 hp  — at 220/230 V rated value 5 hp  — at 460/480 V rated value 10 hp  — at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		
- at 200/208 V rated value 3 hp - at 220/230 V rated value 5 hp - at 460/480 V rated value 10 hp - at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		V.P
— at 220/230 V rated value       5 hp         — at 460/480 V rated value       10 hp         — at 575/600 V rated value       15 hp         contact rating of auxiliary contacts according to UL       A600 / P600	•	3 hp
- at 460/480 V rated value 10 hp - at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		
— at 575/600 V rated value 15 hp  contact rating of auxiliary contacts according to UL A600 / P600		
contact rating of auxiliary contacts according to UL A600 / P600		
- The state of the	Short-circuit protection	
design of the fuse link		
for short-circuit protection of the main circuit	-	

<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)	
with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)	
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions		
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface	
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	
side-by-side mounting	Yes	
height	102 mm	
width	45 mm	
depth	107 mm	
required spacing		
with side-by-side mounting	40	
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
• for grounded parts	10	
— forwards	10 mm	
— upwards	10 mm	
— at the side — downwards	6 mm 10 mm	
for live parts	10 111111	
for live parts	10 mm	
— norwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals	O IIIIII	
type of electrical connection		
for main current circuit	spring-loaded terminals	
for auxiliary and control circuit	spring-loaded terminals	
at contactor for auxiliary contacts	Spring-type terminals	
of magnet coil	Spring-type terminals	
type of connectable conductor cross-sections for main contacts	Opining type terminals	
• solid	2x (1 10 mm²)	
solid or stranded	2x (1 10 mm²)	
finely stranded with core end processing	2x (1 6 mm²)	
finely stranded without core end processing	2x (1 6 mm²)	
connectable conductor cross-section for main contacts		
• solid	1 10 mm²	
stranded	1 10 mm²	
finely stranded with core end processing	1 6 mm²	
finely stranded without core end processing	1 6 mm²	
connectable conductor cross-section for auxiliary contacts		
solid or stranded	0.5 2.5 mm²	
• finely stranded with core end processing	0.5 1.5 mm²	
finely stranded without core end processing	0.5 2.5 mm²	
type of connectable conductor cross-sections		
for auxiliary contacts		
— solid or stranded	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)	
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 14)	
AWG number as coded connectable conductor cross		
section	40.0	
• for main contacts	18 8	
for auxiliary contacts	20 14	
Safety related data		
product function		
mirror contact according to IEC 60947-4-1	Yes	
B10 value with high demand rate according to SN 31920	450 000	

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
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	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

## **General Product Approval**



Confirmation





<u>KC</u>



	EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conformity	Test Certificates
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Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

## Marine / Shipping













Marine / Shipping other Railway Dangerous Good Environment



Confirmation



Vibration and Shock

Transport Information

Environmental Confirmations

## 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=3RT2025-2BG40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-2BG40

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

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-2BG40}}$ 

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

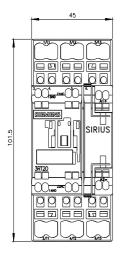
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2025-2BG40&lang=en

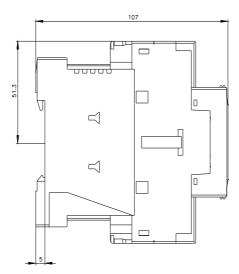
Characteristic: Tripping characteristics, I²t, Let-through current

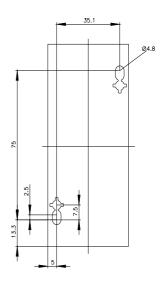
https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-2BG40/chai

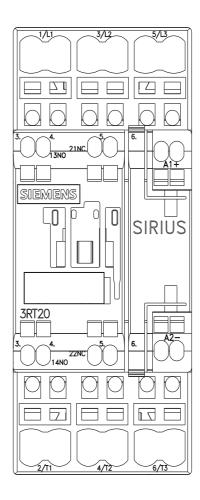
Further characteristics (e.g. electrical endurance, switching frequency)

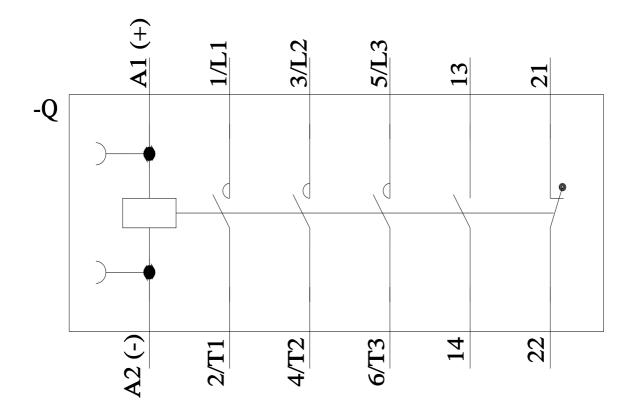
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-2BG40&objecttype=14&gridview=view1











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