# **SIEMENS**

## **Data sheet**

3RT2024-1BB40-0CC0



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal, communication-capable

size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • 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 since pulse • at DC  shock resistance at rectangular impulse • at DC  at DC  of the contactor with aided 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 unit conditions  installation altitude at height above sea level maximum • during operation • during operation • during operation • during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60088-2-30  maximum	product brand name	SIRIUS
Size of contactor product extension  • function module for communication • function function function • function function function • function function function • function	product designation	Power contactor
size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • 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 since pulse • at DC  shock resistance at rectangular impulse • at DC  at DC  of the contactor with aided 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 unit conditions  installation altitude at height above sea level maximum • during operation • during operation • during operation • during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60088-2-30  maximum	product type designation	3RT2
product extension  • function module for communication • auxiliarly switch  power loss [W] for rated value of the current • at AC in hot operating state e • at AC in hot operating state 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 vith degree of pollution 3 rated value • of auxiliary circuit rated value • 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 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	General technical data	
• function module for communication • auxillary switch • auxillary switch • auxillary 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 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 switch sine pulse • of tDC	size of contactor	S0
• auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state   0.9 W   • without load current share typical   5.9 W   • 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 trated value   6 kV   • of main circuit rated value   6 kV   • of main circuit rated value   6 kV   • of main circuit rated value   6 kV   • of auxiliary circuit rated value   6 kV   • of with principle of the 60947-1   • 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 bloc	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 • 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 with degree of pollution 3 rated value • of main circuit rated value • of main circuit rated value • of auxiliary circuit rated value • of bV  400 V	<ul> <li>function module for communication</li> </ul>	Yes
at AC in hot operating state 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 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 block typical of the contactor with added auxili	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 of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of the contactor acrossing to EN 60947-1 shock resistance at rectangular impulse 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 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 typ	power loss [W] for rated value of the current	
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 since at rectangular impulse of at DC of contactor typical 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 block typical of the contactor with added auxiliary switch block typical of the contact	<ul> <li>at AC in hot operating state</li> </ul>	0.9 W
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 maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse o at DC shock resistance with sine pulse o at DC shock resistance with sine pulse of contactor typical 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 electronically optimized auxiliary switch block typical of the contactor with added electronically optimi	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.3 W
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 main circuit rated value     of auxillary circuit rated value     ovalue      ovalue	<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 the contacts according to EN 60947-1     shock resistance at rectangular impulse     of at DC	insulation voltage	
value surge voltage resistance  • of main circuit rated value • of auxiliary circuit rated value  of kV  400 V  400 V  shock resistance at rectangular impulse  • at DC  at DC  10g / 5 ms, 7,5g / 10 ms  shock resistance with sine pulse  • at DC  nechanical 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 wit	<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     aximum permissible voltage for safe isolation between coil 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     oat 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     reference code according to IEC 81346-2     Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature     ouring operation     ouring operation     ouring storage     relative humidity minimum     relative humidity at 55 °C according to IEC 60068-2-30 maximum      of maximum      of main contactor vale value     do v      400 V       400 V      400 V       400 V       400 V       400 V       400 V       400 V       10 ms      6 kg / 5 ms, 7,5g / 10 ms      10 ms      6 do 00 00      10 000 000      10 000 000      10 000 00	, ,	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	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 DC shock resistance with sine pulse • at DC 10g / 5 ms, 7,5g / 10 ms  **To 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  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contactor with added auxiliary switch block typical  **To wook on the contacto	<ul> <li>of main circuit rated value</li> </ul>	6 kV
coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse  • at 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 • of the prohibitance (Date)  Teference 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  relative humidity at 55 °C according to IEC 60068-2-30 maximum	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
• at DC  shock resistance with sine pulse • 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 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 relative humidity at 55 °C according to IEC 60068-2-30 maximum		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 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 of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum  15g / 5 ms, 10g / 10 ms  10 000 000  10 0	• 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 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 of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum  10 000 000 10 000 000 10 000 000 10 000 00	shock resistance with sine pulse	
<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>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>10/01/2009</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum ambient temperature</li> <li>o during operation</li> <li>o during storage</li> <li>relative humidity minimum</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 maximum</li> </ul>	• 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      reference code according to IEC 81346-2     Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature     o during operation     o during storage     relative humidity minimum     relative humidity at 55 °C according to IEC 60068-2-30 maximum      5 000 000  10 000 000  10 000 000  10 000 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  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature  of during operation of during storage  relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum  10 000 000  10 000 000  10 000 000  10 000 00	<ul> <li>of contactor typical</li> </ul>	10 000 000
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 • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum  Output  Description  10/01/2009  2 000 m  3 000 m  4 000 m  5 000 m  6 000 m  7		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 relative humidity at 55 °C according to IEC 60068-2-30 maximum  10/01/2009  2 000 m  -25 +60 °C  -55 +80 °C  10 %  95 %		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  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  2 000 m  -25 +60 °C  -55 +80 °C  10 %  95 %	Substance Prohibitance (Date)	10/01/2009
ambient temperature	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>telative humidity minimum</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 maximum</li> </ul>	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C  relative humidity minimum 10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 %	ambient temperature	
relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 10 % 95 %	<ul><li>during operation</li></ul>	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum	during storage	-55 +80 °C
maximum	relative humidity minimum	10 %
Main circuit	,	95 %
nam chear.	Main circuit	

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	000.1/
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	40.4
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	40 A
rated value	40 A
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	12.5 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	35.2 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	9.9 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	11.4 A
	11.4 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	11.4 A
— up to 500 V for current peak value n=20 rated	11.3 A
value	
<ul> <li>up to 690 V for current peak value n=20 rated</li> </ul>	9 A
value	
• at AC-6a	
— up to 230 V for current peak value n=30 rated	7.6 A
value — up to 400 V for current peak value n=30 rated	7.6 A
value	7.0 A
<ul> <li>up to 500 V for current peak value n=30 rated</li> </ul>	7.6 A
value	
<ul> <li>up to 690 V for current peak value n=30 rated</li> </ul>	7.6 A
value	
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm <sup>2</sup>
operational current for approx. 200000 operating	
cycles at AC-4	
at 400 V rated value	5.5 A
at 690 V rated value	5.5 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	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
<ul> <li>with 2 current paths in series at DC-1</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	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	05.4
— at 24 V rated value	35 A
— at 60 V rated value	35 A

at 110 V rated value	35 A
— at 110 V rated value	
— 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.	20.4
— at 24 V rated value	20 A 5 A
— at 60 V rated value	
— 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
with 2 current paths in series at DC-3 at DC-5	
— 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
with 3 current paths in series at DC-3 at DC-5	
— 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-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles	
at AC-4	2.6.14M
at 400 V rated value     at 600 V rated value	2.6 kW
• at 690 V rated value	4.6 kW
operating apparent power at AC-6a	4.5.12/4
• 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	9.8 kVA
• up to 690 V for current peak value n=20 rated value	10.7 kVA
operating apparent power at AC-6a	0.1374
• up to 230 V for current peak value n=30 rated value	3 kVA
• up to 400 V for current peak value n=30 rated value	5.2 kVA
• up to 500 V for current peak value n=30 rated value	6.5 kVA
• up to 690 V for current peak value n=30 rated value	9 kVA
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	210 A; Use minimum cross-section acc. to AC-1 rated value
_	210 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> </ul>	170 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10's switching at zero current maximum     limited to 30 s switching at zero current maximum	126 A; Use minimum cross-section acc. to AC-1 rated value
_	105 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum  no-load switching frequency	100 A, OSC Hillimum Gross-Section acc. to AC-1 Tated Value
no-load switching frequency  • at DC	1 500 1/h
	1 300 1/11
operating frequency	1 000 1/h
• at AC-1 maximum	1 000 1/h 1 000 1/h
• at AC-2 maximum	1 000 1/h
<ul><li>at AC-3 maximum</li><li>at AC-3e maximum</li></ul>	1 000 1/h
■ at AC-3€ maximum	1 000 1/h

• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
• initial value	0.8
• full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	50 170 ms
opening delay	30 170 ms
• at DC	15 18 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2, optionally via function module
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
instantaneous contact	
number of NO contacts for auxiliary contacts	1
instantaneous contact	40.4
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
at 500 V rated value     at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
<ul> <li>at 48 V rated value</li> </ul>	6 A
<ul><li>at 60 V rated value</li></ul>	6 A
<ul> <li>at 110 V rated value</li> </ul>	3 A
<ul> <li>at 125 V rated value</li> </ul>	2 A
<ul> <li>at 220 V rated value</li> </ul>	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
• at 48 V rated value	2 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> </ul>	2 A 1 A
at 125 V rated value     at 125 V rated value	0.9 A
at 123 V rated value     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	11 A
• at 600 V rated value	11 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	1 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	O.h.,
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
<ul><li>— at 460/480 V rated value</li><li>— at 575/600 V rated value</li></ul>	7.5 hp
contact rating of auxiliary contacts according to UL	10 hp A600 / P600
Short-circuit protection	7,000 / 1 000
design of the fuse link	
for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
Special containation in required	32. 22. 1 (332.), 133.3. ), ann 32.1 (333.1, 133.3.), 2330. 331 (413.0.)

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) gG: 10 A (500 V, 1 kA)

required	
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	85 mm
width	45 mm
depth	107 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
— forwards	10 mm
— upwards	10 mm
<ul><li>— at the side</li><li>— downwards</li></ul>	6 mm 10 mm
for live parts	10 111111
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>solid or stranded</li> </ul>	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
connectable conductor cross-section for main contacts	
• solid	1 10 mm <sup>2</sup>
• stranded	1 10 mm <sup>2</sup>
finely stranded with core end processing	1 10 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
for auxiliary contacts	
<ul><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 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>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
• for main contacts	16 8
for auxiliary contacts	20 14
Safety related data	
product function	v.
mirror contact according to IEC 60947-4-1  P40 value with high decreased acts according to CN 34000.	Yes
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	40.0/
with low demand rate according to SN 31920     with high demand rate according to SN 31920	40 % 73 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	13 70

failure rate [FIT] with low demand rate according to SN 21020

T1 value for proof test interval or service life according to IFC 61508

protection class IP on the front according to IEC

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

#### **General Product Approval**





Confirmation



<u>KC</u>



**EMC** 

Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination
Certificate





Special Test Certificate

Type Test Certificates/Test Report

### Marine / Shipping













other

Railway

**Dangerous Good** 

**Environment** 

Confirmation



Vibration and Shock

<u>Transport Information</u>

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=3RT2024-1BB40-0CC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2024-1BB40-0CC0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BB40-0CC0

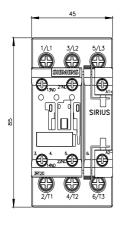
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

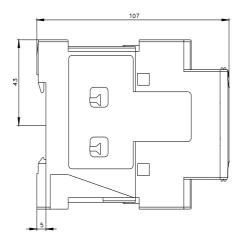
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2024-1BB40-0CC0&lang=en

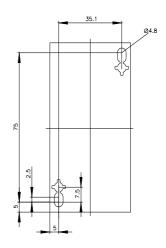
Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BB40-0CC0/char">https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BB40-0CC0/char</a>

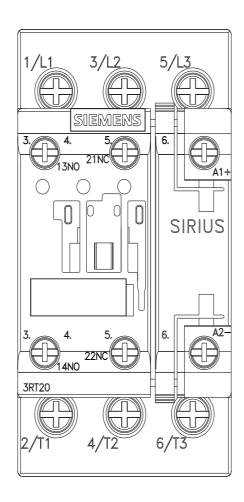
Further characteristics (e.g. electrical endurance, switching frequency)

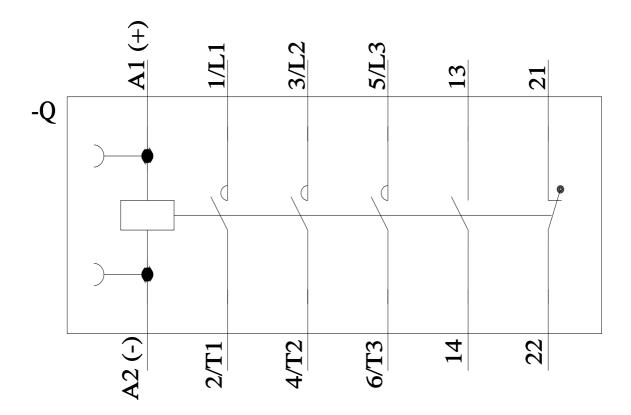
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2024-1BB40-0CC0&objecttype=14&gridview=view1











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