## **SIEMENS**

Data sheet 3RT2017-1SB41



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, 0.85-1.85  $^{\star}$  Us, with integrated suppressor diode, auxiliary contacts: 1 NO, screw terminal, size: S00

product type designation 3RT2  size of contactor S00  product extension  • function module for communication  • auxiliary switch  • at AC in hot operating state  • at AC in hot operating state per pole  • without load current share typical  • without load current share typical  type of calculation of power loss depending on pole  insulation voltage  • of main circuit with degree of poliution 3 rated value  • of auxiliary circuit with degree of poliution 3 rated value  • of auxiliary circuit with degree of poliution 3 rated value  • of auxiliary circuit rated value  • of auxiliary of auxiliary at 8 of auxiliary circuit rated value  • at DC  • a	product brand name	SIRIUS
Size of contactor S00  riversity of contactor No  suxiliary switch No  auxiliary switch No  power loss [W] for rated value of the current  at AC in hot operating state 1.5 W  at AC in hot operating state 9.5 W  without load current share typical 1.6 W  type of calculation of power loss depending on pole quadratic  insulation voltage  of main circuit with degree of pollution 3 rated value 990 V  surge voltage resistance  of main circuit rated value 6 kV  advisilary circuit rated value 6 kV  maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1  shock resistance at rectangular impulse  at DC 7.3g / 5 ms, 4.7g / 10 ms  shock resistance with sine pulse  at DC 11.4g / 5 ms, 7.3g / 10 ms  shock resistance with sine pulse  at DC 11.4g / 5 ms, 7.3g / 10 ms  shock resistance vith sine pulse  at DC 11.4g / 5 ms, 7.3g / 10 ms  shock resistance of the control of the	product designation	Coupling contactor
size of contactor product extension  • function module for communication • 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 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 • at DC  \$\text{3.9} f.\text{5.m}, 4.7g / 10 ms \$\text{shock resistance at rectangular impulse} • at DC  \$\text{3.0} f.\text{5.m}, 4.7g / 10 ms \$\text{3.000 000} \$\text{5.m}, 4.7g / 10 ms \$\text{5.m}, 4.7g	product type designation	3RT2
product extension  • function module for communication  • auxiliary switch  power loss [W] for rated value of the current  • at AC in hot operating state   1.5 W    • at AC in hot operating state   1.5 W    • at AC in hot operating state per pole   0.5 W    • without load current share typical   1.6 W    type of calculation of power loss depending on pole    insulation voltage   • 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 an in circuit rated value   6 kV    • of auxiliary circuit rated value   6 kV    • of contactor resistance at rectangular impulse   400 V    • at DC   7.3g / 5 ms, 4.7g / 10 ms    shock resistance with sine pulse   11.4g / 5 ms, 7.3g / 10 ms    mechanical service life (operating cycles)   0 contactor typical   30 000 000    reference code according to IEC 81346-2   Q    Substance Prohibitance (Date)   200 m    with a substance and thick at height above sea level maximum   2 000 m    ambient temperature   4 during operation   25 +60 °C    • during operation   25 +60 °C    • during operation   25 +60 °C    • during storage   55 +80 °C    relative humidity at 55 °C according to IEC 60068-2-30    governmental footprint	General technical data	
• 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 • without load current share typical • of aculation of power loss depending on pole 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 rated value • of uxillary circuit rated value • o	size of contactor	S00
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 to guadratic  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 a will circuit rated value of a will circuit rated value of auxillary circuit rated value of au	product extension	
power loss [W] for rated value of the current  at AC in hot operating state	<ul> <li>function module for communication</li> </ul>	No
at AC in hot operating state at AC in hot operating state per pole without load current share typical type of calculation of power loss depending on pole 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 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 with williary circuit rated value of williary circui	auxiliary switch	No
at AC in hot operating state per pole without load current share typical type of calculation of power loss depending on pole 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 avxiliary circuit rated value of avxili	power loss [W] for rated value of the current	
without load current share typical type of calculation of power loss depending on pole 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 with degree of pollution 3 rated value of auxiliary circuit value of auxiliary ci	<ul> <li>at AC in hot operating state</li> </ul>	1.5 W
type of calculation of power loss depending on pole 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 with degree of pollution 3 rated value  • of main circuit rated value  • of auxiliary circuit rated value  • at DC  7.3g / 5 ms, 4.7g / 10 ms  shock resistance at rectangular impulse  • at DC  11.4g / 5 ms, 7,3g / 10 ms  mechanical service life (operating cycles)  • of contactor typical  • of contactor typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during operation  • during storage  relative humidity minimum  relative humidity minimum  Environmental footprint	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.5 W
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 auxiliary circuit rated value  • of value rate over a rectangular impulse  • at DC  • of contactor typical	without load current share typical	1.6 W
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 kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     of DC	type of calculation of power loss depending on pole	quadratic
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 kV     maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     ot DC     7.3g / 5 ms, 4.7g / 10 ms  shock resistance with sine pulse     ot DC     11,4g / 5 ms, 7,3g / 10 ms  mechanical service life (operating cycles)     of contactor typical     30 000 000  reference code according to IEC 81346-2     Q  Substance Prohibitance (Date)  SYHC substance name     Lead - 7439-92-1  Weight     0.295 kg  Ambient conditions installation altitude at height above sea level maximum     ambient temperature     ouring operation     -25 +60 °C     oturing storage     relative humidity minimum  relative humidity minimum  Environmental footprint	insulation voltage	
surge voltage resistance  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 at DC  shock resistance with sine pulse  of contactor typical  of contactor typical  of contactor typical  reference code according to IEC 81346-2  Qu  Substance Prohibitance (Date)  SYHC substance name  Lead - 7439-92-1  Weight  0.295 kg  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  of during operation  of characterists and the sea of contacterists and the sea of con	<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     ad NV     maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     ot DC	<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     oat DC     factor of the pulse     oat DC     interpretation of the pulse     of contactor typical     of contactor typical     of contactor typical     of contactor typical     substance Prohibitance (Date)  SYHC substance name     Lead - 7439-92-1  Weight     O.295 kg  Ambient conditions  installation altitude at height above sea level maximum     ambient temperature     oduring storage     oduring storage     relative humidity minimum  relative humidity minimum  Environmental footprint  at 00 V  400 V  40	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  shock resistance with sine pulse  • at DC  at DC  to at DC  shock resistance with sine pulse  • at DC  mechanical service life (operating cycles)  • of contactor typical  of contactor typical  substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  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  Environmental footprint	of main circuit rated value	6 kV
coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  • at DC  shock resistance with sine pulse  • at DC  11,4g / 5 ms, 7,3g / 10 ms  mechanical service life (operating cycles)  • of contactor typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  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  Environmental footprint	of auxiliary circuit rated value	6 kV
* at DC     * shock resistance with sine pulse     * at DC     * at DC     * 11,4g / 5 ms, 7,3g / 10 ms  mechanical service life (operating cycles)     * of contactor typical		400 V
shock resistance with sine pulse  • at DC  11,4g / 5 ms, 7,3g / 10 ms  mechanical service life (operating cycles)  • of contactor typical  30 000 000  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  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  Environmental footprint	shock resistance at rectangular impulse	
at DC  mechanical service life (operating cycles)  of contactor typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  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  Environmental footprint	• at DC	7.3g / 5 ms, 4.7g / 10 ms
mechanical service life (operating cycles)  ● of contactor typical  reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  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  Environmental footprint	shock resistance with sine pulse	
of contactor typical     reference code according to IEC 81346-2     Substance Prohibitance (Date)  SVHC substance name     Lead - 7439-92-1  Weight     0.295 kg  Ambient conditions  installation altitude at height above sea level maximum     ambient temperature     o during operation     o during storage     during storage     relative humidity minimum     10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Environmental footprint	• at DC	11,4g / 5 ms, 7,3g / 10 ms
reference code according to IEC 81346-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  -25 +60 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Environmental footprint	mechanical service life (operating cycles)	
Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  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  Environmental footprint	of contactor typical	30 000 000
SVHC substance name  Lead - 7439-92-1  Weight  0.295 kg  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  Environmental footprint	reference code according to IEC 81346-2	Q
Weight  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  Environmental footprint	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  Environmental footprint	SVHC substance name	Lead - 7439-92-1
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  Environmental footprint	Weight	0.295 kg
ambient temperature	Ambient conditions	
● during operation     ● during storage     ● during storage	installation altitude at height above sea level maximum	2 000 m
during storage     relative humidity minimum     10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Environmental footprint  -55 +80 °C  95 %  95 %	ambient temperature	
relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Environmental footprint	<ul> <li>during operation</li> </ul>	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum  Environmental footprint	during storage	-55 +80 °C
Environmental footprint	relative humidity minimum	10 %
		95 %
Environmental Product Declaration(EPD)	Environmental footprint	
Environmental i roddot pedialidinal D)	Environmental Product Declaration(EPD)	Yes

Global Warming Potential [CO2 eq] total	153 kg
Global Warming Potential [CO2 eq] during manufacturing	1.42 kg
Global Warming Potential [CO2 eq] during operation	152 kg
Global Warming Potential [CO2 eq] after end of life	-0.305 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
• at AC-5a up to 690 V rated value	19.4 A
• at AC-5b up to 400 V rated value	9.9 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	4.8 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
a with 2 aureant noths in series at DC 4	
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	

— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	0.35 A
with 3 current paths in series at DC-3 at DC-5	0.0071
— at 24 V rated value	20 A
— at 60 V rated value	
	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 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	5.5 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	5.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	2.8 kVA
• up to 400 V for current peak value n=20 rated value	4.9 kVA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	6.2 kVA
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	8 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	1.9 kVA
up to 400 V for current peak value n=30 rated value	3.3 kVA
up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value	4.1 kVA
up to 690 V for current peak value n=30 rated value      up to 690 V for current peak value n=30 rated value	5.7 kVA
short-time withstand current in cold operating state up to	K., (
40 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	200 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	123 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	
-	
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	96 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum     limited to 60 s switching at zero current maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum	96 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum     no-load switching frequency	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum  no-load switching frequency     at DC	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum     no-load switching frequency     at DC     operating frequency	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h
limited to 60 s switching at zero current maximum  no-load switching frequency     at DC  operating frequency     at AC-1 maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  1 000 1/h
Iimited to 60 s switching at zero current maximum     no-load switching frequency     at DC     operating frequency     at AC-1 maximum     at AC-2 maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  1 000 1/h 750 1/h
Iimited to 60 s switching at zero current maximum  no-load switching frequency     at DC  operating frequency     at AC-1 maximum     at AC-2 maximum     at AC-3 maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  1 000 1/h 750 1/h 750 1/h
Iimited to 60 s switching at zero current maximum  no-load switching frequency     at DC  operating frequency     at AC-1 maximum     at AC-2 maximum     at AC-3 maximum     at AC-3 e maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  1 000 1/h 750 1/h 750 1/h
Iimited to 60 s switching at zero current maximum  no-load switching frequency     at DC  operating frequency     at AC-1 maximum     at AC-2 maximum     at AC-3 maximum	96 A; Use minimum cross-section acc. to AC-1 rated value 74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value  10 000 1/h  1 000 1/h 750 1/h 750 1/h

type of voltage of the control supply voltage	DC
type of voltage of the control supply voltage  control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value of	27 (
magnet coil at DC	
initial value	0.85
• full-scale value	1.85
design of the surge suppressor	suppressor diode
closing power of magnet coil at DC	1.6 W
holding power of magnet coil at DC	1.6 W
closing delay	
• at DC	25 120 ms
opening delay	
• at DC	5 20 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
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
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
• at 110 V rated value	3 A
at 125 V rated value	2 A
at 220 V rated value	1.4
at 600 V rated value	0.15 A
operational current at DC-13	40.4
<ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> </ul>	10 A 2 A
• at 60 V rated value	2 A
at 110 V rated value     at 125 V rated value	1 A 0.9 A
<ul> <li>at 125 V rated value</li> <li>at 220 V rated value</li> </ul>	0.3 A
at 600 V rated value	0.3 A 0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	ridary officining per 100 million (17 v, 1 mix)
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]	
• for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
with type of coordination 1 required	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)

nstallation/ 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
height	58 mm
width	45 mm
depth	73 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— upwarus — downwards	10 mm
— at the side	0 mm
• for grounded parts	40
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>
connectable conductor cross-section for auxiliary contacts	0.0 2.3 mm
solid or stranded	0.5 4 mm²
	0.5 2.5 mm <sup>2</sup>
• finely stranded with core end processing  type of connectable conductor cross sections	0.0 2.0 Hilli
type of connectable conductor cross-sections	
for auxiliary contacts	Ov (0.5 4.5 mans?) Ov (0.75 0.5 mass?) Ov 4 mass?
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross section	
• for main contacts	20 12
for auxiliary contacts	20 12
afety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	No
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
proportion of dangerous failules	

<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

**General Product Approval** 







Confirmation



<u>KC</u>

**General Product Ap**proval

EMV

**Functional Saftey** 

**Test Certificates** 

Marine / Shipping





Type Examination Certificate

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

Type Test Certificates/Test Report



Marine / Shipping











**Miscellaneous** 

other

other

Railway

**Dangerous goods** 

**Environment** 

Confirmation

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

**Transport Information** 



**Environmental Confirmations** 

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=3RT2017-1SB41

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2017-1SB41}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1SB41

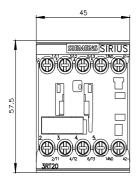
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

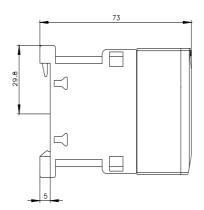
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2017-1SB41&lang=en

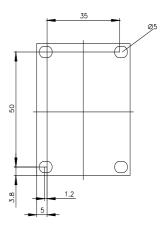
Characteristic: Tripping characteristics, I2t, Let-through current

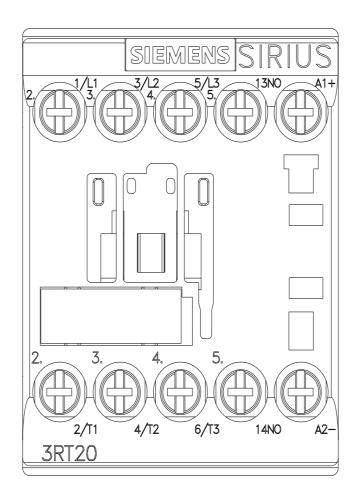
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1SB41/char

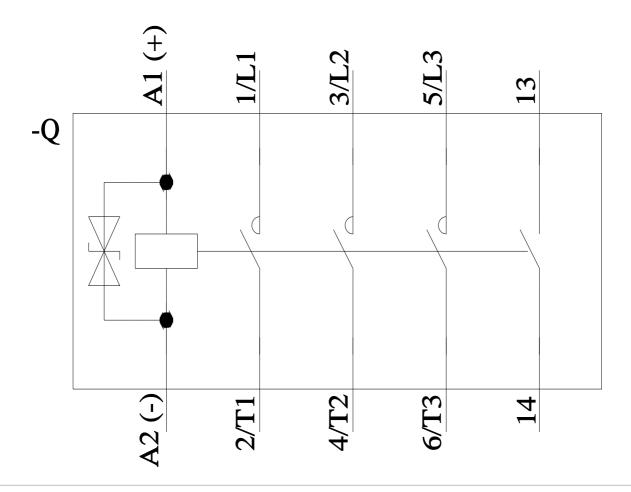
Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1SB41&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1SB41&objecttype=14&gridview=view1</a>











♂

last modified: