## SIEMENS

## Data sheet

## 3RT2016-2AP62



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NC, spring-loaded terminal, size: S00  $\,$ 

200 - 200	
product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	0.9 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.3 W
<ul> <li>without load current share typical</li> </ul>	1.2 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	30 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	
Weight	0.254 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	39.6 kg
Global Warming Potential [CO2 eq] during manufacturing	1.18 kg
Global Warming Potential [CO2 eq] during operation	38.5 kg
Global Warming Potential [CO2 eq] after end of life	-0.155 kg
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
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	22 A
• at AC-1	60 A
— up to 690 V at ambient temperature 40 °C rated value	22 A 20 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3 — at 400 V rated value	9 A
— at 500 V rated value — at 500 V rated value	9 A 7.7 A
— at 690 V rated value	6.7 A
• at AC-3e	
- at 400 V rated value	9 A
— at 500 V rated value	7.7 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	7.4 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	5.3 A
— up to 400 V for current peak value n=20 rated value	5.3 A
— up to 500 V for current peak value n=20 rated value	5.3 A
— up to 690 V for current peak value n=20 rated value	5 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	3.5 A
— up to 400 V for current peak value n=30 rated value	3.5 A
— up to 500 V for current peak value n=30 rated value	3.6 A
— up to 690 V for current peak value n=30 rated value	3.3 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm <sup>2</sup>
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	20.4
— at 24 V rated value — at 60 V rated value	20 A 20 A
— at 100 V rated value — at 110 V rated value	20 A 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
with 2 current paths in series at DC-1	
— 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	12 A 1.6 A
— at 220 V rated value — at 440 V rated value	

a with 2 autrent notion in parise of DC 1	
with 3 current paths in series at DC-1     — 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	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1.3.5
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
• with 2 current paths in series 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	0.35 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— 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-2 at 400 V rated value	4 kW
• at AC-3	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 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	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	2 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	3.6 kVA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	4.6 kVA
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	5.9 kVA
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	1.3 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	2.4 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	3.1 kVA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	4 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>	155 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	111 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	86 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 30 s switching at zero current maximum	66 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	55 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	40.000 4/h
• at AC	10 000 1/h
operating frequency	1.000.1/b
• at AC-1 maximum	1 000 1/h 750 1/b
• at AC-2 maximum	750 1/h 750 1/h
• at AC-3 maximum	750 1/h

Al Add envalue     Add envalu	a at AC 20 maximum	750.1/b
Operational increases         AC           type of voltage of the control supply voltage         AC           • • 65 01: France value         20 V           • • 65 01: France value         08 - 1.1           # 65 01: France value         08 - 1.1           # 65 01: France value         28.4 VA           • • 65 01: France value         08 - 1.1           # 65 01: France value         0.81           # 65 01: France value         0.81           # 65 01: France value         0.24           # 65 01: France value         0.24           # 65 01: France value         0.24           # 66 01: France value         0.24           # 66 01: France value         0.24           # 67 01: France value         0.24           # 67 01: France value         0.24           # 66 01: France value         0	at AC-3e maximum	750 1/h
Type of voltage of the control supply voltage         AC           control supply voltage at AC         220 V           • at 50 Hz zated value         220 V           • at 50 Hz zated value         220 V           • at 50 Hz zated value         220 V           • at 50 Hz         0.8 1.1           • at 50 Hz         0.8 .		200 1/11
control supply voltage 44 AC     20 V       • af 60 hr meet volue     20 V       • af 60 hr meet volue     240 V       • af 60 hr     0.811       • af 60 hr     0.811       apparent pit-trip power of magnet coll at AC     264 VA       • af 80 hr     284 VA       • af 80 hr     28		
• at 00 transit value20 Voperating range factor control supply voltage rated value of impart coil at AC0.81.1• at 00 tra0.81.1• at 00 tra0.8.1• at 00 tra0.81• at 00 tra0.24• at 00 tra0.15 ms• at 00 tra015 ms• at 00 tra015 ms• at 00 tra015 ms• at 00 tra015 ms• at 00 tra016 ms• at 00 tra016 ms• at 00 tra016 ms• at 00 trad value116 ms• at 00 trad value0.0.16 ms• at 00 trad value116 ms• at 00 trad value0.0.16 ms• at 00 trad value		AC
- at 80 bt 2 cates value     240 V       operating mays factor control supply voltage rated value of operating mays factor control supply voltage rated value of at 80 bt 2     0.8 1.1       at 80 bt 2     0.24       at 80 bt 2     0.3 Fms       operating mays     1 15 ms       atcring fme     1 15 ms       atcring fme     1 16 ms       control varian of the surico operating mechanism     18 14 15 ms       outs at 80 bt 7 ated value     10 A       operational current at AC-		
operating range factor control supply voltage rated value of magnet coil at AC       0.81.1         a # 60 Hz       0.81.1         a # 60 Hz       0.81.1         apparent pickup power of magnet coil at AC       28.4 VA         • at 60 Hz       28.4 VA         intductive power factor with closing power of the coil       0.81         • at 60 Hz       0.8.1         • at 60 Hz       0.24         • at 60 Hz       0.4		
magnet coll at AC0.8 1.1• at 60 htz0.8 1.1apparent pick-up power of magnet coll at AC26.4 VA• at 60 htz26.4 VA• at 60 htz26.4 VA• at 60 htz0.81• at 60 htz0.24• at 60 htz0.24• at 60 htz0.24• at 60 htz0.24• at 80 htz0.5 ms• at 80 htz0.5 ms• at 80 httc0.6 ms• at 80 httd0.6 ms <trr>• at 80 httd0.6 ms<tr< td=""><td></td><td>240 V</td></tr<></trr>		240 V
• • • • • • • • • • • • • • • • • • •		
apparent pick-up power of magnet coil at AC     26.4 VA       • at 60 Hz     26.4 VA       inductive power factor with closing power of the coil     0.81       • at 60 Hz     0.24       closing data     0.24       closing data     0.24       closing data     0.35 ms       opening delay     045 ms       • at AC     935 ms       opening delay     115 ms       • at AC     935 ms       opening delay     115 ms       • at AC     945 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxilary circuit     10.A       operational current at AC-12 maximum     10.A       operational current at AC-12 maximum     10.A       operational current at AC-15     1	• at 50 Hz	0.8 1.1
a. 15 0 Hz     26.4 VA       inductive power factor with closing power of the coll     0.81       • at 50 Hz     0.81       apparent holding power of magnet coll at AC     4.4 VA       • at 50 Hz     0.81       apparent holding power of magnet coll at AC     4.4 VA       • at 50 Hz     0.24       • at 60 Hz     0.4       • at 60 Hz     0.4       • at 60 Hz     0.4       • at 20 Vrado value     10       • at 20 Vrado value     10 A       • at 200 Vrado value     2A       • at 800 Vrado value     1A       • at 800 Vrado value     1A       • at 800 Vrado value     6A       • at 800 Vrado value	• at 60 Hz	0.8 1.1
• at 60 Hz26.4 VAinductive power factor with closing power of the coll0.81• at 80 Hz0.81• at 80 Hz0.81• at 80 Hz4.4 VA• at 80 Hz4.4 VA• at 80 Hz0.24• at 80 Hz0.91• at 80 Vz Red value1• at 80 Vz Red value1• at 800 Vz Red value3A• at 800 Vz Red value1A• at 800 Vz Red value10 A• at 800 Vz Red value10 A• at 800 Vz Red value6A• at 800 Vz Red value10 A• at 800 Vz Red value<	apparent pick-up power of magnet coil at AC	
Inductive power factor with closing power of the coll     0.81       • at 50 Hz     0.81       apparent holding power of magnet coll at AC     44 VA       • at 50 Hz     0.24       • at 50 Hz     0.24       • at 50 Hz     0.24       • at 60 Hz     0.24       closing datay     0.4.15 ms       • at AC     415 ms       • at AC     415 ms       • at AC     415 ms       • at AC     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circitd     10 A       number of NC contacts for auxiliary contacts instantaneous     1       operational current at AC-12 maximum     10 A       operational current	• at 50 Hz	26.4 VA
• at 50 Hz0.81• at 50 Hz0.81• at 50 Hz4.4 VA• at 50 Hz4.4 VAInductive power factor with the holding power of the coll0.24• at 50 Hz0.24• at 60 Hz0.24• at AC9 35 ms• at AC9 35 ms• at AC10 15 ms• at 30 V rated value10 15 ms• at 300 V rated value10.A• at 300 V rated value3.A• at 300 V rated value10.A• at 300 V rated value10.A• at 42 V rated value6.A• at 300 V rated value3.A• at 300	• at 60 Hz	26.4 VA
• at 60 Hz0.81apparent holding power of magnet coil at AC4.4 VA• at 60 Hz4.4 VA• at 60 Hz4.4 VAinductive power factor with the holding power of the coil0.24• at 50 Hz0.24• at 60 Hz0.24• at 70 Hz935 ms• opening delay015 ms• at AC415 ms• at AC115 ms• at AC115 ms• at AC115 ms• at 70 Hz10 A• at 70 Hz10 A• operation of the switch operating mechanism1• at 230 V rated value10 A• at 600 V rated value3A• at 600 V rated value6A• at 600 V rated value10 A• at 600 V rated value10 A </td <td>inductive power factor with closing power of the coil</td> <td></td>	inductive power factor with closing power of the coil	
apparent holding power of magnet coil at AC       4.4 VA         • at 50 Hz       4.4 VA         • at 50 Hz       4.4 VA         inductive power factor with the holding power of the coil       0.24         • at 60 Hz       0.24         • at 60 Hz       0.24         closing delay       0.24         • at AC       935 ms         opening dolay       415 ms         • at AC       935 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       10         operational current at AC-12 maximum       10 A         operational current at AC-15       1         • at 200 V rated value       3.A         • at 300 V rated value       3.A         • at 400 V rated value       1.A         operational current at AC-12       10 A         • at 200 V rated value       2.A         • at 200 V rated value       2.A         • at 200 V rated value       3.A         • at 200 V rated value       6.A         • at 200 V rated value       2.A         • at 20 V rated value       2.A         • at 20 V rated value       2.A         • at 20 V rated value       0.15 A <tr< td=""><td>• at 50 Hz</td><td>0.81</td></tr<>	• at 50 Hz	0.81
• at 50 Hz     4.4 VA       • at 60 Hz     4.4 VA       • at 60 Hz     4.4 VA       • at 60 Hz     0.24       • at 60 Hz     0.24       • closing delay     0.24       • at AC     935 ms       opening delay     415 ms       • at AC     935 ms       • at AC     1015 ms       arcing time     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     10       number of NC contacts for auxiliary contacts instantaneous contact     1       operational current at AC-12 maximum     10 A       operational current at AC-12 maximum     10 A       operational current at AC-12 maximum     10 A       • at 230 V rated value     1A       • at 600 V rated value     1A       • at 600 V rated value     6 A       • at 600 V rated value     3 A       • at 125 V rated value     1A       • at 200 V rated value     1A       • at 200 V rated value     1A       • at 60 V rated value     1A </td <td>• at 60 Hz</td> <td>0.81</td>	• at 60 Hz	0.81
• at 60 Hz44 VAInductive power factor with the holding power of the coll0.24• at 80 Hz0.24• at 80 Hz0.24closing delay0.24• at AC9 35 msopening delay10 15 msat AC4 15 msarcing time10 15 mscontrol version of the switch operating mechanism10 15 msAutiliary circuit10 15 msperitorial current at AC-12 maximum10 Aoperational current at AC-12 maximum10 Aoperational current at AC-12 maximum10 Aoperational current at AC-151• at 200 V rated value2 A• at 300 V rated value3 A• at 300 V rated value1 Aoperational current at AC-12 maximum10 Aoperational current at AC-131• at 200 V rated value3 A• at 300 V rated value1 Aoperational current at DC-12	apparent holding power of magnet coil at AC	
inductive power factor with the holding power of the coll     0.24       • at 60 Hz     0.24       closing delay     935 ms       • at AC     935 ms       opening delay     415 ms       arcing time     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     1       number of NC contacts for auxiliary contacts instantaneous     1       operational current at AC-12 maximum     10 A       operational current at AC-15     10 A       • at 230 V rated value     10 A       operational current at AC-15     10 A       • at 600 V rated value     1 A       operational current at AC-15     10 A       • at 600 V rated value     1 A       operational current at DC-12     • at 600 V rated value       • at 42 V rated value     10 A       • at 42 V rated value     6 A       • at 100 V rated value     1 A       operational current at DC-12     • at 600 V rated value       • at 600 V rated value     1 A       • at 60 V rated value     1 A       • at 60 V rated value <td< td=""><td></td><td>4.4 VA</td></td<>		4.4 VA
• at 50 Hz     0.24       • at 60 Hz     0.24       • closing delay     0.35 ms       • at AC     935 ms       opening delay     015 ms       arcing time     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary decreation     1       number of NC contacts for auxiliary contacts instantaneous     1       operational current at AC-12 maximum     10 A       operational current at AC-15     3A       • at 230 V rated value     3A       • at 600 V rated value     3A       • at 600 V rated value     3A       • at 600 V rated value     6A       • at 600 V rated value     6A       • at 40 V rated value     6A       • at 40 V rated value     6A       • at 600 V rated value     6A       • at 24 V rated value     6A       • at 600 V rated value     6A       • at 600 V rated value     6A       • at 24 V rated value     1A       • at 600 V rated value     6A       • at 24 V rated value     1A       • at 600 V rated value     1A       • at 24 V rated value	• at 60 Hz	4.4 VA
• at 50 Hz     0.24       • at 60 Hz     0.24       • closing delay     0.35 ms       • at AC     935 ms       opening delay     015 ms       arcing time     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary decreation     1       number of NC contacts for auxiliary contacts instantaneous     1       operational current at AC-12 maximum     10 A       operational current at AC-15     3A       • at 230 V rated value     3A       • at 600 V rated value     3A       • at 600 V rated value     3A       • at 600 V rated value     6A       • at 600 V rated value     6A       • at 40 V rated value     6A       • at 40 V rated value     6A       • at 600 V rated value     6A       • at 24 V rated value     6A       • at 600 V rated value     6A       • at 600 V rated value     6A       • at 24 V rated value     1A       • at 600 V rated value     6A       • at 24 V rated value     1A       • at 600 V rated value     1A       • at 24 V rated value	inductive power factor with the holding power of the coil	
closing delay       e. at AC       9 35 ms         opening delay       4 15 ms         e at AC       4 15 ms         arcing time       10 15 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-12 maximum       10 A         operational current at AC-12 maximum       10 A         • at 230 V rated value       2 A         • at 400 V rated value       2 A         • at 240 V rated value       1 A         operational current at DC-12       10 A         • at 24 V rated value       6 A         • at 250 V rated value       3 A         • at 60 V rated value       1 A         operational current at DC-13       0 A         • at 220 V rated value       0 A         • at 24 V rated value       2 A         • at 250 V rated value       2 A         • at 24 V rated value       0 A         • at 250 V rated value       2 A         • at 24 V rated value       0 A         • at 250 V rated value       0 A		0.24
closing delay       e. at AC       9 35 ms         opening delay       4 15 ms         e at AC       4 15 ms         arcing time       10 15 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-12 maximum       10 A         operational current at AC-12 maximum       10 A         • at 230 V rated value       2 A         • at 400 V rated value       2 A         • at 240 V rated value       1 A         operational current at DC-12       10 A         • at 24 V rated value       6 A         • at 250 V rated value       3 A         • at 60 V rated value       1 A         operational current at DC-13       0 A         • at 220 V rated value       0 A         • at 24 V rated value       2 A         • at 250 V rated value       2 A         • at 24 V rated value       0 A         • at 250 V rated value       2 A         • at 24 V rated value       0 A         • at 250 V rated value       0 A		
• at AC     935 ms       opening delay     -       • at AC     415 ms       arcing time     1015 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     -       number of NC contacts for auxiliary contacts instantaneous     1       contact     0       operational current at AC-12     -       • at 230 V rated value     10 A       • at 600 V rated value     2 A       • at 600 V rated value     1 A       operational current at DC-12     -       • at 800 V rated value     10 A       • at 600 V rated value     6 A       • at 100 V rated value     3 A       • at 110 V rated value     6 A       • at 220 V rated value     1 A       operational current at DC-13     -       • at 220 V rated value     1 A       • at 220 V rated value     0 A       • at 220 V rated value <td></td> <td></td>		
• at AC     4 15 ms       arcing time     10 15 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     1       number of NC contacts for auxiliary contacts instantaneous contact     1       operational current at AC-15     1       • at 230 V rated value     3A       • at 400 V rated value     3A       • at 600 V rated value     1A       operational current at DC-12		9 35 ms
• at AC     4 15 ms       arcing time     10 15 ms       control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     1       number of NC contacts for auxiliary contacts instantaneous contact     1       operational current at AC-15     1       • at 230 V rated value     3A       • at 400 V rated value     3A       • at 600 V rated value     1A       operational current at DC-12		
control version of the switch operating mechanism     Standard A1 - A2       Auxiliary circuit     1       number of NC contacts for auxiliary contacts instantaneous contact     1       operational current at AC-12     10 A       • at 230 V rated value     10 A       • at 200 V rated value     2 A       • at 600 V rated value     1 A       operational current at DC-12     1 A       • at 240 V rated value     6 A       • at 480 V rated value     6 A       • at 480 V rated value     6 A       • at 480 V rated value     1 A       operational current at DC-12     0 A       • at 240 V rated value     6 A       • at 250 V rated value     1 A       operational current at DC-12     0 A       • at 48 V rated value     6 A       • at 250 V rated value     1 A       • at 260 V rated value     1 A       • at 260 V rated value     1 A       • at 270 V rated value     2 A       • at 28 V rated value     1 A       • at 29 V rated value     1 A       • at 20 V rated value     2 A       • at 40 V rated value     2 A       • at 10 V rated value     <		4 15 ms
control version of the switch operating mechanism         Standard A1 - A2           Auxiliary circuit         Image: Contract for auxiliary contacts instantaneous         1           operational current at AC-12 maximum         10 A           operational current at AC-15         Image: Contact value           • at 20 V rated value         10 A           • at 400 V rated value         3 A           • at 600 V rated value         2 A           • at 600 V rated value         1 A           operational current at DC-12         Image: Contact value           • at 40 V rated value         6 A           • at 48 V rated value         6 A           • at 48 V rated value         6 A           • at 10 V rated value         6 A           • at 22 V rated value         1 A           operational current at DC-12         Image: Contact value           • at 48 V rated value         6 A           • at 24 V rated value         6 A           • at 25 V rated value         1 A           • at 26 V rated value         1 A           • at 26 V vrated value         10 A           • at 27 V rated value         10 A           • at 48 V rated value         2 A           • at 60 V rated value         2 A           • at 6	arcing time	10 15 ms
Auxiliary circuit         number of NC contacts for auxiliary contacts instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A         • at 200 V rated value       3 A         • at 400 V rated value       2 A         • at 500 V rated value       1 A         operational current at DC-12       10 A         • at 40 V rated value       1 A         operational current at DC-12		Standard A1 - A2
number of NC contacts for auxiliary contacts instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A         • at 230 V rated value       3 A         • at 400 V rated value       3 A         • at 500 V rated value       1 A         operational current at DC-12       -         • at 480 V rated value       1 A         operational current at DC-12       -         • at 48 V rated value       6 A         • at 48 V rated value       6 A         • at 10 V rated value       2 A         • at 20 V rated value       6 A         • at 20 V rated value       6 A         • at 10 V rated value       6 A         • at 20 V rated value       1 A         operational current at DC-13       -         • at 200 V rated value       0.15 A         operational current at DC-13       -         • at 48 V rated value       2 A         • at 48 V rated value       2 A         • at 49 V rated value       0 A         • at 49 V rated value       0 A         • at 20 V rated value       0 A         • at 48 V rated value       0 A         • at 60 V rated value       0.4		
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operational current at AC-15     10 A       • 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 40 V rated value     6 A       • at 60 V rated value     6 A       • at 110 V rated value     2 A       • at 25 V rated value     2 A       • at 20 V rated value     0.15 A       operational current at DC-13     •       • at 20 V rated value     1 A       • at 48 V rated value     2 A       • at 40 V rated value     2 A       • at 60 V rated value     2 A       • at 20 V rated value     2 A       • at 20 V rated value     2 A       • at 20 V rated value     0.4       • at 60 V rated value     2 A       • at 60 V rated value     0.3 A       • at 20 V rated value     0.1 A       contact reliability of auxiliary contacts     1 faulty switching per 100 million (17 V, 1 mA) <tr< td=""><td></td><td>10 A</td></tr<>		10 A
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• at 400 V rated value3 A• at 500 V rated value2 A• at 680 V rated value1 Aoperational current at DC-12• at 48 V rated value6 A• at 48 V rated value6 A• at 48 V rated value6 A• at 600 V rated value3 A• at 10 V rated value6 A• at 25 V rated value1 A• at 20 V rated value1 A• at 20 V rated value2 A• at 600 V rated value0.15 Aoperational current at DC-1310 A• at 600 V rated value0.15 A• at 25 V rated value0.0 A• at 25 V rated value0.16 A• at 20 V rated value0.0 A• at 20 V rated value0.15 Aoperational current at DC-1310 A• at 25 V rated value0.16 A• at 600 V rated value0.0 A• at 20 V rated value0.0 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 600 V rated value7.6 A• at 600 V rated value9 A• yielded mechanical performance [hp]9 A		10 A
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at 48 V rated value6 Aat 60 V rated value6 Aat 110 V rated value3 Aat 125 V rated value2 Aat 220 V rated value1 Aat 600 V rated value0.15 Aoperational current at DC-1310 Aat 24 V rated value2 Aat 80 V rated value10 Aat 60 V rated value2 Aat 24 V rated value2 Aat 25 V rated value10 Aat 24 V rated value2 Aat 60 V rated value2 Aat 60 V rated value2 Aat 110 V rated value3 Aat 25 V rated value0.9 Aat 260 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motorat 480 V rated value7.6 Aat 600 V rated value9 Ayielded mechanical performance [hp]9 A	•	10 Δ
at 60 V rated value6 A• at 10 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13		
• at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-1310 A• at 24 V rated value2 A• at 48 V rated value2 A• at 60 V rated value2 A• at 60 V rated value0.9 A• at 125 V rated value0.3 A• at 220 V rated value0.1 A• at 600 V rated value9 A• at 600 V rated value9 A		
• at 125 V rated value       2 A         • at 220 V rated value       1 A         • at 600 V rated value       0.15 A         operational current at DC-13		
• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-1310 A• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 60 V rated value0.9 A• at 125 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 A• yielded mechanical performance [hp]9 A		
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• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 110 V rated value1 A• at 125 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratings7.6 A• at 600 V rated value9 A		0.10 A
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• at 60 V rated value2 A• at 110 V rated value1 A• at 125 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 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 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>7.6 A</li> <li>9 A</li> </ul> </li> <li>yielded mechanical performance [hp]</li> </ul>		
• at 125 V rated value       0.9 A         • at 220 V rated value       0.3 A         • at 600 V rated value       0.1 A         contact reliability of auxiliary contacts       1 faulty switching per 100 million (17 V, 1 mA)         UL/CSA ratings       1         full-load current (FLA) for 3-phase AC motor       7.6 A         • at 600 V rated value       9 A         yielded mechanical performance [hp]       9 A		
• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value7.6 A• at 600 V rated value9 Ayielded mechanical performance [hp]		
• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratings7.6 A• at 480 V rated value9 A• at 600 V rated value9 A		
contact reliability of auxiliary contacts       1 faulty switching per 100 million (17 V, 1 mA)         UL/CSA ratings       Image: Contact reliability of auxiliary contacts         full-load current (FLA) for 3-phase AC motor       Image: Contact reliability of auxiliary contacts         • at 480 V rated value       7.6 A         • at 600 V rated value       9 A         yielded mechanical performance [hp]       Image: Contact reliability of auxiliary contacts		
UL/CSA ratings         full-load current (FLA) for 3-phase AC motor         • at 480 V rated value       7.6 A         • at 600 V rated value       9 A         yielded mechanical performance [hp]       9 A		
full-load current (FLA) for 3-phase AC motor     7.6 A       • at 480 V rated value     7.6 A       • at 600 V rated value     9 A       yielded mechanical performance [hp]     9 A		1 Taulty switching per 100 million (17 V, 1 mA)
at 480 V rated value     7.6 A     7.6 A     9 A      yielded mechanical performance [hp]		
• at 600 V rated value 9 A yielded mechanical performance [hp]		
yielded mechanical performance [hp]		
		9 A
for single-phase AC motor		
	for single-phase AC motor	

at 110/120 V/ rated value	0.22 hz
— at 110/120 V rated value — at 230 V rated value	0.33 hp 1 hp
	r np
for 3-phase AC motor     at 200/208 V rated value	2 hz
- at 200/208 V rated value	2 hp
- at 220/230 V rated value	3 hp
- at 460/480 V rated value	5 hp
at 575/600 V rated value	7.5 hp
contact rating of auxiliary contacts according to UL Short-circuit protection	A600 / Q600
design of the fuse link	
5	
<ul> <li>for short-circuit protection of the main circuit</li> <li>with type of coordination 1 required</li> </ul>	C: 254 (600)/ 100(4) aM: 204 (600)/ 100(4) DS89: 254 (415)/ 80(4)
<ul> <li>with type of coordination 1 required</li> <li>with type of coordination 2 required</li> </ul>	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
— with type of assignment 2 required     for short singuit protection of the suviliant switch 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)
Installation/ mounting/ dimensions	1/ 400° relation negative on vertical mounting surfaces can be tilted forward and
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	70 mm
width	45 mm
depth	73 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul> <li>for grounded parts</li> </ul>	
— 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	
for main current circuit	spring-loaded terminals
for auxiliary and control circuit	spring-loaded terminals
at contactor for auxiliary contacts	Spring-toget terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid	2x (0.5 4 mm²)
— solid or stranded	2x (0.5 4 mm <sup>2</sup> )
<ul> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
for AWG cables for main contacts	2x (0.5 2.5 mm) ) 2x (20 12)
connectable conductor cross-section for main contacts	
solid	0.5 4 mm²
stranded	0.5 4 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 4 mm 0.5 2.5 mm <sup>2</sup>
	0.5 2.5 mm <sup>2</sup>
finely stranded without core end processing     connectable conductor cross-section for auxiliary contacts	0.0 2.0 mm
connectable conductor cross-section for auxiliary contacts	$0.5 4 \text{ mm}^2$
solid or stranded     finally stranded with core and processing	0.5 4 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> <li>finally stranded without core and processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
finely stranded without core end processing	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	

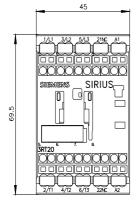
— solid or stra	nded		2x (0	,5 4 mm²)		
	led with core end proces	sina		.5 2.5 mm²)		
-	ded without core end procee	÷		.5 2.5 mm²)		
-	or auxiliary contacts	Joboling		0 12)		
	d connectable conduct	or cross				
<ul> <li>for main contacts</li> </ul>	;		20	12		
<ul> <li>for auxiliary containing</li> </ul>	acts		20	12		
Safety related data						
product function						
<ul> <li>mirror contact ac</li> </ul>	cording to IEC 60947-4-1		Yes			
<ul> <li>positively driven</li> </ul>	operation according to IE	C 60947-5-1	No			
<ul> <li>suitable for safety</li> </ul>	y 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						
	with low demand rate according to SN 31920		40 %			
<ul> <li>with high demand</li> </ul>	d rate according to SN 31	920	73 %			
B10 value with high de	emand rate according t	o SN 31920	1 000	000		
failure rate [FIT] with 1 31920	ow demand rate accord	ling to SN	100 F	TIT		
ISO 13849						
device type according	to ISO 13849-1		3			
overdimensioning acc IEC 61508	cording to ISO 13849-2	necessary	Yes			
safety device type acc	cording to IEC 61508-2		Туре	Α		
Electrical Safety						
protection class IP on	the front according to	IEC 60529	IP20			
touch protection on th	e front according to IE	C 60529	finger	r-safe, for vertical contact	from the front	
Approvals Certificates						
General Product Appr	roval					
CE EG-Konf.	UK CA	<u>Confirmatio</u>	<u>n</u>			KC
General Product Approval	EMV	Functional Saf	tey	Test Certificates		Marine / Shipping
	_					
EHC	RCM	<u>Type Examinatio</u> <u>tificate</u>	n Cer-	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>	ABS
<b>ERIC</b> Marine / Shipping	RCM		n Cer-			ABS
			n Cer-			ABS
Marine / Shipping	Railway		n Cer-	ates/Test Report		ABS
Marine / Shipping		tificate PRS	n Cer-	ates/Test Report		ABS

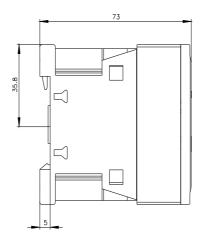
## Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-2AP62 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-2AP62 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AP62 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2016-2AP62&lang=en Characteristic: Tripping characteristics, I²t, Let-through current

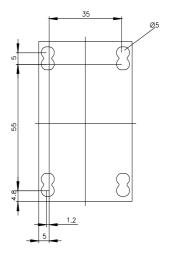
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AP62/char

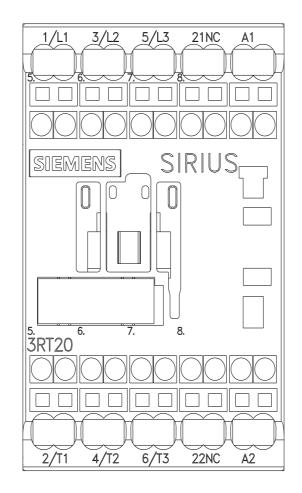
Further characteristics (e.g. electrical endurance, switching frequency)

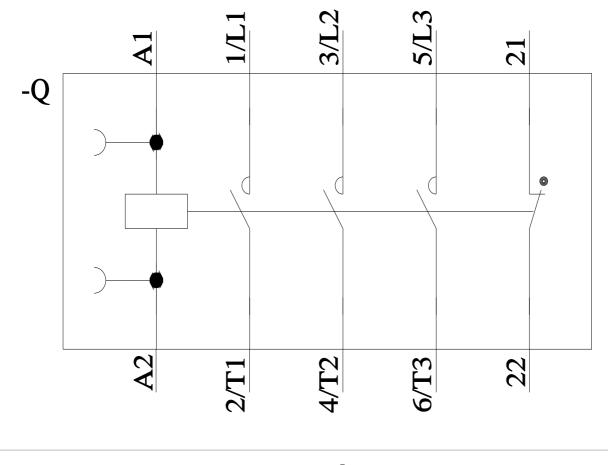
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-2AP62&objecttype=14&gridview=view1











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