## SIEMENS

## Data sheet

## 3RT2027-1NP30



Power contactor, AC-3 32 A, 15 kW / 400 V 1 NO + 1 NC, AC 50-60 Hz / DC 200-280 V AC / DC 3-pole, size S0 screw terminals

product disignation     Prover contactor       product disignation     3RT2       General technical data     S0       size of contactor     S0       product disignation     No       • at AC in hot operating state     6.3 W       • at AC in hot operating state per pole     2.3 W       • without load current share typical     4.3 W       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit rated value     6 kV       • of main contrates according to EN 60947-1     400 V       stock resistance at rectangular impulse     8.3g / 5 ms, 5.3g / 10 ms       • at AC     10g / 5 ms, 7.5g / 10 ms       • at AC     13.5g / 5 ms, 8.3g / 10 ms       • at AC     10g / 5 ms, 7.5g / 10 ms       • at AC     13.5g / 5 ms, 8.3g / 10 ms       • at AC     10 000 000       • of onain contrupical     10 000 000       • at AC     10 00	product brand name	SIRIUS
product type designation         3RT2           General technical data         size of contactor           size of contactor         S0           product sxtension         No           • tunction module for communication         No           • auxiliary switch         Yes           power loss [W] for rated value of the current         6.3 W           • at AC in hot operating state per pole         2.3 W           • without load current share typical         4.3 W           insulation voltage         6 of main circuit with degree of pollution 3 rated value           • of maxiliary circuit rated value         690 V           • of auxiliary circuit rated value         6 kV           • at AC         8.3g / 5 ms, 5.3g / 10 ms           • at AC         13 / 5 ms, 7.5g / 10 ms           • at AC         13 / 5 / 5 ms, 8.3g / 10 ms           • at AC         13 / 5 / 5 ms, 8.3g / 10 ms           • at AC         10 000 000           • of the contactor with add	product brand name	
General technical data         size of contactor       S0         product extension       • function module for communication         • function module for communication       No         • auxiliary switch       Yes         power loss [W] for rated value of the current       6.3 W         • at AC in hot operating state per pole       2.3 W         • without load current share typical       4.3 W         insulation voltage       6 main circuit with degree of pollution 3 rated value         • of main circuit with degree of pollution 3 rated value       690 V         • of auxiliary circuit with degree of pollution 3 rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at AC       8.3g / 5 ms, 5.3g / 10 ms         • at AC       13.5g / 5 ms, 8.3g / 10 ms         • at DC       10 (9 / 5 ms, 10g / 10 ms         • at DC       10 (9 / 5 ms, 10g / 10 ms         • at DC       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000	<b>_</b>	
size of contactor     S0       product extension     No       • duction module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     6.3 W       • at AC in hot operating state per pole     6.3 W       • at AC in hot operating state per pole     6.3 W       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     64V       • of main circuit with degree of pollution 5 rated value     6kV       • of main circuit with degree of pollution 5 rated value     6kV       • of main circuit with degree of pollution 5 rated value     6kV       • of main circuit rated value     6kV       • of auxiliary circuit rated value     6kV       • of auxiliary circuit rated value     6kV       • of auxiliary circuit rated value     6kV       • at AC     8.3g / 5 ms, 5.3g / 10 ms       • at AC     10.9 / 5 ms, 7.5g / 10 ms       • at AC     10.9 / 5 ms, 8.3g / 10 ms       • at AC     10.9 / 5 ms, 8.3g / 10 ms       • at AC     10.9 / 5 ms, 8.3g / 10 ms       • at AC     10.000 000       • of the contactor with added electronically optimized auxiliary switch block typical     10 000 000		31(12
product extension     No       • function module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     6.3 W       • at AC in hot operating state per pole     2.3 W       • without load current share typical     4.3 W       insulation voltage     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of auxiliary circuit with degree of pollution 3 rated value     690 V       • of auxiliary circuit rated value     6 kV       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       • at AC     8.3g / 5 ms, 5.3g / 10 ms       • at AC     13.5g / 5 ms, 8.3g / 10 ms       • at AC     13.5g / 5 ms, 10g / 10 ms       • at AC     10 000 000       • at AC     10 000 000       • of the contactor with added electronically optimized auxiliary switch block typical     10 000 000       • of the contactor with added electronically optimized auxiliary switch block typical     10 000 000       • of the contac		<u></u>
• function module for communication       No         • auxiliary switch       Yes         power loss [W] for rated value of the current       6.3 W         • at AC in hot operating state       6.3 W         • at AC in hot operating state per pole       2.3 W         • without load current share typical       4.3 W         insulation voltage       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at AC       8,3g / 5 ms, 5.3g / 10 ms         • at AC       10g / 5 ms, 7.5g / 10 ms         shock resistance with sine pulse       13.5g / 5 ms, 8.3g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (switching cycles)       10 000 000         • of the contactor with added electronically optimized auxiliary switch block       10 000 000 <td></td> <td>50</td>		50
• auxiliary switch     Yes       power loss [W] for rated value of the current     6.3 W       • at AC in hot operating state per pole     2.3 W       • without load current share typical     4.3 W       insulation voltage     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit rated value     6 kV       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       • at AC     10g / 5 ms, 7.3g / 10 ms       • at AC     10g / 5 ms, 7.5g / 10 ms       • at AC     13.5g / 5 ms, 8.3g / 10 ms       • at AC     15 / 5 ms, 10g / 10 ms       • at AC     10 000 000       • at BC     10 000 000       • of con		Na
power loss [W] for rated value of the current       6.3 W         • at AC in hot operating state       6.3 W         • at AC in hot operating state per pole       2.3 W         • without load current share typical       4.3 W         insulation voltage       • of main circuit with degree of pollution 3 rated value       690 V         • of auxiliary circuit with degree of pollution 3 rated value       690 V         • of auxiliary circuit rated value       6 kV         • at AC       8.3g / 5 ms, 5.3g / 10 ms         • at AC       10g / 5 ms, 7.5g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • of contactor typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical		
• at AC in hot operating state per pole       6.3 W         • at AC in hot operating state per pole       2.3 W         • without load current share typical       4.3 W         insulation voltage       600 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at AC       10g / 5 ms, 7.5g / 10 ms         • at AC       13.5g / 5 ms, 8.3g / 10 ms         • at AC       13.5g / 5 ms, 10g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000<		res
• at AC in hot operating state per pole       2.3 W         • without load current share typical       4.3 W         insulation voltage       600 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       8,3g / 5 ms, 5,3g / 10 ms         • at AC       10g / 5 ms, 7,5g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • at AC       1000 000         • of the contactor with added electronically optimized axiliary switch block typical       10 000 000         • of the contactor with added electronically optimized axiliary switch block typical       2000 m         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       2000 m </td <td></td> <td>0.014</td>		0.014
• without load current share typical       4.3 W         insulation voltage       • of main circuit with degree of pollution 3 rated value       690 V         • of auxiliary circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       690 V         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at AC       8,3g / 5 ms, 5,3g / 10 ms         • at DC       10g / 5 ms, 7,5g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 10g / 10 ms         • at AC       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 00		
insulation voltage <ul> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of main circuit rated value</li> <li>of main circuit rated value</li> <li>of auxiliary circuit rated value</li> <li>of waximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1</li> </ul> <li>shock resistance at rectangular impulse         <ul> <li>at AC</li> <li>biok resistance with sine pulse</li> <li>at AC</li> <li>biok resistance with sine pulse</li> <li>at AC</li> <li>biok resistance life (switching cycles)</li> <li>of contactor typical</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of othactor with added auxiliary switch block typical</li> <li>of othe contactor with added auxiliary switch block typical</li> <li>of othe contactor with added auxiliary switch block typical</li> <li>fully 000 000</li> </ul> </li> <li>reference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>Installation altitude at height above sea level maximum</li> <li>2000 m</li> <li>ambient temperature             <ul> <li>during operation</li> <li>-25 +60 °C</li> </ul> </li>		
<ul> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>surge voltage resistance</li> <li>of main circuit rated value</li> <li>6 kV</li> <li>of auxiliary circuit rated value</li> <li>6 kV</li> <li>maximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1</li> <li>shock resistance at rectangular impulse</li> <li>at AC</li> <li>at AC</li> <li>biock resistance with sine pulse</li> <li>at AC</li> <li>at AC</li> <li>biock resistance with sine pulse</li> <li>at AC</li> <li>biock resistance with sine pulse</li> <li>at AC</li> <li>biock resistance with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical<td></td><td>4.3 W</td></li></ul>		4.3 W
• of auxiliary circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       6 KV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       400 V         • at AC       8,3g / 5 ms, 5,3g / 10 ms         • at AC       10g / 5 ms, 7,5g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • at DC       10 000 000         • of contactor typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       5 000 000         • of the contactor with added auxiliary switch block typical       10 001/2009         Ambient conditions       10/01/2009         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C	C C	600.V
value       value         surge voltage resistance       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       8,3g / 5 ms, 5,3g / 10 ms         • at AC       8,3g / 5 ms, 7,5g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 10g / 10 ms         • at AC       10 000 000         • of contactor typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       5000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       2000 m         ambient conditions       2000 m </td <td></td> <td></td>		
• of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       8,3g / 5 ms, 5,3g / 10 ms         • at AC       8,3g / 5 ms, 7,5g / 10 ms         • at AC       10g / 5 ms, 7,5g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 10g / 10 ms         • at AC       15g / 5 ms, 10g / 10 ms         • at DC       10 000 000         • of the contactor typical       5 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block       10 000 000         typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2 000 m         installation altitude at height above sea level maximum<	, , , , , , , , , , , , , , , , , , , ,	690 V
• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse8,3g / 5 ms, 5,3g / 10 ms• at AC8,3g / 5 ms, 7,5g / 10 ms• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse13,5g / 5 ms, 8,3g / 10 ms• at AC13,5g / 5 ms, 8,3g / 10 ms• at AC13,5g / 5 ms, 10g / 10 ms• at DC15g / 5 ms, 10g / 10 ms• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions installation altitude at height above sea level maximum e during operation2 000 m	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse • at AC • at DC8,3g / 5 ms, 5,3g / 10 msshock resistance with sine pulse • at AC • at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at AC • at DC13,5g / 5 ms, 8,3g / 10 mse at DC • at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at AC • at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at AC • at DC10g / 5 ms, 10g / 10 msmechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions installation altitude at height above sea level maximum • during operation2 000 m	<ul> <li>of main circuit rated value</li> </ul>	6 kV
coil and main contacts according to EN 60947-1shock resistance at rectangular impulse• at AC8,3g / 5 ms, 5,3g / 10 ms• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse13,5g / 5 ms, 8,3g / 10 ms• at AC13,5g / 5 ms, 8,3g / 10 ms• at DC15g / 5 ms, 10g / 10 ms• at DC15g / 5 ms, 10g / 10 ms• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions2 000 minstallation altitude at height above sea level maximum e during operation2 000 m	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
• at AC8,3g / 5 ms, 5,3g / 10 ms• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse13,5g / 5 ms, 8,3g / 10 ms• at AC13,5g / 5 ms, 8,3g / 10 ms• at DC15g / 5 ms, 10g / 10 ms• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2 000 000• of the contactor with addee auxiliary switch block typical2 000 mambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m		400 V
• at DC       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       13,5g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (switching cycles)       10 000 000         • of contactor typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         freference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2 000 m         ambient temperature       -25 +60 °C	shock resistance at rectangular impulse	
shock resistance with sine pulse       0	• at AC	8,3g / 5 ms, 5,3g / 10 ms
• at AC13,5g / 5 ms, 8,3g / 10 ms• at DC15g / 5 ms, 10g / 10 msmechanical service life (switching cycles)-• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• feference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions10/01/2009installation altitude at height above sea level maximum • during operation2 000 m	• at DC	10g / 5 ms, 7,5g / 10 ms
• at DC         15g / 5 ms, 10g / 10 ms           mechanical service life (switching cycles)         10 000 000           • of contactor typical         10 000 000           • of the contactor with added electronically optimized auxiliary switch block typical         5 000 000           • of the contactor with added auxiliary switch block typical         10 000 000           • of the contactor with added auxiliary switch block typical         10 000 000           • of the contactor with added auxiliary switch block typical         10 000 000           reference code according to IEC 81346-2         Q           Substance Prohibitance (Date)         10/01/2009           Ambient conditions         2 000 m           installation altitude at height above sea level maximum         2 000 m           ambient temperature         -25 +60 °C	shock resistance with sine pulse	
mechanical service life (switching cycles)       10 000 000         • of contactor typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       5 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C	• at AC	13,5g / 5 ms, 8,3g / 10 ms
• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum e during operation2 000 m	at DC	15g / 5 ms, 10g / 10 ms
• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum e during operation2 000 m	mechanical service life (switching cycles)	
auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       installation altitude at height above sea level maximum         ambient temperature       2 000 m         • during operation       -25 +60 °C	<ul> <li>of contactor typical</li> </ul>	10 000 000
typical       reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       installation altitude at height above sea level maximum         ambient temperature       2 000 m         • during operation       -25 +60 °C		5 000 000
Substance Prohibitance (Date)       10/01/2009         Ambient conditions       installation altitude at height above sea level maximum         ambient temperature       2 000 m         • during operation       -25 +60 °C		10 000 000
Ambient conditions         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C	Substance Prohibitance (Date)	10/01/2009
ambient temperature       • during operation       -25 +60 °C	Ambient conditions	
• during operation -25 +60 °C	installation altitude at height above sea level maximum	2 000 m
	ambient temperature	
• during storage -55 +80 °C	<ul> <li>during operation</li> </ul>	-25 +60 °C
	during storage	-55 +80 °C

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
<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</li> </ul>	50 A
rated value ● at AC-1	
up to 690 V at ambient temperature 40 °C	50 A
rated value	
— up to 690 V at ambient temperature 60 °C	42 A
rated value	
<ul> <li>at AC-3</li> <li>— at 400 V rated value</li> </ul>	32 A
— at 500 V rated value	32 A 32 A
— at 690 V rated value	21 A
• at AC-3e	217
• at AC-Se — at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
at AC-4 at 400 V rated value	22 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	44 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	26.5 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	30.8 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	30.8 A
<ul> <li>— up to 500 V for current peak value n=20 rated value</li> </ul>	27 A
<ul> <li>— up to 690 V for current peak value n=20 rated value</li> </ul>	21 A
• at AC-6a	
<ul> <li>— up to 230 V for current peak value n=30 rated value</li> </ul>	20.5 A
— up to 400 V for current peak value n=30 rated value	20.5 A
— up to 500 V for current peak value n=30 rated value	18 A
up to 690 V for current peak value n=30 rated value	18 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12 A
• at 690 V rated value	12 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
• with 2 current paths in series at DC-1	25.4
— at 24 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
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value</li> </ul>	35 A
— at 110 V rated value	35 A 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	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-4	
	C IAN
at 400 V rated value	6 kW
• at 690 V rated value	10.3 kW
operating apparent power at AC-6a	40.013/4
• up to 230 V for current peak value n=20 rated value	12.2 kVA
• up to 400 V for current peak value n=20 rated value	21.3 kVA
• up to 500 V for current peak value n=20 rated value	23.3 kVA
• up to 690 V for current peak value n=20 rated value	25 kVA
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	8.1 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	14.2 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	15.5 kVA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	21.5 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>	499 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	395 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value
e de la companya de l	186 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	
<ul> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul>	152 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	
-	

operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
<ul> <li>at AC-3 maximum</li> </ul>	750 1/h
• at AC-3e maximum	750 1/h
● at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
• at 50 Hz rated value	200 280 V
• at 60 Hz rated value	200 280 V
control supply voltage at DC	
rated value	200 280 V
operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.7
• full-scale value	1.1
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.7 1.1
• at 60 Hz	0.7 1.1
design of the surge suppressor	with varistor
inrush current peak	25 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.1 A
locked-rotor current peak	0.13 A
duration of locked-rotor current holding current mean value	180 ms 17 mA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	12.7 VA
• at 60 Hz	14.7 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.98
• at 60 Hz	0.98
apparent holding power of magnet coil at AC	
• at 50 Hz	3.9 VA
• at 60 Hz	4.3 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.51
• at 60 Hz	0.56
closing power of magnet coil at DC	14.3 W
holding power of magnet coil at DC	1.9 W
closing delay	
• at AC	50 80 ms
• at DC	50 75 ms
opening delay	22 52
• at AC	30 50 ms
• at DC	30 50 ms 10 10 ms
arcing time control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	40.4
at 230 V rated value	10 A
<ul> <li>at 400 V rated value</li> </ul>	3 A
<ul> <li>at 500 V rated value</li> </ul>	2 A

• at 690 V rated value	1 A			
operational current at DC-12				
at 24 V rated value	10 A			
at 48 V rated value	6 A			
at 60 V rated value	6 A			
at 110 V rated value	3 A			
at 110 V rated value     at 125 V rated value	2 A			
at 125 v lated value     at 220 V rated value	2 A 1 A			
at 600 V rated value	0.15 A			
operational current at DC-13	0.13 A			
at 24 V rated value	10 A			
at 48 V rated value	2 A			
at 40 V rated value	2 A			
at 110 V rated value	1A			
at 125 V rated value	0.9 A			
at 220 V rated value	0.3 A			
at 220 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	27 A			
at 480 V rated value     at 600 V rated value	27 A 27 A			
	21 0			
yielded mechanical performance [hp]				
for single-phase AC motor	0 hz			
- at 110/120 V rated value	2 hp			
— at 230 V rated value	5 hp			
for 3-phase AC motor     at 200/200 V reted value	10 hz			
— at 200/208 V rated value	10 hp			
- at 220/230 V rated value	10 hp			
— at 460/480 V rated value	20 hp			
— at 575/600 V rated value	25 hp			
contact rating of auxiliary contacts according to UL	A600 / P600			
Short-circuit protection				
design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	~C: 1354 (CO0)/ 100H4) -MI 504 (CO0)/ 100H4) DC00: 1354			
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)			
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)			
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (500 V, 1 kA)			
Installation/ mounting/ dimensions				
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted			
	forward and backward by +/- 22.5° on vertical mounting surface			
fastening method	screw and snap-on mounting onto 35 mm standard mounting 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			
<ul> <li>for grounded parts</li> </ul>				
— forwards	10 mm			
— upwards	10 mm			
— at the side	6 mm			
— downwards	10 mm			

e for live parts	
<ul> <li>for live parts</li> <li>forwards</li> </ul>	10 mm
— upwards	10 mm
— upwards — downwards	10 mm
— at the side	6 mm
Connections/ Terminals	8 11111
type of electrical connection	
• for main current circuit	screw-type terminals
for auxiliary and control circuit	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 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )
— solid or stranded	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )
— finely stranded with core end processing	2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
at AWG cables for main contacts	2x (16 12), 2x (14 8)
connectable conductor cross-section for main contacts	
• solid	1 10 mm²
stranded	1 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	1 10 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	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	
<ul> <li>for main contacts</li> </ul>	16 8
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 у
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
Certificates/ approvals	
General Product Approval	
<u>Confirmation</u>	
(m) (m)	› (Ψ.) FHI
CSA CCC	

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EMC

Functional

Declaration of Conformity

Test Certificates

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	Safety/Safety of Machinery				
RCM	<u>Type Examination</u> <u>Certificate</u>		CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate
Test Certificates	Marine / Shipping				
<u>Miscellaneous</u>	ABS	B D REAU VERITAS		Lloyd's Register us	RINA
Marine / Shipping	other			Dangerous Good	
RMRS	<u>Confirmation</u>	UDE VDE	<u>Confirmation</u>	<u>Transport Informa-</u> <u>tion</u>	
	wnloadcenter (Catalog	s, Brochures,)			
Industry Mall (Online https://mall.industry.s	https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2027-1NP30				
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1NP30					
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1NP30					
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Characteristic: Tripp	bing characteristics, I <sup>2</sup> t,	Let-through current	t		
Further characterist	ics (e.g. electrical endu	rance, switching fre	quency)		hierr-rierra
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