## SIEMENS

## Data sheet

## 3RT2038-1CL24-3MA0



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, with plugged-in varistor, auxiliary contacts: 2 NO + 2 NC, screw terminal, size: S2, captive auxiliary switch

product brand name         SiRUS           product type designation         9wer contactor           product type designation         3R12           Contract of         \$2           size of contactor         \$2           ifunction module for communication         No           - durating switch         No           power loss [W] for rated value of the current         *           - et AC in hot operating state per pole         5.7 W           - et AC in hot operating state per pole         5.7 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 auxiliary circuit rated value         690 V           - of auxiliary circuit rated value         64 KV           - of auxiliary circuit rated value         64 V           - of auxiliary circuit rated value         10.00 V		
product type designation         3RT2           General technical data	product brand name	SIRIUS
Concrait technical data     S2       size of contactor     S2       product extension     No       • function module for communication     No       • auxiliary switch     No       ower loss [W] for rated value of the current     -       • at AC in hot operating state     17.1 W       • at AC in hot operating state projole     5.7 W       • without load current share typical     7.2 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     64 V       • of main circuit rated value     64 V       • of main circuit rated value     64 V       • of auxiliary circuit rated value     100 V       • at AC     9.8g / 5 ms, 6.5g / 10 ms       • at AC     15.3g / 5 ms, 10.1g / 10 ms       mechanical service life (operating cycles)     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	product designation	Power contactor
size of contactor     §2       product extension     No       • function module for communication     No       • auxiliary switch     No       power loss [W] for rated value of the current     17.1 W       • at AC in hot operating state per pole     5.7 W       • without load current share typical     17.2 W       Insulation voltage     690 V       • of main circult with degree of pollution 3 rated value     690 V       • of main circult with degree of pollution 3 rated value     690 V       • of main circult with degree of pollution 3 rated value     690 V       • of main circult with degree of pollution 3 rated value     690 V       • of main circult ated value     6 kV       • of main circult ated value     6 kV       • of auxiliary circult rated value     6 kV       • of auxiliary circult rated value     6 kV       • of auxiliary circult rated value     6 kV       • of auxiliary solution go EN 60947-1     400 V       shock resistance with sine pulse     15.3g / 5 ms, 6.5g / 10 ms       • at AC     15.3g / 5 ms, 10.1g / 10 ms       mechanical service life (operating cycles)     10 000 000       • of the contactor with added electronically optimized     10 000 000       • of the contactor with added auxiliary switch block typical     10 000 000       reference code according to IEC 60068-2.20<	product type designation	3RT2
product extension         No           • function module for communication         No           • auxillary switch         No           • auxillary switch         No           • at AC in hot operating state         17.1 W           • at AC in hot operating state per pole         5.7 W           • without load current share typical         17.2 W           Insulation voltage         600 V           • of main circut with degree of pollution 3 rated value         690 V           • of main circut rated value         690 V           • of main circut rated value         64V           • of main circut rated value         6kV           • of main circut rated value         6kV           • of main circut rated value         6kV           • of main contacts according to EN 60947-1         5k0K           • at AC         9.8g / 5 ms, 6.5g / 10 ms           • at AC         15.3g / 5 ms, 10.1g / 10 ms           mechanical service life (operating cycles)         10 000 000           • of the contactor with added electronically optimized         10000 000           auxiliary switch block typical         10 000 000           • of the contactor with added electronically optimized         00           auxiliary switch block typical         00	General technical data	
• function module for communication         No           • auxiliary switch         No           power loss [W] for rated value of the current         -           • at AC in hot operating state         17.1 W           • at AC in hot operating state per pole         5.7 W           • without load current share typical         17.2 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 main circuit rated value         6 kV           • of auxiliary circuit rated value         10 V           • of auxiliary circuit rated value         9 kg / 5 ms, 6.5g / 10 ms           shock resistance with sine pulse         10 000 000           • at AC         15.3g / 5 ms, 10.1g / 10 ms           reference code according to IEC 81346-2         Q           Substance Prohibitance (Date)	size of contactor	S2
exakilary switch         No           power loss [W] for rated value of the current <ul> <li>at AC in hot operating state</li> <li>T.1 W</li> <li>at AC in hot operating state per pole</li> <li>S.7 W</li> <li>without load current share typical</li> <li>T.2 W</li> <li>insulation voltage</li> <li>of main circuit with degree of pollution 3 rated value</li> <li>690 V</li> <li>state value</li> <li>690 V</li> <li>state value</li> <li>690 V</li> <li>61 williary circuit with degree of pollution 3 rated value</li> <li>600 V</li> <li>61 williary circuit rated value</li> <li>64 kV</li> <li>61 williary circuit rated value</li> <li>6 kV</li> <li>61 williary circuit rated value</li> <li>6 kV</li> <li>94 v</li> <li>94 v</li></ul>	product extension	
power loss [W] for rated value of the current         I           at AC in hot operating state per pole         5.7 W           at AC in hot operating state per pole         5.7 W           without load current share typical         17.2 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           surge voltage resistance         6 kV           of auxiliary circuit rated value         6 kV           of auxiliary suiter block typical         000 V           shock resistance at rectangular impulse         5 (3 / 5 ms, 6.5 / 10 ms           at AC         9.8 g/ 5 ms, 6.5 g/ 10 ms           shock resistance with sine pulse         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	<ul> <li>function module for communication</li> </ul>	No
• at AC in hot operating state     17.1 W       • at AC in hot operating state per pole     5.7 W       • without load current share typical     17.2 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 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     9.8g / 5 ms, 6.5g / 10 ms       shock resistance with sine pulse     15.3g / 5 ms, 10.1g / 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       installation attitude at height above sea level maximum </td <td>auxiliary switch</td> <td>No</td>	auxiliary switch	No
• at AC in hot operating state per pole       5.7 W         • without load current share typical       17.2 W         insulation voltage       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • surge voltage resistance       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       68 V         • of main circuit with degree of pollution separation between coll and main contacts according to EN 60947-1       400 V         * at AC       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 10.1g / 10 ms         mechanical service life (operating 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	power loss [W] for rated value of the current	
• without load current share typical       17.2 W         insulation voltage       600 V         • of main circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       690 V         • of main 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         out a main constate according to EN 60947-1       400 V         shock resistance at rectangular impulse       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 10.1g / 10 ms         mechanical service life (operating cycles)       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 contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 001/2014         Anbient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -55 +60 °C         • during storage       -55 +60 °C <t< td=""><td><ul> <li>at AC in hot operating state</li> </ul></td><td>17.1 W</td></t<>	<ul> <li>at AC in hot operating state</li> </ul>	17.1 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         surge voltage resistance       680 V         • 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         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 10.1g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of contactor with added electronically optimized 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)       10/01/2014         Ambient temperature       -         • during operation       -25 +60 °C         • during storage       -25 +60 °C         • during storage       -25 +60 °C         • during storage       -25 +60 °C	<ul> <li>at AC in hot operating state per pole</li> </ul>	5.7 W
• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse400 V• at AC9.8g / 5 ms, 6.5g / 10 msshock resistance with sine pulse-• at AC9.8g / 5 ms, 10.1g / 10 msmechanical service life (operating cycles)10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added electronically optimized 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 selver maximum2000 mambient conditions-25 +60 °C• during operation-25 +60 °C• during storage-25 +60 °C• during storage-25 +60 °C• faltive humidity minimum10 %relative humidity minimum95 %	<ul> <li>without load current share typical</li> </ul>	17.2 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         • at AC       9.8g / 5 ms, 6.5g / 10 ms         • at AC       15.3g / 5 ms, 10.1g / 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       10 000 000         • of the contactor with added sectonically optimized auxiliary switch block typical       10 000 000         • of the contactor with added sectonically optimized auxiliary switch block typical       10 000 000         • of the contactor with added sectonically optimized auxiliary switch block typical       10 000 000         Installation attritude at height above se	insulation voltage	
surge voltage resistance       6 kV         • of main circuit rated value       6 kV         • of auxillary circuit rated value       6 kV         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 6.5g / 10 ms         shock resistance with sine pulse       15.3g / 5 ms, 10.1g / 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 electronically optimized 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)       2000 m         ambient conditions       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
• of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 6.5g / 10 ms         shock resistance with sine pulse       -         • at AC       15.3g / 5 ms, 10.1g / 10 ms         mechanical service life (operating cycles)       -         • of ontactor 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         reference code according to IEC 81346-2       Q         Ambient conditions       2 000 m         ambient temperature       -         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %	<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
• of auxiliary circuit rated value       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       9.8g / 5 ms, 6.5g / 10 ms         • at AC       9.8g / 5 ms, 6.5g / 10 ms         shock resistance with sine pulse       9.8g / 5 ms, 10.1g / 10 ms         • at AC       15.3g / 5 ms, 10.1g / 10 ms         mechanical service life (operating 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       2000 m         ambient temperature       -25 +60 °C         • during storage       -25 +60 °C         • during storage       -55 +80 °C         relative humidity at 55 °C according to IEC 60068-2-30       35 %         maximum <td< td=""><td>surge voltage resistance</td><td></td></td<>	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse <ul> <li>at AC</li> <li>9.8g / 5 ms, 6.5g / 10 ms</li> </ul> shock resistance with sine pulse <ul> <li>at AC</li> <li>15.3g / 5 ms, 10.1g / 10 ms</li> </ul> mechanical service life (operating cycles) <ul> <li>of contactor typical</li> <li>10 000 000</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>10 000 000</li> </ul> 10 000 000 <li>feference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2014</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>2 000 m</li> <li>ambient temperature         <ul> <li>during operation</li> <li>-25 +60 °C</li> <li>ext +60 °C</li> <li>stallation altitude at 55 °C according to IEC 60068-2-30</li> <li>maximum</li> </ul></li>	<ul> <li>of main circuit rated value</li> </ul>	6 kV
coil and main contacts according to EN 60947-1         shock resistance at rectangular impulse         • at AC       9.8g / 5 ms, 6.5g / 10 ms         shock resistance with sine pulse         • at AC       15.3g / 5 ms, 10.1g / 10 ms         mechanical service life (operating 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2014         Ambient conditions       2000 m         ambient temperature       -25 +60 °C         • 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       95 %	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
• at AC9.8g / 5 ms, 6.5g / 10 msshock resistance with sine pulse		400 V
shock resistance with sine pulse       i5.3g / 5 ms, 10.1g / 10 ms         mechanical service life (operating cycles)       i0 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)       10/01/2014         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         of during operation       -25 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit	shock resistance at rectangular impulse	
• at AC15.3g / 5 ms, 10.1g / 10 msmechanical service life (operating cycles) • of contactor typical10 000 000• of contactor with added electronically optimized 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 typical0000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor during to tec 610 contactor0000 000• during operation • during storage-25 +60 °C• during storage-55 +80 °C• relative humidity minimum10 %• prelative humidity at 55 °C according to IEC 60068-2-30 maximum95 %• Main circuit	• at AC	9.8g / 5 ms, 6.5g / 10 ms
mechanical service life (operating cycles)       10 000 000         • of 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2014         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • 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       95 %         Main circuit	shock resistance with sine pulse	
• 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 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2014Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• at AC	15.3g / 5 ms, 10.1g / 10 ms
of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	mechanical service life (operating cycles)	
auxiliary switch block typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2014         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         maximum       95 %	<ul> <li>of contactor typical</li> </ul>	10 000 000
reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2014         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • 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 %	· ·	5 000 000
Substance Prohibitance (Date)       10/01/2014         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • 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 %	<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Ambient conditions         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • 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 %         Main circuit	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum       2 000 m         ambient temperature <ul> <li>during operation</li> <li>-25 +60 °C</li> <li>during storage</li> <li>-55 +80 °C</li> </ul> relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %	Substance Prohibitance (Date)	10/01/2014
ambient temperature     -25 +60 °C       • 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 %       Main circuit	Ambient conditions	
• 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 %	installation altitude at height above sea level maximum	2 000 m
	ambient temperature	
relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit       10 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30       95 %         maximum       95 %         Main circuit       95 %	during storage	-55 +80 °C
maximum	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	Main circuit	
	number of poles for main current circuit	3

number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated	90 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	90 A
— up to 690 V at ambient temperature 60 $^\circ C$ rated value	80 A
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-3e	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
at AC-4 at 400 V rated value	55 A
at AC-5a up to 690 V rated value	79.2 A
at AC-5b up to 400 V rated value	66.4 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	70 A
— up to 400 V for current peak value n=20 rated value	70 A
— up to 500 V for current peak value n=20 rated value	70 A
— up to 690 V for current peak value n=20 rated value	58 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	46.7 A
— up to 400 V for current peak value n=30 rated value	46.7 A
— up to 500 V for current peak value n=30 rated value	46.7 A
— up to 690 V for current peak value n=30 rated value	46.7 A
minimum cross-section in main circuit at maximum AC-1 rated value	35 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	30 A
at 690 V rated value	24 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1A
— 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	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	

— at 24 V rated value	35 A
— at 60 V rated value	6 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 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	55 A
— at 60 V rated value	45 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	37 kW
• at AC-3	
- at 230 V rated value	22 kW
— at 200 V rated value	37 kW
	37 KW
- at 500 V rated value	
— at 690 V rated value	45 kW
• at AC-3e	
- at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
operating power for approx. 200000 operating cycles at AC- 4	
<ul> <li>at 400 V rated value</li> </ul>	15.8 kW
at 690 V rated value	21.8 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	27.8 kVA
• up to 400 V for current peak value n=20 rated value	48.4 kVA
• up to 500 V for current peak value n=20 rated value	60.6 kVA
	69.3 kVA
up to 690 V for current peak value n=20 rated value	00.0 KVA
operating apparent power at AC-6a	18.6 kV/A
up to 230 V for current peak value n=30 rated value	18.6 kVA
• up to 400 V for current peak value n=30 rated value	32.3 kVA
up to 500 V for current peak value n=30 rated value	40.4 kVA
up to 690 V for current peak value n=30 rated value	55.8 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>	1 298 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	898 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	640 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	414 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	333 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
at AC-1 maximum	700 1/h
	350 1/h
• at AC-2 maximum	
• at AC-3 maximum	500 1/h
at AC-3e maximum	500 1/h
at AC-4 maximum	150 1/h
Control circuit/ Control	

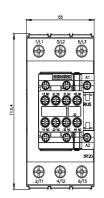
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
• at 50 Hz	210 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	2
contact	
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul> <li>at 230 V rated value</li> </ul>	6 A
<ul> <li>at 400 V rated value</li> </ul>	3 A
<ul> <li>at 500 V rated value</li> </ul>	2 A
<ul> <li>at 690 V rated value</li> </ul>	1 A
operational current at DC-12	
<ul> <li>at 24 V rated value</li> </ul>	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 A
• at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	6 A
• at 48 V rated value	2 A
• at 60 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 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
JL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	65 A
	62 A
at 600 V rated value	02 A
yielded mechanical performance [hp] • for single-phase AC motor	

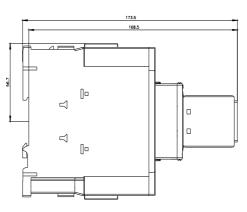
— at 110/120 V rated value	5 hp		
— at 230 V rated value	15 hp		
<ul> <li>for 3-phase AC motor</li> </ul>			
— at 200/208 V rated value	20 hp		
— at 220/230 V rated value	25 hp		
— at 460/480 V rated value	50 hp		
— at 575/600 V rated value	60 hp		
contact rating of auxiliary contacts according to UL	A600 / Q600		
Short-circuit protection			
design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit</li> </ul>			
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)		
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (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 DIN rail according to DIN EN 60715		
side-by-side mounting	Yes		
height	114 mm		
width	55 mm		
depth	174 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		
• 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	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 or stranded	2x (1 35 mm²), 1x (1 50 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²)		
connectable conductor cross-section for main contacts			
<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²		
connectable conductor cross-section for auxiliary contacts			
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm <sup>2</sup>		
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>		
type of connectable conductor cross-sections			
<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>for AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)		
AWG number as coded connectable conductor cross section			
• for main contacts	18 1		

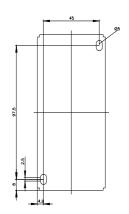
<ul> <li>for auxiliary con</li> </ul>	itacts		20 14			
afety related data						
product function						
	ccording to IEC 60947-4-1		Yes			
	operation according to IEC	60947-5-1	No			
			1 000 000			
B10 value with high demand rate according to SN 31920 proportion of dangerous failures						
	d rate according to SN 319	20	40 %			
	nd rate according to SN 319		73 %			
	ow demand rate according		100 FIT			
	interval or service life acco		20 a			
61508			200			
protection class IP of	n the front according to II	EC 60529	IP20			
touch protection on t	the front according to IEC	60529	finger-safe, for vertical conta	ct from the front		
suitability for use						
<ul> <li>safety-related system</li> </ul>	witching OFF		Yes			
ertificates/ approvals	;					
General Product App	proval					
() E		<u>Confirmatio</u>		<u>KC</u>	EHC	
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	Conformity	Test Certificates		
RCM	Type Examination Cer- tificate	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate	
Marine / Shipping						
ABS	BUREAU VERITAS		Lloyd's Register uis	PRS	RINA	
Marine / Shipping	other		Railway	Dangerous Good	Environment	
RMRS RMRS	<u>Confirmation</u>	<u>Confirmatio</u>	n <u>Vibration and Shock</u>	Transport Information	Environmental Con- firmations	
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Image database (pro		on drawings, 3D ı	- <u>-3MAU</u> nodels, device circuit diagra 2038-1CL24-3MA0⟨=en	ms, EPLAN macros,)		
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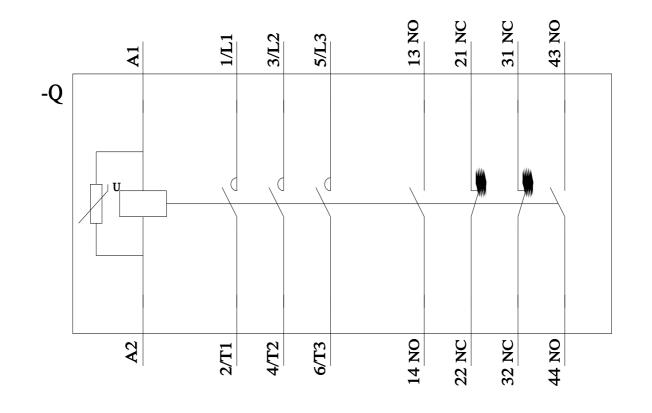
6/30/2023

## Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1CL24-3MA0/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-1CL24-3MA0&objecttype=14&gridview=view1









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