

power contactor, AC-3 80 A, 37 kW / 400 V 1 NO + 1 NC, 110 V
AC/50 Hz 120 V/60 Hz 3-pole, 3 NO, Size S3 screw terminal



Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT2

General technical data	
Size of contactor	S3
Product extension	
<ul style="list-style-type: none"> function module for communication 	No
<ul style="list-style-type: none"> Auxiliary switch 	Yes
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> at AC in hot operating state 	15.9 W
<ul style="list-style-type: none"> at AC in hot operating state per pole 	5.3 W
Power loss [W] for rated value of the current without load current share typical	22 W
Surge voltage resistance	
<ul style="list-style-type: none"> of main circuit rated value 	8 kV
<ul style="list-style-type: none"> of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation	
<ul style="list-style-type: none"> between coil and main contacts acc. to EN 60947-1 	690 V

Protection class IP	
<ul style="list-style-type: none"> • on the front • of the terminal 	IP20 IP00
Shock resistance at rectangular impulse	
<ul style="list-style-type: none"> • at AC 	6.7 g / 5 ms, 4.0 g / 10 ms
Shock resistance with sine pulse	
<ul style="list-style-type: none"> • at AC 	10.6 g / 5 ms, 6.3 g / 10 ms
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • of contactor typical • of the contactor with added electronics-compatible auxiliary switch block typical • of the contactor with added auxiliary switch block typical 	10 000 000 5 000 000 10 000 000
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	Q

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	-25 ... +60 °C -55 ... +80 °C

Main circuit

Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Operating voltage	
<ul style="list-style-type: none"> • at AC-3 rated value maximum 	1 000 V
Operating current	
<ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value — up to 1000 V at ambient temperature 40 °C rated value — up to 1000 V at ambient temperature 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value 	125 A 125 A 105 A 60 A 50 A 80 A 80 A

— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-4 at 400 V rated value	66 A
• at AC-5a up to 690 V rated value	110 A
• at AC-5b up to 400 V rated value	80 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	80 A
— up to 400 V for current peak value n=20 rated value	80 A
— up to 500 V for current peak value n=20 rated value	80 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	54 A
— up to 400 V for current peak value n=30 rated value	54 A
— up to 500 V for current peak value n=30 rated value	54 A
— up to 690 V for current peak value n=30 rated value	54 A
Minimum cross-section in main circuit	
• at maximum AC-1 rated value	50 mm ²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	34 A
• at 690 V rated value	24 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	100 A
— at 110 V rated value	9 A
— at 220 V rated value	2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.4 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	10 A
— at 440 V rated value	1.8 A
— at 600 V rated value	1 A
• with 3 current paths in series at DC-1	