## connector 3RT2016-1AF01

URL:https://www.sxplc.com/connector-3rt2016-1af01

## **Product data sheet**

General technical data
size of contactor S00
product extension
● function module for communication No
● auxiliary switch Yes
power loss [W] for rated value of the current
● at AC in hot operating state 0.9 W
• at AC in hot operating state per pole 0.3 W
• without load current share typical 1.1 W

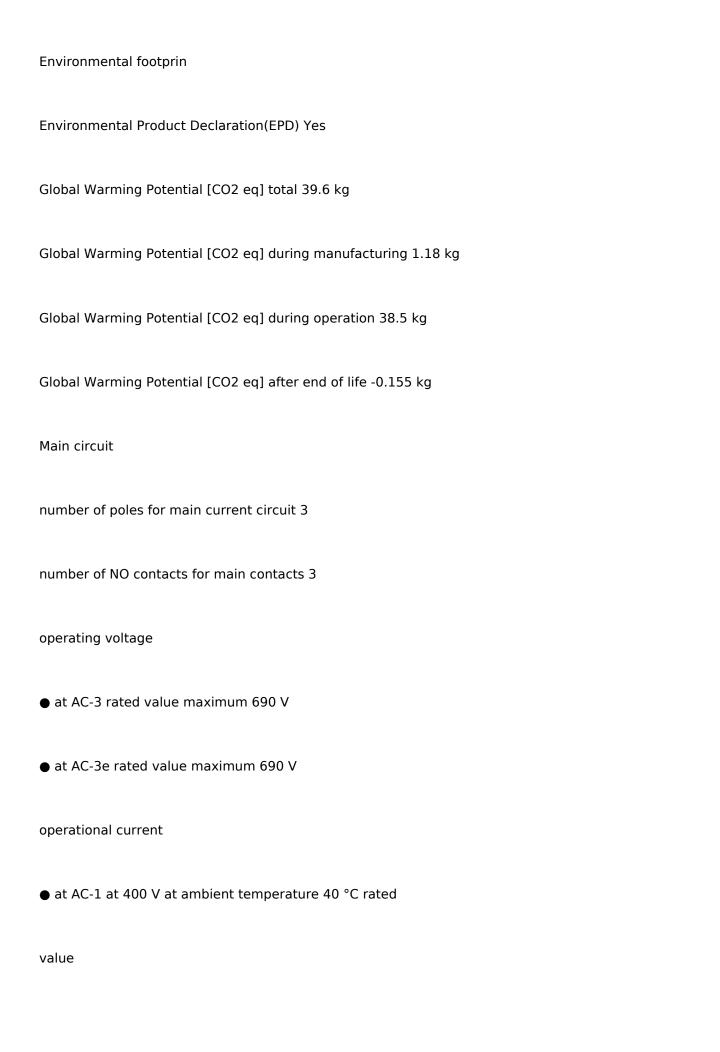
type of calculation of power loss depending on pole quadratic

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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
● of main circuit rated value 6 kV
● 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
● 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)

• of contactor typical 30 000 000



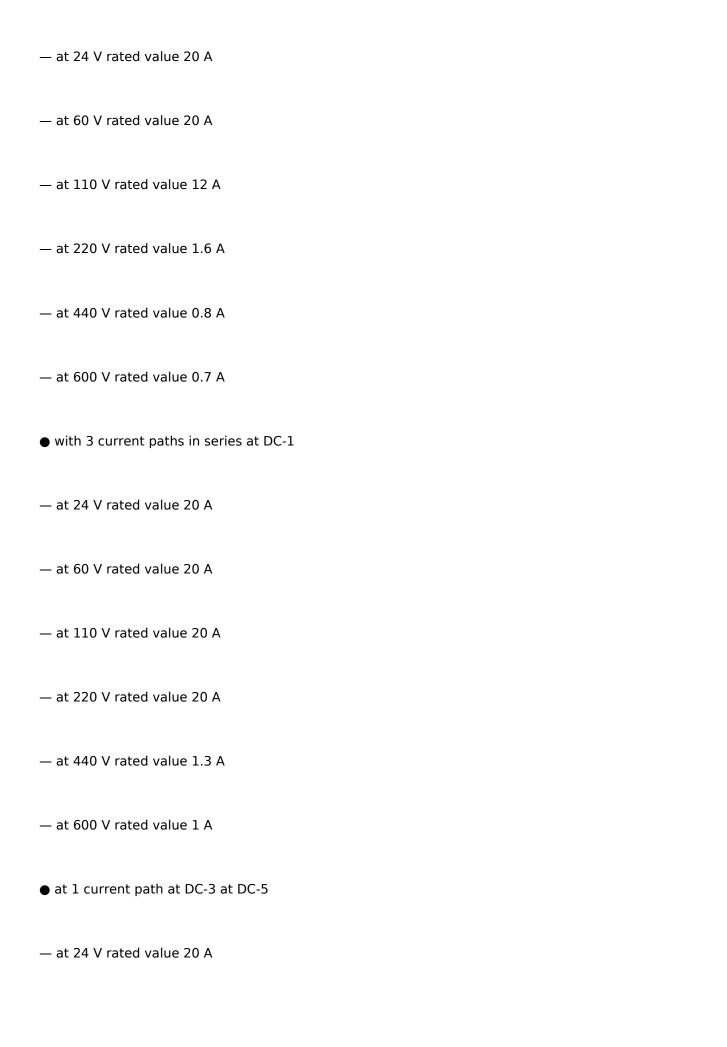


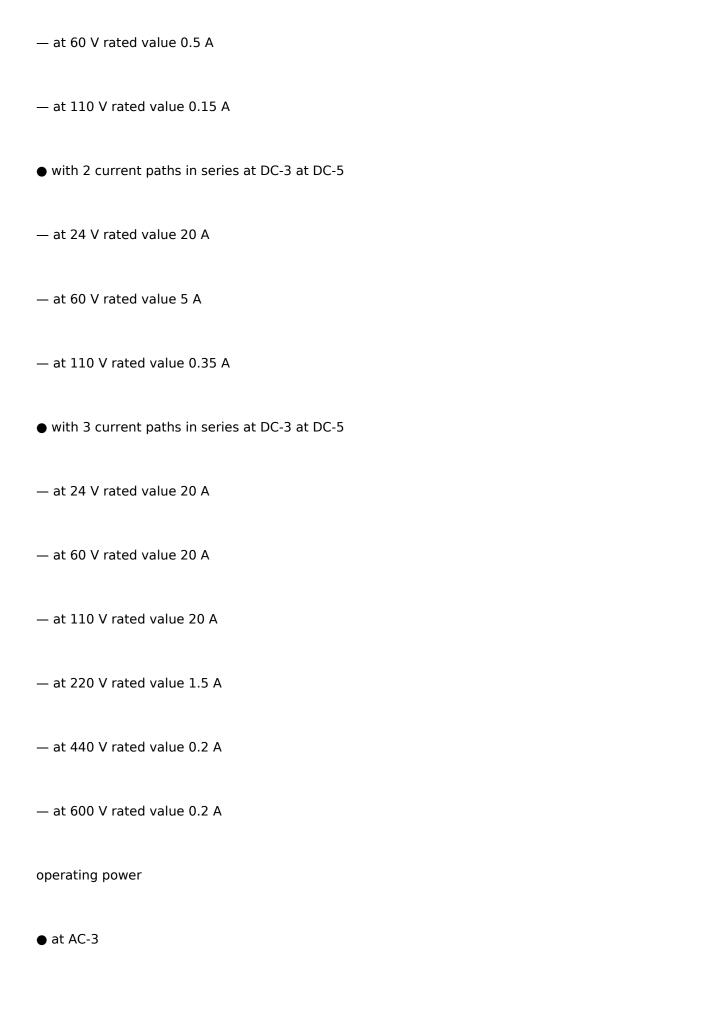
• at AC-1
— up to 690 V at ambient temperature 40 °C rated
value
22 A
— up to 690 V at ambient temperature 60 °C rated
value
20 A
• at AC-3
— at 400 V rated value 9 A
— at 500 V rated value 7.7 A
— at 690 V rated value 6.7 A
● at AC-3e
— at 400 V rated value 9 A
— at 500 V rated value 7.7 A

● at 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

at 690 V rated value 6.7 A

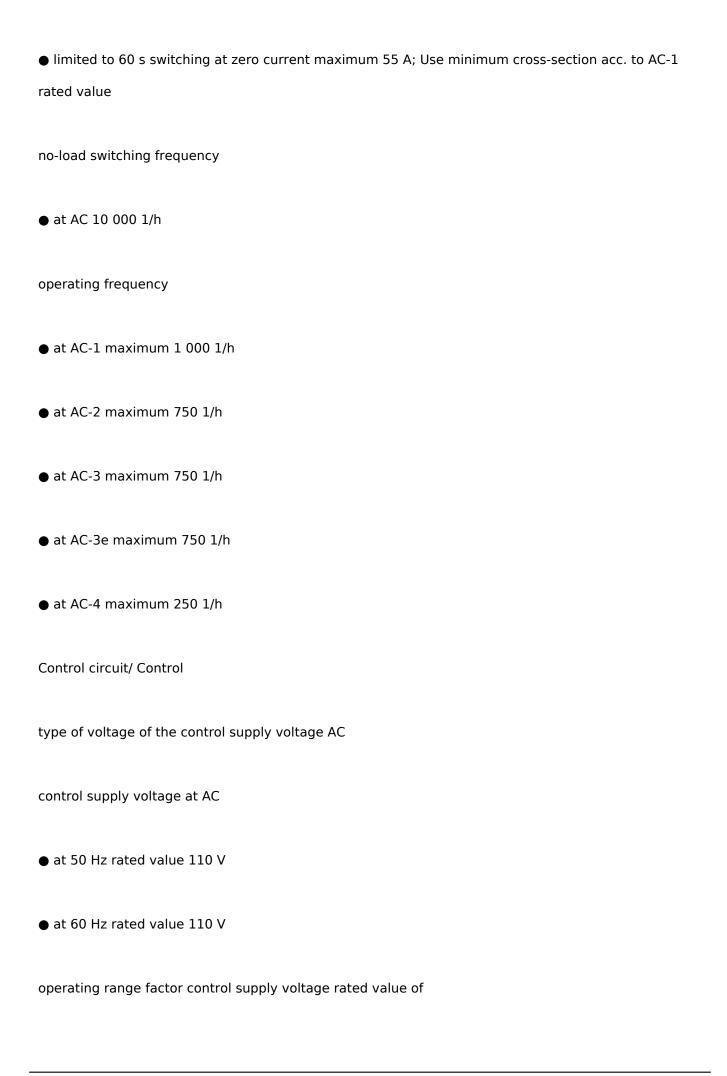
value
4 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at
AC-4
• at 400 V rated value 4.1 A
• at 690 V rated value 3.3 A
operational current
● at 1 current path at DC-1
— at 24 V rated value 20 A
— at 60 V rated value 20 A
<ul><li>at 110 V rated value 2.1 A</li><li>at 220 V rated value 0.8 A</li></ul>
— at 220 V rated value 0.6 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







● up to 500 V for current peak value n=20 rated value 4.6 kVA
● up to 690 V for current peak value n=20 rated value 5.9 kVA
operating apparent power at AC-6a
● up to 230 V for current peak value n=30 rated value 1.3 kVA
● up to 400 V for current peak value n=30 rated value 2.4 kVA
● up to 500 V for current peak value n=30 rated value 3.1 kVA
● up to 690 V for current peak value n=30 rated value 4 kVA
short-time withstand current in cold operating state up to
40 °C
● limited to 1 s switching at zero current maximum 155 A; Use minimum cross-section acc. to AC-1 rated value
● limited to 5 s switching at zero current maximum 111 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 10 s switching at zero current maximum 86 A; Use minimum cross-section acc. to AC-1 rated value
● limited to 30 s switching at zero current maximum 66 A; Use minimum cross-section acc. to AC-1 rated value



● at 50 Hz 0.8 1.1
● at 60 Hz 0.85 1.1
apparent pick-up power of magnet coil at AC
● at 50 Hz 27 VA
● at 60 Hz 24.3 VA
inductive power factor with closing power of the coil
● at 50 Hz 0.8
● at 60 Hz 0.75
apparent holding power of magnet coil at AC
● at 50 Hz 4.2 VA
● at 60 Hz 3.3 VA
inductive power factor with the holding power of the coil
● at 50 Hz 0.25
● at 60 Hz 0.25

magnet coil at AC

closing delay
● at AC 9 35 ms
opening delay
● at AC 4 15 ms
arcing time 10 15 ms
control version of the switch operating mechanism Standard A1 - A2
Auxiliary circuit
number of NO contacts for auxiliary contacts instantaneous
contact
1
operational current at AC-12 maximum 10 A
operational current at AC-15
● at 230 V rated value 10 A
● at 400 V rated value 3 A
● at 500 V rated value 2 A

• at 690 V rated value 1 A		
operational current at DC-12		
• at 24 V rated value 10 A		
● at 48 V rated value 6 A		
● at 60 V rated value 6 A		
• at 110 V rated value 3 A		
• at 125 V rated value 2 A		
• at 220 V rated value 1 A		
● at 600 V rated value 0.15 A		
operational current at DC-13		
● at 24 V rated value 10 A		
● at 48 V rated value 2 A		
● at 60 V rated value 2 A		
● at 110 V rated value 1 A		
● 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

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]

- for single-phase AC motor
- at 110/120 V rated value 0.33 hp
- at 230 V rated value 1 hp

