



## contactor LC1-D65AM7

URL: <https://www.sxplc.com/contactor-lc1-d65am7>

### Product data sheet

Areas of application for contactors for AC loads with a power factor greater than or equal to 0.95.

For non-inductive or slightly inductive loads, resistance furnaces.

Category of use AC-4

AC-1

AC-3

AC-3e

Number of poles 3P

Rated operating voltage [Ue] Power circuit:  $\leq 690$  V AC 25...400 Hz. .400 Hz

Power circuit:  $\leq 300$  V DC

Rated operating current [Ie] 80 A (at operating temperature  $\leq 60\text{ }^{\circ}\text{C}$ ) at operating voltage  $\leq \leq 440\text{ V AC AC-1}$  for power circuits

65 A (at operating temperatures  $\leq 60\text{ }^{\circ}\text{C}$ ) at operating voltages  $\leq \leq 440\text{ V AC AC-3}$  for power circuits

65 A (at operating temperature  $\leq 60\text{ }^{\circ}\text{C}$ ) when operating voltage  $\leq \leq 440\text{ V AC AC-3e}$  for power supply circuits

[Uc] control circuit voltage 220 V AC 50/60 Hz

Motor power (kW) 11 kW when operating voltage  $\leq 400\text{ V AC 50/60 Hz (AC-4)}$

18.5 kW when operating voltage  $\leq 220\text{... } 230\text{ V AC 50/60 Hz (AC-3)}$

30 kW at operating voltages  $\leq 380\text{... } 400\text{ V AC 50/60 Hz (AC-3) } 400\text{ V AC 50/60 Hz (AC-3)}$

37 kW at operating voltages  $\leq 500\text{ V AC 50/60 Hz (AC-3)}$

37 kW at operating voltages  $\leq 660\text{... } 690\text{ V AC 50/60 Hz (AC-3) } 690\text{ V AC 50/60 Hz (AC-3)}$

18.5 kW when operating voltage  $\leq 220\text{... } 230\text{ V AC 50/60 Hz (AC-3) } 230\text{ V AC 50/60 Hz (AC-3e)}$

30 kW when operating voltage  $\leq 380\text{... } 400\text{ V AC 50/60 Hz (AC-3e) } 400\text{ V AC 50/60 Hz (AC-3e)}$

37 kW at operating voltages  $\leq 500\text{ V AC 50/60 Hz (AC-3e)}$

37 kW at operating voltages  $\leq 660\text{... } 690\text{ V AC 50/60 Hz (AC-3e) } 690\text{ V AC 50/60 Hz (AC-3e)}$

Motor power 40 hp at operating voltage  $\leq 460/480\text{ V AC 50/60 Hz}$  for 3-phase motors

5 hp at operating voltages  $\leq 115$  V AC 50/60 Hz for 1-phase motors

10 hp when operating voltage  $\leq 230/240$  V AC 50/60 Hz for 1-phase motors

20 hp when operating voltage  $\leq 200/208$  V AC 50/60 Hz for 3-phase motors

20 hp when operating voltage  $\leq 230/240$  V AC 50/60 Hz for 3-phase motors

50 hp at operating voltages  $\leq 575/600$  V AC 50/60 Hz for 3-phase motors

Model LC1D

Circuit contact type 3 NO

Protective cover with

Conventional heating current [I<sub>th</sub>] 10 A (at operating temperature  $\leq 60$  °C) for signaling circuits

80 A (at operating temperature  $\leq 60$  °C) for power supply circuits

Rated turn-on capacity [I<sub>rms</sub>] 140 A AC for signal circuits according to IEC 60947-5-1

250 A DC for signaling circuits according to IEC 60947-5-1

1000 A at operating voltage  $\leq 440$  V for power circuits in accordance with IEC 60947

Rated breaking capacity 1000 A at operating voltage  $\leq 440$  V for mains circuits according to IEC 60947

Rated short-time withstand current [I<sub>cw</sub>] 640 A at operating temperature  $\leq 40$  °C for 10 s for mains

circuits

900 A at operating temperatures  $\leq 40\text{ }^{\circ}\text{C}$  for 1 s for power circuits

110 A at operating temperatures  $\leq 40\text{ }^{\circ}\text{C}$  for 10 minutes for power circuits

260 A at operating temperatures  $\leq 40\text{ }^{\circ}\text{C}$  for 1 min. for power circuits

100 A for 1 s for signal circuits

120 A for 500 ms for signaling circuits

140 A for 100 ms for signal circuits

Fuses for use with relays 10 A gG for signal circuits in accordance with IEC 60947-5-1

125 A gG at operating voltages  $\leq 690\text{ V}$  with type 1, for power circuits

125 A gG at operating voltages  $\leq 690\text{ V}$  with type 2, for power circuits

Average impedance  $1.5\text{ m}\Omega$  - Ith 80 A 50 Hz for power circuits

Power consumption per pole 9.6 W AC-1

6.3 W AC-3

6.3 W AC-3e

Rated insulation voltage [Ui] Power supply circuit: 600 V CSA approved

Power supply circuit: 600 V UL recognized

Signal circuit: 690 V in accordance with IEC 60947-1

Signal circuit: 600 V CSA approved

Signal circuits: 600 V UL recognized

Power circuits: 690 V according to IEC 60947-4-1

Overvoltage category III

Pollution class 3

Rated impulse withstand voltage [Uimp] 6 kV according to IEC 60947

Safety and reliability class B10d = 1369863 cycles Contactor with nominal load in accordance with EN/ISO 13849-1

B10d = 20000000 cycles Contactors for mechanical loads in accordance with EN/ISO 13849-1

Mechanical life 6 Mcycles

Electrical life 1.4 Mcycles 80 A AC-1 Ue condition  $\leq 440$  V

1.45 Mcycles 65 A AC-3 Ue  $\leq 440$  V

1.45 Mcycles 65 A AC-3e Ue  $\leq 440$  V

Control loop characteristics AC at 50/60 Hz Standard

Surge suppression module No built-in surge suppression module

Control voltage limits 0.3.... 0.6 U<sub>c</sub> (-40...70 °C) Coil release AC 50/60 Hz

0.8... 1.1 U<sub>c</sub> (-40...70 °C) 1.1 U<sub>c</sub> (-40...60 °C) Coil release AC 50 Hz

0.85... 1.1 U<sub>c</sub> (-40...60 °C) 1.1 U<sub>c</sub> (-40...60 °C Coil suction AC 60 Hz)

1... 1.1 U<sub>c</sub> (-40...60 °C) 1.1 U<sub>c</sub> (60...70 °C Coil suction AC 50/60 Hz)

(Power consumption (VA) 140 VA 60 Hz cos phi 0.75 (at 20°C)

160 VA 50 Hz cos phi 0.75 (at 20 °C)

(~50 Hz Hold) Power Consumption (VA) 13 VA 60 Hz cos phi 0.3 (at 20 °C)

15 VA 50 Hz cos phi 0.3 (at 20 °C)

Thermal dissipation 4...5 W at 50/60 Hz

Operating time 4... 19 ms 19 ms breaking

12... 26 ms Closing 12...26 ms closing

