

LC1D09D7C

Contacteur, TeSys Deca, 3P(3 NO), AC-3/
AC-3e, 0 to 440V, 9A, 42VAC 50/60Hz coil,
Screw terminal



Main

Range	TeSys Deca
Range of product	TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz Power circuit: ≤ 225 V DC
[Ie] rated operational current	25 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit 9 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 9 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	42 V AC 50/60 Hz

Complementary

Motor power kW	5.5 kW at 500 V AC 50/60 Hz (AC-3) 2.2 kW at 220/240 V AC 50/60 Hz (AC-3) 4 kW at 380/400 V AC 50/60 Hz (AC-3) 4 kW at 415/440 V AC 50/60 Hz (AC-3) 5.5 kW at 660/690 V AC 50/60 Hz (AC-3) 2.2 kW at 400 V AC 50/60 Hz (AC-4) 5.5 kW at 500 V AC 50/60 Hz (AC-3e) 2.2 kW at 220/240 V AC 50/60 Hz (AC-3e) 4 kW at 380/400 V AC 50/60 Hz (AC-3e) 4 kW at 415/440 V AC 50/60 Hz (AC-3e) 5.5 kW at 660/690 V AC 50/60 Hz (AC-3e)
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	Without
[Ith] conventional free air thermal current	25 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit
[Icw] rated short-time withstand current	105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at ≤ 690 V coordination type 1 for power circuit 20 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 25 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III

Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	15 Mcycles
Electrical durability	0.6 Mcycles 25 A AC-1 at $U_e \leq 440$ V 2 Mcycles 9 A AC-3 at $U_e \leq 440$ V 2 Mcycles 6.6 A AC-3 at U_e 660/690 V 2 Mcycles 9 A AC-3e at $U_e \leq 440$ V 2 Mcycles 6.6 A AC-3e at U_e 660/690 V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U_c (-40...60 °C):drop-out 50/60 Hz 0.8...1.1 U_c (-40...60 °C):operational 50 Hz 0.85...1.1 U_c (-40...60 °C):operational 60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	5 VA 60 Hz cos phi 0.3 (at 20 °C) 6 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	1.5...2.5 W at 50/60 Hz
Operating time	12...22 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 1...4 mm ² - external diameter: 8 mm - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...4 mm ² - external diameter: 8 mm - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1...4 mm ² - external diameter: 8 mm - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm ² - external diameter: 8 mm - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1...4 mm ² - external diameter: 8 mm - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1...4 mm ² - external diameter: 8 mm - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw connection
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on cable connector - with screwdriver flat Ø 6 mm M3.5 Power circuit: 1.7 N.m - on cable connector - with screwdriver Philips No 2 M3.5 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 Type mirror contact 1 NC conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Mounting support	Rail Plate







Environment

Standards	IEC 60947-4-1 GB 14048.4
Product certifications	CCC[RETURN]CE[RETURN]UKCA
IP degree of protection	IP2X front face for main circuit conforming to IEC 60529 IP2X front face for coil circuit conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Permissible ambient air temperature around the device	-40...60 °C operation 60...70 °C with derating -60...80 °C storage
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-11
Mechanical robustness	Vibrations contactor open (2 Gn, 5...300 Hz) conforming to IEC 60068-2-6 Vibrations contactor closed (4 Gn, 5...300 Hz) conforming to IEC 60068-2-6 Shocks 11 ms contactor open (10 Gn) conforming to IEC 60068-2-27 Shocks 11 ms contactor closed (15 gn) conforming to IEC 60068-2-27
Height	77 mm
Width	45 mm
Depth	86 mm
Net weight	0.32 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8 cm
Package 1 Width	10.2 cm
Package 1 Length	5.2 cm
Package 1 Weight	334.42 g

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information