Product data sheet Characteristics

LC1D50AM7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 220 V AC 50/60 Hz coil





Main

Main		
Range of product	TeSys D	
Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-3 AC-4 AC-1	
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit	
[le] rated operational current	50 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 80 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	22 kW at 380400 V AC 50/60 Hz AC-3 25 kW at 415 V AC 50/60 Hz AC-3 30 kW at 440 V AC 50/60 Hz AC-3 30 kW at 500 V AC 50/60 Hz AC-3 33 kW at 660690 V AC 50/60 Hz AC-3 15 kW at 220230 V AC 50/60 Hz AC-3 11 kW at 400 V AC 50/60 Hz AC-4	
Motor power hp	3 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 15 hp at 200/208 V AC 50/60 Hz for 3 phases motors 15 hp at 230/240 V AC 50/60 Hz for 3 phases motors 15 hp at 230/240 V AC 50/60 Hz for 3 phases motors 40 hp at 460/480 V AC 50/60 Hz for 3 phases motors 40 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Control circuit type	AC 50/60 Hz	
[Uc] control circuit voltage	220 V AC 50/60 Hz	
Auxiliary contact composition	y contact composition 1 NO + 1 NC	

[Uimp] rated impulse withstand voltage	Conforming to IEC 60947	
Overvoltage category	III	
[Ith] conventional free air thermal current	80 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit	
Irms rated making capacity	900 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1	
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947	
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 400 A <= 40 °C 10 s power circuit 810 A <= 40 °C 1 s power circuit 84 A <= 40 °C 10 min power circuit 208 A <= 40 °C 1 min power circuit	
Associated fuse rating	100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1	
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A for power circuit	
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL	
Electrical durability	1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V	
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1	
Protective cover	With	
Mounting support	Rail Plate	
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508	
Product certifications	BV DNV RINA CSA CCC LROS UL GL GOST	
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm² - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm² - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm² - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm² - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm² - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end	
Tightening torque	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: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm² hexagonal 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm² hexagonal 4 mm	
Operating time	1226 ms closing 419 ms opening	
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	6 Mcycles	
Operating rate	rate 3600 cyc/h at <= 60 °C	

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.30.6 Uc drop-out at 60 °C, AC 50/60 Hz 0.81.1 Uc operational at 60 °C, AC 50 Hz 0.851.1 Uc operational at 60 °C, AC 60 Hz	
Inrush power in VA	140 VA at 20 °C (cos φ 0.75) 60 Hz 160 VA at 20 °C (cos φ 0.75) 50 Hz	
Hold-in power consumption in VA	13 VA at 20 °C (cos φ 0.3) 60 Hz 15 VA at 20 °C (cos φ 0.3) 50 Hz	
Heat dissipation	45 W at 50/60 Hz	
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	
Signalling circuit frequency	25400 Hz	
Minimum switching current	5 mA for signalling circuit	
Minimum switching voltage	17 V 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)	
Insulation resistance	> 10 MOhm for signalling circuit	
Motor power range AC-3	711 kW 200240 V 3 phases 1525 kW 200240 V 3 phases 1525 kW 380440 V 3 phases 3050 kW 380440 V 3 phases 3050 kW 480500 V 3 phases	
Motor starter type	Direct on-line contactor	
Contactor coil voltage	220 V AC standard	

Environment

LITTIONICITE			
IP degree of protection	IP2x front face conforming to IEC 60529		
Protective treatment	TH conforming to IEC 60068-2-30		
Pollution degree	3		
Ambient air temperature for operation	-560 °C		
Ambient air temperature for storage	-6080 °C		
Permissible ambient air temperature around the device	-4070 °C at Uc		
Operating altitude	3000 m without derating in temperature		
Fire resistance	850 °C conforming to IEC 60695-2-1		
Flame retardance	V1 conforming to UL 94		
Mechanical robustness	Vibrations contactor open 2 Gn, 5300 Hz Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms		
Height	122 mm		
Width	55 mm		
Depth	120 mm		
Product weight	0.855 kg		

Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	☑ End of life manual	

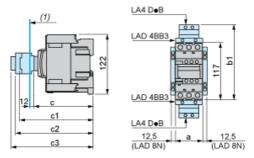
Contractual warranty

	-	
Warranty period	18 months	

Product data sheet Dimensions Drawings

LC1D50AM7

Dimensions



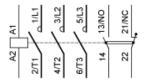
(1) Minimum electrical clearance

LC1		D40AD65A
а		55
b1	with LA4 D●2	_
with LA4 DB3 or	L1/8/10 4BB3	
with LA4 DF, DT	vith LA4 DF, DT 157	
with LA4 DM, DV	V) 666.	
С	without cover or add-on blocks	118
with cover, without 22dd-on blocks		
c1	with LAD N (1 contact)	_
with LAD N or C (2500 4 contacts)		
c2	with LA6 DK10, LAD 6DK	163
c3	with LAD T, R, S	171
with LAD T, R, S	aักี6 sealing cover	

Product data sheet Connections and Schema

LC1D50AM7

Wiring



LC1D50AM7

Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power 22 kW and 415 VAC

Motor Power (kW)	Icu (kA)	Breaker	Contactor
22	50	•	C
		GV3P50	LC1D50AM7

Non contractual pictures. Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.