Product data sheet Characteristics

LC1D150E7





Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 150 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	40 KW at 220230 V AC 50/60 Hz (AC-3) 75 KW at 380400 V AC 50/60 Hz (AC-3) 80 KW at 415440 V AC 50/60 Hz (AC-3) 90 KW at 500 V AC 50/60 Hz (AC-3) 100 KW at 660690 V AC 50/60 Hz (AC-3) 75 KW at 1000 V AC 50/60 Hz (AC-3) 22 KW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	40 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 50 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 100 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 125 Hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 KV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1660 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	250 A 40 °C - 10 min for power circuit 580 A 40 °C - 1 min for power circuit 1200 A 40 °C - 10 s for power circuit 1400 A 40 °C - 1 s for power circuit 1400 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit

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Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 315 A gG at <= 690 V coordination type 1 for power circuit 250 A gG at <= 690 V coordination type 2 for power circuit	
Average impedance	0.6 MOhm - Ith 200 A 50 Hz for power circuit	
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified	
Electrical durability	0.85 Mcycles 150 A AC-3 at Ue <= 440 V 1 Mcycles 200 A AC-1 at Ue <= 440 V	
Power dissipation per pole	24 W AC-1 13.5 W AC-3	
Protective cover	With	
Mounting support	Plate Rail	
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	CCC BV DNV CSA LROS (Lloyds register of shipping) GOST RINA GL UL	
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²solid without cable end Power circuit: connector 1 cable(s) 10120 mm²flexible without cable end Power circuit: connector 2 cable(s) 1050 mm²flexible with cable end Power circuit: connector 2 cable(s) 1050 mm²flexible with cable end Power circuit: connector 1 cable(s) 10120 mm²solid without cable end Power circuit: connector 1 cable(s) 10120 mm²solid without cable end	
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mn Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No Power circuit: 12 N.m - on connector hexagonal screw head 4 mm	
Operating time	2035 ms closing 4075 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	8 Mcycles	
Maximum operating rate	1200 Cyc/H 60 °C	
Complementary		
Coil technology	Built-in bidirectional peak limiting diode suppressor	

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Inrush power in VA	280350 VA 60 Hz cos phi 0.9 (at 20 °C) 280350 VA 50 Hz cos phi 0.9 (at 20 °C)	
Hold-in power consumption in VA	218 VA 60 Hz cos phi 0.9 (at 20 °C) 218 VA 50 Hz cos phi 0.9 (at 20 °C)	
Heat dissipation	34.5 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 contact1.5 Ms on energisation between NC and NO contact	
Insulation resistance	> 10 MOhm for signalling circuit	
Contact compatibility	M13	
Compatibility code	LC1D	
Power range	3050 KW at 200240 V 3 phases 55100 KW at 380440 V 3 phases 55100 KW at 480500 V 3 phases	
Motor starter type	Direct on-line contactor	
Contactor coil voltage	48 V AC standard	

Environment

IP degree of protection	IP20 front face conforming to IEC 60529	
Protective treatment	TH conforming to IEC 60068-2-30	
Pollution degree	3	
Ambient air temperature for storage	-6080 °C	
Operating altitude	3000 m without derating	
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 closed: 15 Gn for 11 ms Shocks contactor open: 6 Gn for 11 ms	
Height	158 Mm	
Width	120 Mm	
Depth	136 Mm	
Net weight	2.5 Kg	

Packing Units

Package 1 Weight	2.630 Kg	
Package 1 Height	1.900 Dm	
Package 1 width	1.750 Dm	
Package 1 Length	2.100 Dm	

Offer Sustainability

Sustainable offer status	Green Premium product	
EU RoHS Directive	Compliant E EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	₫Yes	
China RoHS Regulation	☑ China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	☑ End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	

Contractual warranty

Warranty	18 months	

Product Life Status :	Commercialised	