Product datasheet Characteristics

LC1D95M7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 95 A - 220 V AC 50/60 Hz coil



Main

TTT COLOR		
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 25400 Hz for power circuit <= 1000 V AC for power circuit	
[le] rated operational current	125 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit 95 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit	
Motor power kW	45 kW at 660690 V AC 50/60 Hz AC-3 45 kW at 415440 V AC 50/60 Hz AC-3 55 kW at 500 V AC 50/60 Hz AC-3 45 kW at 1000 V AC 50/60 Hz AC-3 15 kW at 400 V AC 50/60 Hz AC-4 25 kW at 220230 V AC 50/60 Hz AC-3 45 kW at 380400 V AC 50/60 Hz AC-3	
Motor power hp	20 hp at 200/208 V AC 50/60 Hz for 3 phases motors 7.5 hp at 115 V AC 50/60 Hz for 1 phase motors 15 hp at 230/240 V AC 50/60 Hz for 1 phase motors 25 hp at 230/240 V AC 50/60 Hz for 3 phases motors 60 hp at 460/480 V AC 50/60 Hz for 3 phases motors 60 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Control circuit type	AC 50/60 Hz	
Control circuit voltage	220 V AC 50/60 Hz	Ë
Auxiliary contact composition	1 NO + 1 NC	

[Ulimp] rated impulse withstend voltage	Conforming to IEC 60047
Uimp] rated impulse withstand voltage Overvoltage category	Conforming to IEC 60947
[Ith] conventional free air thermal current	125 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	1100 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	1100 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	1100 A <= 40 °C 1 s power circuit 135 A <= 40 °C 10 min power circuit 400 A <= 40 °C 1 min power circuit 800 A <= 40 °C 10 s power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	160 A gG at <= 690 V coordination type 2 for power circuit 200 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 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	1.2 Mcycles 95 A AC-3 at Ue <= 440 V 1.3 Mcycles 125 A AC-1 at Ue <= 440 V
Power dissipation per pole	7.2 W AC-3 12.5 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	GL GOST RINA LROS DNV CCC BV
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 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 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 450 mm² - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 450 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 450 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 450 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 450 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 450 mm² - cable stiffness: solid - without cable end
Tightening torque	Power circuit: 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 9 N.m - on connector hexagonal 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	2035 ms closing 620 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

Mechanical durability	4 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.851.1 Uc operational at 55 °C, AC 60 Hz 0.30.6 Uc drop-out at 55 °C, AC 50/60 Hz 0.81.1 Uc operational at 55 °C, AC 50 Hz	
Inrush power in VA	245 VA at 20 °C (cos φ 0.75) 60 Hz 245 VA at 20 °C (cos φ 0.75) 50 Hz	
Hold-in power consumption in VA	26 VA at 20 °C (cos φ 0.3) 60 Hz 26 VA at 20 °C (cos φ 0.3) 50 Hz	
Heat dissipation	610 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	1525 kW 200240 V 3 phases 3050 kW 380440 V 3 phases 3050 kW 480500 V 3 phases 55100 kW 480500 V 3 phases 3050 kW 525690 V 3 phases	
Motor starter type	Direct on-line contactor	
Contactor coil voltage	220 V AC	

Environment

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 Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	127 mm
Width	85 mm
Depth	130 mm
Product weight	1.61 kg
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Contractual warranty

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Warranty period	18 months	

LC1D95M7

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Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power 45 kW and 415 VAC

<!-- DataBOM 2 Template BEGIN -->

Motor Power (kW)	lcu (kA)	Breaker	Contactor
45	36		
		GV7RE100	LC1D95M7

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.

<!-- DataBOM 2 Template END --> <!-- No Variants -->