Product datasheet

Specifications





TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 380 V AC 50/60 Hz coil

LC1D50AQ7

Main

Range	TeSys TeSys Deca		
Range Of Produc	TeSys Deca		
Product Or Component Type	Contactor		
Device Short Name	LC1D		
Contactor 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 25400 Hz Power circuit: <= 300 V DC		
[le] Rated Operational Current	50 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-3e for power circuit		
[Uc] Control Circuit Voltage	380 V AC 50/60 Hz		

Complementary

Motor Power Kw	15 kW at 220230 V AC 50/60 Hz (AC-3) 22 kW at 380400 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)	
	25 kW at 415 V AC 50/60 Hz (AC-3)	
	30 kW at 440 V AC 50/60 Hz (AC-3)	
	11 kW at 400 V AC 50/60 Hz (AC-4)	
	15 kW at 220230 V AC 50/60 Hz (AC-3e)	
	22 kW at 380400 V AC 50/60 Hz (AC-3e)	
	30 kW at 500 V AC 50/60 Hz (AC-3e)	
	33 kW at 660690 V AC 50/60 Hz (AC-3e)	
	25 kW at 415 V AC 50/60 Hz (AC-3e)	
	30 kW at 440 V AC 50/60 Hz (AC-3e)	
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	
	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	
Compatibility Code	LC1D	
Pole Contact Composition	3 NO	
Contact Compatibility	M2	
Protective Cover	With	

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.



[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 80 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 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947		
Rated Breaking Capacity	900 A at 440 V for power circuit conforming to IEC 60947		
[Icw] Rated Short-Time Withstand Current	400 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 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 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit		
Average Impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit		
Power Dissipation Per Pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e		
[Ui] Rated Insulation Voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1		
Overvoltage Category	III		
Pollution Degree	3		
[Uimp] Rated Impulse Withstand	6 kV conforming to IEC 60947		
Voltage			
	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		
Voltage	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO		
Voltage 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		
Voltage Safety Reliability Level Mechanical Durability	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V		
Voltage Safety Reliability Level Mechanical Durability Electrical Durability	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V		
Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V AC at 50/60 Hz		
Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V AC at 50/60 Hz Without built-in suppressor module 0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz		
Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V AC at 50/60 Hz Without built-in suppressor module 0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz		
Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V AC at 50/60 Hz Without built-in suppressor module 0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz 140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)		
Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits Inrush Power In Va Hold-In Power Consumption In Va	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 6 Mcycles 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V AC at 50/60 Hz Without built-in suppressor module 0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz 140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)		

Connections - Terminals	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with		
Connections - Terminals	cable end		
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end		
	Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end		
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end		
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without		
	cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without		
	cable end Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible		
	without cable end Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible		
	without cable end Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible		
	with cable end Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible		
	with cable end Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: solid		
	without cable end		
	Power circuit: EverLink BTR screw connectors 2 125 mm ² - cable stiffness: solid without cable end		
Tightening Torque	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver flat Ø		
	6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver		
	Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm²		
	hexagonal screw head 4 mm		
	Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm ² hexagonal screw head 4 mm		
	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2		
	Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2		
Auxiliary Contact Composition	1 NO + 1 NC		
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 Voltage	17 V for signalling circuit		
Minimum Switching Current	5 mA 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	Plate Rail		
	Nail		
Environment			
Standards	CSA C22.2 No 14		
	EN 60947-4-1 EN 60947-5-1		
	IEC 60947-4-1 IEC 60947-5-1		
	UL 508		
	IEC 60335-1		
Product Certifications	UL DNV		
	CCC CSA		
	BV		
	LROS (Lloyds register of shipping)		
	GOST GL		
	RINA		
	NIVA		

Protective Treatment	TH conforming to IEC 60068-2-30			
Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat			
Permissible Ambient Air Temperature Around The Device	-4060 °C 6070 °C with derating			
Operating Altitude	03000 m			
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 (10 Gn for 11 ms)			
Height	122 mm			
Width	55 mm			
Depth	120 mm			
Net Weight	0.855 kg			

Packing Units

Unit Type Of Package 1	PCE	
Number Of Units In Package 1	1	
Package 1 Height	6.3 cm	<u> </u>
Package 1 Width	13.7 cm	
Package 1 Length	15.3 cm	11,
Package 1 Weight	933 g	
Unit Type Of Package 2	S02	
Number Of Units In Package 2	10	
Package 2 Height	15 cm	
Package 2 Width	30 cm	
Package 2 Length	40 cm	
Package 2 Weight	9.59 kg	5/1

Contractual warranty

Warranty 18 months





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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

②	Reach Free Of Svhc		
⊘	Toxic Heavy Metal Free		
⊘	Mercury Free		
⊘	Rohs Exemption Information	Yes	
9	Pvc Free		

Certifications & Standards

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Compliant EU RoHS Declaration	
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
Circularity Profile	End of Life Information	

