Product datasheet

Specifications





TeSys Deca contactor , 3P(3 NO) , AC-3 , <= 440V, 50 A , 110V AC 50/60 Hz coil

LC1D50A3F7

! Discontinued on: 31-Dec-2020

(!) Discontinued

Main

Range	TeSys	
Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load Motor control	
Utilisation Category	AC-4 AC-3 AC-1	
Poles Description	3P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	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	
[Uc] Control Circuit Voltage	110 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)	
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	
Protective Cover	With	
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit	
Thermal Current	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
Accordated Fuce Pating	40 A cO for circulture circuit conference to IFO 00047 F 4
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
[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 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	6 Mcycles
Electrical Durability	1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V
Control Circuit Type	AC at 50/60 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	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
Inrush Power In Va	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	45 W at 50/60 Hz
Operating Time	419 ms opening 1226 ms closing
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: spring terminals 1 2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm² - cable stiffness: flexible 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 mm² - cable stiffness: solid without cable end
Tightening Torque	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 2.525 mm² hexagonal screw head 4 mm

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	Rail Plate	

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
Product Certifications	GOST
	CSA
	UL
	LROS (Lloyds register of shipping)
	RINA
	CCC
	BV
	GL
	DNV
	DINV
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
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	-4060 °C
Temperature Around The Device	6070 °C with derating
	55 5 5 With dordaing
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	6.2 cm
Package 1 Width	13.7 cm

Package 1 Length	15.2 cm	
Package 1 Weight	948 a	

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

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