Product datasheet

Specifications





Contactor, TeSys Deca, 3P(3 NO), AC-3/AC-3e, <=400V, 50A, 240V AC 50/60Hz coil, screw clamp terminals

LC1D50AU7

Main

Range	TeSys TeSys Deca
Range Of Product	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	240 V AC 50/60 Hz

Complementary

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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	400 A 40 °C - 10 s for power circuit
Current	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-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
Flashriant Durchility	
Electrical Durability	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
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 Committee In Ma	
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: screw clamp terminals 2 12.5 mm ² - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 14 mm ² - 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 mm ² - cable stiffness: solid without cable end
	Power circuit: screw connection 1 135 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw connection 2 125 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw connection 1 135 mm ² - cable stiffness: flexible with cable end Power circuit: screw connection 2 125 mm ² - cable stiffness: flexible with cable end Power circuit: screw connection 1 135 mm ² - cable stiffness: solid without cable end Power circuit: screw connection 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
nsulation 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 IEC 60335-1
Product Certifications	CSA BV GL RINA DNV UL GOST LROS (Lloyds register of shipping) CCC
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
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
Package 1 Width	13.7 cm
Package 1 Length	15.3 cm
Package 1 Weight	926 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	9.975 kg
Unit Type Of Package 3	S06
Number Of Units In Package 3	160
Package 3 Height	73.5 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	180.28 kg

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

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

Learn more about Green Premium >

Guide to assess a product's sustainability >



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