Specifications





TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 38 A - 48 V AC 50/60 Hz coil

LC1D38E7

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-1 for power circuit	
·	38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
	38 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
[Uc] control circuit voltage	48 V AC 50/60 Hz	

Complementary

Motor power kW	18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660690 V AC 50/60 Hz (AC-3) 7.5 kW at 400 V AC 50/60 Hz (AC-4)	
	18.5 kW at 380400 V AC 50/60 Hz (AC-3) 9 kW at 220230 V AC 50/60 Hz (AC-3)	
	18.5 kW at 415440 V AC 50/60 Hz (AC-3) 18.5 kW at 500 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3e) 18.5 kW at 380400 V AC 50/60 Hz (AC-3e)	
	9 kW at 220230 V AC 50/60 Hz (AC-3e) 18.5 kW at 415440 V AC 50/60 Hz (AC-3e)	
Motor power hp	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	5 hp at 240 V AC 50/60 Hz for 1 phase motors 20 hp at 480 V AC 50/60 Hz for 3 phases motors	
	25 hp at 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 thermal current	10 A (at 60 °C) for signalling circuit 50 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947	

Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand	60 A 40 °C - 10 min for power circuit
current	430 A 40 °C - 1 s for power circuit
	150 A 40 °C - 1 min for power circuit
	310 A 40 °C - 10 s 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
	63 A gG at <= 690 V coordination type 1 for power circuit
	63 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
Power dissipation per pole	5 W AC-1
	3 W AC-3
	3 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 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	15 Mcycles
Electrical durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V
	1.4 Mcycles 38 A AC-3 at Ue <= 440 V
	1.4 Mcycles 38 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	70 VA 60 Hz cos phi 0.75 (at 20 °C)
	70 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	23 W at 50/60 Hz
Operating time	419 ms opening
	1222 ms closing
Maximum operating rate	3600 cyc/h 60 °C
Maximum operating rate	3600 cyc/h at 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 clamp terminals 1 2.510 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 110 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.510 mm ² - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - 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
Auxiliary contacts type Signalling circuit frequency Minimum switching voltage	type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling circuit frequency Minimum switching voltage	type mirror contact 1 NC conforming to IEC 60947-4-1 25400 Hz
Signalling circuit frequency Minimum switching voltage Minimum switching current	type mirror contact 1 NC conforming to IEC 60947-4-1 25400 Hz 17 V for signalling circuit
Signalling circuit frequency	type mirror contact 1 NC conforming to IEC 60947-4-1 25400 Hz 17 V for signalling circuit 5 mA for signalling circuit

Environment

CSA C22.2 No 14
EN 60947-4-1
EN 60947-5-1
IEC 60947-4-1
IEC 60947-5-1
UL 60947-4-1
IEC 60335-1:Clause 30.2
IEC 60335-2-40:Annex JJ
UL 60335-2-40:Annex JJ
CSA C22.2 No 60947-4-1
UL
CCC
CSA
Marine
UKCA
EAC
CB Scheme
IP20 front face conforming to IEC 60529
TH conforming to IEC 60068-2-30
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 (8 Gn for 11 ms)	
Height	85 mm	
Width	45 mm	
Depth	92 mm	
Net weight	0.38 kg	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	420.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.716 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 >



Yes

Sustainable Packaging Transparency RoHS/REACh

Resource performance

Sustainable Packaging

Well-being performance

Reach Free Of Svhc

Rohs Exemption Information

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

Image of product / Alternate images

Alternative

LC1D38E7





