

# LC1D38F7

IEC contactor, TeSys Deca, nonreversing, 38A, 20HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VAC 50/60Hz coil, open



## Main

Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contactors
Device short name	LC1D
Contactors application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	50 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit 38 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

## Complementary

Motor power kW	18.5 kW 500 V AC 50/60 Hz 18.5 kW 660...690 V AC 50/60 Hz 18.5 kW 380...400 V AC 50/60 Hz 9 kW 220...230 V AC 50/60 Hz 18.5 kW 415...440 V AC 50/60 Hz
Maximum Horse Power Rating	10 Hp 230/240 V at AC 50/60 Hz for 3 phase 10 Hp 200/208 V at AC 50/60 Hz for 3 phase 5 Hp 240 V at AC 50/60 Hz for 1 phase 20 Hp 480 V at AC 50/60 Hz for 3 phase 25 hp 600 V at AC 50/60 Hz for 3 phase
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M2
Protective cover	With
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 50 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 550 A 440 V power circuit IEC 60947
Rated breaking capacity	550 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	60 A 104 °F (40 °C) - 10 min power circuit 430 A 104 °F (40 °C) - 1 s power circuit 150 A 104 °F (40 °C) - 1 min power circuit 310 A 104 °F (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	10 A gG signalling circuit IEC 60947-5-1 63 A gG <= 690 V type 1 power circuit 63 A gG <= 690 V type 2 power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz power circuit

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 690 V IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	15 Mcycles
Electrical durability	1.4 Mcycles 50 A AC-1 <= 440 V 1.4 Mcycles 38 A AC-3 <= 440 V 1.4 Mcycles 38 A AC-3e <= 440 V
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 U <sub>c</sub> 140...158 °F (60...70 °C) operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	2...3 W 50/60 Hz
Operating time	4...19 ms opening 12...22 ms closing
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in <sup>2</sup> (1.5...10 mm <sup>2</sup> ) solid without cable end Power circuit screw clamp terminals 2 0.00...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> ) solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V signalling circuit
Minimum switching current	5 mA signalling circuit
Insulation resistance	> 10 MOhm 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

## 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 RINA BV CCC CSA LROS (Lloyds register of shipping) GL GOST
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 8 Gn for 11 ms)
Height	3.35 in (85 mm)
Width	1.77 in (45 mm)
Depth	3.62 in (92 mm)
Product Weight	0.84 lb(US) (0.38 kg)

## Ordering and shipping details

Category	22354-CTR, TESYS D, OPEN, 9-38A AC
Discount Schedule	I12
GTIN	3389110352207
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	3.62 in (9.200 cm)
Package 1 Length	4.41 in (11.200 cm)
Package 1 Weight	14.57 oz (413.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	18.90 lb(US) (8.575 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Contractual warranty

Warranty	18 months
----------	-----------