

# Product data sheet

Specifications



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

LC1D38F7

Product availability : Stock - Normally stocked in distribution facility

Price\* : 231.60 USD

## Main

Range	TeSys TeSys Deca
Range of Product	TeSys D TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor 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

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

<b>[Ith] conventional free air thermal current</b>	10 A 140 °F (60 °C) signalling circuit 50 A 140 °F (60 °C) power circuit
<b>Irms rated making capacity</b>	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
<b>Rated breaking capacity</b>	550 A 440 V power circuit IEC 60947
<b>[Icw] rated short-time withstand current</b>	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
<b>Associated fuse rating</b>	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
<b>Average impedance</b>	2 mOhm - Ith 50 A 50 Hz power circuit
<b>Power dissipation per pole</b>	5 W AC-1 3 W AC-3 3 W AC-3e
<b>[Ui] rated insulation voltage</b>	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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	15 Mcycles
<b>Electrical durability</b>	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
<b>Control circuit type</b>	AC 50/60 Hz
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	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
<b>Inrush power in VA</b>	70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C))
<b>Heat dissipation</b>	2...3 W 50/60 Hz
<b>Operating time</b>	4...19 ms opening 12...22 ms closing
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Connections - terminals</b>	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
<b>Tightening torque</b>	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

<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching voltage</b>	17 V signalling circuit
<b>Minimum switching current</b>	5 mA signalling circuit
<b>Insulation resistance</b>	> 10 MOhm signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Mounting Support</b>	Plate Rail

## Environment

<b>Standards</b>	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
<b>Product Certifications</b>	UL DNV RINA BV CCC CSA LROS (Lloyds register of shipping) GL GOST
<b>IP degree of protection</b>	IP20 front face IEC 60529
<b>Protective treatment</b>	THIEC 60068-2-30
<b>Climatic withstand</b>	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	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)
<b>Height</b>	3.35 in (85 mm)
<b>Width</b>	1.77 in (45 mm)
<b>Depth</b>	3.62 in (92 mm)
<b>Net Weight</b>	0.84 lb(US) (0.38 kg)

## Ordering and shipping details

<b>Category</b>	22354-CTR, TESYS D, OPEN, 9-38A AC
<b>Discount Schedule</b>	I12
<b>GTIN</b>	3389110352207
<b>Returnability</b>	No
<b>Country of origin</b>	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
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
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
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## Recommended replacement(s)