

# Product data sheet

Specifications



IEC contactor, TeSys Deca,  
nonreversing, 38A, 20HP at  
480VAC, 3 phase, 3 pole, 3 NO,  
220VAC 50/60Hz coil, open style

LC1D386M7

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## Main

<b>Range</b>	TeSys TeSys Deca
<b>Range of Product</b>	TeSys Deca
<b>Product or Component Type</b>	Contactors
<b>Device short name</b>	LC1D
<b>Contactors application</b>	Resistive load Motor control
<b>Utilisation category</b>	AC-4 AC-1 AC-3 AC-3e
<b>Poles description</b>	3P
<b>[Ue] rated operational voltage</b>	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
<b>[Ie] rated operational current</b>	50 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 38 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 38 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
<b>[Uc] control circuit voltage</b>	220 V AC 50/60 Hz

## Complementary

<b>Motor power kW</b>	18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3) 7.5 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 9 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 415...440 V AC 50/60 Hz (AC-3) 18.5 kW at 500 V AC 50/60 Hz (AC-3e) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3e) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 9 kW at 220...230 V AC 50/60 Hz (AC-3e) 18.5 kW at 415...440 V AC 50/60 Hz (AC-3e)
<b>Maximum Horse Power Rating</b>	10 hp at 230/240 V AC 50/60 Hz for 3 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phase 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 phase motors 25 hp at 600 V AC 50/60 Hz for 3 phase motors
<b>Compatibility code</b>	LC1D
<b>Pole contact composition</b>	3 NO
<b>Protective cover</b>	With
<b>[Ith] conventional free air thermal current</b>	10 A (at 140 °F (60 °C)) for signalling circuit 50 A (at 140 °F (60 °C)) for power circuit

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

<b>Irms rated making capacity</b>	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
<b>Rated breaking capacity</b>	550 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	60 A 104 °F (40 °C) - 10 min for power circuit 430 A 104 °F (40 °C) - 1 s for power circuit 150 A 104 °F (40 °C) - 1 min for power circuit 310 A 104 °F (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
<b>Associated fuse rating</b>	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
<b>Average impedance</b>	2 mOhm - Ith 50 A 50 Hz for 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 Uc (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 50 Hz 0.85...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 60 Hz 1...1.1 Uc (140...158 °F (60...70 °C)):operational AC 50/60 Hz
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	2...3 W at 50/60 Hz
<b>Operating time</b>	4...19 ms opening 12...22 ms closing
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C
<b>Connections - terminals</b>	Control circuit: lugs-ring terminals - external diameter: 0.3 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 0.4 in (10 mm)
<b>Tightening torque</b>	Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 22.1 lbf.in (2.5 N.m) lugs-ring terminals flat Ø 8 mm M4 Power circuit 22.1 lbf.in (2.5 N.m) lugs-ring terminals Philips No 2 M4 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.1 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 for signalling circuit
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm for 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>	Rail Plate

## 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 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
<b>Product Certifications</b>	UL CCC CSA Marine UKCA EAC CB Scheme
<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>	3.3 in (85 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.6 in (92 mm)
<b>Net Weight</b>	0.84 lb(US) (0.38 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0I12
<b>GTIN</b>	3389110805604
<b>Returnability</b>	No

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Country of origin	ID
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## Packing Units

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Unit Type of Package 1	PCE
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Nbr. of units in pkg.	1
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Package 1 Height	1.9 in (4.9 cm)
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Package 1 Width	4.4 in (11.1 cm)
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Package 1 Length	3.5 in (8.9 cm)
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Package weight(Lbs)	15.0 oz (424.0 g)
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## Contractual warranty

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Warranty	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

 <b>Environmental footprint</b>	
Carbon footprint (kg CO2 eq, Total Life cycle)	174
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better

 <b>Materials and Substances</b>	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Compliant
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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>
PVC free	Yes

### Use Again

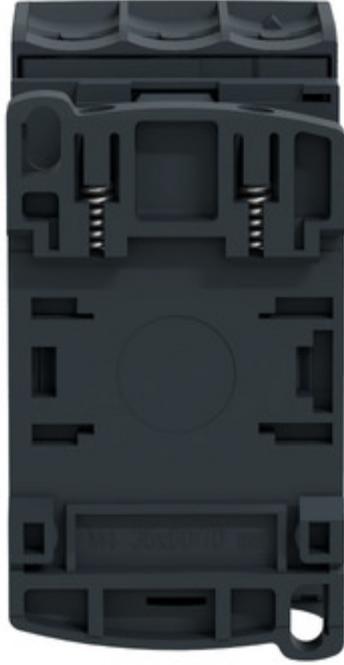
 <b>Repack and remanufacture</b>	
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Image of product / Alternate images

Alternative

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Technical Illustration

Assembly's dimensions

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