

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - $\leq$ 440 V 32 A - 220 V AC coil

LC1D32M7

### Main

Range of product	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: $\leq$ 690 V AC 25...400 Hz Power circuit: $\leq$ 300 V DC
[Ie] rated operational current	32 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3 for power circuit 50 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-1 for power circuit 32 A (at $\leq$ 60 °C) at $\leq$ 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

### Complementary

Motor power kW	7.5 kW at 220...230 V AC 50/60 Hz (AC-3) 15 kW at 380...400 V AC 50/60 Hz (AC-3) 15 kW at 415...440 V AC 50/60 Hz (AC-3) 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) 7.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 15 kW at 380...400 V AC 50/60 Hz (AC-3e) 15 kW at 415...440 V AC 50/60 Hz (AC-3e) 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)
Motor power hp	2 hp at 115 V AC 50/60 Hz for 1 phase motors 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 20 hp at 460/480 V AC 50/60 Hz for 3 phases motors 25 hp at 575/600 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

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

<b>[Icw] rated short-time withstand current</b>	260 A 40 °C - 10 s for power circuit 430 A 40 °C - 1 s for power circuit 60 A 40 °C - 10 min for power circuit 138 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
<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 - lth 50 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	2 W AC-3 5 W AC-1 2 W AC-3e
<b>[Ui] rated insulation voltage</b>	Power circuit: 690 V conforming to IEC 60947-4-1 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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	15 Mcycles
<b>Electrical durability</b>	1.65 Mcycles 32 A AC-3 at $U_e \leq 440$ V 1.4 Mcycles 50 A AC-1 at $U_e \leq 440$ V 1.65 Mcycles 32 A AC-3e at $U_e \leq 440$ V
<b>Control circuit type</b>	AC at 50/60 Hz standard
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 $U_c$ (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 $U_c$ (-40...60 °C):operational AC 50 Hz 0.85...1.1 $U_c$ (-40...60 °C):operational AC 60 Hz 1...1.1 $U_c$ (60...70 °C):operational AC 50/60 Hz
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	2...3 W at 50/60 Hz
<b>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C

<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 1 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 1...10 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.5...10 mm <sup>2</sup> - cable stiffness: solid without cable end
	Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: solid without cable end

<b>Tightening torque</b>	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	

<b>Auxiliary contact composition</b>	1 NO + 1 NC
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<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
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<b>Signalling circuit frequency</b>	25...400 Hz
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<b>Minimum switching voltage</b>	17 V for signalling circuit
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<b>Minimum switching current</b>	5 mA for signalling circuit
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<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
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<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 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 conforming to IEC 60529
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<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
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<b>Climatic withstand</b>	conforming to IACS E10 exposure to damp heat
	conforming to IEC 60947-1 Annex Q category D exposure to damp heat

<b>Permissible ambient air temperature around the device</b>	-40...60 °C 60...70 °C with derating
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to 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>	85 mm
<b>Width</b>	45 mm
<b>Depth</b>	92 mm
<b>Product weight</b>	0.375 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.000 cm
<b>Package 1 Width</b>	9.200 cm
<b>Package 1 Length</b>	11.200 cm
<b>Package 1 Weight</b>	404.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	8.354 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	160
<b>Package 3 Height</b>	45.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	76.016 kg

## Contractual warranty

<b>Warranty (in months)</b>	18
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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 >](#)



### Environmental footprint

Total lifecycle Carbon footprint	147 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	144 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.9 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Free of Substances of Very High Concern above the threshold</a>
PVC free	Yes

## Use Longer




### Lifetime extension

Repair	No
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## Use Again

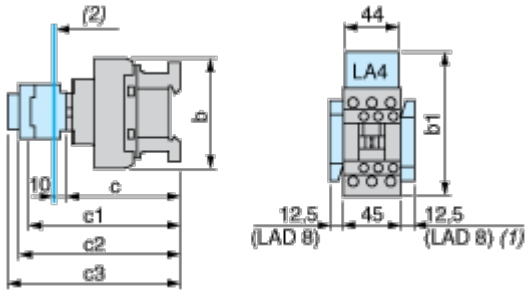


### Repack and remanufacture

Recyclability potential, in %	66
End of life manual availability	<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

Dimensions Drawings

Dimensions



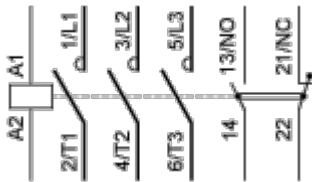
- (1) Including LAD 4BB
- (2) Minimum electrical clearance

LC1		D25...D38 (3-pole)
<b>b</b>	without add-on blocks	85
<b>b1</b>	with LAD 4BB	98
	with LA4 D•2	114 <sup>(1)</sup>
	with LA4 DF, DT	123 <sup>(1)</sup>
	with LA4 DW, DL	130 <sup>(1)</sup>
<b>c</b>	without cover or add-on blocks	90
	with cover, without add-on blocks	92
<b>c1</b>	with LAD N or C (2 or 4 contacts)	123
<b>c2</b>	with LA6 DK10, LAD 6K10	135
<b>c3</b>	with LAD T, R, S	143
	with LAD T, R, S and sealing cover	147
<b>(1)</b>	Including LAD 4BB.	

Connections and Schema

Wiring

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Offer Marketing Illustration

Product benefits / Features

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### TeSys Deca Contactors

#### Technical Benefits



- Deca green delivers a consistent low consumption range of contactors from 9 A to 80 A.
- Covers control voltage from 24 to 250 V, with same coils for AC and DC.
- Designed to meet the requirements of industrial and HVAC applications
- With IEC60335-1 compliance, improved fire resistance, and dust-proof auxiliaries
- Suitable for safety applications thanks to mechanically linked contacts and mirror contacts
- Outstanding breaking/making capacity up to 20 In with PLC direct connection

Offer Marketing Illustration

Product benefits / Features

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Offer Marketing Illustration

Product benefits / Features

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## TeSys Deca Contactors



### Reliable

Multi-standard solutions, high reliability, long mechanical and electrical durability for different sizes, and the most complete accessories.



### Energy efficiency

These electronic-coil contactors require up to 80 % less energy than electro-mechanical contactors.



### Universal

Multi standards certified (IEC, UL, CSA, CCC, EAC, Marine), Green Premium compliant (RoHS/REACH).



Image of product / Alternate images

Alternative

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