

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - $\leq 440$ V 32 A - 24 V DC coil

LC1D32BD

### Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-4 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	24 V DC

### 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>	30 Mcycles
<b>Electrical durability</b>	1.65 Mcycles 32 A AC-3 at Ue <= 440 V 1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.65 Mcycles 32 A AC-3e at Ue <= 440 V
<b>Control circuit type</b>	DC standard
<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.25 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
<b>Inrush power in W</b>	5.4 W (at 20 °C)
<b>Hold-in power consumption in W</b>	5.4 W at 20 °C
<b>Operating time</b>	63 ±15 % ms closing 20 ±20 % ms opening
<b>Time constant</b>	28 ms
<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

<b>Auxiliary contact composition</b>	1 NO + 1 NC
<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
<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 conforming to IEC 60529
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<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>	101 mm
<b>Net weight</b>	0.535 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>	585.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<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>	9.055 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	240
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	154.500 kg

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------

## 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.

[How this information helps you >](#)

### Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	45
---	----

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	Compliant with Exemptions
-------------------	---------------------------

SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
-------------	--------------------------------------

REACH Regulation	<a href="#">REACH Declaration</a>
------------------	-----------------------------------

China RoHS Regulation	<a href="#">China RoHS declaration</a>
-----------------------	--

PVC free	Yes
----------	-----

## Use Again

### Repack and remanufacture

Circularity Profile	<a href="#">End of Life Information</a>
---------------------	---

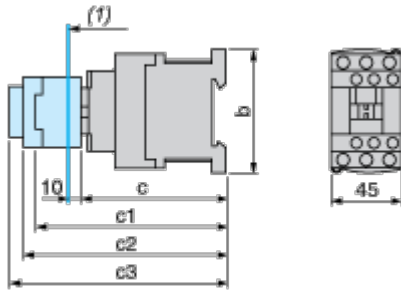
Take-back

No

---

Dimensions Drawings

Dimensions



(1) Minimum electrical clearance

LC1		D25...D38	D183...D323
<b>b</b>		85	99
<b>c</b>	without cover or add-on blocks	99	99
	with cover, without add-on blocks	101	101
<b>c1</b>	with LAD N or C (2 or 4 contacts)	132	132
<b>c2</b>	with LA6 DK10	144	144
<b>c3</b>	with LAD T, R, S	152	152
	with LAD T, R, S and sealing cover	156	156

Connections and Schema

Wiring

---

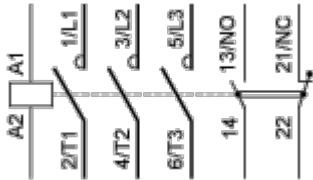




Image of product / Alternate images

Alternative

---



