

# Product datasheet

Specifications



## TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 48 V AC coil

Local distributor code: 381803162 LC1D18E7

EAN Code : 3389110349429

### Main

Range	TeSys TeSys Deca
Range of product	TeSys D TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur 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	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 18 A (at <60 °C) at <= 440 V AC AC-3e for power circuit

### Complementary

Motor power kW	4 kW at 220...230 V AC 50/60 Hz (AC-3) 7.5 kW at 380...400 V AC 50/60 Hz (AC-3) 9 kW at 415...440 V AC 50/60 Hz (AC-3) 10 kW at 500 V AC 50/60 Hz (AC-3) 10 kW at 660...690 V AC 50/60 Hz (AC-3) 4 kW at 400 V AC 50/60 Hz (AC-4) 4 kW at 220...230 V AC 50/60 Hz (AC-3e) 7.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 9 kW at 415...440 V AC 50/60 Hz (AC-3e) 10 kW at 500 V AC 50/60 Hz (AC-3e) 10 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor power hp	1 hp at 115 V AC 50/60 Hz for 1 phase motors 3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Pole contact composition	3 NO
Contact compatibility	M2
Protective cover	With
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC

<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>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<b>Overvoltage category</b>	III
<b>[Ith] conventional free air thermal current</b>	10 A (at 60 °C) for signalling circuit 32 A (at 60 °C) for power circuit
<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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	300 A at 440 V for power circuit conforming to IEC 60947
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
<b>Control circuit type</b>	AC at 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...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz
<b>Average impedance</b>	2.5 mOhm - Ith 32 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	2.5 W AC-1 0.8 W AC-3 0.8 W AC-3e
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V 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>Maximum operating rate</b>	3600 cyc/h 60 °C
<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>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Tightening torque</b>	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
<b>Mounting support</b>	Rail Plate
<b>Electrical durability</b>	1.65 Mcycles 18 A AC-3 at U <sub>e</sub> <= 440 V 1 Mcycles 32 A AC-1 at U <sub>e</sub> <= 440 V 1.65 Mcycles 18 A AC-3e at U <sub>e</sub> <= 440 V
<b>Mechanical durability</b>	15 Mcycles
<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>Operating altitude</b>	0...3000 m
<b>Compatibility code</b>	LC1D
<b>Product certifications</b>	GL RINA UL CSA DNV BV GOST LROS (Lloyds register of shipping) CCC

## Environment

<b>Climatic withstand</b>	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Mechanical robustness</b>	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms
<b>Height</b>	77 mm
<b>Width</b>	45 mm
<b>Depth</b>	86 mm
<b>Net weight</b>	0.33 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	358.0 g
<b>Package 1 Height</b>	5.0 cm
<b>Package 1 width</b>	9.2 cm
<b>Package 1 Length</b>	11.2 cm
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Weight</b>	7.442 kg
<b>Package 2 Height</b>	15.0 cm
<b>Package 2 width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	320
<b>Package 3 Weight</b>	127.072 kg
<b>Package 3 Height</b>	75.0 cm
<b>Package 3 width</b>	80.0 cm
<b>Package 3 Length</b>	60.0 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>

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<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes

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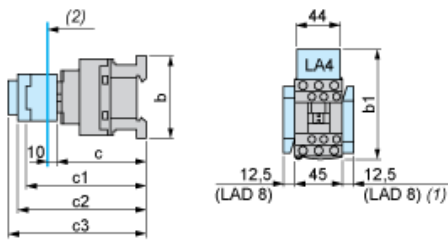
### **Contractual warranty**

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<b>Warranty</b>	18 months
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**Dimensions**



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

LC1		D09...D18	D093...D123	D099...D129
<b>b</b>	without add-on blocks	77	99	80
<b>b1</b>	with LAD 4BB	94	107	95.5
	with LA4 D•2	110 <sup>(1)</sup>	123 <sup>(1)</sup>	111.5 <sup>(1)</sup>
	with LA4 DF, DT	119 <sup>(1)</sup>	132 <sup>(1)</sup>	120.5 <sup>(1)</sup>
	with LA4 DW, DL	126 <sup>(1)</sup>	139 <sup>(1)</sup>	127.5 <sup>(1)</sup>
<b>c</b>	without cover or add-on blocks	84	84	84
	with cover, without add-on blocks	86	86	86
<b>c1</b>	with LAD N or C (2 or 4 contacts)	117	117	117
<b>c2</b>	with LA6 DK10, LAD 6K10	129	129	129
<b>c3</b>	with LAD T, R, S	137	137	137
	with LAD T, R, S and sealing cover	141	141	141
<b>(1)</b>	Including LAD 4BB.			

Wiring

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