

# Product data sheet

Specifications



TeSys Deca contactor , 3P(3 NO) , AC-3 , <= 440V, 150 A , 220V AC 50/60 Hz coil

LC1D150M7



## Main

Range	TeSys
Product name	TeSys D TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 150 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	40 kW at 220...230 V AC 50/60 Hz (AC-3) 75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415...440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4)
Motor power HP (UL / CSA)	40 hp at 200/208 V AC 50/60 Hz for 3 phases motors 50 hp at 230/240 V AC 50/60 Hz for 3 phases motors 100 hp at 460/480 V AC 50/60 Hz for 3 phases motors 125 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	220 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 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 1660 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<b>[Icw] rated short-time withstand current</b>	250 A 40 °C - 10 min for power circuit 580 A 40 °C - 1 min for power circuit 1200 A 40 °C - 10 s for power circuit 1400 A 40 °C - 1 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 60947-5-1 315 A gG at <= 690 V coordination type 1 for power circuit 250 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	0.6 mOhm - Ith 200 A 50 Hz for power circuit
<b>[Ui] rated insulation voltage</b>	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
<b>Electrical durability</b>	0.85 Mcycles 150 A AC-3 at Ue <= 440 V 1 Mcycles 200 A AC-1 at Ue <= 440 V
<b>Power dissipation per pole</b>	24 W AC-1 13.5 W AC-3
<b>Front cover</b>	With
<b>Mounting support</b>	Rail Plate
<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
<b>Product certifications</b>	CCC LROS (Lloyds register of shipping) GL GOST RINA CSA BV UL DNV UKCA
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²solid without cable end Power circuit: connector 1 cable(s) 10...120 mm²flexible without cable end Power circuit: connector 2 cable(s) 10...50 mm²flexible without cable end Power circuit: connector 1 cable(s) 10...120 mm²flexible with cable end Power circuit: connector 2 cable(s) 10...50 mm²flexible with cable end Power circuit: connector 1 cable(s) 10...120 mm²solid without cable end Power circuit: connector 2 cable(s) 10...50 mm²solid without cable end
<b>Tightening torque</b>	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
<b>Operating time</b>	20...35 ms closing 40...75 ms opening
<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>	8 Mcycles
<b>Maximum operating rate</b>	1200 cyc/h 60 °C

## Complementary

<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.3...0.5 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.15 Uc (-40...55 °C):operational AC 50/60 Hz 1...1.15 Uc (55...70 °C):operational AC 50/60 Hz
<b>Inrush power in VA</b>	280...350 VA 60 Hz cos phi 0.9 (at 20 °C) 280...350 VA 50 Hz cos phi 0.9 (at 20 °C)

Hold-in power consumption in VA	2...18 VA 60 Hz cos phi 0.9 (at 20 °C) 2...18 VA 50 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	3...4.5 W at 50/60 Hz
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
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Insulation resistance	> 10 MOhm for signalling circuit

## Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	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: 6 Gn for 11 ms
Height	158 mm
Width	120 mm
Depth	136 mm
Net weight	2.5 kg

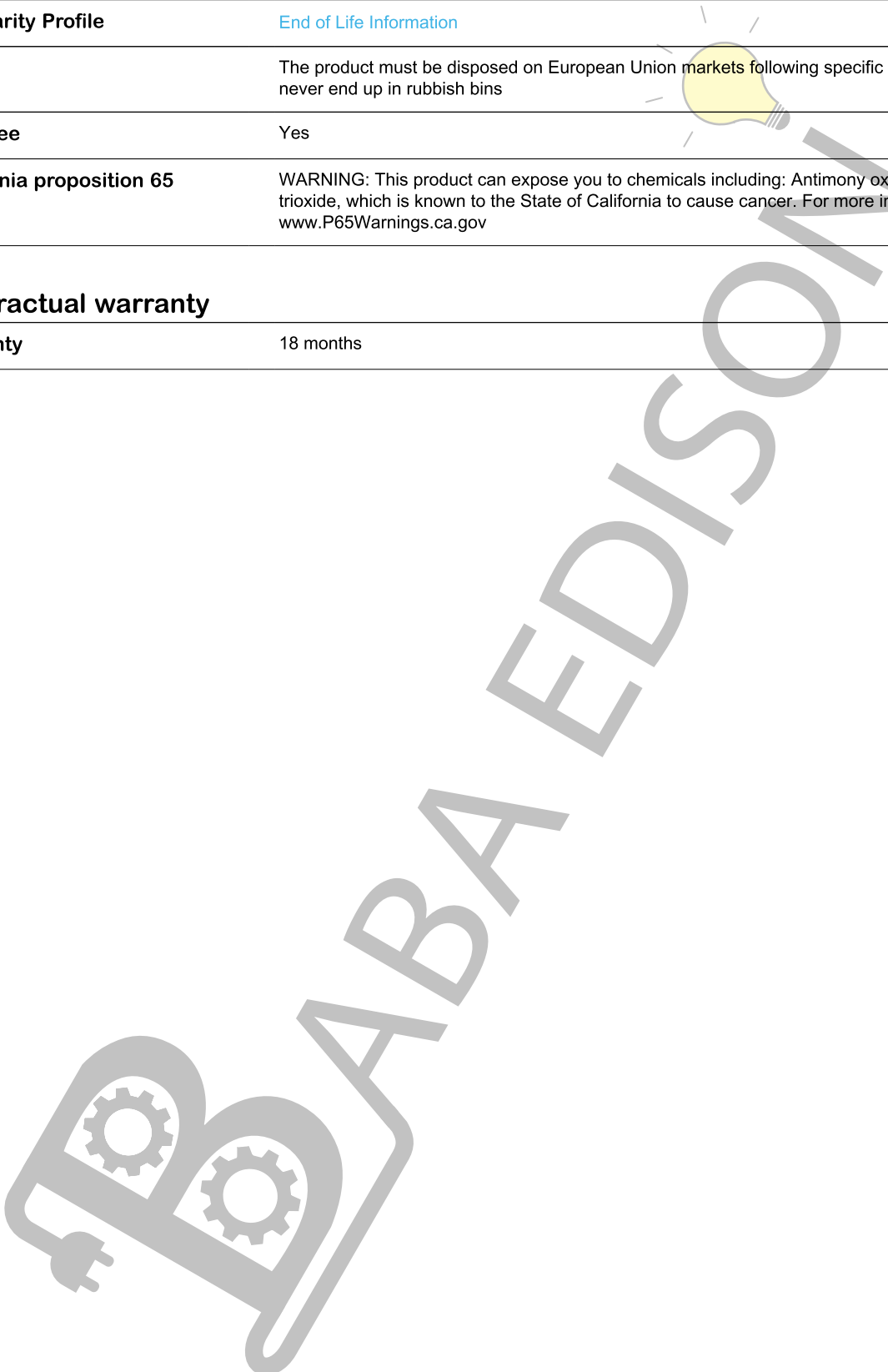
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	2.49 kg
Package 1 Height	21 cm
Package 1 width	20 cm
Package 1 Length	23.5 cm
Unit Type of Package 2	P06
Number of Units in Package 2	27
Package 2 Weight	79.819 kg
Package 2 Height	73.5 cm
Package 2 width	80 cm
Package 2 Length	60 cm
Package 3 Height	80 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
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REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
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
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="#">www.P65Warnings.ca.gov</a>
<b>Contractual warranty</b>	
Warranty	18 months

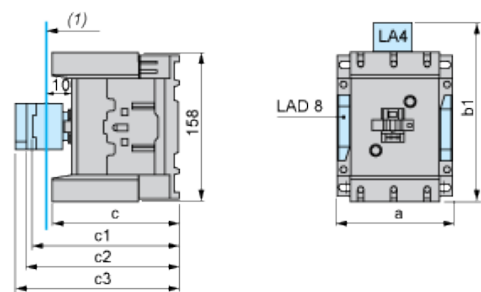


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Dimensions Drawings

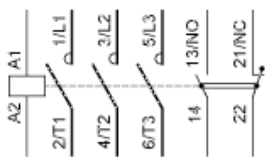
Dimensions



(1) Minimum electrical clearance

LC1		D115 and D150 (3-pole)
a		120
b1	with LA4 DA2	174
	with LA4 DF, DT	185
	with LA4 DM, DL	188
	with LA4 DW	188
c	without cover or add-on blocks	132
	with cover, without add-on blocks	136
c1	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK20	155
c3	with LAD T, R, S	168
	with LAD T, R, S and sealing cover	172

Wiring



BABA EDISON