

# Product data sheet

Specifications



## TeSys Deca contactor, 3P(3NO), AC-3/ AC-3e, <=440V 65A, 220V AC 50/60Hz coil

LC1D65AM7

### Main

Range	TeSys TeSys Deca
Range of product	TeSys D TeSys Deca
Product or component type	Contactors
Device short name	LC1D
Contactors application	Motor control Resistive load
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	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit

### Complementary

Motor power kW	11 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 220...230 V AC 50/60 Hz (AC-3) 30 kW at 380...400 V AC 50/60 Hz (AC-3) 37 kW at 500 V AC 50/60 Hz (AC-3) 37 kW at 660...690 V AC 50/60 Hz (AC-3) 18.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 30 kW at 380...400 V AC 50/60 Hz (AC-3e) 37 kW at 500 V AC 50/60 Hz (AC-3e) 37 kW at 660...690 V AC 50/60 Hz (AC-3e)
Motor power hp	40 hp at 460/480 V AC 50/60 Hz for 3 phases motors 5 hp at 115 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 1 phase motors 20 hp at 200/208 V AC 50/60 Hz for 3 phases motors 20 hp at 230/240 V AC 50/60 Hz for 3 phases motors 50 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
[Ui] rated insulation voltage	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  
 Power circuit: 690 V conforming to IEC 60947-4-1

<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 80 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 1000 A at 440 V for power circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	1000 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 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 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>	1.5 mOhm - I <sub>th</sub> 80 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	9.6 W AC-1 6.3 W AC-3 6.3 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>	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Tightening torque</b>	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2 - on EverLink BTR screw connectors
<b>Mounting support</b>	Rail Plate
<b>Electrical durability</b>	1.4 Mcycles 80 A AC-1 at U <sub>e</sub> <= 440 V 1.45 Mcycles 65 A AC-3 at U <sub>e</sub> <= 440 V 1.45 Mcycles 65 A AC-3e at U <sub>e</sub> <= 440 V
<b>Mechanical durability</b>	6 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>	UL CCC GOST CSA

## 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 closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms
<b>Height</b>	122 mm
<b>Width</b>	55 mm
<b>Depth</b>	120 mm
<b>Net weight</b>	0.86 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>	923.0 g
<b>Package 1 Height</b>	6.3 cm
<b>Package 1 width</b>	13.5 cm
<b>Package 1 Length</b>	15.3 cm
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	10
<b>Package 2 Weight</b>	10.011 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

## 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> Pro-active China RoHS declaration (out of China RoHS legal scope)
<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
<b>California proposition 65</b>	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="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

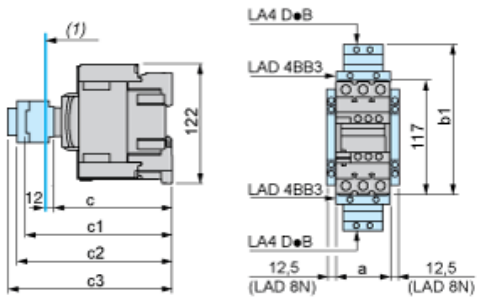
# Contractual warranty

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Warranty

18 months

**Dimensions**



(1) Minimum electrical clearance

LC1		D40A...D65A
a		55
b1	with LA4 D•2	–
	with LA4 DB3 or LAD 4BB3	136
	with LA4 DF, DT	157
	with LA4 DM, DW, DL	166
c	without cover or add-on blocks	118
	with cover, without add-on blocks	120
c1	with LAD N (1 contact)	–
	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK10, LAD 6DK	163
c3	with LAD T, R, S	171
	with LAD T, R, S and sealing cover	175

Wiring

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