

# Product data sheet

Specifications



## Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 95A, 110V DC standard coil

LC1D95FD

### Main

Range	TeSys
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-3e AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	95 A (at <60 °C) at <= 440 V AC-3 for power circuit 125 A (at <60 °C) at <= 690 V AC-1 for power circuit 95 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	110 V DC

### Complementary

Motor power kW	25 kW at 220...230 V AC 50 Hz (AC-3) 45 kW at 380...400 V AC 50 Hz (AC-3) 45 kW at 415...440 V AC 50 Hz (AC-3) 55 kW at 500 V AC 50 Hz (AC-3) 45 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 400 V AC 50 Hz (AC-4) 25 kW at 220...230 V AC 50 Hz (AC-3e) 45 kW at 380...400 V AC 50 Hz (AC-3e) 45 kW at 415...440 V AC 50 Hz (AC-3e) 55 kW at 500 V AC 50 Hz (AC-3e) 45 kW at 660...690 V AC 50 Hz (AC-3e)
Motor power hp	7.5 hp at 120 V AC 60 Hz for 1 phase motors 15 hp at 230/240 V AC 60 Hz for 1 phase motors 30 hp at 200/208 V AC 60 Hz for 3 phases motors 30 hp at 230/240 V AC 60 Hz for 3 phases motors 60 hp at 460/480 V AC 60 Hz for 3 phases motors 60 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M9
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 125 A (at 60 °C) for power circuit

<b>Rms rated making capacity</b>	1100 A at 440 V AC for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
<b>Rated breaking capacity</b>	1100 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	1100 A 40 °C - 1 s for power circuit 800 A 40 °C - 10 s for power circuit 400 A 40 °C - 1 min for power circuit 135 A 40 °C - 10 min for power circuit 140 A - 100 ms for signalling circuit 120 A - 500 ms for signalling circuit 100 A - 1 s for signalling circuit
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 200 A gG at ≤ 690 V coordination type 1 for power circuit 160 A gG at ≤ 690 V coordination type 2 for power circuit
<b>Average impedance</b>	0.8 mOhm - lth 125 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	12.5 W AC-1 7.2 W AC-3 7.2 W AC-3e
<b>[Ui] rated insulation voltage</b>	Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	8 kV conforming to IEC 60947
<b>Safety reliability level</b>	B10d = 1.3 Mcycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20 Mcycles contactor with mechanical load conforming to EN/ISO 13849-1
<b>Mechanical durability</b>	10 Mcycles
<b>Electrical durability</b>	1.2 Mcycles 95 A AC-3 1.3 Mcycles 125 A AC-1 1.2 Mcycles 95 A AC-3e
<b>Control circuit type</b>	DC standard
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.85...1.1 Uc (-40...55 °C):operational DC 1...1.1 Uc (55...70 °C):operational DC
<b>Inrush power in W</b>	22 W (at 20 °C)
<b>Hold-in power consumption in W</b>	22 W at 20 °C
<b>Operating time</b>	95...130 ms closing 20...35 ms opening
<b>Time constant</b>	75 ms
<b>Maximum operating rate</b>	3600 cyc/h 60 °C
<b>Connections - terminals</b>	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...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: 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: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 2 4...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 2 4...16 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: connector 1 4...50 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: connector 2 4...25 mm <sup>2</sup> - cable stiffness: solid 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 - with screwdriver flat Ø 6 to Ø 8 mm 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>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>	EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-5-1 GB/T 14048.4
<b>Product certifications</b>	IECEE CB Scheme CCC EAC LROS (Lloyds register of shipping) RINA BV DNV-GL
<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
<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) Shocks contactor open (8 Gn for 11 ms) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor closed (10 Gn for 11 ms)
<b>Height</b>	127 mm
<b>Width</b>	85 mm
<b>Depth</b>	186 mm
<b>Net weight</b>	2.61 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>	21.0 cm
<b>Package 1 Width</b>	10.0 cm
<b>Package 1 Length</b>	14.0 cm
<b>Package 1 Weight</b>	2.541 kg

## 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>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</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

## Contractual warranty

<b>Warranty</b>	18 months
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## Recommended replacement(s)