

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 80A, 60HP at 480VAC, 3 phase, 3 pole, 3 NO, 110VAC 50/60Hz coil, open style

LC1D80AF7

**Product availability : Stock - Normally stocked in distribution facility**

**Price\* : 426.00 USD**

## Main

<b>Range</b>	TeSys TeSys Deca
<b>Range of Product</b>	TeSys Deca
<b>Product or Component Type</b>	Contactors
<b>Device short name</b>	LC1D
<b>Contactors application</b>	Motor control Resistive load
<b>Utilisation category</b>	AC-1 AC-4 AC-3 AC-3e
<b>Poles description</b>	3P
<b>[Ue] rated operational voltage</b>	Power circuit 690 V AC 25...400 Hz Power circuit 300 V DC
<b>[Ie] rated operational current</b>	80 A 140 °F (60 °C) <= 440 V AC-1 power circuit 66 A 140 °F (60 °C) <= 440 V AC-3 power circuit 66 A 140 °F (60 °C) <= 440 V AC-3e power circuit
<b>[Uc] control circuit voltage</b>	110 V AC 50/60 Hz

## Complementary

<b>Motor power kW</b>	18.5 kW 220...230 V AC 50 Hz AC-3) 37 kW 380...400 V AC 50 Hz AC-3) 37 kW 415 V AC 50 Hz AC-3) 37 kW 440 V AC 50 Hz AC-3) 37 kW 500 V AC 50 Hz AC-3) 37 kW 660...690 V AC 50 Hz AC-3)
<b>Maximum Horse Power Rating</b>	5 hp 115 V at AC 60 Hz for 1 phase 10 hp 230/240 V at AC 60 Hz for 1 phase 20 hp 200/208 V at AC 60 Hz for 3 phase 20 hp 230/240 V at AC 60 Hz for 3 phase 40 hp 460/480 V at AC 60 Hz for 3 phase 50 hp 575/600 V at AC 60 Hz for 3 phase
<b>Compatibility code</b>	LC1D
<b>Pole contact composition</b>	3 NO
<b>Contact compatibility</b>	M2
<b>Protective cover</b>	With
<b>[Ith] conventional free air thermal current</b>	10 A 140 °F (60 °C) signalling circuit 80 A 140 °F (60 °C) power circuit

\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Irms rated making capacity</b>	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 1000 A 440 V AC power circuit IEC 60947
<b>Rated breaking capacity</b>	1000 A 440 V power circuit IEC 60947
<b>[Icw] rated short-time withstand current</b>	520 A 104 °F (40 °C) - 10 s power circuit 900 A 104 °F (40 °C) - 1 s power circuit 110 A 104 °F (40 °C) - 10 min power circuit 260 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
<b>Associated fuse rating</b>	10 A gG signalling circuit IEC 60947-5-1 125 A gG <= 690 V type 1 power circuit 125 A gG <= 690 V type 2 power circuit
<b>Average impedance</b>	1.5 mOhm - lth 80 A 50 Hz power circuit
<b>Power dissipation per pole</b>	9.6 W AC-1 6.5 W AC-3 6.5 W AC-3e
<b>[Ui] rated insulation voltage</b>	Signalling circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-4-1
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	6 Mcycles
<b>Electrical durability</b>	0.7 Mcycles 80 A AC-1 <= 440 V 1 Mcycles 66 A AC-3 <= 440 V 1 Mcycles 66 A AC-3e <= 440 V
<b>Control circuit type</b>	AC 50/60 Hz standard
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz
<b>Inrush power in VA</b>	140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C))
<b>Heat dissipation</b>	4...5 W 50/60 Hz
<b>Operating time</b>	4...19 ms opening 12...26 ms closing
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Connections - terminals</b>	Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid Power circuit EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) solid Power circuit EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) solid Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible Power circuit EverLink BTR screw connectors 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) flexible Power circuit EverLink BTR screw connectors 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible
<b>Tightening torque</b>	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal 0.16 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
<b>Auxiliary contact composition</b>	1 NO + 1 NC

<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching voltage</b>	17 V signalling circuit
<b>Minimum switching current</b>	5 mA signalling circuit
<b>Insulation resistance</b>	> 10 MOhm 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 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
<b>Product Certifications</b>	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)
<b>IP degree of protection</b>	IP20 front face IEC 60529
<b>Protective treatment</b>	THIEC 60068-2-30
<b>Climatic withstand</b>	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562 °F (850 °C) 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 10 Gn for 11 ms)
<b>Height</b>	4.80 in (122 mm)
<b>Width</b>	2.17 in (55 mm)
<b>Depth</b>	4.72 in (120 mm)
<b>Net Weight</b>	1.90 lb(US) (0.86 kg)

## Ordering and shipping details

<b>Category</b>	22357-CTR, TESYS D, OPEN, 40-65A AC
<b>Discount Schedule</b>	I12
<b>GTIN</b>	3606481312136
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.44 in (6.200 cm)
<b>Package 1 Width</b>	5.31 in (13.500 cm)

<b>Package 1 Length</b>	6.10 in (15.500 cm)
<b>Package 1 Weight</b>	32.59 oz (924.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	5.91 in (15.000 cm)
<b>Package 2 Width</b>	11.81 in (30.000 cm)
<b>Package 2 Length</b>	15.75 in (40.000 cm)
<b>Package 2 Weight</b>	21.63 lb(US) (9.811 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>	<a href="#">Yes</a>
<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)