Product data sheet

Specifications





IEC contactor, TeSys Deca, nonreversing, 80A, 60HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 200VAC 60Hz coil, open style

LC1D80L6

Product availability: Stock - Normally stocked in distribution facility

Price*: 363.00 USD

Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-3e AC-4 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit <= 300 V DC 25400 Hz Power circuit <= 690 V AC
[le] Rated Operational Current	125 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	200 V AC 60 Hz

Complementary

Motor Power Kw	22 kW at 220230 V AC 50/60 Hz (AC-3)
	37 kW at 380400 V AC 50/60 Hz (AC-3)
	45 kW at 415440 V AC 50/60 Hz (AC-3)
	55 kW at 500 V AC 50/60 Hz (AC-3)
	45 kW at 660690 V AC 50/60 Hz (AC-3)
	15 kW at 400 V AC 50/60 Hz (AC-4)
	22 kW at 220230 V AC 50/60 Hz (AC-3e)
	37 kW at 380400 V AC 50/60 Hz (AC-3e)
	45 kW at 415440 V AC 50/60 Hz (AC-3e)
	55 kW at 500 V AC 50/60 Hz (AC-3e)
	45 kW at 660690 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	7.5 hp at 120 V AC 50/60 Hz for 1 phase motors
	15 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	30 hp at 200/208 V AC 50/60 Hz for 3 phase motors
	30 hp at 230/240 V AC 50/60 Hz for 3 phase motors
	60 hp at 460/480 V AC 50/60 Hz for 3 phase motors
	60 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With

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

[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 125 A (at 140 °F (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 1100 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	640 A 104 °F (40 °C) - 10 s for power circuit 990 A 104 °F (40 °C) - 1 s for power circuit 135 A 104 °F (40 °C) - 10 min for power circuit 320 A 104 °F (40 °C) - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	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
Average Impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power Dissipation Per Pole	5.1 W AC-3 12.5 W AC-1 5.1 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA
	Signalling circuit 600 V UL
Overvoltage Category	
Overvoltage Category Pollution Degree	Signalling circuit 600 V UL
	Signalling circuit 600 V UL
Pollution Degree [Uimp] Rated Impulse Withstand	Signalling circuit 600 V UL III 3
Pollution Degree [Uimp] Rated Impulse Withstand Voltage	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V AC 60 Hz
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3e <= 440 V AC 60 Hz Without built-in suppressor module 0.851.1 Uc -40131 °F (-4055 °C) operational AC 60 Hz 0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 60 Hz
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V AC 60 Hz Without built-in suppressor module 0.851.1 Uc -40131 °F (-4055 °C) operational AC 60 Hz 0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 60 Hz 11.1 Uc 131158 °F (5570 °C) operational AC 60 Hz
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V AC 60 Hz Without built-in suppressor module 0.851.1 Uc -40131 °F (-4055 °C) operational AC 60 Hz 0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 60 Hz 11.1 Uc 131158 °F (5570 °C) operational AC 60 Hz
Pollution Degree [Uimp] Rated Impulse Withstand Voltage Safety Reliability Level Mechanical Durability Electrical Durability Control Circuit Type Coil Technology Control Circuit Voltage Limits Inrush Power In Va Hold-In Power Consumption In Va	Signalling circuit 600 V UL III 3 8 kV IEC 60947 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 10 Mcycles 0.8 Mcycles 125 A AC-1 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V 1.5 Mcycles 80 A AC-3 <= 440 V AC 60 Hz Without built-in suppressor module 0.851.1 Uc -40131 °F (-4055 °C) operational AC 60 Hz 0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 60 Hz 11.1 Uc 131158 °F (5570 °C) operational AC 60 Hz 220 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))

Connections - Terminals	Control circuit: screw clamp terminals 2 0.000.00 in² (12.5 mm²) - cable stiffness:
	flexible with cable end Control circuit: screw clamp terminals 1 0.000.00 in² (12.5 mm²) - cable stiffness:
	flexible with cable end
	Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: flexible without cable end
	Control circuit: screw clamp terminals 1 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end
	Control circuit: screw clamp terminals 2 0.000.01 in² (14 mm²) - cable stiffness: solid without cable end
	Power circuit: connector 1 0.010.08 in² (450 mm²) - cable stiffness: flexible without cable end
	Power circuit: connector 2 0.010.04 in² (425 mm²) - cable stiffness: flexible without cable end
	Power circuit: connector 1 0.010.08 in² (450 mm²) - cable stiffness: flexible with cable end
	Power circuit: connector 2 0.010.02 in² (416 mm²) - cable stiffness: flexible with cable end
	Power circuit: connector 1 0.010.08 in² (450 mm²) - cable stiffness: solid without
	cable end Power circuit: connector 2 0.010.04 in² (425 mm²) - cable stiffness: solid without cable end
Tightening Torque	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm
	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals Philips No 2 Power circuit 106.21 lbf.in (12 N.m) connector flat Ø 6 to Ø 8 mm
	Power circuit 106.21 lbf.in (12 N.m) connector hexagonal 0.16 in (4 mm)
	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals pozidriv No 2
Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling Circuit Frequency	25400 Hz
Minimum Switching Voltage	17 V for signalling circuit
Minimum Switching Current	5 mA for signalling circuit
Insulation Resistance	> 10 MOhm 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
Mounting Support	Rail Plate
	i late
Environment	
Standards	CSA C22.2 No 14
	EN 60947-4-1 EN 60947-5-1
	IEC 60947-4-1
	IEC 60947-5-1
	UL 508
Product Certifications	BV CSA
	UL
	LROS (Lloyds register of shipping)
	GL DNV
	RINA
	GOST CCC
Ip Degree Of Protection	IP20 front face IEC 60529
Protective Treatment	THIEC 60068-2-30
Climatic Withstand	IACS E10 exposure to damp heat

-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating

Permissible Ambient Air Temperature Around The Device

Operating Altitude	09842.52 ft (03000 m)	
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1	
Flame Retardance	V1 conforming to UL 94	
Mechanical Robustness	Vibrations contactor open 2 Gn, 5300 Hz) Shocks contactor open 8 Gn for 11 ms) Vibrations contactor closed 3 Gn, 5300 Hz) Shocks contactor closed 10 Gn for 11 ms)	
Height	5.00 in (127 mm)	
Width	3.35 in (85 mm)	
Depth	5.12 in (130 mm)	
Net Weight	3.51 lb(US) (1.59 kg)	

Ordering and shipping details

Category	US10I1222359
Discount Schedule	0112
Gtin	3389110441628
Returnability	Yes
Country Of Origin	US

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	6.10 in (15.500 cm)
Package 1 Width	3.74 in (9.500 cm)
Package 1 Length	5.31 in (13.500 cm)
Package 1 Weight	3.53 lb(US) (1.600 kg)
Unit Type Of Package 2	S03
Number Of Units In Package 2	8
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	29.15 lb(US) (13.220 kg)
Unit Type Of Package 3	P06
Number Of Units In Package 3	64
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	250.80 lb(US) (113.760 kg)

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

②	Reach Free Of Svhc
Ø	Toxic Heavy Metal Free
Ø	Mercury Free
Ø	Rohs Exemption Information Yes
②	Pvc Free

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	No need of specific recycling operations
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 www.P65Warnings.ca.gov