Product data sheet

Specifications

IEC contactor, TeSys Deca, nonreversing, 150A, 100HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VAC 50/60Hz coil, open

LC1D150F7

Product availability : Stock - Normally stocked in distribution facility

Price* : 696.00 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-4 AC-3 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	200 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit 150 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 150 A 140 °F (60 °C)) <= 440 V AC AC-3e power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

Complementary

Motor power kW	40 kW 220...230 V AC 50/60 Hz AC-3) 75 kW 380...400 V AC 50/60 Hz AC-3) 80 kW 415...440 V AC 50/60 Hz AC-3) 90 kW 500 V AC 50/60 Hz AC-3) 100 kW 660...690 V AC 50/60 Hz AC-3) 75 kW 1000 V AC 50/60 Hz AC-3) 22 kW 400 V AC 50/60 Hz AC-4) 40 kW 220...230 V AC 50/60 Hz AC-3e) 75 kW 380...400 V AC 50/60 Hz AC-3e) 80 kW 415...440 V AC 50/60 Hz AC-3e) 90 kW 500 V AC 50/60 Hz AC-3e) 100 kW 660...690 V AC 50/60 Hz AC-3e) 75 kW 1000 V AC 50/60 Hz AC-3e)
Maximum Horse Power Rating	40 hp 200/208 V at AC 50/60 Hz for 3 phase 50 hp 230/240 V at AC 50/60 Hz for 3 phase 100 hp 460/480 V at AC 50/60 Hz for 3 phase 125 hp 575/600 V at AC 50/60 Hz for 3 phase
Compatibility code	LC1D
Pole contact composition	3 NO

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

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

Contact compatibility	M13
Protective cover	With
[Ith] conventional free air thermal current	200 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 1660 A 440 V power circuit IEC 60947
Rated breaking capacity	1400 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	250 A 104 °F (40 °C) - 10 min power circuit 580 A 104 °F (40 °C) - 1 min power circuit 1200 A 104 °F (40 °C) - 10 s power circuit 1400 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	10 A gG signalling circuit IEC 60947-5-1 315 A gG <= 690 V type 1 power circuit 250 A gG <= 690 V type 2 power circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz power circuit
Power dissipation per pole	24 W AC-1 13.5 W AC-3 13.5 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	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8 Mcycles
Electrical durability	0.85 Mcycles 150 A AC-3 <= 440 V 1 Mcycles 200 A AC-1 <= 440 V 0.85 Mcycles 150 A AC-3e <= 440 V
Control circuit type	AC 50/60 Hz standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.5 Uc -40…158 °F (-40…70 °C) drop-out AC 50/60 Hz 0.8...1.15 Uc -40…131 °F (-40…55 °C) operational AC 50/60 Hz 1...1.15 Uc 131…158 °F (55…70 °C) operational AC 50/60 Hz
Inrush power in VA	280…350 VA 60 Hz 0.9 68 °F (20 °C)) 280…350 VA 50 Hz 0.9 68 °F (20 °C))
Hold-in power consumption in VA	2…18 VA 60 Hz 0.9 68 °F (20 °C)) 2…18 VA 50 Hz 0.9 68 °F (20 °C))
Heat dissipation	3…4.5 W 50/60 Hz
Operating time	20...35 ms closing 40...75 ms opening
Maximum operating rate	1200 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) flexible with cable end Control circuit screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) flexible with cable end Control circuit screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) flexible without cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) flexible without cable end Control circuit screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) solid without cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) solid without cable end Power circuit connector 1 0.02…0.19 in² (10…120 mm²) flexible without cable end Power circuit connector 2 0.02…0.08 in² (10…50 mm²) flexible without cable end Power circuit connector 1 0.02…0.19 in² (10…120 mm²) flexible with cable end Power circuit connector 2 0.02…0.08 in² (10…50 mm²) flexible with cable end Power circuit connector 1 0.02…0.19 in² (10…120 mm²) solid without cable end Power circuit connector 2 0.02…0.08 in² (10…50 mm²) 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 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	25...400 Hz
Minimum switching voltage	17 V signalling circuit
Minimum switching current	5 mA signalling circuit
Insulation resistance	> 10 MOhm 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	Plate Rail

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	CCC GOST DNV UL LROS (Lloyds register of shipping) BV GL RINA CSA UKCA CE
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	-40…140 °F (-40…60 °C) 140…158 °F (60…70 °C) with derating
Operating altitude	0...9842.52 ft (0...3000 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, 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	6.22 in (158 mm)
Width	4.72 in (120 mm)
Depth	5.35 in (136 mm)
Net Weight	5.51 lb(US) (2.5 kg)

Ordering and shipping details

Category	22359-CTR,TESYS D,OPEN,80-150A AC&DC
Discount Schedule	I12
GTIN	3389110527247
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	7.87 in (20.000 cm)
Package 1 Width	7.87 in (20.000 cm)
Package 1 Length	9.84 in (25.000 cm)
Package 1 Weight	5.49 lb(US) (2.490 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	27
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)
Package 2 Weight	176.88 lb(US) (80.230 kg)

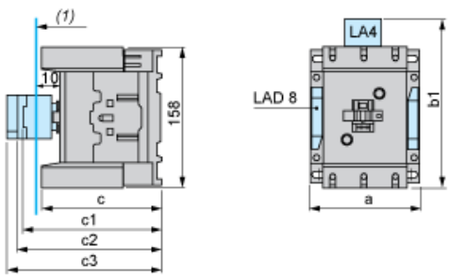
Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Contractual warranty

Warranty	18 months

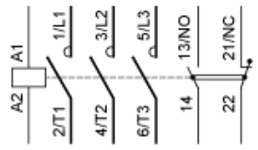
Dimensions



(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



Recommended replacement(s)