

Product data sheet

Specifications



Contactor, TeSys Deca, 3P(3 NO), AC-3/AC-3e, 0 to 440V, 65A, 120VAC 60Hz coil

LC1D65AG7

Main

Range	TeSys TeSys Deca
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-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 140 °F (60 °C) <= 440 V AC AC-1 power circuit 65 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 65 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit
[Uc] control circuit voltage	120 V AC 60 Hz

Complementary

Motor power kW	11 kW 400 V AC 50/60 Hz AC-4) 18.5 kW 220...230 V AC 50/60 Hz AC-3) 30 kW 380...400 V AC 50/60 Hz AC-3) 37 kW 500 V AC 50/60 Hz AC-3) 37 kW 660...690 V AC 50/60 Hz AC-3) 18.5 kW 220...230 V AC 50/60 Hz AC-3e) 30 kW 380...400 V AC 50/60 Hz AC-3e) 37 kW 500 V AC 50/60 Hz AC-3e) 37 kW 660...690 V AC 50/60 Hz AC-3e)
Motor power hp	40 hp 460/480 V AC 50/60 Hz 3 phases 5 hp 115 V AC 50/60 Hz 1 phase 10 hp 230/240 V AC 50/60 Hz 1 phase 20 hp 200/208 V AC 50/60 Hz 3 phases 20 hp 230/240 V AC 50/60 Hz 3 phases 50 hp 575/600 V AC 50/60 Hz 3 phases
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M2
Protective cover	With
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 80 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 1000 A 440 V power circuit IEC 60947
Rated breaking capacity	1000 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	640 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
Associated fuse rating	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
Average impedance	1.5 mOhm - Ith 80 A 50 Hz power circuit
Power dissipation per pole	9.6 W AC-1 6.3 W AC-3 6.3 W AC-3e
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 690 V IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 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	6 Mcycles
Electrical durability	1.4 Mcycles 80 A AC-1 <= 440 V 1.45 Mcycles 65 A AC-3 <= 440 V 1.45 Mcycles 65 A AC-3e <= 440 V
Control circuit type	AC 60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 60 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 60 Hz
Inrush power in VA	140 VA 60 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz 0.3 68 °F (20 °C))
Heat dissipation	4...5 W 60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid without cable end Power circuit screw connection 1 0.00...0.05 in ² (1...35 mm ²) flexible without cable end Power circuit screw connection 2 0.00...0.04 in ² (1...25 mm ²) flexible without cable end Power circuit screw connection 1 0.00...0.05 in ² (1...35 mm ²) flexible with cable end Power circuit screw connection 2 0.00...0.04 in ² (1...25 mm ²) flexible with cable end Power circuit screw connection 1 0.00...0.05 in ² (1...35 mm ²) solid without cable end Power circuit screw connection 2 0.00...0.04 in ² (1...25 mm ²) solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors Phillips No 2 Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) EverLink BTR screw connectors 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	Rail Plate

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 IEC 60335-1
Product certifications	GOST UL CSA CCC
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D 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...3000 m
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 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 10 Gn for 11 ms)
Height	4.80 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Net weight	1.90 lb(US) (0.86 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.44 in (6.2 cm)
Package 1 Width	5.35 in (13.6 cm)
Package 1 Length	6.02 in (15.3 cm)
Package 1 Weight	33.26 oz (943.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)

Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	21.80 lb(US) (9.887 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
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
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Recommended replacement(s)