Product data sheet
Characteristics

LC1D65004G7
IEC contactor, TeSys D, nonreversing, 80A resistive, 4 pole, 4 NO, 120VAC 50/60Hz coil, open style

Main

Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	4P
[Ue] rated operational voltage	Power circuit 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <140 °F (60 °C)) at 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	120 V AC 50/60 Hz

Complementary

Compatibility code	LC1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 80 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	1000 A at 440 V AC for power circuit conforming to IEC 60947 140 A AC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 125 A at 690 V coordination type 1 for power circuit 125 A at 690 V coordination type 2 for power circuit
Average impedance	1 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.3 W AC-3 9.6 W AC-1
[Ui] rated insulation voltage	Control circuit 600 V CSA[RETURN]Control circuit 600 V UL[RETURN]Power circuit 600 V CSA[RETURN]Power circuit 600 V UL[RETURN]Control circuit 690 V IEC 60947-4-1[RETURN]Power circuit 690 V IEC 60947-4-1
Overvoltage category	III
[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	6000000 cycles
Control circuit type	AC 50/60 Hz standard
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.6 Uc 140 °F (60 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc 140 °F (60 °C) operational AC 50/60 Hz
Inrush power in VA	140 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	4…5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening

Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminal 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 0.00…0.05 in² (1…35 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 0.00…0.05 in² (1…35 mm²) - cable stiffness: solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal flat Ø 6 mm hexagonal Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal Philips No 2 hexagonal Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2 Power circuit 44.25 lbf.in (5 N.m) screw clamp terminal pozidriv No 2
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Mounting Support	Rail Plate

Environment

Standards	EN/IEC 60947-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-4-1
Product Certifications	RINA[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]GL[RETURN]DNV[RETURN]LROS (Lloyds register of shipping)[RETURN]BV[RETURN]UKCA
IP degree of protection	IP2X VDE 0106
Protective treatment	THIEC 60068-2-30
Permissible ambient air temperature around the device	23…140 °F (-5…60 °C) -40…158 °F (-40…70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 8 Gn for 11 ms) Shocks contactor closed 10 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 3 Gn, 5...300 Hz)
Height	4.80 in (122 mm)
Width	3.35 in (85 mm)
Depth	5.12 in (130 mm)

Ordering and shipping details

Category	US10I1222357
Discount Schedule	0I12
GTIN	3389110265484
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.58 in (9.100 cm)
Package 1 Width	4.96 in (12.600 cm)
Package 1 Length	5.20 in (13.200 cm)
Package 1 Weight	3.13 lb(US) (1.420 kg)

Unit Type of Package 2	P06
Number of Units in Package 2	128
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	31.50 in (80.000 cm)
Package 2 Length	23.62 in (60.000 cm)
Package 2 Weight	418.35 lb(US) (189.760 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
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
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
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