Product data sheet
Characteristics

LC1D80004E7
IEC contactor, TeSys Deca, nonreversing, 125A resistive, 4 pole, 4 NO, 48VAC 50/60Hz coil, open style

Main

Range	TeSys
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 <= 300 V DC 25...400 Hz Power circuit <= 690 V AC
[Ie] 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 55 A (at <140 °F (60 °C)) at <= 400 V AC AC-4 for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

Complementary

Motor power kW	22 KW at 220...230 V AC 50/60 Hz 37 KW at 380...400 V AC 50/60 Hz 45 KW at 660...690 V AC 50/60 Hz 55 KW at 500 V AC 50/60 Hz 45 kW at 415...440 V AC 50/60 Hz
Compatibility code	LC1D
Pole contact composition	4 NO
Contact compatibility	M1
Protective cover	Without
[Ith] conventional free air thermal current	125 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	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
Associated fuse rating	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	12.5 W AC-1
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1
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	4 Mcycles
Electrical durability	0.8 Mcycles 125 A AC-1 <= 440 V
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 Uc -40…131 °F (-40…55 °C) operational AC 60 Hz 0.3...0.6 Uc -40…158 °F (-40…70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40…131 °F (-40…55 °C) operational AC 50 Hz 1...1.1 Uc 131…158 °F (55…70 °C) operational AC 50/60 Hz
Inrush power in VA	245 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 245 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	26 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 26 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	6…10 W at 50/60 Hz
Operating time	20...35 ms closing 6...20 ms opening
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: solid without cable end Power circuit: connector 1 0.01…0.08 in² (4…50 mm²) - cable stiffness: flexible without cable end Power circuit: connector 2 0.01…0.04 in² (4…25 mm²) - cable stiffness: flexible without cable end Power circuit: connector 1 0.01…0.08 in² (4…50 mm²) - cable stiffness: flexible with cable end Power circuit: connector 2 0.01…0.02 in² (4…16 mm²) - cable stiffness: flexible with cable end Power circuit: connector 1 0.01…0.08 in² (4…50 mm²) - cable stiffness: solid without cable end Power circuit: connector 2 0.01…0.04 in² (4…25 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)
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	LROS (Lloyds register of shipping) [RETURN]RINA[RETURN]BV[RETURN]CSA[RETURN]DNV[RETURN]CCC[RETURN]GOST[RET
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) Shocks contactor open 8 Gn for 11 ms) Vibrations contactor closed 3 Gn, 5...300 Hz) Shocks contactor closed 10 Gn for 11 ms)
Height	5.00 in (127 mm)
Width	3.78 in (96 mm)
Depth	4.92 in (125 mm)
Net Weight	3.88 lb(US) (1.76 kg)

Ordering and shipping details

Category	22359-CTR,TESYS D,OPEN,80-150A AC&DC
Discount Schedule	I12
GTIN	3389110074185
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.33 in (11.0 cm)
Package 1 Width	5.24 in (13.3 cm)
Package 1 Length	6.10 in (15.5 cm)
Package 1 Weight	3.74 lb(US) (1.695 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	5
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	19.33 lb(US) (8.768 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