

LC1D80AU7

IEC contactor, TeSys Deca, nonreversing,
80A, 60HP at 480VAC, 3 phase, 3 pole, 3 NO,
240VAC 50/60Hz coil, open style





Main

Range	TeSys TeSys Deca
Product name	TeSys D TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
Power pole contact composition	3 NO
[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-1 power circuit 66 A 140 °F (60 °C)) <= 440 V AC-3 power circuit 66 A 140 °F (60 °C)) <= 440 V AC-3e power circuit
Motor power kW	18.5 KW 220...230 V AC 50 Hz AC-3) 37 KW 380...400 V AC 50 Hz AC-3) 37 KW 415 V AC 50 Hz AC-3) 37 KW 440 V AC 50 Hz AC-3) 37 KW 500 V AC 50 Hz AC-3) 37 kW 660...690 V AC 50 Hz AC-3)
Motor power HP (UL / CSA)	5 Hp 115 V at AC 60 Hz for 1 phase 10 Hp 230/240 V at AC 60 Hz for 1 phase 20 Hp 200/208 V at AC 60 Hz for 3 phase 20 Hp 230/240 V at AC 60 Hz for 3 phase 40 Hp 460/480 V at AC 60 Hz for 3 phase 50 hp 575/600 V at AC 60 Hz for 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	240 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[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 AC power circuit IEC 60947
Rated breaking capacity	1000 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	520 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
[Ui] rated insulation voltage	Signalling circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-4-1
Electrical durability	0.7 Mcycles 80 A AC-1 <= 440 V 1 Mcycles 66 A AC-3 <= 440 V 1 Mcycles 66 A AC-3e <= 440 V

Power dissipation per pole	9.6 W AC-1 6.5 W AC-3 6.5 W AC-3e
Front cover	With
Mounting Support	Rail Plate
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)
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 with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)solid Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)solid Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)solid Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)flexible Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips 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) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
Operating time	4...19 ms opening 12...26 ms closing
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
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

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 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 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 50/60 Hz
Inrush power in VA	140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	4...5 W 50/60 Hz
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 current	5 mA signalling circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm signalling circuit

Environment

IP degree of protection	IP20 front face IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open10 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)
Color	Gray SE GREY 6)

Ordering and shipping details

Category	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
GTIN	3606481312228
Nbr. of units in pkg.	1
Package weight(Lbs)	29.98 oz (850 g)
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.44 in (6.2 cm)
Package 1 width	5.51 in (14 cm)
Package 1 Length	6.10 in (15.5 cm)
Unit Type of Package 2	CAR
Number of Units in Package 2	1
Package 2 Weight	34.60 oz (981 g)
Package 2 Height	2.36 in (6 cm)
Package 2 width	4.92 in (12.5 cm)

Package 2 Length	5.12 in (13 cm)
Unit Type of Package 3	S02
Number of Units in Package 3	10
Package 3 Weight	21.63 lb(US) (9.81 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)

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
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
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.
PVC free	Yes

Contractual warranty

Warranty	18 months
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