

LC1D80A6LE7

IEC contactor, TeSys D, nonreversing, 80A, 60HP at 480VAC, 3 phase, 3 pole, 3 NO, 208VAC 50/60Hz coil, open style



Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load Motor control
Utilisation category	AC-1 AC-3
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
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 at 60 Hz
[Uc] control circuit voltage	208 V AC 60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947

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

Overvoltage category	III
[I _{th}] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 80 A 140 °F (60 °C) power circuit
I _{rms} 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
[I _{cw}] 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 - I _{th} 80 A 50 Hz power circuit
[U _i] 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
Power dissipation per pole	9.6 W AC-1 6.5 W AC-3
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
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)
Connections - terminals	Control circuit lugs-ring terminals 0.31 in (8 mm) Power circuit lugs-ring terminals 0.65 in (16.5 mm))
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 53.10 lbf.in (6 N.m) lugs-ring terminals hexagonal 0.39 in (10 mm) M6
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 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U _c -40...158 °F (-40...70 °C) drop-out AC 60 Hz 0.85...1.1 U _c -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 U _c 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
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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 for signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to 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
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: 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)
Color	Grey (SE GREY 6)

Ordering and shipping details

GTIN	03606481312082
Nbr. of units in pkg.	1
Package weight(Lbs)	29.98 oz (850 g)

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)

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 Pro-active China RoHS declaration (out of China RoHS legal scope)
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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