

Product data sheet

Characteristics

LC1D18E7

TeSys D IEC contactor, 18 A, 3 P, 10 HP at 480 VAC, nonreversing, 48 VAC 50/60 Hz coil

Product availability : Stock - Normally stocked in distribution facility

Price* : 136.00 USD



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-4 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	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	4 kW 220...230 V AC 50/60 Hz AC-3) 7.5 kW 380...400 V AC 50/60 Hz AC-3) 9 kW 415...440 V AC 50/60 Hz AC-3) 10 kW 500 V AC 50/60 Hz AC-3) 10 kW 660...690 V AC 50/60 Hz AC-3) 4 kW 400 V AC 50/60 Hz AC-4)
Motor power HP (UL / CSA)	1 hp 115 V AC 50/60 Hz 1 phase 3 hp 230/240 V AC 50/60 Hz 1 phase 5 hp 200/208 V AC 50/60 Hz 3 phase 5 hp 230/240 V AC 50/60 Hz 3 phase 10 hp 460/480 V AC 50/60 Hz 3 phase 15 hp 575/600 V AC 50/60 Hz 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 A 140 °F (60 °C) power circuit

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 300 A 440 V power circuit IEC 60947
Rated breaking capacity	300 A 440 V power circuit IEC 60947
[I _{cw}] rated short-time withstand current	145 A 104 °F (40 °C) - 10 s power circuit 240 A 104 °F (40 °C) - 1 s power circuit 40 A 104 °F (40 °C) - 10 min power circuit 84 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 50 A gG ≤ 690 V type 1 power circuit 35 A gG ≤ 690 V type 2 power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz power circuit
[U _i] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 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
Electrical durability	1.65 Mcycles 18 A AC-3 ≤ 440 V 1 Mcycles 32 A AC-1 ≤ 440 V
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3
Front cover	With
Mounting support	Rail Plate
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	GL RINA UL CSA DNV BV GOST LROS (Lloyds register of shipping) CCC
Connections - terminals	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 cable(s) 1...4 mm ² flexible with cable end 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)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 clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...6 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²)solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²)solid without cable end
Tightening torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	12...22 ms closing 4...19 ms opening
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	15 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 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2...3 W at 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
Contact compatibility	M2
Compatibility code	LC1D
Motor power range	4...6 kW 200...240 V 3 phase 7...11 kW 380...440 V 3 phase 7...11 kW 480...500 V 3 phase
Motor starter type	Direct on-line contactor
Contactor coil voltage	48 V AC standard

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
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open: 10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.39 in (86 mm)
Net Weight	0.73 lb(US) (0.33 kg)

Ordering and shipping details

Category	22354 - CTR, TESYS D, OPEN, 9-38A AC
Discount Schedule	I12
GTIN	00785901431732
Nbr. of units in pkg.	1
Package weight(Lbs)	0.8 lb(US) (0.36 kg)
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.13 in (5.4 cm)
Package 1 width	3.54 in (9 cm)
Package 1 Length	4.25 in (10.8 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Weight	16.62 lb(US) (7.538 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Weight	291.58 lb(US) (132.26 kg)
Package 3 Height	30.31 in (77 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

Offer Sustainability

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
RECh Regulation	RECh Declaration
RECh 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)
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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