

# Product data sheet

## Characteristics

# LC1D18G7

IEC contactor, TeSys D, nonreversing, 18A, 10HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 120VAC 50/60Hz coil, open



Product availability: Stock - Normally stocked in distribution facility

Price\*: 136.00 USD



### Main

Range	TeSys
Product name	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3
Poles description	3P
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 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 32 A 140 °F (60 °C)) <= 440 V AC AC-1 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)
Maximum Horse Power Rating	1 Hp 115 V at AC 50/60 Hz for 1 phase 3 Hp 230/240 V at AC 50/60 Hz for 1 phase 5 Hp 200/208 V at AC 50/60 Hz for 3 phase 5 Hp 230/240 V at AC 50/60 Hz for 3 phase 10 Hp 460/480 V at AC 50/60 Hz for 3 phase 15 Hp 575/600 V at AC 50/60 Hz for 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	120 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 KV IEC 60947
Oversvoltage category	III

[I <sub>th</sub> ] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 32 A 140 °F (60 °C) power circuit
I <sub>rms</sub> 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 <sub>cw</sub> ] 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 - I <sub>th</sub> 32 A 50 Hz power circuit
[U <sub>i</sub> ] rated insulation voltage	Power circuit 690 V 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
Protective cover	With
Mounting support	Plate Rail
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	BV GL CCC CSA RINA DNV GOST LROS (Lloyds register of shipping) UL
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...6 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )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 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
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...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	70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	2...3 W 50/60 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...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 open: 10 Gn for 11 ms Shocks contactor closed: 15 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	03389110349474
Nbr. of units in pkg.	1
Package weight(Lbs)	12.87 Oz (365 g)

Returnability	Yes
Country of origin	ID

### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.17 In (5.5 cm)
Package 1 width	3.74 In (9.5 cm)
Package 1 Length	4.65 In (11.8 cm)

### 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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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Product Life Status : **Commercialised**