

# LC1D188BD

IEC contactor, TeSys D, nonreversing, 32A  
resistive, 4 pole, 2 NO and 2 NC, 24VDC coil,  
open style





## Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	32 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
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 32 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 60947-5-1 300 A 440 V power circuit IEC 60947
Rated breaking capacity	300 A 440 V power circuit IEC 60947
[Icw] 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
[Ui] 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 Mcycles 32 A AC-1 <= 440 V
Power dissipation per pole	2.5 W AC-1
Front 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	GL CSA CCC RINA GOST UL DNV BV LROS (Lloyds register of shipping)
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 connector 1 0.00...0.02 in <sup>2</sup> (2.5... 10 mm <sup>2</sup> )flexible without cable end Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5... 10 mm <sup>2</sup> )flexible without cable end Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5... 10 mm <sup>2</sup> )flexible with cable end Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5... 10 mm <sup>2</sup> )flexible with cable end Power circuit connector 1 0.00...0.02 in <sup>2</sup> (2.5... 16 mm <sup>2</sup> )solid without cable end Power circuit connector 2 0.00...0.02 in <sup>2</sup> (2.5... 16 mm <sup>2</sup> )solid without cable end
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 15.05 lbf.in (1.7 N.m) connector flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) connector Philips No 2
Operating time	53.55...72.45 ms closing 16...24 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	30 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

## Complementary

Coil technology	With integral suppression device
Control circuit voltage limits	0.1...0.25 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out DC 0.7...1.25 U <sub>c</sub> -40...140 °F (-40...60 °C) operational DC 1...1.25 U <sub>c</sub> 140...158 °F (60...70 °C) operational DC
Time constant	28 ms
Inrush power in W	5.4 W 68 °F (20 °C))
Hold-in power consumption in W	5.4 W 68 °F (20 °C)
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	3.58 in (91 mm)
Width	1.77 in (45 mm)
Depth	4.21 in (107 mm)
Net Weight	1.29 lb(US) (0.585 kg)

## Ordering and shipping details

Category	22355 - CTR, TESYS D, OPEN, 9-38A DC
Discount Schedule	I12
GTIN	00785901755371
Nbr. of units in pkg.	1
Package weight(Lbs)	1.39 lb(US) (0.63 kg)
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>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
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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