



## Main

Range	TeSys
Product name	TeSys D Green
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A 140 °F (60 °C) <= 440 V AC-1 power circuit
[Uc] control circuit voltage	24 V DC
Coil type	DC low consumption
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	80 A 140 °F (60 °C) power circuit 10 A 140 °F (60 °C) signalling circuit
Irms rated making capacity	1000 A 440 V power circuit IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1
Rated breaking capacity	1000 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	110 A 104 °F (40 °C) - 10 min power circuit 260 A 104 °F (40 °C) - 1 min power circuit 520 A 104 °F (40 °C) - 10 s power circuit 900 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	125 A gG <= 690 V type 1 power circuit 125 A gG <= 690 V type 2 power circuit

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

## 10 A gG signalling circuit IEC 60947-5-1

Average impedance	1.6 mOhm - lth 80 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1
Electrical durability	0.5 Mcycles 80 A AC-1 <= 440 V
Power dissipation per pole	10.2 W AC-1
Front cover	With
Mounting support	Plate Rail
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	Power circuit lugs-ring terminals 0.65 in (16.5 mm) Control circuit lugs-ring terminals 0.31 in (8 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	55...65 ms closing 20...80 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	6 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

## Complementary

Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc -40...158 °F (-40...70 °C) drop-out DC 0.8...1.2 Uc -40...140 °F (-40...60 °C) operational DC 1...1.2 Uc 140...158 °F (60...70 °C) operational DC
Inrush power in W	11 W 68 °F (20 °C)
Hold-in power consumption in W	0.5 W 68 °F (20 °C)
Heat dissipation	0.5 W
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
Flame retardance	V1 conforming to UL 94

Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	4.80 in (122 mm)
Width	2.76 in (70 mm)
Depth	4.72 in (120 mm)
Net Weight	2.84 lb(US) (1.290 kg)
Color	Gray SE GREY 6) Green SE GREEN 2)

### Ordering and shipping details

GTIN	03606489493592
Nbr. of units in pkg.	1
Package weight(Lbs)	2.56 lb(US) (1.161 kg)

### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.76 in (7 cm)
Package 1 width	5.43 in (13.8 cm)
Package 1 Length	6.02 in (15.3 cm)

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</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> Product out of China RoHS scope. Substance declaration for your information.
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.
Halogen content performance	Halogen free plastic parts & cables product

### Contractual warranty

Warranty	18 months
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