

Characteristics

IEC contactor, TeSys Deca, nonreversing, 80A
resistive, 4 pole, 4 NO, 24VDC coil, open style



Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
Contacteur application	Resistive load
Utilisation category	AC-1
Poles description	4P
[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 AC-1 power circuit
[Uc] control circuit voltage	24 V DC

Compatibility code	LC1D
Pole contact composition	4 NO
Contact compatibility	M7
Protective cover	With
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 80 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 1000 A 440 V power circuit IEC 60947
Rated breaking capacity	1000 A 440 V power circuit IEC 60947
[Icw] 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	1.6 mOhm - Ith 80 A 50 Hz power circuit
Power dissipation per pole	10.2 W AC-1
[Ui] rated insulation voltage	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 Power circuit 690 V IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
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	10 Mcycles
Electrical durability	0.5 Mcycles 80 A AC-1 <= 440 V
Control circuit type	DC standard

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 U _c -40...158 °F (-40...70 °C) drop-out DC 0.75...1.25 U _c -40...140 °F (-40...60 °C) operational DC 1...1.25 U _c 140...158 °F (60...70 °C) operational DC
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Operating time	42.5...57.5 ms closing 16...24 ms opening
Time constant	34 ms
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	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) 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 0.00...0.01 in ² (1...4 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 EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) flexible without cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) flexible without cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) solid without cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) 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 70.81 lbf.in (8 N.m) screw clamp terminals 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) screw clamp terminals 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
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 voltage	17 V signalling circuit
Minimum switching current	5 mA signalling circuit
Insulation resistance	> 10 MOhm 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
Mounting Support	Rail Plate

Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
Product Certifications	LROS (Lloyds register of shipping) CSA UL BV GOST DNV GL CCC RINA
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
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	2.76 in (70 mm)
Depth	4.72 in (120 mm)
Net Weight	2.70 lb(US) (1.225 kg)

Ordering and shipping details

Category	22358-CTR, TESYS D, OPEN, 40-65A DC
Discount Schedule	I12
GTIN	3389119409360
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.11 in (7.9 cm)
Package 1 Width	5.43 in (13.8 cm)
Package 1 Length	6.02 in (15.3 cm)
Package 1 Weight	2.53 lb(US) (1.148 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	7
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	18.41 lb(US) (8.35 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	56
Package 3 Height	17.72 in (45 cm)
Package 3 Width	31.50 in (80 cm)

Package 3 Length	23.62 in (60 cm)
Package 3 Weight	168.50 lb(US) (76.428 kg)

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 www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
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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