

# Contactor, TeSys Deca, 4P(4 NO), AC-1, <=440V, 20A, 24VDC standard coil, screw clamp terminal

LC1DT20BD

#### Main

Range	TeSys TeSys Deca	
Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load	
Utilisation Category	AC-1	
Poles Description	4P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	20 A (at <60 °C) at <= 440 V AC AC-1 for power circuit	
[Uc] Control Circuit Voltage	24 V DC	

## Complementary

Compatibility Code	LC1D
Pole Contact Composition	4 NO
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 20 A (at 60 °C) for power circuit
Irms Rated Making Capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 20 A 50 Hz for power circuit
Power Dissipation Per Pole	1.56 W AC-1

[Ui] Rated Insulation Voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand	6 kV conforming to IEC 60947
Voltage Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical Durability	30 Mcycles
Control Circuit Type	DC standard
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.10.25 Uc (-4070 °C):drop-out DC 0.71.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC
Inrush Power In W	5.4 W (at 20 °C)
Hold-In Power Consumption In W	5.4 W at 20 °C
Operating Time	20 ±20 % ms opening 63 ±15 % ms closing
Time Constant	28 ms
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals  Tightening Torque	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end
	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Auxiliary Contact Composition	1 NO + 1 NC
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	25400 Hz
Minimum Switching Voltage	17 V for signalling circuit
Minimum Switching Current	5 mA for signalling circuit

Insulation Resistance	> 10 MOhm for 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	Plate Rail
Environment	
Standards	CSA C22.2 No 14
	EN 60947-4-1
	EN 60947-5-1 IEC 60947-4-1
	IEC 60947-4-1
	UL 508
	IEC 60335-1
Product Certifications	GOST
	LROS (Lloyds register of shipping)
	UL CSA
	RINA
	BV
	CCC
	DNV GL
Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Protective Treatment	TH conforming to IEC 60068-2-30
Climatic Withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-4060 °C 6070 °C with derating
Operating Altitude	03000 m
Fire Resistance	850 °C conforming to IEC 60695-2-1
Flame Retardance	V1 conforming to UL 94
Mechanical Robustness	Vibrations contactor open (2 Gn, 5300 Hz)
	Vibrations contactor closed (4 Gn, 5300 Hz)
	Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)
Height	85 mm
Width	45 mm
Depth	99 mm
Net Weight	0.365 kg
Packing Units	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	9.5 cm
Package 1 Length	12.0 cm

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Number Of Units In Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	9.5 cm
Package 1 Length	12.0 cm
Package 1 Weight	558.0 g

## **Contractual warranty**

Warranty 18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance

Mercury Free

Rohs Exemption Information

Yes



Pvc Free

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
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