

# TeSys Deca changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 40 A - 24 V AC coil

LC2DT40B7V

#### ! Discontinued

#### Main

Product Name   TeSys Deca		
Product Or Component Type Changeover contactor  Device Short Name LC2D  Contactor Application Resistive load  Utilisation Category AC-1 AC-3 AC-3e AC-3e AC-4  Device Presentation Preassembled with reversing power busbar  Poles Description 4P  Power Pole Contact Composition 4 NO  [Ue] Rated Operational Voltage Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC  [le] Rated Operational Current 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit  Control Circuit Type AC at 50/60 Hz  Auxiliary Contact Composition 1 NO + 1 NC  [Uimp] Rated Impulse Withstand Voltage Overvoltage Category III  [Ith] Conventional Free Air 40 A (at 60 °C) for signalling circuit 40 A (at 60 °C) for power circuit 40 A (at 60 °C) for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947  Rated Breaking Capacity 450 A at 440 V for power circuit conforming to IEC 60947  Rated Breaking Capacity 450 A at 440 V for power circuit conforming to IEC 60947  Rated Short-Time Withstand Current 400 A 0°C - 10 in for power circuit 240 A 40 °C - 10 min for power circuit 240 A 40 °C - 10 min for power circuit 240 A 40 °C - 10 for power circuit	Range	TeSys
Device Short Name  LC2D  Contactor Application  Resistive load  Utilisation Category  AC-1 AC-3 AC-3e AC-4  Device Presentation  Preassembled with reversing power busbar  Poles Description  4P  Power Pole Contact Composition  4 NO  [Ue] Rated Operational Voltage  Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC  [le] Rated Operational Current  40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit  Control Circuit Type  AC at 50/60 Hz  [Uc] Control Circuit Voltage  24 V AC 50/60 Hz  Auxiliary Contact Composition  1 NO + 1 NC  [Uimp] Rated Impulse Withstand of kV conforming to IEC 60947 Voltage  Overvoltage Category  III  [Ith] Conventional Free Air Thermal Current  40 A (at 60 °C) for signalling circuit conforming to IEC 60947-5-1 450 A DC for signalling circuit conforming to IEC 60947-5-1 450 A DC for signalling circuit conforming to IEC 60947  Rated Breaking Capacity  450 A at 440 V for power circuit conforming to IEC 60947  Rated Breaking Capacity  50 A 40 °C - 10 min for power circuit 240 A 40 °C - 10 min for power circuit 240 A 40 °C - 10 min for power circuit	Product Name	TeSys Deca
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Device Presentation   Preassembled with reversing power busbar	Utilisation Category	AC-3
Poles Description 4P  Power Pole Contact Composition 4 NO  [Ue] Rated Operational Voltage Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC  [le] Rated Operational Current 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit  Control Circuit Type AC at 50/60 Hz  [Uc] Control Circuit Voltage 24 V AC 50/60 Hz  Auxiliary Contact Composition 1 NO + 1 NC  [Uimp] Rated Impulse Withstand Voltage Overvoltage Category III  [Ith] Conventional Free Air 10 A (at 60 °C) for signalling circuit 40 A (at 60 °C) for power circuit  Irms Rated Making Capacity 140 A AC for signalling circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947  Rated Breaking Capacity 450 A at 440 V for power circuit conforming to IEC 60947  [Icw] Rated Short-Time Withstand Current 120 A 40 °C - 10 min for power circuit 240 A 40 °C - 10 s for power circuit 240 A 40 °C - 10		
Power Pole Contact Composition   4 NO	Device Presentation	Preassembled with reversing power busbar
Control Circuit Type   AC at 50/60 Hz	Poles Description	4P
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[Icw] Rated Short-Time Withstand Current  50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min for power circuit 240 A 40 °C - 10 s for power circuit	Irms Rated Making Capacity	250 A DC for signalling circuit conforming to IEC 60947-5-1
Current 120 A 40 °C - 1 min for power circuit 240 A 40 °C - 10 s for power circuit	Rated Breaking Capacity	450 A at 440 V for power circuit conforming to IEC 60947
100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit		120 A 40 °C - 1 min for power circuit 240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit
Associated Fuse Rating  10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit	Associated Fuse Rating	63 A gG at <= 690 V coordination type 1 for power circuit
Average Impedance 2 mOhm - Ith 40 A 50 Hz for power circuit	Average Impedance	2 mOhm - Ith 40 A 50 Hz for power circuit

[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 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
Electrical Durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power Dissipation Per Pole	3.2 W AC-1
Front Cover	With
Interlocking Type	Electrical and mechanical
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 CCC CSA DNV GL RINA UL EAC
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.516 mm²solid without cable end Power circuit: connector 1 cable(s) 2.516 mm²solid without cable end Power circuit: connector 2 cable(s) 2.516 mm²solid without cable end
Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2
Operating Time	1222 ms closing 419 ms opening
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	15 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C
Complementary	
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush Power In Va	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	7.5 VA (at 20 °C) cos phi 0.3 60 Hz 7 VA (at 20 °C) cos phi 0.3 50 Hz
Heat Dissipation	23 W at 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	25400 Hz	
Minimum Switching Current	5 mA for signalling circuit	
Minimum Switching Voltage	17 V 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	
Insulation Resistance	> 10 MOhm for signalling circuit	

# **Environment**

Degree Of Protection IP20 front face conforming to IEC 60529	
Climatic Withstand	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Protective Treatment	TH conforming to IEC 60068-2-30
Pollution Degree	3
Ambient Air Temperature For Operation	-4060 °C 6070 °C with derating
Ambient Air Temperature For Storage	-6080 °C
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: 8 Gn for 11 ms
Height	91 mm
Width	90 mm
Depth	98 mm
Net Weight	0.85 kg

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

# **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.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

### Well-being performance

<b>⊘</b>	Reach Free Of Svhc	
	Toxic Heavy Metal Free	
<b>Ø</b>	Mercury Free	
<b>Ø</b>	Rohs Exemption Information	Yes
	Pvc Free	
Eu R	ohs Directive	Compliant
		EU RoHS Declaration
Chin	a Rohs Regulation	China RoHS declaration
		Pro-active China RoHS declaration (out of China RoHS legal scope)