

# Product datasheet

Specifications



## TeSys Deca changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 40 A - 155 V DC coil

LC2DT40PD

⚠ Discontinued on: 10 Jun 2022

⚠ End-of-service on: 26 Nov 2024

⚠ Discontinued

### Main

Range	TeSys
Product name	TeSys Deca
Product or component type	Changeover contactor
Device short name	LC2D
Contactors 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 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	155 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	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 60947-5-1 250 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
[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 380 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 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit

<b>[Ui] rated insulation voltage</b>	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
<b>Electrical durability</b>	1.4 Mcycles 40 A AC-1 at $U_e \leq 440$ V
<b>Power dissipation per pole</b>	3.2 W AC-1
<b>Front cover</b>	With
<b>Interlocking type</b>	Mechanical
<b>Mounting support</b>	Rail Plate
<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
<b>Product certifications</b>	BV CCC CSA DNV GL RINA UL EAC

<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: connector 1 cable(s) 2.5...10 mm <sup>2</sup> flexible without cable end Power circuit: connector 2 cable(s) 2.5...10 mm <sup>2</sup> flexible without cable end Power circuit: connector 1 cable(s) 2.5...10 mm <sup>2</sup> flexible with cable end Power circuit: connector 2 cable(s) 2.5...10 mm <sup>2</sup> flexible with cable end Power circuit: connector 1 cable(s) 2.5...16 mm <sup>2</sup> solid without cable end Power circuit: connector 2 cable(s) 2.5...16 mm <sup>2</sup> solid without cable end
--------------------------------	--

<b>Tightening torque</b>	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat $\varnothing$ 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 $\varnothing$ 6 mm Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2
--------------------------	--

<b>Operating time</b>	53.55...72.45 ms closing 16...24 ms opening
-----------------------	--

<b>Safety reliability level</b>	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
---------------------------------	--

<b>Mechanical durability</b>	30 Mcycles
------------------------------	------------

<b>Maximum operating rate</b>	3600 cyc/h 60 °C
-------------------------------	------------------

## Complementary

<b>Coil technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control circuit voltage limits</b>	0.1...0.25 $U_c$ (-40...70 °C):drop-out DC 0.7...1.25 $U_c$ (-40...60 °C):operational DC 1...1.25 $U_c$ (60...70 °C):operational DC
<b>Time constant</b>	28 ms
<b>Inrush power in W</b>	5.4 W at 20 °C
<b>Hold-in power consumption in W</b>	5.4 W at 20 °C
<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1

<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit

## Environment

<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Climatic withstand</b>	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	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: 8 Gn for 11 ms
<b>Height</b>	91 mm
<b>Width</b>	90 mm
<b>Depth</b>	98 mm
<b>Net weight</b>	0.85 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1

## Contractual warranty

<b>Warranty (in months)</b>	18
-----------------------------	----



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer



#### Lifetime extension

Repair

No