# Product data sheet Characteristics

# LC2DT25BL

TeSys D changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 25 A - 24 V DC coil

Product availability: Non-Stock - Not normally stocked in distribution facility





#### Main

Range	TeSys
Product name	TeSys D
Product or component type	Changeover contactor
Device short name	LC2D
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preassembled, with prewired power connections
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	25 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Control circuit type	DC low consumption
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 25 A 140 °F (60 °C) power circuit
Irms rated making capacity	250 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	250 A 440 V power circuit IEC 60947
[lcw] rated short-time withstand current	30 A 104 °F (40 °C) - 10 min power circuit 61 A 104 °F (40 °C) - 1 min power circuit 105 A 104 °F (40 °C) - 10 s power circuit 210 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit

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Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 600 V UL Signalling circuit 600 V UL Signalling circuit 600 V CSA Signalling circuit 600 V UL  Electrical durability 0.8 Mcycles 25 A AC-1 <= 440 V  Power dissipation per pole 1.55 W AC-1  Safety cover With Interlocking type Mechanical  Mounting support Plate Rail  Standards CSA C22.2 No 14 EN 60947-8-1 IEC 60947-8-1 IEC 60947-8-1 IEC 60947-8-1 IEC 60947-8-1 U.5 08  Product certifications BV DNV GOST CCC RINA GIROS LROS (Lloyds register of shipping) UL CSA  Connections - terminals Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.000.01 in² (12 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.0		140 A - 100 ms signalling circuit
Power circuit 690 V IEC 60947-4-1   Power circuit 690 V IEC 80947-4-1   Power circuit 690 V IEC 80947-1   Signalling circuit 600 V CSA   Signalling circuit 600 V II   CSA	Associated fuse rating	40 A gG <= 690 V type 1 power circuit
Power circuit 600 V CLS Signalling circuit 6	Average impedance	2.5 mOhm - Ith 25 A 50 Hz power circuit
Power dissipation per pole  1.56 W AC-1  Safety cover  With  Mechanical  Mounting support  Plate Rail  Standards  CSA C22.2 No 14 EN 60947-4-1 EN 60947-4-1 EN 60947-5-1 IEC 60947-6-1 I	[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
Safety cover   With     Interlocking type   Mechanical     Mounting support   Plate     Rail     Standards   CSA C22.2 No 14     EN 60947-4-1     EN 60947-6-1     EC 60947-6-1     EV 60947-6	Electrical durability	0.8 Mcycles 25 A AC-1 <= 440 V
Interlocking type    Mechanical	Power dissipation per pole	1.56 W AC-1
Plate Rail	Safety cover	With
Standards   CSA C22.2 No 14     EN 60947-8-1     EN 60947-8-1     EC CC RINA     GUST     CCC RINA     GUST     CCC RINA     CSA     C	Interlocking type	Mechanical
EN 60947-4-1 EN 60947-5-1 IEC 60947-5 IEC 60947-5 IEC 60947-5 IEC 60947-5 IEC 60947-5 IEC 60947-5 IIEC 60947-5 IIEC 60947-5 IIEC	Mounting support	
DNV GOST CCC RINA GL LROS (Lloyds register of shipping) UL CSA  Connections - terminals  Power circuit screw clamp terminals 1 0.0001 in² (14 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)slexible without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power 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  Operating time 65.4588.55 ms closing 2030 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	Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1
Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power 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  Operating time  65.4588.55 ms closing 2030 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	Product certifications	DNV GOST CCC RINA GL LROS (Lloyds register of shipping) UL
Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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  Operating time 65.4588.55 ms closing 2030 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 30 Mcycles	Connections - terminals	Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end
2030 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  30 Mcycles	Tightening torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm
B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  Mechanical durability 30 Mcycles	Operating time	
· · · · · · · · · · · · · · · · · · ·	Safety reliability level	
Maximum operating rate 3600 cyc/h 140 °F (60 °C)	Mechanical durability	30 Mcycles
	Maximum operating rate	3600 cyc/h 140 °F (60 °C)

## Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	Drop-out 0.10.3 Uc DC 140 °F (60 °C)) Operational 0.81.25 Uc DC 140 °F (60 °C))
Time constant	40 ms
Inrush power in W	2.4 W 68 °F (20 °C))
Hold-in power consumption in W	2.4 W 68 °F (20 °C)
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1

Signalling circuit frequency	25400 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	23140 °F (-560 °C)
Ambient air temperature for storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	-40158 °F (-4070 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5300 Hz Vibrations contactor closed4 Gn, 5300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	3.35 in (85 mm)
Width	3.54 in (90 mm)
Depth	3.54 in (90 mm)
Net weight	1.61 lb(US) (0.73 kg)

#### Ordering and shipping details

0 11 0	
Category	22354 - CTR,TESYS D,OPEN,9-38A AC
Discount Schedule	l12
GTIN	00785901610533
Returnability	No
Country of origin	FR

#### Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
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.

## Contractual warranty

14/	40
vvarrantv	18 months
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