Product data sheet

Specifications

TeSys Deca changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 32 A - 5 V DC coil

LC2DT32AL

Discontinued

Main

Range	TeSys
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-4
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 25...400 Hz Power circuit: <= 300 V DC
[Ie] Rated Operational Current	32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Control Circuit Type	DC low consumption
[Uc] Control Circuit Voltage	5 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 32 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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min for power circuit 145 A 40 °C - 10 s for power circuit 240 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 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 32 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 Mcycles 32 A AC-1 at Ue <= 440 V
Power Dissipation Per Pole	2.5 W AC-1
Front Cover	With
Interlocking Type	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	GOST CSA CCC LROS (Lloyds register of shipping) GL RINA UL BV DNV
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²solid Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²solid Power circuit: connector 1 cable(s) 2.5…10 mm²flexible without cable end Power circuit: connector 2 cable(s) 2.5…10 mm²flexible without cable end Power circuit: connector 1 cable(s) 2.5…10 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.5…10 mm²flexible with cable end Power circuit: connector 1 cable(s) 2.5…16 mm²solid Power circuit: connector 2 cable(s) 2.5…16 mm²solid
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	65.45...88.55 ms closing 20...30 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	30 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.1...0.3 Uc (-40…70 °C):drop-out DC 0.8...1.25 Uc (-40…60 °C):operational DC 1...1.25 Uc (60…70 °C):operational DC
Time Constant	40 ms
Inrush Power In W	2.4 W (at 20 °C)
Hold-In Power Consumption In W	2.4 W at 20 °C

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	25...400 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

Ip 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	-40…60 °C 60…70 °C with derating
Ambient Air Temperature For Storage	-60…80 °C
Operating Altitude	0...3000 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, 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
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