Product datasheet

Specification





TeSys Deca reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 38 A - 48 V DC coil

LC2D38ED

! Discontinued on: 10-Oct-2020

! End-of-service on: 04-Nov-2020

Main

Range	TeSys
Product Name	TeSys Deca
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-1
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] Rated Operational Current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor Power Kw	9 kW at 220230 V AC 50 Hz 18.5 kW at 380400 V AC 50 Hz 18.5 kW at 415440 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 660690 V AC 50 Hz
Motor Power Hp (UI / Csa)	10 hp at 230/240 V AC 60 Hz for 3 phases motors 5 hp at 240 V AC 60 Hz for 1 phase motors 10 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 480 V AC 60 Hz for 3 phases motors 25 hp at 600 V AC 60 Hz for 3 phases motors
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	48 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 50 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 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	550 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	60 A 40 °C - 10 min for power circuit 430 A 40 °C - 1 s for power circuit
	150 A 40 °C - 1 min for power circuit
	310 A 40 °C - 10 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
	63 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 50 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 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V
Power Dissipation Per Pole	5 W AC-1
	3 W AC-3
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	LROS (Lloyds register of shipping) CSA
	UL
	GL DNV
	RINA
	CCC
	BV GOST
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 1 . 4 mm²flevible without cable and
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 Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid
	Power circuit: screw clamp terminals 2 cable(s) 14 mm solid Power circuit: screw clamp terminals 1 cable(s) 2.510 mm²flexible without cable
	end
	Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²flexible without cable
	end Power circuit: screw clamp terminals 1 cable(s) 110 mm²flexible with cable end
	Power circuit: screw clamp terminals 1 cable(s) 1.56 mm²flexible with cable end
	Power circuit: screw clamp terminals 1 cable(s) 1.510 mm²solid
	Power circuit: screw clamp terminals 2 cable(s) 2.510 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: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
	Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver hat 9 0 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating Time	53.5572.45 ms closing 1624 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
Machanical Durability	20 Mayeles
Mechanical Durability	30 Mcycles

Maximum Operating Rate	3600 cyc/h 60 °C	

Complementary

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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
Time Constant	28 ms
Inrush Power In W	5.4 W (at 20 °C)
Hold-In Power Consumption In W	5.4 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	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

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	-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	85 mm
Width	90 mm
Depth	101 mm
Net Weight	1.137 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.9 cm
Package 1 Width	11.4 cm
Package 1 Length	11.8 cm

Package 1 Weight

1.17 kg

Contractual warranty

Warranty

18 months



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Transparency RoHS/REACh

Well-being performance

⊘	Reach Free Of Svhc
⊘	Toxic Heavy Metal Free
⊘	Mercury Free
⊘	Rohs Exemption Information Yes
⊘	Pvc Free

Certifications & Standards

Eu Rohs Directive	Compliant
	EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information