



ⓘ Discontinued

has not been replaced. Please contact your customer care center for more information.

Main

Range	TeSys
Product name	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
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 25...400 Hz Power circuit: ≤ 300 V DC
[Ie] rated operational current	32 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 50 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit
Motor power kW	7.5 kW at 220...230 V AC 50 Hz 15 kW at 380...400 V AC 50 Hz 15 kW at 415...440 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 660...690 V AC 50 Hz
Motor power HP (UL / CSA)	2 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 7.5 hp at 200/208 V AC 60 Hz for 3 phases motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	174 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overtoltage 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[I _{cw}] rated short-time withstand current	60 A 40 °C - 10 min for power circuit 138 A 40 °C - 1 min for power circuit 260 A 40 °C - 10 s for power circuit 430 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 63 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
[U _i] 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	1.65 Mcycles 32 A AC-3 at U _e ≤ 440 V 1.4 Mcycles 50 A AC-1 at U _e ≤ 440 V
Power dissipation per pole	2 W AC-3 5 W AC-1
Safety cover	Without
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	CSA GL GOST DNV LROS (Lloyds register of shipping) BV CCC UL RINA
Connections - terminals	Control circuit: lugs-ring terminals (external diameter: 8 mm) Power circuit: lugs-ring terminals (external diameter: 10 mm)
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm M4 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M4
Operating time	53.55...72.45 ms closing 16...24 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 2000000 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	Drop-out: 0.1...0.25 U _c DC (at 60 °C) Operational: 0.7...1.25 U _c DC (at 60 °C)
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	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
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at U _c
Operating altitude	3000 m without
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	85 mm
Width	90 mm
Depth	99 mm
Net weight	1.127 kg

Contractual warranty

Warranty	18 months
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