



Main

Range	TeSys
Product name	TeSys D Green
Product or component type	Reversing contactor
Device short name	LC2D
Contactors application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	80 A ($\leq 60\text{ }^{\circ}\text{C}$) at $\leq 440\text{ V AC-1}$ for power circuit 80 A ($\leq 60\text{ }^{\circ}\text{C}$) at $\leq 440\text{ V AC-3}$ for power circuit
Motor power kW	37 kW at 500 V AC 50 Hz 37 kW at 380...400 V AC 50 Hz 37 kW at 440 V AC 50 Hz 37 kW at 415 V AC 50 Hz 37 kW at 660...690 V AC 50 Hz 22 kW at 220...230 V AC 50 Hz
Motor power HP (UL / CSA)	40 hp at 460/480 V AC 60 Hz for 3 phases motors 5 hp at 115 V AC 60 Hz for 1 phase motors 10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 230/240 V AC 60 Hz for 3 phases motors 50 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz AC/DC electronic DC AC/DC electronic
[Uc] control circuit voltage	24...60 V AC 50/60 Hz 24...60 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	80 A at $\leq 60\text{ }^{\circ}\text{C}$ for power circuit 10 A at $\leq 60\text{ }^{\circ}\text{C}$ for signalling circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1

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

	250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 520 A <= 40 °C 10 s power circuit 900 A <= 40 °C 1 s power circuit 110 A <= 40 °C 10 min power circuit 260 A <= 40 °C 1 min power circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A for power circuit
[Ui] rated insulation voltage	690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1
Electrical durability	0.5 Mcycles 80 A AC-1 <= 440 V 1 Mcycles 66 A AC-3 <= 440 V
Power dissipation per pole	9.6 W AC-3 9.6 W AC-1
Safety cover	With
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 EN/IEC 60947-5-1
Product certifications	UL CSA CCC EAC KC LROS (Lloyds register of shipping) DNV-GL
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: solid Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: solid Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: flexible Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: flexible
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 : 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm ² hexagonal 4 mm Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal 4 mm
Operating time	55...65 ms closing 20...80 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	6 Mcycles
Operating rate	<= 3600 cyc/h at <= 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc drop-out at 60 °C 0.85...1.1 Uc operational at 60 °C
Inrush power in VA	15 VA at 20 °C 50/60 Hz

Inrush power in W	16 W at 20 °C
Hold-in power consumption in VA	1 VA at 20 °C 50/60 Hz
Hold-in power consumption in W	0.7 W at 20 °C
Heat dissipation	0.7 W at 50/60 Hz
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	-25...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Operating altitude	0...3000 m without derating
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 open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	122 mm
Width	119 mm
Depth	120 mm
Product weight	2.174 kg
Colour	Grey SE GREY 6 Green SE GREEN 2

Offer Sustainability

RECh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months
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