Product data sheet Characteristics

LC2D12EHE TeSys D reversing contactor - 3P - <= 440 V - 12 A AC-3 - 48...130 V AC/DC coil



Main

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Main		
Range of product	TeSys D	
Range	TeSys	
Product name	TeSys D Green	
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	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 690 V AC 25400 Hz for power circuit	
[le] rated operational current	12 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 25 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	3 kW at 220230 V AC 50/60 Hz 7.5 kW at 500 V AC 50/60 Hz 7.5 kW at 660690 V AC 50/60 Hz 5.5 kW at 380400 V AC 50/60 Hz 5.5 kW at 415440 V AC 50/60 Hz	
Control circuit type	AC 50/60 Hz AC/DC electronic DC AC/DC electronic	
[Uc] control circuit voltage	48130 V DC 48130 V AC 50/60 Hz	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	
Overvoltage category	III	
[lth] conventional free air thermal current	25 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit	
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1	



	250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	105 A <= 40 °C 10 s power circuit 210 A <= 40 °C 1 s power circuit 30 A <= 40 °C 10 min power circuit 61 A <= 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	25 A gG at <= 690 V coordination type 2 for power circuit 40 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 25 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	2.4 Mcycles 9 A AC-3 <= 440 V >= 17221 650000 cycles 25 A AC-1 <= 440 V >= 17221 83000 cycles AC-4 <= 440 V >= 17221
Power dissipation per pole	0.36 W AC-3 1.56 W AC-1
Protective 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
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 12.5 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 125 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without c
Tightening torque	Power circuit : 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit : 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 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
Operating time	4555 ms closing 2090 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	15000000 cycles
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 0.851.1 Uc operational at 60 °C

Inrush power in VA	25 VA at 20 °C 50/60 Hz	
Inrush power in W	24 W at 20 °C	
Hold-in power consumption in VA	1.3 VA at 20 °C 50/60 Hz	
Hold-in power consumption in W	0.8 W at 20 °C	
Heat dissipation	0.8 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	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
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-2560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without derating in temperature
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 open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	77 mm
Width	90 mm
Depth	86 mm
Product weight	0.793 kg
Colour	Grey SE GREY 6 Green SE GREEN 2

Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1640 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	End of life manual	