Product data sheet
Characteristics

LC2D40ABBE
TeSys D reversing contactor - 3P - <= 440 V - 40 A AC-3 - 24 V DC coil

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	Resistive load Motor control
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	40 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 60 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	11 kW at 220...230 V AC 50/60 Hz 22 kW at 500 V AC 50/60 Hz 30 kW at 660...690 V AC 50/60 Hz 18.5 kW at 380...400 V AC 50/60 Hz 22 kW at 415...440 V AC 50/60 Hz
Control circuit type	DC DC low consumption
Control circuit voltage	24 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	60 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	800 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	800 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 320 A <= 40 °C 10 s power circuit 720 A <= 40 °C 1 s power circuit 72 A <= 40 °C 10 min power circuit 165 A <= 40 °C 1 min power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 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 60 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	1.5 Mcycles 40 A AC-3 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Protective cover	With
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm² - cable stiffness: flexible - without cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm² - cable stiffness: solid - without cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm² - cable stiffness: flexible - without cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end
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 : 5 N.m - on EverLink BTR screw connectors - cable <= 25 mm² hexagonal 4 mm Power circuit : 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm² hexagonal 4 mm
Operating time	55...65 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
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	0.8...1.2 Uc operational at 60 °C <= 0.1 Uc drop-out at 60 °C
Inrush power in W	11 W at 20 °C
Hold-in power consumption in W	0.5 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	-25...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °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	Shocks contactor open 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	122 mm
Width	119 mm
Depth	120 mm
Product weight	2.154 kg
Colour	Grey SE GREY 6 Green SE GREEN 2

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1625 - 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