# Product data sheet Characteristics

# LC2D115004U5

# TeSys D changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 200 A - 240 V AC coil



#### Main

Main	
Commercial Status	Commercialised
Range of product	TeSys D
Product or component type	Changeover contactor
Device short name	LC2D
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preassembled with reversing power busbar
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	<= 460 V DC for power circuit <= 1000 V AC 25400 Hz for power circuit
[le] rated operational current	200 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50 Hz
Control circuit voltage	240 V AC 50 Hz
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	200 A at <= 60 °C for power circuit
Irms rated making capacity	1260 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	1100 A <= 40 °C 1 s power circuit 950 A <= 40 °C 10 s power circuit 550 A <= 40 °C 1 min power circuit 250 A <= 40 °C 10 min power circuit
Associated fuse rating	200 A gG at <= 690 V coordination type 2 for power circuit 250 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.60 mOhm at 50 Hz - Ith 200 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA
Electrical durability	0.8 Mcycles 200 A AC-1 at Ue <= 440 V
Power dissipation per pole	24 W AC-1
Safety cover	Without
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14

Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Power circuit: connector 2 cable(s) 1050 mm² - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 10120 mm² - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 1050 mm² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 10120 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 1050 mm² - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 10120 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 12 N.m - on connector hexagonal 4 mm  Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2  Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	620 ms opening 2050 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	8000000 cycles
Operating rate	2400 cyc/h at <= 60 °C

## Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.81.15 Uc at 55 °C operational 50 Hz 0.30.5 Uc at 55 °C drop-out 50 Hz
Inrush power in VA	300 VA at 20 °C (cos φ 0.8) 50 Hz
Hold-in power consumption in VA	22 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	38 W at 50 Hz

### Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-560 °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	Shocks contactor open 6 Gn for 11 ms	
	Shocks contactor closed 15 Gn for 11 ms	
	Vibrations contactor closed 4 Gn, 5300 Hz	
	Vibrations contactor open 2 Gn, 5300 Hz	
Height	158 mm	
Width	334 mm	
Depth	148 mm	
Product weight	7.4 kg	

## Contractual warranty

Period 18 months	nonths
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