

## contactor TeSys Deca - 4 poles (2NO + 2NC) - AC-1 440V 60 A coil 220 V AC

LC1D40008M6

Discontinued on: 1 Nov 2020

① Discontinued

EAN Code: 3389110070538

#### Main

Range	TeSys
Range Of Product	TeSys D
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load
Utilisation Category	AC-1
Poles Description	4P
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz
[le] Rated Operational Current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	220 V AC 60 Hz

### **Complementary**

Motor Power Kw	18.5 kW at 380400 V AC 50/60 Hz 22 kW at 500 V AC 50/60 Hz 30 kW at 660690 V AC 50/60 Hz 22 kW at 415440 V AC 50/60 Hz 11 kW at 220230 V AC 50/60 Hz
Motor Power Hp	10 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to CSA 10 hp at 200/208 V AC 60 Hz for 3 phases motors conforming to UL 10 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to CSA 10 hp at 230/240 V AC 60 Hz for 3 phases motors conforming to UL 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to CSA 3 hp at 115 V AC 60 Hz for 1 phase motors conforming to UL 30 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to CSA 30 hp at 460/480 V AC 60 Hz for 3 phases motors conforming to UL 30 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 30 hp at 575/600 V AC 60 Hz for 3 phases motors conforming to CSA 30 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL 5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to CSA 5 hp at 230/240 V AC 60 Hz for 1 phase motors conforming to UL
Compatibility Code	LC1D
Pole Contact Composition	2 NO + 2 NC
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	10 A (at 60 °C) for control circuit 60 A (at 60 °C) for power circuit
Irms Rated Making Capacity	140 A AC for control circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	800 A at 440 V for power circuit conforming to IEC 60947

Associated Free Batter	
Associated Fuse Rating	10 A gG for control circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 for power circuit
	80 A gG at <= 690 V coordination type 1 for power circuit
Average Impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power Dissipation Per Pole	5.4 W AC-1
[Ui] Rated Insulation Voltage	Control circuit: 600 V CSA certified
	Control circuit: 600 V UL certified
	Power circuit: 600 V CSA certified  Power circuit: 600 V UL certified
	Control circuit: 690 V conforming to IEC 60947-1
	Power circuit: 690 V conforming to IEC 60947-1
Overvoltage Category	III
[Uimp] Rated Impulse Withstand	6 kV conforming to IEC 60947
Voltage Safety Reliability Level	P10d = 1260962 cycles contactor with naminal load conforming to ENVISO 12940.1
Salety Kellability 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	6000000 cycles
Control Circuit Type	AC at 60 Hz
Coil Technology	Without built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.851.1 Uc (55 °C):operational AC 60 Hz
	0.30.6 Uc (60 °C):drop-out AC 60 Hz
Inrush Power In Va	140 VA cos phi 0.75 (at 20 °C)
	160 VA cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	13 VA 60 Hz cos phi 0.3 (at 20 °C)
	15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	45 W at 50/60 Hz for control circuit
Operating Time	1226 ms closing
	419 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C
Connections - Terminals	Control circuit: screw clamp terminal 1 14 mm² - cable stiffness: solid without cable
	end Control circuit: screw clamp terminal 2 14 mm² - cable stiffness: solid without cable
	end
	Control circuit: screw clamp terminal 1 12.5 mm² - cable stiffness: flexible without
	cable end Control circuit: screw clamp terminal 2 12.5 mm² - cable stiffness: flexible without
	cable end
	Control circuit: screw clamp terminal 1 14 mm² - cable stiffness: flexible with cable
	end Control circuit: screw clamp terminal 2 14 mm² - cable stiffness: flexible with cable
	end
	Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: solid with cable end
	Power circuit: screw clamp terminal 2 2.535 mm <sup>2</sup> - cable stiffness: solid with cable
	end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible without
	i ower circuit, screw ciamp terminar i 2.555 mm - cable stimess; flexible without
	cable end
	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without
	Power circuit: screw clamp terminal 2 2.525 $\text{mm}^2$ - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without
	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end  Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end  Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with
	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end  Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end
Tightening Torque	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with cable end  Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Tightening Torque	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with cable end  Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2
Tightening Torque	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with cable end  Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with cable end  Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 8 mm
Tightening Torque  Auxiliary Contacts Type	Power circuit: screw clamp terminal 2 2.525 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminal 1 2.535 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminal 2 2.535 mm² - cable stiffness: flexible with cable end  Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm

Minimum Switching Current	5 mA for control circuit	
Insulation Resistance	> 10 MOhm for control circuit	
Non-Overlap Time	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts	
Mounting Support	Rail Plate	
<b>5</b>		

#### **Environment**

Standards	UL 508 IEC 60947-5-1 IEC 60947-4-1 CSA C22.2 No 14 EN 60947-5-1 EN 60947-4-1
Product Certifications	CCC BV CSA RINA DNV LROS (Lloyds register of shipping) GOST GL UL
Ip Degree Of Protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Climatic Withstand	conforming to IACS E10 exposure to damp heat
Permissible Ambient Air Temperature Around The Device	-6080 °C storage -4060 °C operation 6070 °C with derating
Operating Altitude	3000 m without derating
Fire Resistance	850 °C conforming to IEC 60695-2-1
Flame Retardance	V1 conforming to UL 94
Mechanical Robustness	Shocks contactor closed (10 Gn) Shocks contactor opened (8 gn) Vibrations contactor opened (2 Gn, 5300 Hz) Vibrations contactor closed (4 Gn, 5300 Hz)
Height	127 mm
Width	85 mm
Depth	125 mm
Net Weight	1.44 kg

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

# **Contractual warranty**

Warranty 18 months