## Product data sheet Characteristics

### LC1D12F7

# TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 12 A - 110 V AC coil

Product availability: Stock - Normally stocked in distribution facility





#### Main

Mairi		
Range of product	TeSys D	
Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Motor control Resistive load	
Utilisation category	AC-1 AC-3 AC-4	
Poles description	3P	
Pole contact composition	3 NO	·
System Voltage	<= 300 V DC power circuit <= 690 V AC 25400 Hz power circuit	
[le] rated operational current	12 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 25 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit	
Motor power kW	7.5 kW at 500 V AC 50/60 Hz AC-3 7.5 kW at 660690 V AC 50/60 Hz AC-3 5.5 kW at 380400 V AC 50/60 Hz AC-3 5.5 kW at 415440 V AC 50/60 Hz AC-3 3 kW at 220230 V AC 50/60 Hz AC-3 3.7 kW at 400 V AC 50/60 Hz AC-4	
Motor power hp	1 hp at 115 V AC 50/60 Hz 1 phase motors 2 hp at 230/240 V AC 50/60 Hz 1 phase motors 3 hp at 200/208 V AC 50/60 Hz 3 phases motors 3 hp at 230/240 V AC 50/60 Hz 3 phases motors 7.5 hp at 460/480 V AC 50/60 Hz 3 phases motors 10 hp at 575/600 V AC 50/60 Hz 3 phases motors	
Control circuit type	AC 50/60 Hz	
Control circuit voltage	110 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
[Ith] conventional free air thermal current	25 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	250 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 A at 440 V power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	105 A <= 104 °F (40 °C) 10 s power circuit 210 A <= 104 °F (40 °C) 1 s power circuit 30 A <= 104 °F (40 °C) 10 min power circuit 61 A <= 104 °F (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 power circuit 40 A gG at <= 690 V coordination type 1 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 25 A power circuit
[Ui] rated insulation voltage	600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	2 Mcycles 12 A AC-3 at Ue <= 440 V 0.8 Mcycles 25 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.36 W AC-3 1.56 W AC-1
Protective cover	With
Mounting support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 00 in² (12.5 mm²) - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 2 cable(s) 00.01 in² (12.5 mm²) - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 1 cable(s) 00.01 in² (12.5 mm²) - cable stiffness: solid - without cable end

	Power circuit: screw clamp terminals 2 cable(s) 00.01 in² (14 mm²) - cable stiffness: solid - without cable end
Tightening torque	Power circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2
Operating time	419 ms opening 1222 ms closing
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	15 Mcycles
Operating rate	3600 cvc/h at <= 140 °F (60 °C)

#### Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.30.6 Uc drop-out at 140 °F (60 °C), AC 50/60 Hz 0.81.1 Uc operational at 140 °F (60 °C), AC 50 Hz 0.851.1 Uc operational at 140 °F (60 °C), AC 60 Hz
Inrush power in VA	70 VA at 68 °F (20 °C) (cos φ 0.75) 60 Hz 70 VA at 68 °F (20 °C) (cos φ 0.75) 50 Hz
Hold-in power consumption in VA	7.5 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz 7 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz
Heat dissipation	23 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 signalling circuit
Minimum switching voltage	17 V signalling circuit
Non-overlap time	1.5 ms on energisation between NC and NO contact     1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm signalling circuit
Motor power range AC-3	2.23 kW 200240 V 3 phases 46 kW 380440 V 3 phases 46 kW 480500 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	110 V AC

#### Environment

IP2x front face conforming to IEC 60529
TH conforming to IEC 60068-2-30
3
-4140 °F (-2060 °C)
-76176 °F (-6080 °C)
-40158 °F (-4070 °C) at Uc
9842.52 ft (3000 m) without derating in temperature
1562 °F (850 °C) conforming to IEC 60695-2-1
V1 conforming to UL 94
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
3.03 in (77 mm)
1.77 in (45 mm)
3.39 in (86 mm)
0.72 lb(US) (0.325 kg)

### Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	112
GTIN	00785901207023
Nbr. of units in pkg.	1
Package weight(Lbs)	0.7800000000000003
Returnability	Υ
Country of origin	ID

### Offer Sustainability

Green Premium product
Compliant - since 0627 - Schneider Electric declaration of conformity
Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold
Reference not containing SVHC above the threshold
Available
Available
-

#### Contractual warranty

Warranty period	18 months