## Product data sheet Characteristics

## LC1D096F7

# TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 110 V AC coil

Product availability: Non-Stock - Not normally stocked in distribution facility

Price\*: 94.00 USD



#### Main

IVIAIII	
Commercial Status	Commercialised
Range of product	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit
[le] rated operational current	9 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 25 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	5.5 kW at 660690 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 4 kW at 415440 V AC 50/60 Hz 4 kW at 380400 V AC 50/60 Hz 2.2 kW at 220230 V AC 50/60 Hz
Motor power hp	7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 0.5 hp at 115 V AC 50/60 Hz for 1 phase 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	10 A at <= 140 °F (60 °C) for signalling circuit 25 A at <= 140 °F (60 °C) for power circuit
Irms rated making capacity	250 A DC for signalling circuit conforming to IEC 60947-5-1 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	61 A <= 104 °F (40 °C) 1 min power circuit 30 A <= 104 °F (40 °C) 10 min power circuit 140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit 210 A <= 104 °F (40 °C) 1 s power circuit 105 A <= 104 °F (40 °C) 10 s power circuit

Associated fuse rating	20 A gG at <= 690 V coordination type 2 for power circuit 25 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	600 V for signalling circuit certifications UL 600 V for signalling circuit certifications CSA 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA 690 V for power circuit conforming to IEC 60947-4-1
Electrical durability	2 Mcycles 9 A AC-3 at Ue <= 440 V 0.6 Mcycles 25 A AC-1 at Ue <= 440 V
Power dissipation per pole	AC-3 1.56 W AC-1
Protective cover	With
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: lugs-ring terminals - external diameter: 0.31 in (8 mm) Control circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm)
Tightening torque	Power circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver Philips No 2 screw: M3.5 Power circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver flat Ø 8 mm screw: M3.5 Control circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver Philips No 2 screw: M3.5 Control circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw: M3.5
Operating time	419 ms opening 1222 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	15 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

### Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.851.1 Uc at 140 °F (60 °C) operational 60 Hz 0.81.1 Uc at 140 °F (60 °C) operational 50 Hz 0.30.6 Uc at 140 °F (60 °C) drop-out 50/60 Hz	
Inrush power in VA	70 VA at 68 °F (20 °C) (cos φ 0.75) 50 Hz 70 VA at 68 °F (20 °C) (cos φ 0.75) 60 Hz	
Hold-in power consumption in VA	7 VA at 68 °F (20 °C) (cos φ 0.3) 50 Hz 7.5 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz	
Heat dissipation	23 W at 50/60 Hz	

Auxiliary contacts type	Type mirror contact (1 NC) conforming to IEC 60947-4-1 Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1
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 energisation (between NC and NO contact) 1.5 ms on de-energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm for signalling circuit

#### 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	23140 °F (-560 °C)
Ambient air temperature for storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	-40158 °F (-4070 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 10 Gn for 11 ms Vibrations contactor closed 4 Gn, 5300 Hz Vibrations contactor open 2 Gn, 5300 Hz
Height	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.39 in (86 mm)
Product weight	0.71 lb(US) (0.32 kg)

### Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	l12
GTIN	00785901787464
Nbr. of units in pkg.	1
Package weight(Lbs)	0.72
Product availability	Non-Stock - Not normally stocked in distribution facility
Returnability	N
Country of origin	ID

#### Contractual warranty

Period	18 months	

