# Product data sheet Characteristics

# LC1D186BL

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 24 V DC coil

Product availability: Stock - Normally stocked in distribution facility



Price\*: 170.00 USD



TVI CITT	
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
Power pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 690 V AC 25400 Hz power circuit
[le] rated operational current	18 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit 32 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Motor power kW	10 kW at 500 V AC 50/60 Hz AC-3 10 kW at 660690 V AC 50/60 Hz AC-3 4 kW at 220230 V AC 50/60 Hz AC-3 7.5 kW at 380400 V AC 50/60 Hz AC-3 9 kW at 415440 V AC 50/60 Hz AC-3 4 kW at 400 V AC 50/60 Hz AC-4
Motor power HP (UL / CSA)	1 hp at 115 V AC 50/60 Hz 1 phase motors 3 hp at 230/240 V AC 50/60 Hz 1 phase motors 5 hp at 200/208 V AC 50/60 Hz 3 phases motors 5 hp at 230/240 V AC 50/60 Hz 3 phases motors 10 hp at 460/480 V AC 50/60 Hz 3 phases motors 15 hp at 575/600 V AC 50/60 Hz 3 phases motors
Control circuit type	DC low consumption
[Uc] 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	32 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	300 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	300 A at 440 V power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	145 A <= 104 °F (40 °C) 10 s power circuit 240 A <= 104 °F (40 °C) 1 s power circuit 40 A <= 104 °F (40 °C) 10 min power circuit 84 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	35 A gG at <= 690 V coordination type 2 power circuit 50 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 32 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	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.8 W AC-3 2.5 W AC-1
Safety 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 LROS (Lloyds register of shipping) RINA UL
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm)
Tightening torque	Control circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver flat Ø 6 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 Power circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver flat Ø 8 mm screw : M3.5 Power circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5
Operating time	65.4588.55 ms closing 2030 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
Mechanical durability	30 Mcycles
Operating rate	3600 cyc/h at <= 140 °F (60 °C)

### Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor

Control circuit voltage limits	0.10.3 Uc drop-out at 140 °F (60 °C), DC 0.81.25 Uc operational at 140 °F (60 °C), DC	
Time constant	40 ms	
Inrush power in W	2.4 W at 68 °F (20 °C)	
Hold-in power consumption in W	2.4 W at 68 °F (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	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	

#### 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	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	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
Height	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.74 in (95 mm)
Product weight	1.08 lb(US) (0.49 kg)

## Ordering and shipping details

22345 - CTR,D-LINE,OPEN,NONREV-NEW
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00785901561187
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ID

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0633 - 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 end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer.
More information	For more information go to www.p65warnings.ca.gov

Warranty period

18 months