# LC1DT60A6N7

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 60 A - 415 V AC 50/60 Hz coil



### Main

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Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Pole contact composition	4 NO
[Ue] rated operational voltage	<= 690 V AC 25400 Hz for power circuit <= 300 V DC for power circuit
[le] rated operational current	60 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
Control circuit voltage	415 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
[lth] conventional free air thermal current	60 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	800 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 320 A <= 40 °C 10 s power circuit 720 A <= 40 °C 1 s power circuit 72 A <= 40 °C 10 min power circuit 165 A <= 40 °C 1 min power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.6 mOhm at 50 Hz - Ith 60 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4- 1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	5.8 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	Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 16.5 mm
Tightening torque	Power circuit: 6 N.m - on lugs-ring terminals screw: M6 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw: M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw: M3.5
Operating time	1226 ms closing 419 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	6 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

## Complementary

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Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.30.6 Uc at 60 °C drop-out 50/60 Hz 0.81.1 Uc at 60 °C operational 50 Hz 0.851.1 Uc at 60 °C operational 60 Hz
Inrush power in VA	140 VA at 20 °C (cos φ 0.75) 60 Hz 160 VA at 20 °C (cos φ 0.75) 50 Hz
Hold-in power consumption in VA	13 VA at 20 °C (cos φ 0.3) 60 Hz 15 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	45 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 for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on 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	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	e -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	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	122 mm	
Width	70 mm	
Depth	120 mm	
Product weight	1.09 kg	

