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## LC1D806B7

TeSys D contactor - 3P(3 NO) - AC-3 -  $\leq 440$  V 80 A - 24 V AC  
50/60 Hz coil

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### Main

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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
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	$\leq 690$ V AC for power circuit $\leq 300$ V DC 25...400 Hz for power circuit
[Ie] rated operational current	125 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit 80 A ( $\leq 60$ °C) at $\leq 440$ V AC AC-3 for power circuit
Motor power kW	22 kW at 220...230 V AC 50/60 Hz 37 kW at 380...400 V AC 50/60 Hz 45 kW at 1000 V AC 50/60 Hz 45 kW at 660...690 V AC 50/60 Hz 55 kW at 500 V AC 50/60 Hz 45 kW at 415...440 V AC 50/60 Hz
Motor power hp	20 hp at 200/208 V AC 50/60 Hz for 3 phases motors 7.5 hp at 115 V AC 50/60 Hz for 1 phase motors 15 hp at 230/240 V AC 50/60 Hz for 1 phase motors 25 hp at 230/240 V AC 50/60 Hz for 3 phases motors 60 hp at 460/480 V AC 50/60 Hz for 3 phases motors 60 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	125 A at $\leq 60$ °C for power circuit 10 A at $\leq 60$ °C for signalling circuit
Irms rated making capacity	1100 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	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	135 A $\leq 40$ °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 640 A $\leq 40$ °C 10 s power circuit 990 A $\leq 40$ °C 1 s power circuit 320 A $\leq 40$ °C 1 min power circuit
Associated fuse rating	160 A gG at $\leq 690$ V coordination type 2 for power circuit 200 A gG at $\leq 690$ V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	0.8 mOhm at 50 Hz - Ith 125 A for power circuit

<b>[Ui] rated insulation voltage</b>	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
<b>Electrical durability</b>	0.8 Mcycles 125 A AC-1 at $U_e \leq 440$ V 1.5 Mcycles 80 A AC-3 at $U_e \leq 440$ V
<b>Power dissipation per pole</b>	5.1 W AC-3 12.5 W AC-1
<b>Protective cover</b>	With
<b>Mounting support</b>	Plate Rail
<b>Standards</b>	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
<b>Product certifications</b>	BV CCC CSA DNV GL GOST RINA UL LROS
<b>Connections - terminals</b>	Power circuit : bars 13 x 16 mm Control circuit : lugs-ring terminals - external diameter: 8 mm Power circuit : lugs-ring terminals - external diameter: 17 mm
<b>Tightening torque</b>	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 Power circuit : 9 N.m - on lugs-ring terminals hexagonal 10 mm screw : M6 Power circuit : 9 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm screw : M6 Power circuit : 9 N.m - on bars - with screwdriver flat Ø 8 mm screw : M6 Power circuit : 9 N.m - on bars hexagonal 10 mm screw : M6
<b>Operating time</b>	20...35 ms closing 6...20 ms opening
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	4 Mcycles
<b>Operating rate</b>	3600 cyc/h at $\leq 60$ °C

## Complementary

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<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 $U_c$ at 55 °C drop-out 50/60 Hz 0.8...1.1 $U_c$ at 55 °C operational 50 Hz 0.85...1.1 $U_c$ at 55 °C operational 60 Hz
<b>Inrush power in VA</b>	245 VA at 20 °C ( $\cos \phi$ 0.75) 60 Hz 245 VA at 20 °C ( $\cos \phi$ 0.75) 50 Hz
<b>Hold-in power consumption in VA</b>	26 VA at 20 °C ( $\cos \phi$ 0.3) 60 Hz 26 VA at 20 °C ( $\cos \phi$ 0.3) 50 Hz
<b>Heat dissipation</b>	6...10 W at 50/60 Hz
<b>Auxiliary contacts type</b>	Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit


## Environment

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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	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °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, 5...300 Hz Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	127 mm
Width	85 mm
Depth	130 mm
Product weight	1.59 kg

## Offer Sustainability

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Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0716 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available  <a href="#">download Product environmental</a>
Product end of life instructions	Need no specific recycling operations

## Contractual warranty

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Period	18 months
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