

# TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 150 A - 220 V AC 50/60 Hz coil

LC1D150M7

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Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 150 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 150 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

#### Complementary

Complementary	
Motor power kW	40 kW at 220230 V AC 50/60 Hz (AC-3) 75 kW at 380400 V AC 50/60 Hz (AC-3) 80 kW at 415440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4) 40 kW at 220230 V AC 50/60 Hz (AC-3e) 75 kW at 380400 V AC 50/60 Hz (AC-3e) 80 kW at 415440 V AC 50/60 Hz (AC-3e) 90 kW at 500 V AC 50/60 Hz (AC-3e) 100 kW at 660690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e)
Motor power hp	40 hp at 200/208 V AC 50/60 Hz for 3 phases motors 50 hp at 230/240 V AC 50/60 Hz for 3 phases motors 100 hp at 460/480 V AC 50/60 Hz for 3 phases motors 125 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M13
Protective cover	With
[Ith] conventional free air thermal current	200 A (at 60 °C) for power circuit

Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1660 A at 440 V for power circuit conforming to IEC 60947	
Rated breaking capacity	1400 A at 440 V for power circuit conforming to IEC 60947	
[Icw] rated short-time withstand current	250 A 40 °C - 10 min for power circuit 580 A 40 °C - 1 min for power circuit 1200 A 40 °C - 10 s for power circuit 1400 A 40 °C - 1 s for power circuit 1400 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 315 A gG at <= 690 V coordination type 1 for power circuit 250 A gG at <= 690 V coordination type 2 for power circuit	
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit	
Power dissipation per pole	24 W AC-1 13.5 W AC-3 13.5 W AC-3e	
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified	
Overvoltage category	III	
Pollution degree	3	
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947	
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	8 Mcycles	
Electrical durability	0.85 Mcycles 150 A AC-3 at Ue <= 440 V 1 Mcycles 200 A AC-1 at Ue <= 440 V 0.85 Mcycles 150 A AC-3e at Ue <= 440 V	
Control circuit type	AC at 50/60 Hz standard	
Coil technology	Built-in bidirectional peak limiting diode suppressor	
Control circuit voltage limits	0.30.5 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.15 Uc (-4055 °C):operational AC 50/60 Hz 11.15 Uc (5570 °C):operational AC 50/60 Hz	
Inrush power in VA	280350 VA 60 Hz cos phi 0.9 (at 20 °C) 280350 VA 50 Hz cos phi 0.9 (at 20 °C)	
Hold-in power consumption in VA	218 VA 60 Hz cos phi 0.9 (at 20 °C) 218 VA 50 Hz cos phi 0.9 (at 20 °C)	
Heat dissipation	34.5 W at 50/60 Hz	
Operating time	2035 ms closing 4075 ms opening	
Maximum operating rate	1200 cyc/h 60 °C	
Connections - terminals	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: solid without cable end Power circuit: connector 1 10120 mm² - cable stiffness: flexible without cable end Power circuit: connector 2 1050 mm² - cable stiffness: flexible with cable end Power circuit: connector 1 10120 mm² - cable stiffness: flexible with cable end Power circuit: connector 2 1050 mm² - cable stiffness: solid without cable end Power circuit: connector 1 10120 mm² - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm² - cable stiffness: solid without cable end Power circuit: connector 2 1050 mm² - cable stiffness: solid without cable end	
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2	
Auxiliary contact composition	1 NO + 1 NC	

	type minor contact 1140 contoming to 120 00047-4-1	
Signalling circuit frequency	25400 Hz	
Minimum switching voltage	17 V for signalling circuit	
Minimum switching current	5 mA for signalling circuit	
Insulation resistance	> 10 MOhm 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	
Mounting support	Rail Plate	
Environment		

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	CCC LROS (Lloyds register of shipping)
	GL
	GOST
	RINA
	CSA
	BV
	UL
	DNV
	UKCA
	CE
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	conforming to IACS E10 exposure to damp heat
Permissible ambient air	-4060 °C
temperature around the device	6070 °C with derating
Operating altitude	03000 m
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 closed (15 Gn for 11 ms)
	Shocks contactor open (6 Gn for 11 ms)
Height	158 mm
Width	120 mm
Depth	136 mm
Product weight	2.5 kg

## **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.000 cm
Package 1 Width	20.000 cm
Package 1 Length	23.500 cm
Package 1 Weight	2.490 kg
Unit Type of Package 2	P06
Number of Units in Package 2	27
Package 2 Height	75.000 cm

Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	79.819 kg

# Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Compliant EU RoHS Declaration	
Mercury free	Yes	
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
RoHS exemption information	Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	

### **Contractual warranty**

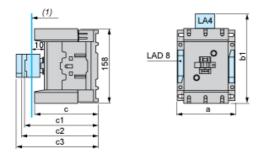
Warranty 18 months

# **Product datasheet**

# LC1D150M7

**Dimensions Drawings** 

#### **Dimensions**



#### (1) Minimum electrical clearance

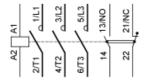
LC1		D115 and D150 (3-pole)
а		120
b1	with LA4 DA2	174
	with LA4 DF, DT	185
	with LA4 DM, DL	188
	with LA4 DW	188
С	without cover or add-on blocks	132
	with cover, without add-on blocks	136
c1	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK20	155
с3	with LAD T, R, S	168
	with LAD T, R, S and sealing cover	172

# **Product datasheet**

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Connections and Schema

#### Wiring



Recommended replacement(s)