Product datasheet

Specifications





TeSys D contactor - 3P(3 NO) -AC-3 - <= 440 V 32 A - 220 V AC coil

LC1D32M7

Main

Range Of Product	TeSys Deca	
Product Or Component Type	Contactor	
Device Short Name	LC1D	
Contactor Application	Resistive load Motor control	
Utilisation Category	AC-4 AC-1 AC-3 AC-3e	
Poles Description	3P	
[Ue] Rated Operational Voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	
[le] Rated Operational Current	32 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
[Uc] Control Circuit Voltage	220 V AC 50/60 Hz	

Complementary

Motor Power Kw	7.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	15 kW at 380400 V AC 50/60 Hz (AC-3)	
	15 kW at 415440 V AC 50/60 Hz (AC-3)	
	18.5 kW at 500 V AC 50/60 Hz (AC-3)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3)	
	7.5 kW at 400 V AC 50/60 Hz (AC-4)	
	7.5 kW at 220230 V AC 50/60 Hz (AC-3e)	
	15 kW at 380400 V AC 50/60 Hz (AC-3e)	
	15 kW at 415440 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 500 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	2 hp at 115 V AC 50/60 Hz for 1 phase motors	
	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	20 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	25 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Compatibility Code	LC1D	
Pole Contact Composition	3 NO	
Contact Compatibility	M2	
Protective Cover	With	
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit	
Thermal Current	50 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	
	550 A at 440 V for power circuit conforming to IEC 60947	

Rated Breaking Capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	260 A 40 °C - 10 s for power circuit 430 A 40 °C - 1 s for power circuit 60 A 40 °C - 10 min for power circuit 138 A 40 °C - 1 min for power circuit 100 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 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
Power Dissipation Per Pole	2 W AC-3 5 W AC-1 2 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified 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	6 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	15 Mcycles
Electrical Durability	1.65 Mcycles 32 A AC-3 at Ue <= 440 V 1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.65 Mcycles 32 A AC-3e at Ue <= 440 V
Control Circuit Type	AC at 50/60 Hz standard
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush Power In Va	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	23 W at 50/60 Hz
Operating Time	1222 ms closing 419 ms opening
Maximum Operating Rate	3600 cyc/h 60 °C

Connections - Terminals	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible without cable end	
	caple end Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: flexible without	
	cable end	
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 2 12.5 mm ² - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 1 14 mm ² - cable stiffness: solid without cable end	
	Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 1 2.510 mm ² - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 1 110 mm ² - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 1 1.510 mm ² - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 2 2.510 mm ² - cable stiffness: solid without cable end	
Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2	
Auxiliary Contact Composition	1 NO + 1 NC	
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 Voltage	17 V for signalling circuit	
in the second	5 mA for signalling circuit	
	5 mA for signalling circuit	
Minimum Switching Current	5 mA for signalling circuit > 10 MOhm for signalling circuit	
Minimum Switching Current Insulation Resistance Non-Overlap Time		

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	
	IEC 60335-1	
Product Certifications	DNV	
	RINA	
	LROS (Lloyds register of shipping)	
	CCC	
	CSA	
	GL	
	GOST	
	BV	
	UL	
	UKCA	
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	
	conforming to IEC 60947-1 Annex Q category D 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	
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 (8 Gn for 11 ms)
Height	85 mm
Width	45 mm
Depth	92 mm
Net Weight	0.375 kg

Packing Units

-	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	412.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.502 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	160
Package 3 Height	45.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	76.016 kg

Contractual warranty

Warranty

12 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance

Reach Free Of Svhc
 Toxic Heavy Metal Free
 Mercury Free
 Rohs Exemption Information Yes
 Pvc Free

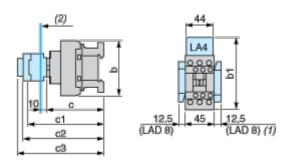
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

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Dimensions Drawings

Dimensions



(1) Including LAD 4BB

(2) Minimum electrical clearance

LC1		D25D38 (3-pole)
b	without add-on blocks	85
	with LAD 4BB	98
	with LA4 D•2	₁₁₄ (1)
b1	with LA4 DF, DT	₁₂₃ (1)
	with LA4 DW, DL	₁₃₀ (1)
	without cover or add-on blocks	90
c	with cover, without add-on blocks	92
c1	with LAD N or C (2 or 4 contacts)	123
c2	with LA6 DK10, LAD 6K10	135
-2	with LAD T, R, S	143
c3	with LAD T, R, S and sealing cover	147
(1)	Including LAD 4BB.	

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Connections and Schema

Wiring

