# **Product datasheet**

Specification





# Contactor, TeSys Deca, 3P(3 NO), AC-3/AC-3e, <=400V, 40A, 220V AC 50/60Hz coil, spring terminals

LC1D40A3M7

### Main

Range	TeSys TeSys Deca
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	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 40 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	18.5 kW at 380400 V AC 50/60 Hz (AC-3)
	11 kW at 220230 V AC 50/60 Hz (AC-3)
	22 kW at 415440 V AC 50/60 Hz (AC-3)
	22 kW at 500 V AC 50/60 Hz (AC-3)
	30 kW at 660690 V AC 50/60 Hz (AC-3)
	9 kW at 400 V AC 50/60 Hz (AC-4)
	18.5 kW at 380400 V AC 50/60 Hz (AC-3e)
	11 kW at 220230 V AC 50/60 Hz (AC-3e)
	22 kW at 415440 V AC 50/60 Hz (AC-3e)
	22 kW at 500 V AC 50/60 Hz (AC-3e)
	30 kW at 660690 V AC 50/60 Hz (AC-3e)
Motor Power Hp	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors
	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors
	30 hp at 575/600 V AC 50/60 Hz for 3 phases motors
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors
	3 hp at 115 V AC 50/60 Hz for 1 phase motors
	30 hp at 460/480 V AC 50/60 Hz for 3 phases motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	60 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
	800 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand	320 A 40 °C - 10 s for power circuit
Current	720 A 40 °C - 1 s for power circuit
	72 A 40 °C - 10 min for power circuit
	165 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
	80 A gG at <= 690 V coordination type 1 for power circuit
	80 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power Dissipation Per Pole	2.4 W AC-3
	5.4 W AC-1
	2.4 W AC-3e
[Ui] Rated Insulation Voltage	Power circuit: 600 V CSA certified
[0] Nated insulation voltage	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
	Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage Category	III
Pollution Degree	3
[Uimp] Rated Impulse Withstand	6 kV conforming to IEC 60947
Voltage	
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
Electrical Durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
-	1.5 Mcycles 40 A AC-3 at Ue <= 440 V
	1.5 Mcycles 40 A AC-3e at Ue <= 440 V
Control Circuit Type	AC at 50/60 Hz
Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz
<b>5</b>	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	140 VA 60 Hz cos phi 0.75 (at 20 °C)
	160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hald to Barres Commention to Va	
Hold-In Power Consumption In Va	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	45 W at 50/60 Hz
Operating Time	419 ms opening
	1226 ms closing
Maximum Operating Rate	3600 cyc/h 60 °C
	•

Connections - Terminals	Power circuit: EverLink BTR screw connectors 1 135 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible
	without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm <sup>2</sup> - cable stiffness: flexible with cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: solid without cable end
	Control circuit: spring terminals 1 0.752.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: spring terminals 2 $0.752.5 \ \text{mm}^2$ - cable stiffness: flexible without cable end
Tightening Torque	Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm²
	hexagonal screw head 4 mm  Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm²
	hexagonal screw head 4 mm
	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
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	Plate Rail
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	CSA
	UL GOST
	CCC
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 Temperature Around The Device	-4060 °C 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)
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 (10 Gn for 11 ms)

Height	122 mm	
Width	55 mm	
Depth	120 mm	
Net Weight	0.85 ka	

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	6.2 cm
Package 1 Width	13.7 cm
Package 1 Length	15.2 cm
Package 1 Weight	943 g

## **Contractual warranty**

Warranty 18 months



**Green Premium**<sup>TM</sup> **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-CO<sub>2</sub> 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

<b>⊘</b>	Reach Free Of Svhc
<b>⊘</b>	Toxic Heavy Metal Free
<b>⊘</b>	Mercury Free
<b>②</b>	Rohs Exemption Information Yes
<b>⊘</b>	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