# **Product datasheet**

Specifications





# Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 38A, 240V AC 50/60Hz coil, screw clamp terminals

LC1D38U7

#### 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	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	240 V AC 50/60 Hz

## Complementary

Motor Power Kw	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)	
	18.5 kW at 380400 V AC 50/60 Hz (AC-3)	
	9 kW at 220230 V AC 50/60 Hz (AC-3)	
	18.5 kW at 415440 V AC 50/60 Hz (AC-3)	
	18.5 kW at 500 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 660690 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 380400 V AC 50/60 Hz (AC-3e)	
	9 kW at 220230 V AC 50/60 Hz (AC-3e)	
	18.5 kW at 415440 V AC 50/60 Hz (AC-3e)	
Motor Power Hp	10 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	10 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	5 hp at 240 V AC 50/60 Hz for 1 phase motors	
	20 hp at 480 V AC 50/60 Hz for 3 phases motors	
	25 hp at 600 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	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	60 A 40 °C - 10 min for power circuit 430 A 40 °C - 1 s for power circuit 150 A 40 °C - 1 min for power circuit 310 A 40 °C - 10 s 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	5 W AC-1 3 W AC-3 3 W AC-3e
[Ui] Rated Insulation Voltage	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 Power circuit: 690 V conforming to IEC 60947-4-1
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	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V 1.4 Mcycles 38 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 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	419 ms opening 1222 ms closing
Maximum Operating Rate	3600 cyc/h 60 °C

Connections - Terminals	Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without cable end	
	Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 1 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Power circuit: screw clamp terminals 1 110 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 2 1.56 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Power circuit: screw clamp terminals 1 1.510 mm <sup>2</sup> - cable stiffness: solid without cable end	
	Power circuit: screw clamp terminals 2 2.510 mm <sup>2</sup> - 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	
	5 mA for signalling circuit	
Minimum Switching Current	5 mA for signalling circuit	
	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		
	GL		
	CCC		
	LROS (Lloyds register of shipping)		
	RINA		
	BV		
	GOST		
	UL		
	CSA		
	CB		
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) 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	0.38 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	416.000 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	8.652 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	146.432 kg

### **Contractual warranty**

Warranty

18 months

# Sustainability Screen Premium

**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

Reach Free Of Svhc
 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