Product data sheet

Specifications

Green Premium™

Contactor, TeSys Deca, 3P(3NO),AC-3/AC-3e/<=440V 65A,240V AC 50/60Hz coil, screw clamp terminals

LC1D65U7

Main

Range	TeSys
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
Device Short Name	LC1D
Contactor Application	Resistive load
Utilisation Category	AC-4 AC-1 AC-2 AC-3e AC-3
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] Rated Operational Current	65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 65 A (at <140 °F (60 °C)) at 240 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at 240 V AC AC-1 for power circuit
[Uc] Control Circuit Voltage	240 V AC 50/60 Hz

Complementary

Motor Power Kw	11 kW at 400 V AC 50 Hz (AC-4) 30 kW at 380...400 V AC 50 Hz (AC-3) 37 kW at 500 V AC 50 Hz (AC-3) 37 kW at 660...690 V AC 50 Hz (AC-3) 18.5 kW at 220...230 V AC 50 Hz (AC-3) 30 kW at 415 V AC 50 Hz (AC-3) 37 kW at 1000 V AC 50 Hz (AC-3) 30 kW at 440 V AC 50 Hz (AC-3e) 30 kW at 380...400 V AC 50 Hz (AC-3e) 37 kW at 500 V AC 50 Hz (AC-3e) 37 kW at 660...690 V AC 50 Hz (AC-3e) 18.5 kW at 220...230 V AC 50 Hz (AC-3e) 30 kW at 415 V AC 50 Hz (AC-3e) 37 kW at 1000 V AC 50 Hz (AC-3e) 37 kW at 500 V AC 50 Hz 30 kW at 380...400 V AC 50 Hz
Motor Power Hp	10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 50 hp at 575/600 V AC 60 Hz for 3 phases motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Protective Cover	With

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ith] Conventional Free Air Thermal Current	80 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for control circuit
Irms Rated Making Capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
[Icw] Rated Short-Time Withstand Current	520 A 104 °F (40 °C) - 10 s for power circuit 900 A 104 °F (40 °C) - 1 s for power circuit
Associated Fuse Rating	125 A gG at <= 690 V coordination type 2 for power circuit 160 A gG at <= 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Average Impedance	1.5 Ohm - Ith 80 A 50 Hz for power circuit
Power Dissipation Per Pole	6.4 W AC-4 4.2 W AC-3e 6.3 W AC-3 9.6 W AC-1
[Ui] Rated Insulation Voltage	Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL IEC 60947-1 Control circuit 690 V IEC 60947-1 Power circuit 690 V CSA IEC 60947-1 Control circuit 600 V CSA
Overvoltage Category	III
[Uimp] Rated Impulse Withstand Voltage	6 kV IEC 60947
Safety Reliability Level	B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical Durability	6000000 cycles
Control Circuit Type	AC 50/60 Hz
Coil Technology	Without built-in
Control Circuit Voltage Limits	0.8...1.1 Uc -40…140 °F (-40…60 °C) operational AC 50 Hz 0.85...1.1 Uc -40…140 °F (-40…60 °C) operational AC 60 Hz 1...1.1 Uc 140…158 °F (60…70 °C) operational AC 50/60 Hz 0.3...0.6 Uc -40…158 °F (-40…70 °C) drop-out AC 50/60 Hz
Inrush Power In Va	160 VA cos phi 0.75 (at 68 °F (20 °C)) 140 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-In Power Consumption In Va	15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat Dissipation	4…5 W at 50/60 Hz for control circuit
Operating Time	12...26 ms closing 4...19 ms opening
Maximum Operating Rate	3600 cyc/mn 140 °F (60 °C)

Connections - Terminals	Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw terminals 1 0.00…0.04 in² (2.5…25 mm²) - cable stiffness: rigid Power circuit: screw terminals 2 0.00…0.02 in² (2.5…16 mm²) - cable stiffness: rigid without cable end Power circuit: screw terminals 1 0.00…0.04 in² (2.5…25 mm²) - cable stiffness: flexible without cable end Power circuit: screw terminals 2 0.00…0.02 in² (2.5…16 mm²) - cable stiffness: flexible without cable end Power circuit: screw terminals 1 0.00…0.04 in² (2.5…25 mm²) - cable stiffness: flexible with cable end Power circuit: screw terminals 2 0.00…0.02 in² (2.5…10 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) - cable stiffness: rigid
Tightening Torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.25 lbf.in (5 N.m) screw terminal flat Ø 6 to Ø 8 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm
Auxiliary Contact Composition	1 NO + 1 NC
Auxiliary Contacts Type	Mirror contact 1 NC IEC 60947-4-1 Mechanically linked 1 NO + 1 NC IEC 60947-5-1
Minimum Switching Voltage	17 V for control circuit
Minimum Switching Current	5 mA for control circuit
Insulation Resistance	> 10 MOhm for control circuit
Non-Overlap Time	1.5 ms on energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting Support	Plate Rail

Environment

Standards	EN 60947-4-1 CSA C22.2 No 14 IEC 60947-4-1 EN 60947-5-1 UL 508
Product Certifications	DNV UL RINA CCC CSA LROS (Lloyds register of shipping) BV GL UKCA
Ip Degree Of Protection	IP2X VDE 0106 IP2X IEC 60529
Protective Treatment	TH 3)IEC 60068-2-30
Climatic Withstand	IACS E10 exposure to damp heat
Operating Altitude	0...3000 m
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 UL 94

Mechanical Robustness	Shocks contactor closed 15 Gn for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor opened 10 Gn for 11 ms)
Height	4.80 in (122 mm)
Width	2.76 in (70 mm)
Depth	4.65 in (118 mm)
Net Weight	4.82 lb(US) (2.185 kg)
Quantity Per Set	Set of 10

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.51 in (14.000 cm)
Package 1 Width	5.20 in (13.200 cm)
Package 1 Length	3.74 in (9.500 cm)
Package 1 Weight	3.16 lb(US) (1.433 kg)
Unit Type Of Package 2	S02
Number Of Units In Package 2	5
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	16.44 lb(US) (7.459 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 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	No need of specific recycling operations