Product data sheet
Characteristics

LC1D65ED
Contactor, TeSys Deca,3P(3NO),AC-3/AC-3e 440V 65A,coil 36V DC, screw clamp terminals

Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Resistive load
Utilisation category	AC-4 AC-1 AC-3 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V DC

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) 30 KW at 380...400 V AC 50 Hz 30 kW at 440 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
[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit

Irms rated making capacity	1000 A at 440 V DC for power circuit conforming to IEC 60947 1000 A at 440 V for power circuit conforming to IEC 60947 250 A DC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
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
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 4.2 W AC-3
[Ui] rated insulation voltage	Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified conforming to IEC 60947-1 Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1 Power circuit: 1000 V CSA certified conforming to IEC 60947-4-1 Control circuit: 600 V CSA certified
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	10000000 cycles
Control circuit type	DC wide range
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.75...1.25 Uc (-40…60 °C):operational DC 1...1.25 Uc (60…70 °C):operational DC 0.1...0.3 Uc (-40…70 °C):drop-out DC
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in W	7.4 W at 20 °C
Rated operational power in W	38 W at 48 V DC-13 - electrical durability: 3000000 cycles - for control circuit 76 W at 48 V DC-13 - electrical durability: 1000000 cycles - for control circuit 12 W at 48 V DC-13 - electrical durability: 10000000 cycles - for control circuit
Operating time	50 ±15 % ms closing 20 ±20 % ms opening
Time constant	34 ms
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: rigid Power circuit: screw terminals 2 2.5…16 mm² - cable stiffness: rigid without cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 2 2.5…16 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5…10 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: rigid
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mirror contact 1 NC conforming to IEC 60947-4-1 Type mechanically linked 1 NO + 1 NC conforming to 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 Plate

Environment

Standards	UL 508 EN 60947-5-1 EN 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 IEC 60947-4-1
Product certifications	CCC[RETURN]CSA[RETURN]GOST[RETURN]RINA[RETURN]GL[RETURN]DNV[RETURN]L (Lloyds register of shipping)[RETURN]UL[RETURN]UKCA[RETURN]CCC
IP degree of protection	IP2X conforming to VDE 0106 IP2X conforming to IEC 60529
Climatic withstand	Conforming to IACS E10 exposure to damp heat
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to 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	127 mm
Width	85 mm
Depth	176 mm
Net weight	2.185 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	18.7 cm
Package 1 Width	14.2 cm
Package 1 Length	8.8 cm
Package 1 Weight	2.192 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
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